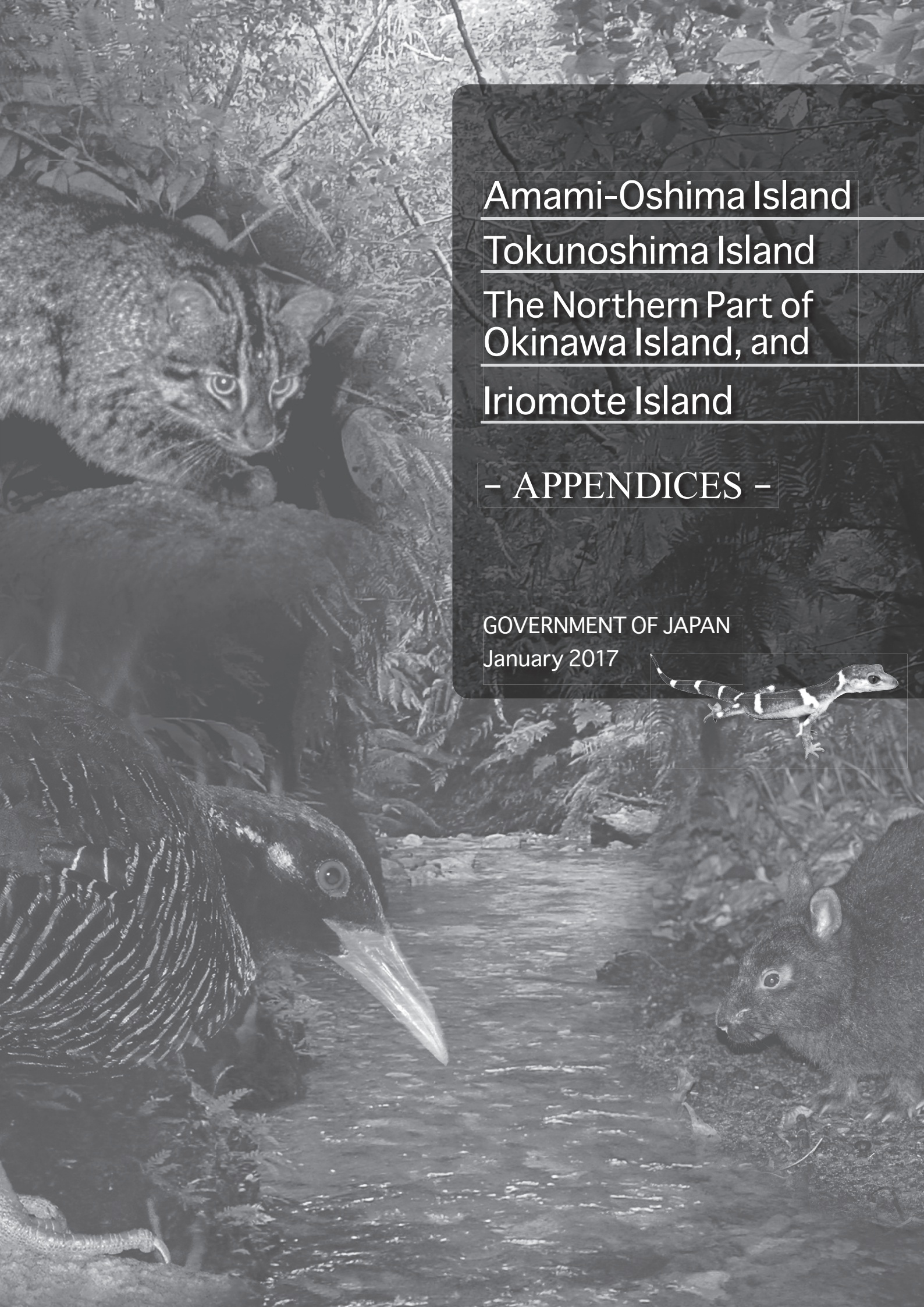

Amami-Oshima Island
Tokunoshima Island
The Northern Part of Okinawa Island, and
Iriomote Island

– APPENDICES –

GOVERNMENT OF JAPAN
January 2017

Amami-Oshima Island,
Tokunoshima Island,
the northern part of Okinawa Island, and
Iriomote Island
－ APPENDICES －

GOVERNMENT OF JAPAN

January 2017

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Appendix 1

Management Plan applying to the nominated property

1-1 : Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island Natural World Heritage Nominated Property Comprehensive Management Plan

1-1. The Comprehensive Management Plan for Amami-Oshima Island, Tokunoshima Island, the Northern Part of Okinawa Island, and Iriomote Island Nominated for Inscription on the World Heritage List

(English translation for World Heritage nomination)

December 27, 2016

Ministry of the Environment / Forestry Agency / Agency for Cultural Affairs
Kagoshima Prefecture / Okinawa Prefecture
Amami City / Yamato Village / Uken Village / Setouchi Town / Tatsugo Town
Tokunoshima Town / Amagi Town / Isen Town
Kunigami Village / Ogimi Village / Higashi Village
Taketomi Town

Japan

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1. Introduction

The nominated property is part of the Ryukyu Chain to the south of Kyushu Island of Japan, a chain of islands extending from northeast to southwest in an arc over a length of approximately 1,200 km. The natural property, "Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island", is nominated for inscription on the World Heritage List as a "serial property" consisting of four component parts: Amami-Oshima Island, Tokunoshima Island, and the northern part of Okinawa Island of the Central Ryukyus and Iriomote Island of the South Ryukyus.

The essential value of this property consists in being an outstanding example representing unique biological processes in the evolution and speciation on the Central Ryukyus and South Ryukyus, which have different periods of isolation from the continent, reflecting the geological history of the Ryukyu Chain. Also, the nominated property contains extremely important and significant habitats for in-situ conservation of biological diversity, providing irreplaceable habitats for terrestrial species of flora and fauna, including 88 endangered species on the IUCN Red List such as the Iriomote cat (CR), the Okinawa woodpecker (CR), the Amami rabbit (EN), and the Okinawa rail (EN).

Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island, which constitute the nominated property, are all small islands, inhabited by people who have been leading their daily lives up to the present. The natural environment inhabited by endemic species, endangered species, and so on are extremely close to, or in some cases partially overlap with, places of people's daily life or livelihoods. Yet, this has given rise to cultures and livelihoods that harness local natural resources, and it is characteristic of this property that the Outstanding Universal Value has been maintained therein. Therefore, it is important to ensure both coordination with local communities and sustainable use for the conservation and management of Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island, which are collectively nominated as a natural property for inscription on the World Heritage List.

In addition, the four regions comprising this "serial property" are geographically separated from one another, extending over many administrative territories involving two prefectures and 12 municipalities. Therefore, it is essential to set up a management mechanism to ensure coordinated conservation and management among individual component parts.

"The Comprehensive Management Plan for Amami-Oshima Island, Tokunoshima Island, the Northern Part of Okinawa Island, and Iriomote Island, Nominated for Inscription on the World Heritage List" (hereafter referred to as "this plan") is hereby presented to recognize the natural environment of globally outstanding value on Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island as heritage of common importance for all humanity and to pass it on to future generations in even better shape in light of specific local characteristics.

2. Basic Framework of the Plan

1) Objective of the Plan

This plan clearly sets out the basic policies concerning the enforcement of various instruments and the promotion of various projects in order to ensure that management organizations* in charge of various instruments related to the conservation and sustainable use of the natural environment in the property, buffer zone, and surrounding area should coordinate and cooperate closely with various stakeholders, including local residents, tourism businesses, farmers, foresters, fishermen, researchers, local groups, and visitors and thereby deliver proper and smooth conservation and management of the natural environment in these areas.

* Management organizations: Ministry of the Environment, Forestry Agency, Agency for Cultural Affairs, Kagoshima Prefecture, Okinawa Prefecture, Amami City, Yamato Village, Uken Village, Setouchi Town, Tatsugo Town, Tokunoshima Town, Amagi Town, Isen Town, Kunigami Village, Ogimi Village, Higashi Village, Taketomi Town

2) Scope of the Plan

The nominated property is a "serial property" consisting of Amami-Oshima Island and Tokunoshima Island of the Amami Island Group, the northern part of Okinawa Island of the Okinawa Island Group, and Iriomote Island of the Sakishima Island Group (Fig. 1). This plan deals with the buffer zone and the surrounding area as well as the nominated property in order to maintain the Outstanding Universal Value of the nominated property.

The areas covered by this plan are described below and shown in Figs. 2 to 5:

○ Nominated property:
- The area that contributes to the Outstanding Universal Value, including the conditions of integrity.
- The national government takes proper legal measures to ensure that the state of conservation at the time of inscription be maintained, enhanced, and passed on to future generations. This area is designated as a special protection zone or class I special zone of the national park or a preservation zone of the forest ecosystem reserve. In addition to these, designations as a national wildlife protection area and/or a natural monument are also made.

○ Buffer zone:
- The area directly adjacent to the nominated property, containing areas and attributes that have functions to support the property and its protection.
- Complementary controls of land use and development are put in place by means of legal and/or customary restrictions for the purpose of effective protection of the nominated property. This area is mainly designated as a class II special zone of the national park or the conservation and utilization zone of the forest ecosystem reserve.

○ Surrounding area:
- The area surrounding the nominated property and buffer zone (including the surrounding boat routes when necessary).
- Necessary measures are taken for maintenance, enhancement, conservation, and management of the property, including legal and/or customary restrictions for conservation and management, sustainable use, awareness raising about the conservation of the heritage area. Since the implementation of these spans over a wide area, the entire administrative territories of the relevant municipalities are basically treated as the surrounding area for Amami-Oshima Island, Tokunoshima Island, and the northern part of Okinawa Island and the entire island for Iriomote Island.

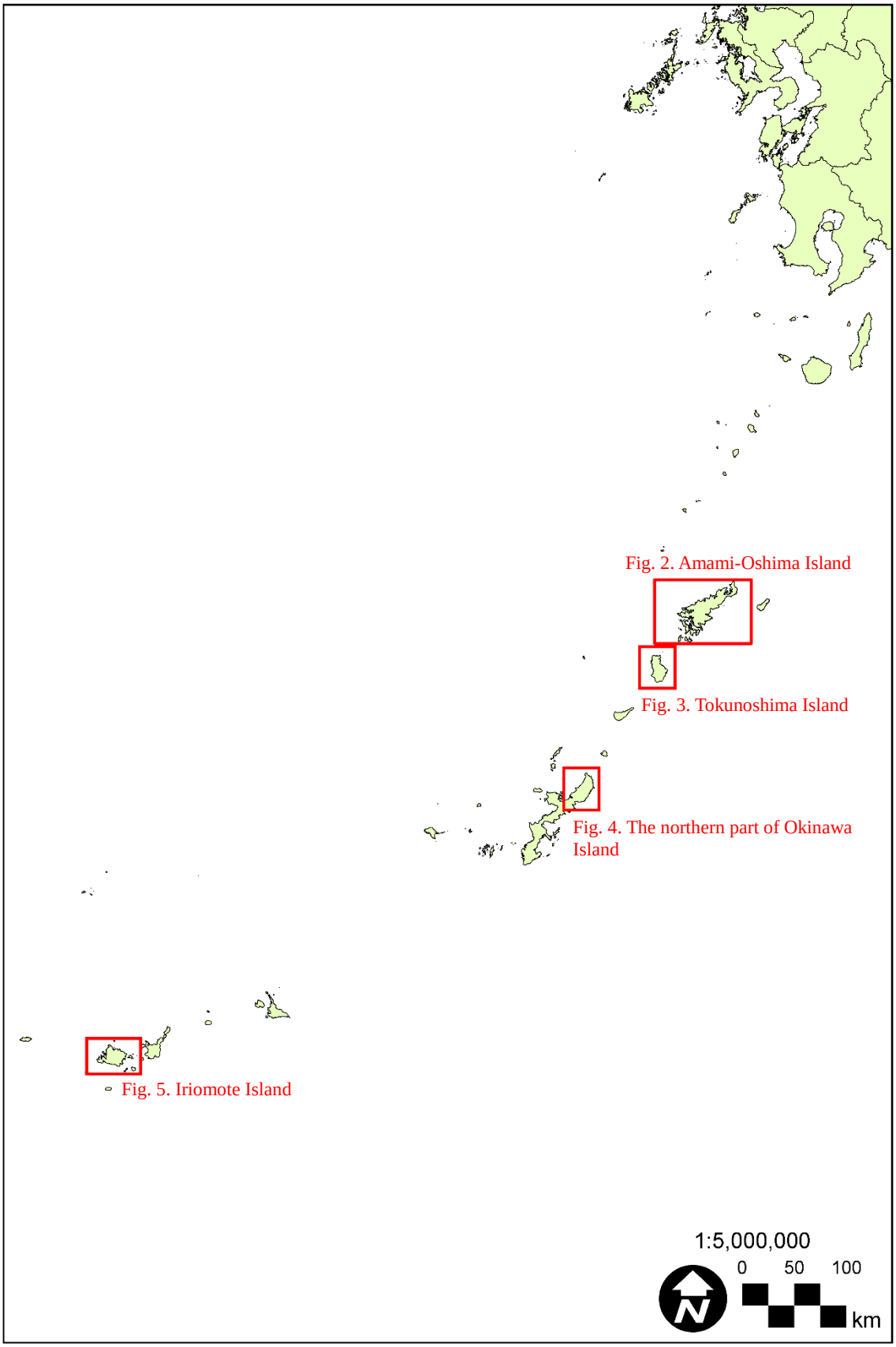


Fig. 1. Locations of the Component Parts of the Nominated Property

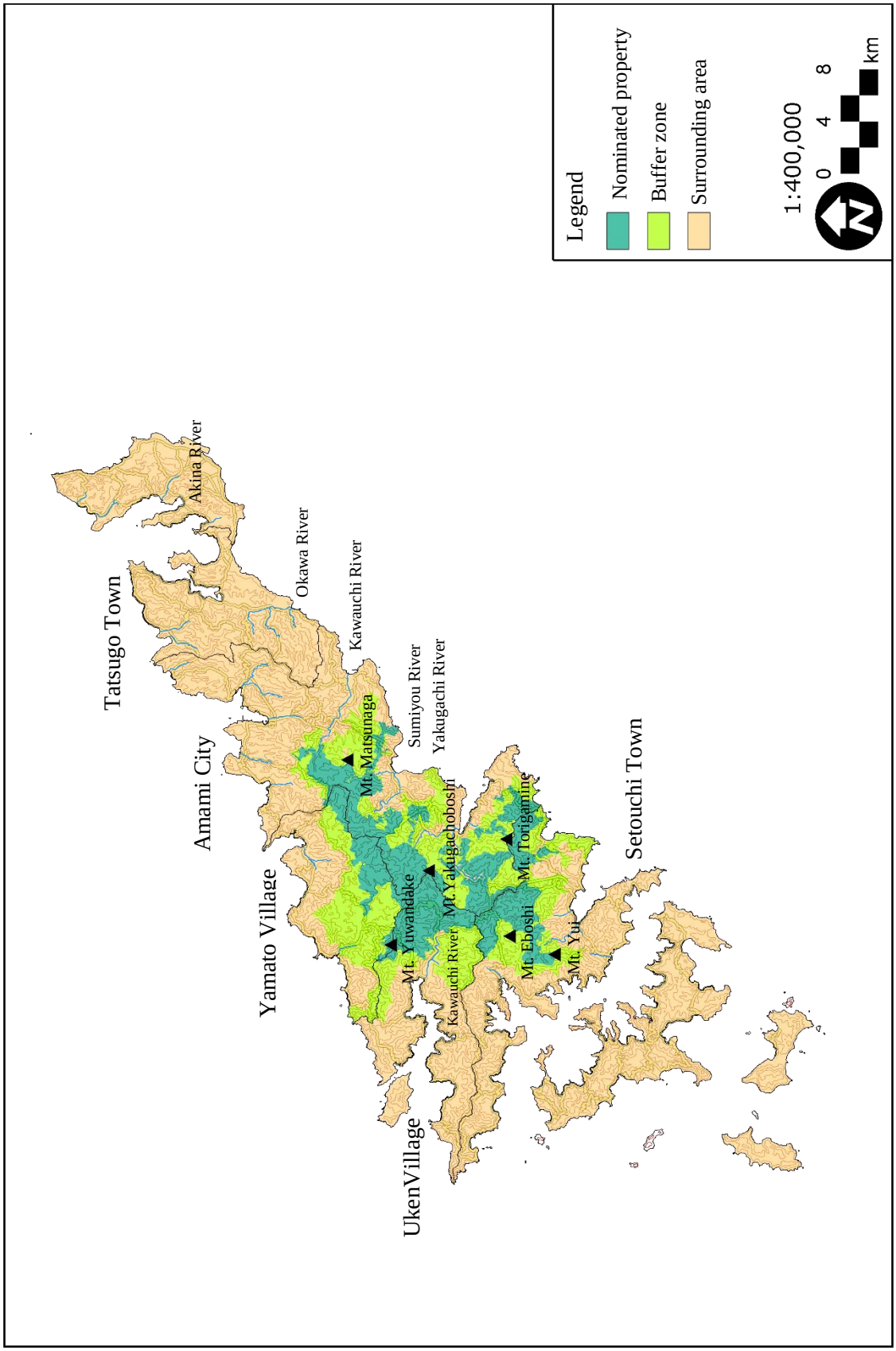


Fig. 2. Amami-Oshima Island

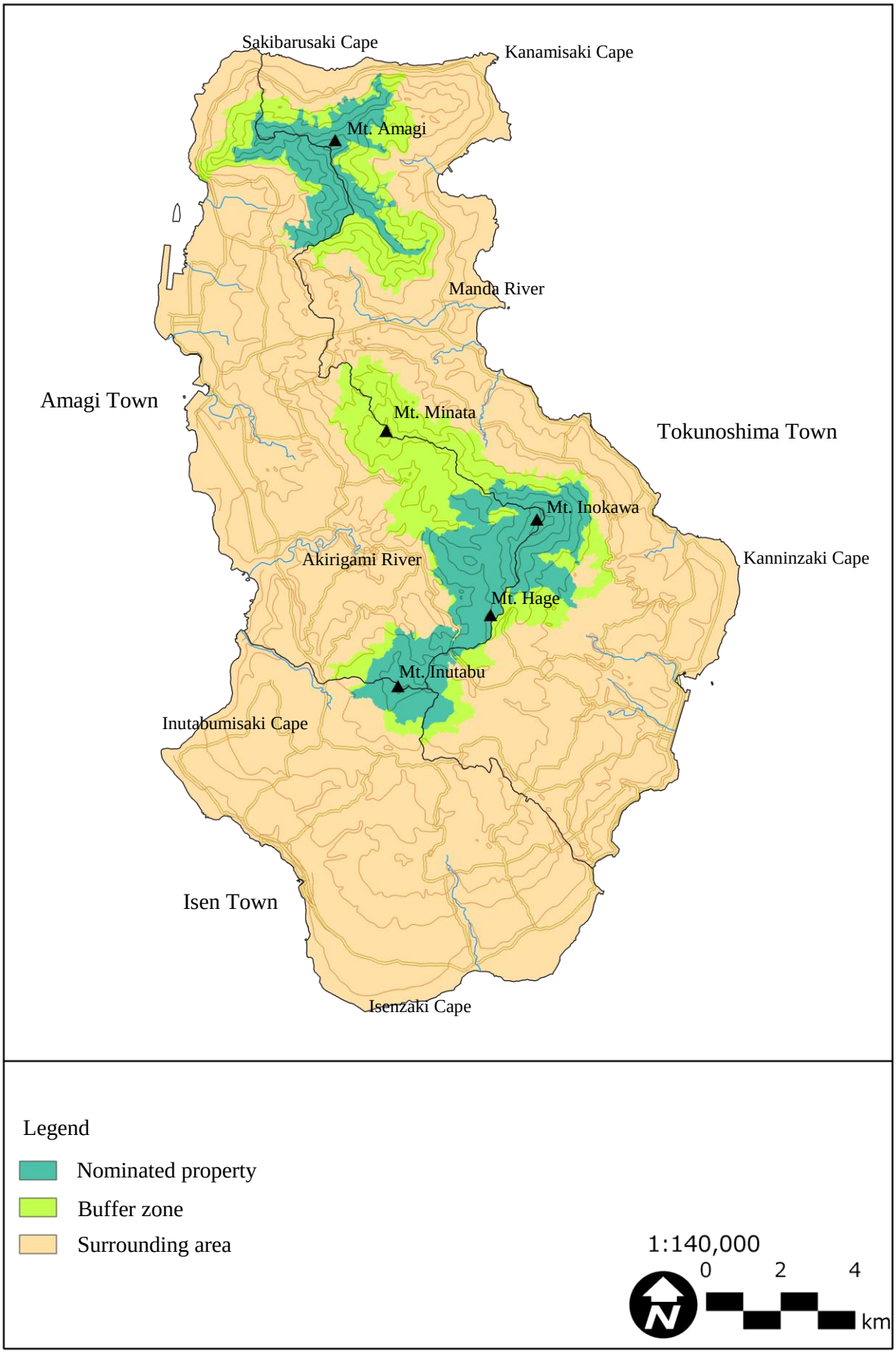


Fig. 3. Tokunoshima Island

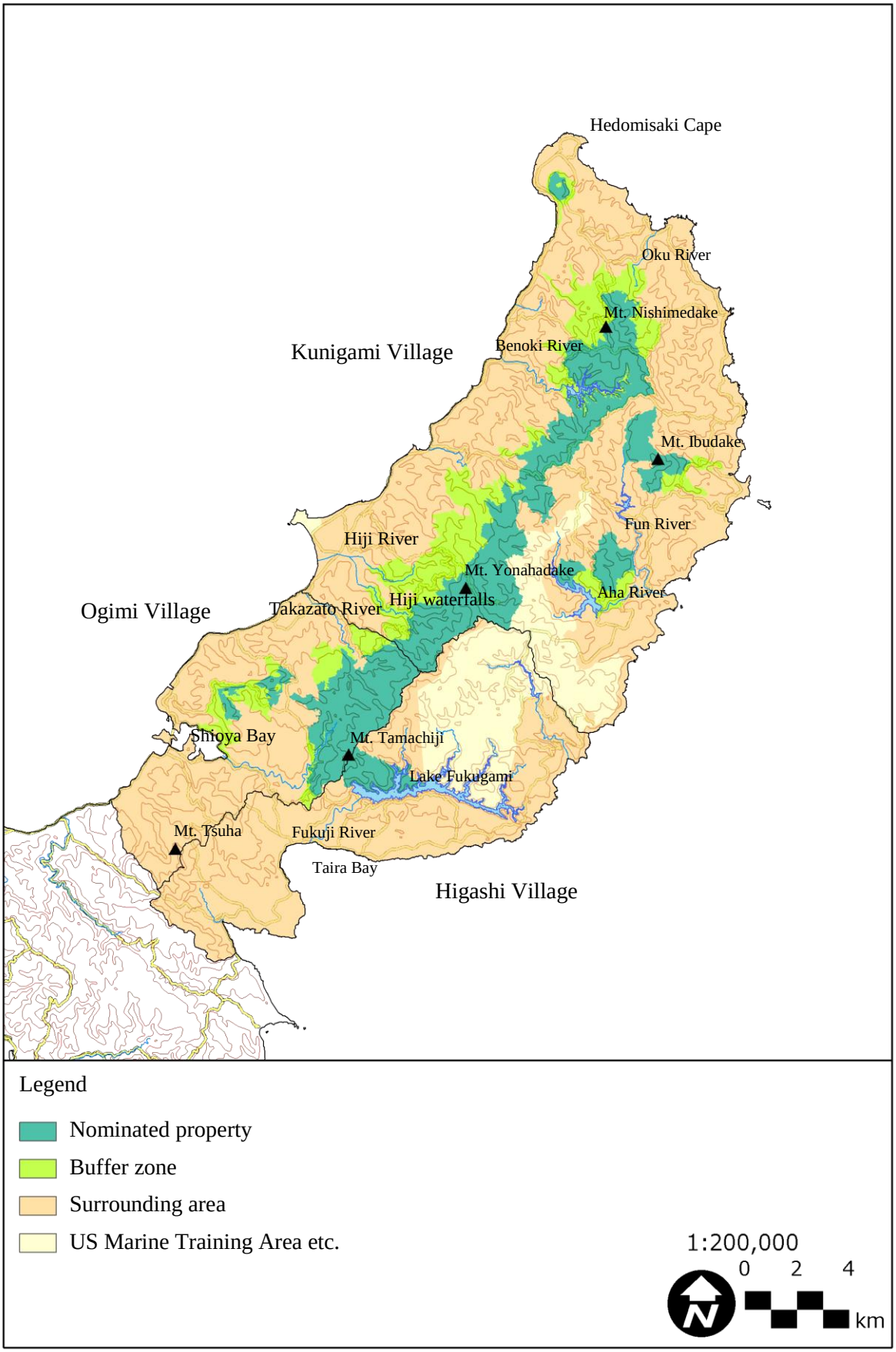


Fig. 4. Northern part of Okinawa Island

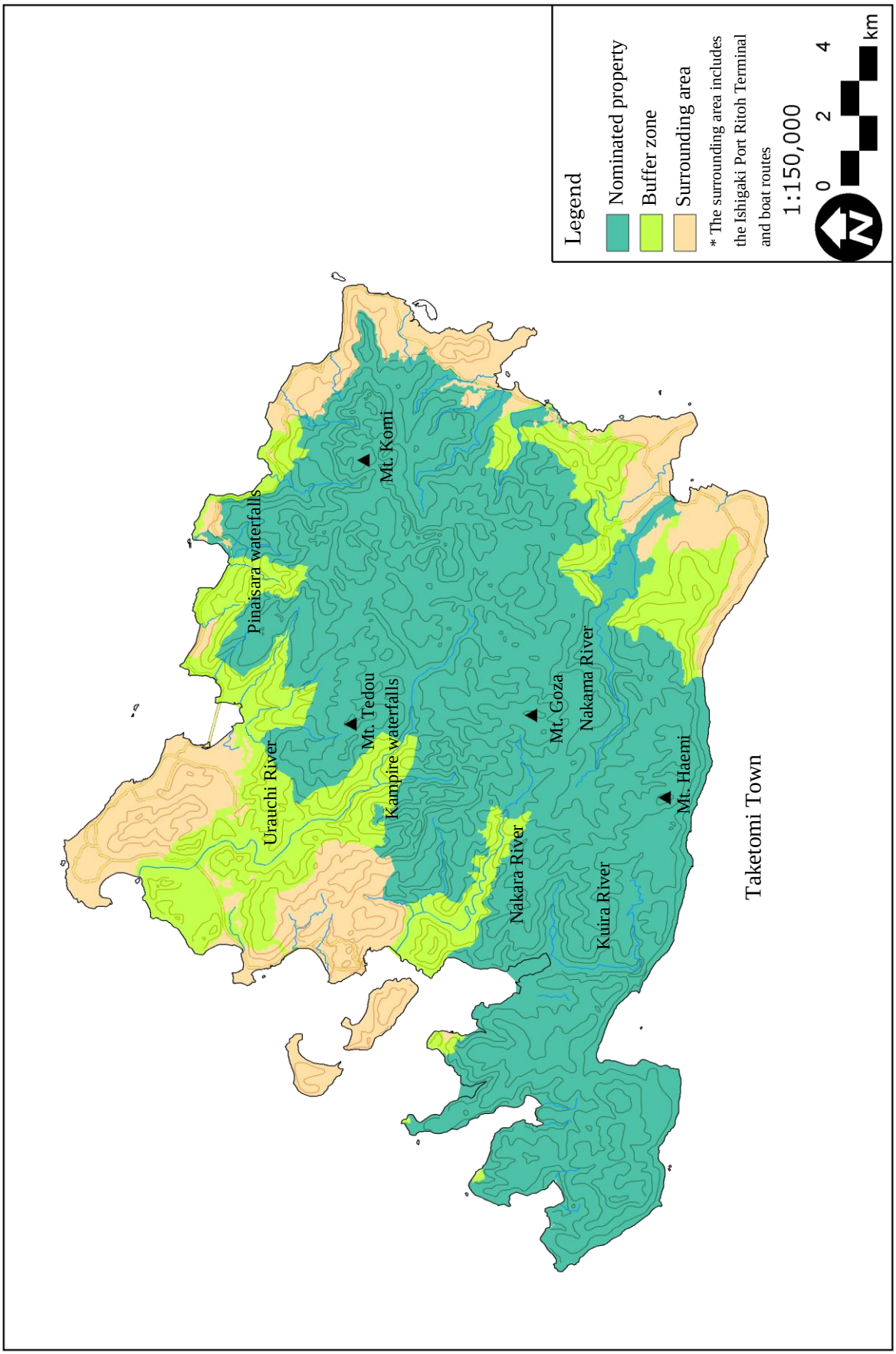


Fig. 5. Iriomote Island

3) Structure of the Plan

The component parts of the nominated property are distributed over four islands, spanning over many administrative territories that include two prefectures and 12 municipalities. Therefore, issues of conservation and management vary from place to place, depending on difference in the natural environment, local history and culture, and social condition. In addition, the protection of the area covered by this plan is delivered by multiple layers of instruments based on the individual domestic laws and regulations, such as designations of protected areas and national endangered species; it is necessary for the management organizations in charge of the individual legal instruments to ensure smooth enforcement of these instruments in mutual coordination.

In light of such circumstances, this plan sets forth an overarching target and basic management policies that commonly apply to the four regions, so that the management organizations can work together for effective conservation and management; in addition, action plans by region are to be developed under this plan (Action Plan for Amami-Oshima Island, Action Plan for Tokunoshima Island, Action Plan for the Northern Part of Okinawa Island, and Action Plan for Iriomote Island).

Each action plan by region identifies action items to be implemented in consideration of the specific characteristics and issues of each of the four regions and in compliance with the overarching target and basic management policies of this plan; the action plan sets out the concrete content, time line, division of roles, targets, evaluation indicators, etc.

Fig. 6 shows the relation between this plan and the action plans by region, together with the structure of each plan. Integrated management of the serial property comprising four regions is to be delivered by enforcing these plans in an integral, mutually interlinked manner.

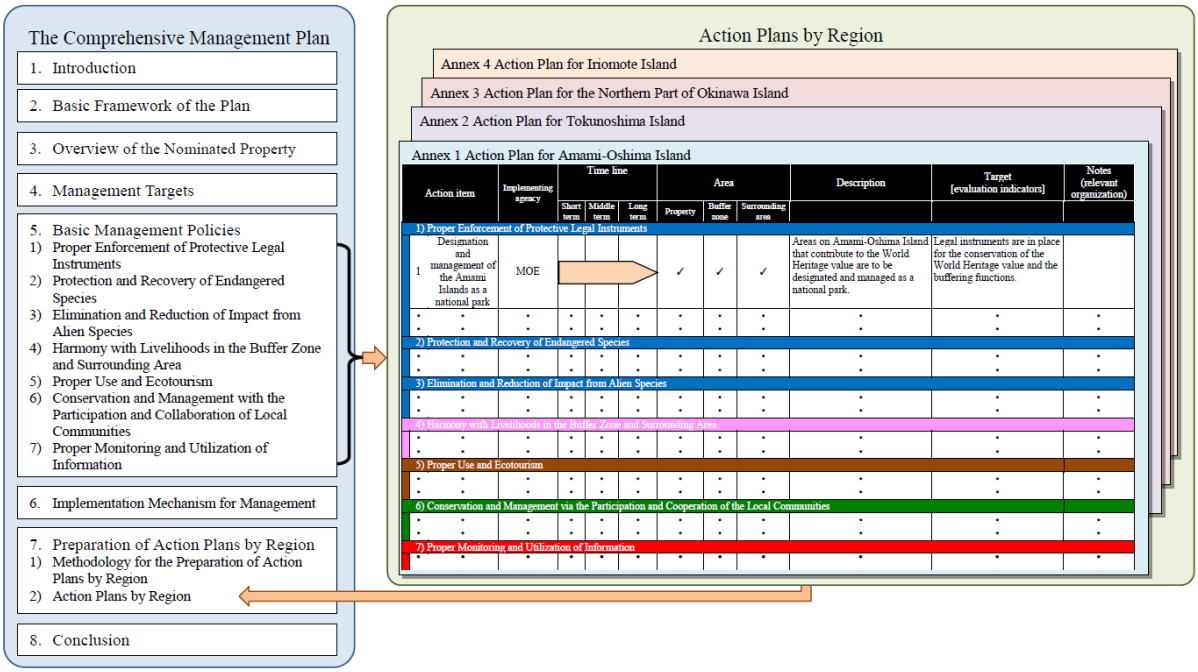


Fig. 6. Structure of the plan

4) Planning Period

This plan covers a period of approximately ten years.
Action plans by region also cover a period of approximately ten years, but their implementation periods are divided into three stages: short term (within three years), middle term (approx. four to six years), and long term (approx. seven to ten years).

5) Progress Management and Revision of the Plan

This plan will carry out intermediate and final evaluations of achievement vis-a-vis the overarching target and zone-specific targets shown in “4. Management Targets” five years after initiation and at the end of the planning period, respectively, and make revisions based on the evaluation results.

With regard to the action plans by region, periodical reviews will be conducted every year and revisions will be made as needed, based on the implementation status of activities identified in the action plans for Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island and the results of monitoring of targets and evaluation indicators by action item.

The mechanism for progress management and revision is provided in “6. Implementation Mechanism for Management”.

3. Overview of the Nominated Property

1) Location

The nominated property is located between 24°20' N and 28°19' N, and is part of the Ryukyu Chain comprised of islands scattered in an arc, approximately 1,200 km long, lying between the south end of Kyushu and Taiwan. It consists of four regions: Amami-Oshima Island and Tokunoshima Island in the Amami Island Group, the northern part of Okinawa Island of the Okinawa Island Group, and Iriomote Island in the Sakishima Island Group.
The area of the nominated property is 37,946 ha.

2) General Information

The nominated property comprises four regions, Amami-Oshima Island, Tokunoshima Island, and the northern part of Okinawa Island in the Central Ryukyus and Iriomote Island in the South Ryukyus. The four islands containing the nominated property are members of the Ryukyu Chain at the southern tip of the Japanese Archipelago aligned in an arc shape along the eastern rim of the Eurasian Continent. Influenced by the Kuroshio Current and the Ogasawara High (subtropical high cell) that sits over the west part of north Pacific Ocean, it has a warm and humid subtropical climate and is covered mainly with evergreen broadleaf subtropical rainforests.

Since the separation from the Eurasian Continent, the Ryukyu Chain has been divided into the North Ryukyus, the Central Ryukyus, and the South Ryukyus by deep straits that run between the islands and by the Kuroshio Current. Some neighboring islands became connected and separated repeatedly according to fluctuations in the sea level. These changes in the distribution of land and water provided unique opportunities for speciation and endemism to the terrestrial creatures of the Central and South Ryukyus in which the nominated property is included. Moreover, the terrestrial biotas of the Central and South Ryukyus show different patterns of speciation and endemism stemming from the difference in the distance and timing of separation from the continent. As a result, an exceptionally large number of endemic species and subspecies can be observed in the nominated property.

The nominated property is home to 1,808 vascular plant species (including subspecies, varieties, and hybrids), 22 terrestrial mammal species, 394 bird species, 36 reptile species, 21 amphibian species, 267 inland water fish species, 6,148 insect species and 47 freshwater decapod crustacean species, including 88 threatened species listed on the IUCN Red List (2016). It can be well said that the nominated property provides a home and habitat for many endangered species and endemic species and contains extremely important natural home and habitat for in-situ conservation of biological diversity.

The nominated property is designated by the Ministry of the Environment, the Forestry Agency, and the Agency for Cultural Affairs as belonging to protection zones (national parks, natural monuments, forest ecosystem reserves, and national wildlife protection areas), and conservation of rich biological diversity showing the process of evolution is secured.

3) Natural Environment

(1) Geology and geography

The nominated property is part of the Ryukyu Chain comprised of islands scattered in an arc, about 1,200 km long, lying between the south end of Kyushu and Taiwan. Located at the boundary of the Eurasian Plate and the Philippine Sea Plate, the Ryukyu Chain is thought to have been generated by tectonic deformation associated with the subduction of the Philippine Sea Plate under the Eurasian Plate in Ryukyu Trench that happened sometime after the late Miocene (Machida et al. 2001; Hase 2010). The Tokara Strait and the Kerama Gap divide the

Ryukyu Chain geological structurally and are known to be effective as the boundaries of biogeography as well (Mizutani 2009). From geological, geomorphological, and biogeographical perspectives, the Ryukyu Chain can be divided into three areas: the North Ryukyus, the Central Ryukyus, and the South Ryukyus (Toyama 2014). The nominated property consists of Amami-Oshima Island, Tokunoshima Island, and the northern part of Okinawa Island, which are located in the Central Ryukyus, and Iriomote Island, which is located in the South Ryukyus. In addition, the nominated property belongs to a non-volcanic uplifted area of an outer arc ridge and consists of mountains and hills of relatively high elevation, which indicates the islands were formed in older days.

(2) Climate

The nominated property belongs to subtropical climate, which has hot summers like those in tropical climate and relatively mild winters. Subtropical climate is characterized by the fact that it is controlled by subtropical high-pressure belts and tropical air masses derived from them, roughly covering the area between 20–30°N and 20–30°S. It is further classified into humid climate and dry climate depending on precipitation. Much of the subtropical part of the world is in the mid-latitude dry zone with low precipitation. Its vegetation is mostly dry, including monsoon forest, savanna, steppe, and desert (Shimizu 2014).

The nominated property is located in the subtropical area, but its climate is called subtropical marine climate, which has precipitation of more than 2,000 mm per year, influenced by the warm Kuroshio Current flowing nearby and monsoons. This makes the area a globally rare place where rainforests are found in the subtropical zone.

(3) Vegetation

The dominant natural vegetation of the nominated property is mountainous forests—evergreen broadleaf forests developed in the humid subtropical zone. Trees dominating the upper layer include oaks, Ryukyu Pines (*Pinus luchuensis*) (Pinaceae), and camphor trees (Lauraceae); its vegetation landscape is similar to that of evergreen broadleaf forests in the warm temperate zone north of Yakushima Island (Soba 2011). However, it has diverse tree species, including tree ferns, *Lasianthus japonicus* and related species, some *Ardisia* species growing as tall as semi-tall trees, strangler figs, and palm trees, which are different from those found in forests in the warm temperate zone. On the other hand, the coasts of this area are home to tree species of coastal vegetation in tropical and subtropical regions, including mangroves, Tahitian screwpines (*Pandanus odoratissimus*), tropical almonds (*Terminalia catappa*), Argusia argentea, powder-puff tree (*Barringtonia racemosa*), and *Hernandia nymphaeifolia* (Hotta 1974; Kira 1989).

Mt. Yuwandake (694 m) on Amami-Oshima Island is the highest peak in the nominated property, and Tokunoshima Island has Mt. Inokawadake with an altitude of 644 m. The forests of these mountains that are located at the height of 500–600 m or more constitute cloud belts, where sunlight is limited and air humidity is high (Suzuki 1979; Miyawaki (edit) 1989; Onishi et al. 2012) and *Arisaemato heterocephali-Castanopsietum sieboldii* is found (Suzuki 1979; Miyawaki (edit) 1989). On the slopes located at an altitude of 450 m+ of Mt. Yonahadake (503 m), the highest peak on Okinawa Island, there are cloud forests whose abundant annual precipitation exceeds 3,000 mm, constituting the *Microlepia hookeriana-Castanopsis sieboldii* community (Niino 2015). Near the peak of Mt. Komidake (469.5 m), the highest peak on Iriomote Island, the *Woodwardia harlandii-Pleioblastus linearis* community is found.

As for the vegetation of mountain stream zones where the riverbed and riverbank are periodically flooded, in the northern part of Okinawa Island and Iriomote Island, the *Lindsaea odorata* var. *japonica-Salvia pygmaea* community is known, in which small and short grasses stick to somewhat shaded rocks. At the upstream and midstream of the Sumiyo River in Amami-Oshima Island are communities dominated by *Rhododendron scabrum* on the rocks.

In the nominated property, many rheophytes grow, including *Salvia pygmaea* Matsum, *Solenogyne mikadoi*, *Lysimachia liukiuensis*, and *Viola amamiana*.

(4) Flora

The four regions containing the nominated property[*1] are home to 1,808 indigenous species of vascular plants (including subspecies, varieties, and hybrids; hereinafter the same), consisting of 300 species of ferns and 1,508 species of seed plants (calculated based on Kagoshima University (2012) and Nature Conservation Division, Department of Environmental Affairs, Okinawa Prefecture (2014)). The flora of these regions is considered to have the historical backgrounds and components, including: (1) Ryukyu-indigenous components that have been in existence since before the formation of the islands, (2) Components originated from the southeastern part of the Eurasian Continent, (3) Components of Palearctic origin, (4) Components originated from Malaysia, (5) Components originated from the Pacific Islands, and (6) Components originated from Australia, reflecting their geological history, climate changes in the past, and geographic conditions such as how the islands are positioned relative to ocean currents (Hatsushima 1975). It is believed that the mountain flora of the regions has a high degree of affinity to those of the Eurasian Continent and the main islands of Japan, whereas the flora found in the regions' forest floors, lowlands, and coastal areas are closely related to those found in tropical Asia (Tateishi 1998). Meanwhile, because of their location in a subtropical zone; i.e., in between tropical and temperate zones, the regions are the southern and northern limits of many species (Hotta 2003).

Out of a total of 1,808 species of vascular plants, 185 species (10%) are endemic. In the Central and South Ryukyus, which were an eastern margin of the Eurasian Continent and hence inherited the rich flora of the continent, some of the inherited species have survived only in the regions under isolation (relict endemism) or differentiated into an entirely new endemic species (new endemism) (Hotta 2003). Among the vascular plant species found in the nominated property, 24 species are listed as globally threatened on the IUCN Red List (2016).

*1 "The four regions containing the nominated property" refer to the whole area of Amami-Oshima, Tokunoshima, and Iriomote Islands, and three Yambaru villages in the northern part of Okinawa Island (Kunigami Village, Ogimi Village, and Higashi Village). Each region includes the nominated areas, buffer zone, and surrounding areas.

(5) Fauna

From the biogeographic viewpoint, the Watase Line, which coincides with the Tokara Strait, has been proposed as a boundary between the Palearctic and Indomalaya ecozones for the distribution of mammals, reptiles, and amphibians (Tokuda 1969), while the Hachisuka Line at the Kerama Gap has been proposed as a boundary for the distribution of birds (Yamashina 1955). Thus, from a phylogeographical point of view, the nominated property is located in-between the two areas that retain very different faunas and can be defined as a geographical transition zone (Motokawa 2000; Ota 2000; Takagi 2009).

Out of the 22 species of terrestrial mammals found in the nominated property, 13 species (59%) are endemic, including Amami rabbit (*Pentalagus furnessi*) and Ryukyu long-haired rat (*Diplothrix legata*). When endemic subspecies such as the Iriomote cat (*Prionailurus bengalensis iriomotensis*) are included, there are a total of 23 species and subspecies, of which 18 (78%) are endemic to the nominated property, showing a very high rate of endemic species.

A total of 394 species of birds from 71 families and 22 orders are recorded as inhabiting the four regions containing the nominated property. With those accounting for 62% of all avian species in Japan, a total of 633 species from 81 families and 24 orders, it is fair to say that the nominated property can be described as having a very rich avifauna (calculated based on the Ornithological Society of Japan (2012) and Nature Conservation Division, Department of

Environmental Affairs, Okinawa Prefecture et al. (2015)). Japan has a total of 11 endemic species of birds (Takagi 2007) and five of them inhabit the nominated property.

The nominated property is home to 36 species (38 species and subspecies) of terrestrial reptiles, or 50% of the national total, serving as a major habitat for terrestrial reptiles in Japan. The nominated property is very rich in endemic species of terrestrial reptiles. Out of the total 36 species of terrestrial reptiles distributed in the nominated property, 23 species (64%) are endemic. The nominated property hosts extremely rich endemism with a total of 33 species and subspecies (87%) endemic to the nominated property.

The nominated property is home to 21 species (22 species and subspecies) of amphibians, or 30% of the national total. Amphibians inhabiting the nominated property show extremely high endemism with 18 species (19 species and subspecies) or 86% of the total species being endemic to the nominated property.

A total of 567 indigenous species of fish from 99 families and 25 orders have been recorded as inhabiting the inland waters of the four islands containing the nominated property[*2] (Yoshigo 2014). Among the inland water fish inhabiting the four islands containing the nominated property, six species and subspecies are listed on the IUCN Red List (2016) as globally threatened species.

A total of 6,148 species (6,447 species and subspecies) of insects inhabit the four islands containing the nominated property (calculated based on Azuma et al. (eds.) (2002), excluding species for which the specific island to which the species are distributed is not provided (For example, simply stating the Amami Island Group, the Okinawa Island Group, or the Yaeyama Islands Group, etc.) Therefore, actual numbers of species are greater than that listed above.). Among the insect fauna, the order Coleoptera (beetles) has the largest number of indigenous species totaling 1,924 species (2,122 species and subspecies), followed by the order Lepidoptera (moths and butterflies) at 1,221 species (1,239 species and subspecies), together accounting for roughly half of the total indigenous species. There are some insect groups that are yet to studied taxonomically, while some areas remain unsurveyed and offer only limited information. Thus, the number of insect species in the nominated property is expected to increase as relevant studies make progress.

Among 73 species of inland water decapod crustaceans originated from Japan, the four islands containing the nominated property harbor 47 species of them, accounting for 64% of the national total (calculated based on Kagoshima University (2014)), 15 species or 32% are endemic. In particular, those of the family Potamidae are endemic, which inhabit freshwater and land, are unable to disperse through the sea because their eggs and larvae cannot survive in seawater (Shokita 1996), and thus all of the 10 species (100%) belonging to this family are endemic.

*2 “The four islands containing the nominated property” refer to the whole area of Amami-Oshima, Tokunoshima, Okinawa, and Iriomote Islands including the nominated areas, the buffer zone, and surrounding areas.

(6) Geological History and Speciation of Terrestrial Fauna

The terrestrial biota of the nominated property has two characteristics. The first is the richness of its relict endemic species that have ancestor species once widely distributed across the continent and the mainland of Japan, but which can now be found only on the Ryukyu Chain. Their speciation reflects the nominated property’s geological history of being formed as continental islands. There are also the new endemic species that have further speciated after having been isolated on the Ryukyu Chain. The second charcteristic is the difference in the pattern of endemism between the Central Ryukyus and the South Ryukyus on individual islands or island groups.

It is considered that the terrestrial fauna of the Central Ryukyus became isolated from those of the Eurasian Continent, the North Ryukyus, and the South Ryukyus at least by the Late Miocene (11.63–5.33 Ma) during the course of the transformation of the continent's eastern periphery into a group of islands, and continued to remain in the isolated state (Okamoto 2017). In the fauna of the Central Ryukyus, some species and their closely-related species, which had initially been distributed on the continent and neighbouring areas, gradually became extinct due to the emergence of new predators and competitors and other reasons, making the remaining species endemic to the Central Ryukyus. These species are relict endemic species, in that they do not have any conspecific or congeneric species in the neighboring Northern and South Ryukyus, but only in remote places such as the Eurasian Continent. This relict endemism is particularly evident in flightless terrestrial animals such as the Amami rabbit, Ryukyu long-haired rat, and Namie's frog. In addition, it is considered that climate changes and associated sea surface changes from around the Late Pliocene (3.6-2.58 Ma) to the Pleistocene (2.58–0.012 Ma) caused repeated connections and separations of the neighboring islands, resulting in a divided distribution of organisms and advances in speciation on individual islands which facilitated evolution to relict endemic and new endemic species and subspecies, such as genus *Tokudaia* and genus *Goniurosaurus*.

The terrestrial fauna on the South Ryukyus appear to have been formed after having been isolated from their counterparts in Taiwan and the Eurasian Continent during the Pliocene (5.33–2.58 Ma) after the South Ryukyus was separated from the Central Ryukyus in the Late Miocene (Okamoto 2017). This explains the reason why the South Ryukyus' fauna, which are represented by the Iriomote cat, does not have their relatives on the Central Ryukyus but have very closely-related species and subspecies mostly in Taiwan and the eastern part of the continent (Ota 1998, 2012; etc.).

In addition, new endemic lineages species are observed in all the regions due to advancement of endemism and speciation of common ancestor species, which were distributed from the Central Ryukyus to the South Ryukyus as well as Taiwan and the entire Eurasian Continent, in each region according to separations and isolations of the islands (Okamoto 2017).

(7) Adaptive Evolution of Animals in Island Ecosystems

In the nominated property, the Central and South Ryukyus have certain differences in the existence of high-level predators as a component of the islands' ecosystems.

High-level predators, such as medium- and large-sized carnivorous mammals and large-sized resident raptors, have not existed at all or been absent for a long period of time on Amami-Oshima Island, Tokunoshima Island and northern Okinawa Island of the Central Ryukyus. The biological communities, which contain a number of relict endemic species, have created a unique ecosystem topped by Habu, large-sized snakes, with animals having evolved in an adaptive way to the ecosystem.

On the other hand, Iriomote Island of the South Ryukyus has Iriomote cats, the only carnivore on the nominated property, and they have significantly expanded their habitat environments and feed resources. The scale of the Island's environment is considered to be too small to allow medium-sized carnivores to live for a long period of time, but it is observed that the cats have evolved to adapt to such a small-scale island environment.

4) Social Environment

(1) Economic activities

All of the four regions containing the nominated property have a low percentage of workers in primary industry relating to the use of natural resources. A large percentage of the workers in

the regions engage in the tourism industry. (For sightseeing, refer to (4) below.) In the primary industry, agriculture has the largest share of workers across all the islands.

The percentage of arable land differs among the regions: 2.6% (2,172 ha) for Amami-Oshima Island (including Kakeroma Island, Uke Island, Yoro Island and other surrounding islands), 27.8% (6,882 ha) for Tokunoshima Island, 4.0% (1,371 ha) for the northern part of Okinawa Island, and 2.3% (654 ha) for Iriomote Island.

In the Central and South Ryukyus, firewood has long been used in daily life, and for industry for the production of salt, sugar, dried bonito, etc., with forestry producing timbering, railroad ties, and charcoals for shipment and, more recently, wood chips and construction materials such as structural materials and laminated woods. Castanopsis (*Castanopsis sieboldii*), which characterizes the region's subtropical rainforest, has a great capacity for sprouting and regeneration, and enables to balance forestry with conservation of landscapes and biodiversity and to maintain homes and habitats for endangered species and endemic species.

Forestry was developed primarily in private forests in Amami-Oshima Island and wood chips have been produced since the 1960s, leveraging natural regeneration of evergreen broadleaved trees, which takes place on a 35- to 45-year cycle. The timber production, however, has decreased by one half (about 0.1 million m^3) after peaking (about 0.2 million m^3) in the early 1970s, with no logging conducted on a large scale since the mid-1990s (Yoneda 2016).

Agriculture was active on Tokunoshima Island, where wood chips had been produced between the 1960s and 1970s. However, no industrial forestry is conducted on a large scale today.

In addition to logging and timber production, seedling raising and afforestation were carried out on Okinawa Island. In recent years, harvested and logging areas have decreased to about one-seventieth of those in the postwar years of recovery, and the forest accumulation has increased about threefold compared with that at the time of return to the mainland.

For the most part, forest resources are used in the daily lives of local communities. With no industrial forestry, Iriomote Island remains largely intact with rich natural surroundings (Kagoshima University 2013).

(2) History

The Ryukyu Chain was first populated by mankind in the Paleolithic, or 30,000 years ago, at the latest. The Shell Midden Period apparently started some 6,000 years ago, under the influence of the Jomon culture. The Shell Midden people are considered to have had the ability of using earthenware and ground stones. They seem to have followed a lifestyle similar to that of the Paleolithic Age, sourcing their food from nature, including seafood from coral reefs and plants and animals from the land (Hokama, 1986; Takara, 1993). At least by the middle of the Shell Midden Period (some 3,000 years ago), groups of settlements had been established at many locations of the Ryukyu Chain (Asato and Doi 1999; Hayaishi 2011).

On Okinawa Island, the Ryukyu Kingdom was established in 1429. The Ryukyu Kingdom placed Amami-Oshima Island and Tokunoshima Island under its control by 1447 A.D., and Iriomote Island by 1500 A.D. However, in the 1600s, the Amami Island Group was separated from the Kingdom and belonged to the Satsuma Domain.

From 1944 to 1945, Okinawa Island became a World War II battlefield. After the War, the Amami Island Group and Okinawa Prefecture were placed under the administrative authority of the US military. It was in 1953 when the administrative rights were returned to the Amami Island Group and in 1972 to Okinawa Prefecture (Government of Japan 1996; Oshima Branch Office, Kagoshima Prefecture 2014). The US military bases in Okinawa Prefecture underwent a phased reorganization and consolidation process after the Prefecture's return to Japan.

However, by 2013, only approximately 20% of the area occupied by the US military as of 1972 had been returned. As of March 2013, the US military bases within Okinawa Prefecture cover an area of 23,176.1 ha, which accounts for 10.2% of the prefecture's total land area. In particular, the US military installations in Kunigami Village and Higashi Village, located in the north of Okinawa Island, occupy an area of 4,485.4 ha (23.0% of the village's land) and 3,394.4 ha (41.5% of the village's land), respectively. Much of the areas, or 7,824.2 ha, is used for Camp Gonsalves (also known as Northern Training Area) (Military Base Affairs Division, Executive Office of the Governor, Okinawa Prefecture 2016). After the return of the Amami Island Group and Okinawa Prefecture to Japan, promotion, development, and growth projects were undertaken under special measures acts and plans based thereon, in light of its historical background, the gap with the mainland arising from its geographical and natural constraints, as well as its societal circumstances.

(3) Culture of coexistence between nature and people

The forests of the nominated property include only small areas of pure primeval sub-tropical rainforests, and most of them have been exposed to a certain level of human interference since old times. Still, they provide nurseries and habitats for a number of highly-endemic, rare species of plants and animals. The factors making this possible are local residents' recognition about nature and landscape, which they have fostered, over a long period of time, by making use of natural resources including endemic plants and animals in their daily lives, their way of interacting with nature based on the recognition, and their lifestyle and culture they have developed therefrom and handed over from generation to generation (Environmental Agency, 1999; Kagoshima Prefecture, 2003; Kagoshima University, 2013).

Traditionally, people in the Central and South Ryukyus led their lives in a close relationship with the surrounding nature. Their villages were unable to be separated from the sea and surrounding mountains in the sense that a village served as the basis of villagers' activities. They caught fish and shellfish in the sea in front of the village, washed things and caught Tanaga (a dialect of Tenaga-ebi, or freshwater prawn), cultivated land in the fields and mountains behind the village, and collected firewood and lumber therefrom as a way of living.

People believed that, beyond the sea, there was a paradise where gods lived (called by different names depending on the region, such as Neriya-Kanaya, Nirai Kanai, Ryugu, etc.), and the gods brought fertility and disaster to the people. During the age of the Ryukyu Kingdom, the "Noro" system was established. A Noro (which means a priestess) was in charge of performing rituals, farming rites, and annual events to welcome gods and send them back. Various types of events and performing arts that are presumed to have been created in that era remain as the village's tradition, although they have been affected by the phenomenon of depopulation associated with the ageing of the local population and the declining number of young people. These traditional events and arts constitute a culture that is deeply rooted in the natural environment and is still prevalent.

In addition, religious beliefs have also influenced the structure of villages and formed a sacred space and a space (landscape) of their village as an integral part of the ocean in front of it and mountains behind it. A village's lands have been used rationally for different purposes, divided into the cultivation area, the fuel wood area, the building materials area, and the undeveloped remote headwaters area, which were placed in a concentric circle centered on the village. Such land use is based on a space concept focused on the protection of headwater areas. Taboos and rules were designed to control access to a sacred domain, and created myths about encounters with holy spirits (called by different names depending on the region, such as Kenmun, Kijimunah, Bunagaya, etc.) and gods of mountains, as well as the existence of divine spaces. These myths have been handed down and protected among villagers in a variety of forms.

In this way, on the Central and South Ryukyus, people recognize that all the surrounding mountains, forests, and the sea are part of their sphere of life and this natural environment plays an integral role in their lives.

(4) Tourism

Of the nominated property Amami-Oshima Island, Tokunoshima Island, and Okinawa Island have regular flight and ferry services from the mainland, and also have a road network in place, including highways on Okinawa Island, for traveling from the airport or seaport. In the case of Iriomote Island, there are regular flight and ferry services from the mainland as well as from Okinawa Island to Ishigaki Island, an island located in its vicinity, from where regular ferry service to Iriomote Island is operated.

There is a substantial difference between the Amami Island Group, which contains Amami-Oshima Island and Tokunoshima Island, and Okinawa Prefecture, which contains the northern part of Okinawa Island and Iriomote Island, in terms of circumstances associated with tourism. In the Amami Island Group, the number of inbound visitors and travelers in 2015, including local residents and business travelers, was approximately 760,000 for the island group as a whole, about 420,000 for Amami-Oshima Island, and about 130,000 for Tokunoshima Island (Oshima Branch Office, Kagoshima Prefecture 2016).

Meanwhile, tourism is positioned as a key industry in Okinawa Prefecture, with the number of inbound tourist visitors to the prefecture in 2015 marking an all-time high of approximately 7.76 million (Okinawa Prefecture Tourism Policy Division 2016). There is no accurate statistical data on how many of those tourists visited the northern part of Okinawa Island (three Yambaru villages); it is estimated that approximately 8% of inbound tourists to Okinawa Prefecture (around 600,000 to 700,000) visited the three Yambaru villages in the northern part of Okinawa Island (Okinawa Prefecture Department of Culture, Tourism and Sports 2015). The number of tourists who visited Iriomote Island in 2015 totaled about 390,000 (Taketomi Town Commerce and Tourism Department, 2016).

Although tourism that offers round tours to tourism spots and facilities is the main form in all of the four regions, ecotourism and other forms of tourism characterized by hands-on experience and extended stays that take advantage of their resources, such as abundant nature and indigenous culture, have been promoted in recent years.

* The content of this chapter is based on the content of the recommendation document. For details of the nominated property and the literature, refer to the recommendation document.

4. Management Targets

1) Overarching Target

The management organizations and stakeholders share the common goal of maintaining and strengthening the Outstanding Universal Value quoted below from the nomination dossier in delivering the conservation and management of the nominated property, the buffer zone, and their surrounding area.

○ Criterion (ix) Ecosystems
The Central Ryukyus and the South Ryukyus where the nominated property is located were once part of a continent and thus had common terrestrial wildlife with the continent. But as the islands have been repeatedly separated and combined due to separations from the continent and changes in straits and the sea surface, species have differentiated, generating endemism in many different evolutionary lineages in the process of formation of small island chains. The nominated property consists of four regions representing the Central Ryukyus and the South Ryukyus. By combining the four regions, the nominated property is an outstanding example of ecosystems that clearly demonstrates the unique processes of speciation and phylogenetic diversity in continental islands reflecting their history.

○ Criterion (x) Biodiversity
The nominated property provides habitats for terrestrial flora and fauna, including 86 endangered species (of which 70 are endemic) listed in the IUCN Red List (2016) such as the Iriomote cat (CR), the Okinawa woodpecker (CR), the Amami rabbit (EN), the Okinawa rail (EN), and Anderson's crocodile newt (EN). Also, many relict endemic species and new endemic species reflecting their history have been observed, showing that the property contains extraordinarily important natural habitats for in-situ conservation of biological diversity from a global perspective.

2) Zone-Specific Targets

(1) Nominated property
The Outstanding Universal Value of the property is to be maintained in the natural condition by minimizing human intervention, keeping a careful watch on changes due to natural processes, and taking necessary measures to protect and recover endangered species and also to address alien species issues.

(2) Buffer zone
Buffering functions that contribute to maintaining the Outstanding Universal Value of the property are to be maintained by ensuring coexistence with human activities such as tourism, agriculture, and forestry and taking necessary complementary measures for the conservation and management of the nominated property to protect and recover endangered species and also to address alien species.

(3) Surrounding area
Measures are taken to enable local communities to share understanding about the Outstanding Universal Value of the property to remove and reduce threats affecting the component parts and thereby avoid the loss of the Outstanding Universal Value by means of sustainable use. In addition, participation and collaboration of local communities in these activities are to be promoted to strike a balance between the conservation of local biodiversity and the sustainable development of local communities.

3) Special Management Perspectives

It is a characteristic of the area covered by this plan that the environment inhabited by endemic species, endangered species, etc. which are constituent elements of the Outstanding Universal Value exists extremely close, or in some cases even partially overlaps, with places of local people's life and livelihoods. Cultures and livelihoods that harness natural resources have been nurtured in this area and the Outstanding Universal Value has been maintained therein. In light of this, stakeholders share the correct understanding of this Outstanding Universal Value and the history of coexistence between nature and humankind. Also, maintaining the exceptional natural environment of the nominated property and passing them on to future generations through coexistence between nature and humankind are to be shared as a common target.

Also, human resource development, public awareness, and information sharing and utilization are to be promoted in local communities in order to strengthen relationship between management organizations and local communities. The use of natural resources within the buffer zone and the surrounding area is to be made in a sustainable manner without damaging the Outstanding Universal Value of the nominated property and in a manner compatible with the promotion of local livelihoods.

Furthermore, in the buffer zone and the surrounding area that are particularly adjacent to the nominated property or located between component parts of the nominated property, efforts are to be made to ensure the continuity of ecosystems that support the maintenance of the Outstanding Universal Value and to strengthen the buffering functions through restoration and regeneration of the natural environment and establishment of ecological corridors in coordination and cooperation with local people.

5. Basic Management Policies

The management organizations and stakeholders work actively in coordination and cooperation to deliver conservation and management that meet the aforementioned objectives in accordance with the basic management policies shown below and the action plans by region, which have been prepared separately under this plan.

1) Proper Enforcement of Protective Legal Instruments

Protective legal instruments such as national parks and forest ecosystem reserves established pursuant to national laws and ordinances will be properly utilized with a view to ensuring the survival of relict endemic species, new endemic species, endangered species, and their important habitats, which account for the Outstanding Universal Value of the nominated property, into the future. It is also intended to soundly protect them from the impacts of humankind, such as development activities that have potential impact on the Outstanding Universal Value of this property.

(1) National Park

"National parks" are designated by the Minister of the Environment and managed pursuant to the Natural Parks Act with the objective of protecting excellent scenic areas and promoting their utilization, thereby contributing to the health, recreation, and cultural edification of the citizens as well as the safeguarding of wildlife diversity.

Pursuant to this law, the legal procedures for designating Amami-Oshima Island and Tokunoshima Island as The Amami Gunto National Park (provisional name) have been taken, and in September 2016 the northern part of Okinawa Island was designated as Yambaru National Park. Iriomote Island had already been designated as Iriomote National Park in 1972, but its revisions and expansions were made in FY2003, FY2007, and FY2011 and the name has been changed correspondingly to Iriomote-Ishigaki National Park. Following this, its area was further expanded to encompass almost the entire island in April 2016.

The "special protection zone" and "class I special zone" within these national parks are subject to particularly strict restrictions on human activities. The "class II special zone" is subject to certain restrictions on human activities while coordination is made with local agriculture and forestry.

(2) Forest Ecosystem Reserve

"Forest ecosystem reserves" are designed to contribute to maintaining the natural environment comprised of forest ecosystems, protecting wildlife, protecting genetic resources, developing forest operation and management technologies, and promoting scientific research by protecting and managing primeval natural forests representative of Japan's climatic zones and forest zones. These forest ecosystem reserves are established and managed by the Regional Administration and Management Plan specified by the Forestry Agency under the Law on the Administration and Management of National Forests.

Based on this system, the Amami Islands Forest Ecosystem Reserve was established on Amami-Oshima Island and Tokunoshima Island in 2013 and the Iriomote Forest Ecosystem Reserve was established on Iriomote Island in 1991. Following these expansions in FY2012, further expansion was made in FY2015.

Within the forest ecosystem reserves, the "preservation zone" is an area to be left to natural succession without human interventions in principle. The "conservation and utilization zone" is an area that plays a role as a buffer for the preservation zone and control measures

equivalent to those in the preservation zone are applied. Within the forest ecosystem reserves, activities such as academic research and nature observation education can be permitted.

(3) Wildlife Protection Area

"National wildlife protection areas" are designated by the Minister of the Environment pursuant to the Wildlife Protection, Control, and Hunting Management Act from among those areas that are recognized as important for international or national wildlife protection. "Prefectural wildlife protection areas" are designated by prefectural governors from among those areas that are recognized as important for the protection of local wildlife pursuant to this same law. Hunting is prohibited in both national and prefectural wildlife protection areas. Also, places where efforts to protect wildlife or habitats are particularly needed are designated as the "special protection zone" in which certain development activities are restricted.

National wildlife protection areas were designated on Amami-Oshima Island in 1965, i.e. the Mt. Yuwandake National Wildlife Protection Area as habitats for rare wildlife species such as the Amami rabbit, the Amami woodcock, the Amami thrush, and the Amami woodpecker, and in three villages in the northern part of Okinawa Island in 2009, i.e. the Yambaru (Ada) National Wildlife Protection Area and the Yambaru (Aha) National Wildlife Protection Area as habitats for rare wildlife species such as the Okinawa woodpecker, the Okinawa rail, and the Ryukyu robin, and on Iriomote Island in 1992, i.e. the Iriomote National Wildlife Protection Area as habitats for rare wildlife species such as the Iriomote cat and the crested serpent eagle. Prefectural wildlife protection areas have been designated at 17 areas on Amami-Oshima Island, 3 areas on Tokunoshima Island in Kagoshima Prefecture, and 4 areas in the northern part of Okinawa Island in Okinawa Prefecture.

Table 1. List of prefectural wildlife protection areas in Kagoshima Prefecture

Name	Location	Area (ha)	Effective period
Naze Elementary School Prefectural Wildlife Protection Area	Amami City	3	Nov. 1, 2007–Oct. 31, 2017
Kasarizaki Prefectural Wildlife Protection Area	Amami City	425	Nov. 1, 2007–Oct. 31, 2017
Kinsakubaru Prefectural Wildlife Protection Area	Amami City	297	Nov. 1, 2007–Oct. 31, 2017
Mt. Kanengo Prefectural Wildlife Protection Area	Amami City	158	Nov. 1, 2008–Oct. 31, 2018
Akazaki Prefectural Wildlife Protection Area	Amami City	156	Nov. 1, 2009–Oct. 31, 2019
Yamato Elementary and Junior High School Prefectural Wildlife Protection Area	Yamato Village	3	Nov. 1, 2009–Oct. 31, 2019
Gamozaki Prefectural Wildlife Protection Area	Amami City	45	Nov. 1, 2009–Oct. 31, 2019
Mt. Rankan Prefectural Wildlife Protection Area	Amami City	1	Nov. 1, 2009–Oct. 31, 2019
Mt. Ogami Prefectural Wildlife Protection Area	Amami City	11	Nov. 1, 2009–Oct. 31, 2019
Sekko Elementary and Junior High School Prefectural Wildlife Protection Area	Setouchi Town	3	Nov. 1, 2010–Oct. 31, 2020
Inutabu Prefectural Wildlife	Isen Town	1,150	Nov. 1, 2010–Oct. 31, 2020

Name	Location	Area (ha)	Effective period
Protection Area			
Ose Coast Prefectural Wildlife Protection Area	Amami City	172	Nov. 1, 2010–Oct. 31, 2020
Kaminomine Elementary School Prefectural Wildlife Protection Area	Tokunoshima Town	3	Nov. 1, 2011–Oct. 31, 2021
Nagakumo Toge Prefectural Wildlife Protection Area	Tatsugo Town	35	Nov. 1, 2013–Oct. 31, 2023
Hatsuno Prefectural Wildlife Protection Area	Setouchi Town	302	Nov. 1, 2014–Oct. 31, 2024
Sumiyou Prefectural Wildlife Protection Area	Amami City	378	Nov. 1, 2014–Oct. 31, 2024
Uchiumi Park Prefectural Wildlife Protection Area	Amami City	71	Nov. 1, 2014–Oct. 31, 2024
Yanma Prefectural Wildlife Protection Area	Amami City	73	Nov. 1, 2015–Oct. 31, 2025
Honohoshi Prefectural Wildlife Protection Area	Setouchi Town	326	Nov. 1, 2015–Oct. 31, 2025
Boma Prefectural Wildlife Protection Area	Tokunoshima Town	310	Nov. 1, 2016–Oct. 31, 2026

Table 2. List of prefectural wildlife protection areas in Okinawa Prefecture

Name	Location	Area (ha)	Effective period
Taiho Prefectural Wildlife Protection Area	Ogimi Village	240	Nov. 1, 2004–Oct. 31, 2024
Mt. Nishimedake Prefectural Wildlife Protection Area (including the special protection zones)	Kunigami Village	84	Nov. 1, 2015–Oct. 31, 2035
Sate Prefectural Wildlife Protection Area (including the special protection zones)	Kunigami Village	158	Nov. 1, 2015–Oct. 31, 2035
Mt. Yonahadake Prefectural Wildlife Protection Area (including the special protection zones)	Kunigami Village	666	Nov. 1, 2015–Oct. 31, 2035

(4) Natural Monuments

Natural monuments are designated by the Minister of Education, Culture, Sports, Science and Technology based on the Law for the Protection of Cultural Properties to protect animals and plants (including their habitats, breeding sites, stopover sites for migratory birds, and native habitats) and geological features and minerals (including areas of unique natural phenomenon) which have significant scientific value for the country. Furthermore, the board of education of each prefecture can similarly designate prefectural natural monuments pursuant to the Kagoshima Prefectural Ordinance on the Protection of Cultural Properties and the Okinawa Prefectural Ordinance on the Protection of Cultural Properties.

Pursuant to this law, 30 national natural monuments have been designated and 22 prefectural natural monuments have been designated in the four regions that constitute the nominated property.

Any acts that would alter the existing state of these natural monuments or affect their preservation require prior permission from the Commissioner for Cultural Affairs or the prefectural board of education, as they are legally protected.

Table 3. List of national natural monuments in the four regions where the component parts of the nominated property is located

Name	Category	Location	Designation date (designation as special natural monument)
Amami rabbit	Special natural monuments	Amami-Oshima Island, Tokunoshima Island	March 3, 1921 (July 4, 1963)
Okinawa woodpecker	Special natural monuments	Northern part of Okinawa Island	May 15, 1972 (March 15, 1977)
Iriomote cat	Special natural monuments	Iriomote Island	May 15, 1972 (March 15, 1977)
Crested serpent eagle	Special natural monuments	Iriomote Island	May 15, 1972 (March 15, 1977)
Ryukyu robin	Natural monuments	Amami-Oshima Island, Tokunoshima Island, Northern part of Okinawa Island, Iriomote Island	January 23, 1970
Land hermit crab	Natural monuments	Amami-Oshima Island, Tokunoshima Island, Northern part of Okinawa Island, Iriomote Island	November 12, 1970
Wood pigeon	Natural monuments	Amami-Oshima Island, Tokunoshima Island, Northern part of Okinawa Island, Iriomote Island	May 19, 1971
Amami Jay	Natural monuments	Amami-Oshima Island	March 3, 1921
Amami Woodpecker	Natural monuments	Amami-Oshima Island	May 19, 1971
Amami thrush	Natural monuments	Amami-Oshima Island	May 19, 1971
Kamiya and Mt. Yuwandake Natural Monument Protection Area	Natural monuments	Amami-Oshima Island	November 8, 1968
Yamatohama's *Quercus miyagii* forest	Natural monuments	Amami-Oshima Island	March 28, 2008
Tokunoshima Myogan-no-mori	Natural monuments	Tokunoshima Island	March 27, 2013
Ryukyu long-haired rat	Natural monuments	Amami-Oshima Island, Tokunoshima Island, Northern part of Okinawa Island	May 15, 1972

Name	Category	Location	Designation date (designation as special natural monument)
Spiny rat	Natural monuments	Amami-Oshima Island, Tokunoshima Island, Northern part of Okinawa Island	May 15, 1972
Ryukyu black-breasted leaf turtle	Natural monuments	Northern part of Okinawa Island	June 26, 1975
Okinawa rail	Natural monuments	Northern part of Okinawa Island	December 18, 1982
Yanbaru long-armed scarab beetle	Natural monuments	Northern part of Okinawa Island	May 14, 1985
Mt. Yonahadake Natural Monument Protection Area	Natural monuments	Northern part of Okinawa Island	May 15, 1972
Aha Tanagagumui plant communities	Natural monuments	Northern part of Okinawa Island	May 15, 1972
Taminatoutaki plant communities	Natural monuments	Northern part of Okinawa Island	May 15, 1972
Gesashi Bay's mangrove	Natural monuments	Northern part of Okinawa Island	May 15, 1972
Yellow-marginated box turtle	Natural monuments	Iriomote Island	May 15, 1972
Ryukyu emerald dove	Natural monuments	Iriomote Island	May 15, 1972
Kishinoue's giant skink	Natural monuments	Iriomote Island	June 26, 1975
Funaura nipa palm communities	Natural monuments	Iriomote Island	May 15, 1972
Satakentia liukiuensis community at Ubundoru	Natural monuments	Iriomote Island	May 15, 1972
Hoshidate Natural Monument Protection Area	Natural monuments	Iriomote Island	May 15, 1972
Nakama River Natural Monument Protection Area	Natural monuments	Iriomote Island	May 15, 1972
Heritiera littoralis community at Komi	Natural monuments	Iriomote Island	March 22, 1978

Table 4. List of prefectural natural monuments in the four regions where the component parts of the nominated property is located

Name	Prefecture	Location	Designation date
Anderson's crocodile newt	Kagoshima	Amami-Oshima Island, Tokunoshima Island	April 22, 2003
Okinawa Ishikawa's frog	Kagoshima	Amami-Oshima Island	April 22, 2003
Banded ground gecko	Kagoshima	Tokunoshima Island	April 22, 2003

Name	Prefecture	Location	Designation date
Otton frog	Kagoshima	Amami-Oshima Island,	April 19, 2005
Amami tip-nosed frog	Kagoshima	Amami-Oshima Island, Tokunoshima Island	April 19, 2011
Uke Island's Uke lily habitats	Kagoshima	Amami-Oshima Island	April 22, 2008
Inutabu Coast's melange sediments	Kagoshima	Tokunoshima Island	April 21, 2009
Great nawab	Okinawa	Northern part of Okinawa Island	August 26, 1969
Orange oakleaf	Okinawa	Northern part of Okinawa Island, Iriomote Island	August 26, 1969
Anderson's crocodile newt	Okinawa	Northern part of Okinawa Island	November 9, 1978
Kuroiwa's grounded gecko (including spotted ground gecko)	Okinawa	Northern part of Okinawa Island	November 9, 1978
Holst's frog	Okinawa	Northern part of Okinawa Island	March 29, 1985
Namie's frog	Okinawa	Northern part of Okinawa Island	March 29, 1985
Okinawa Ishikawa's frog	Okinawa	Northern part of Okinawa Island	March 29, 1985
Amami woodcock	Okinawa	Northern part of Okinawa Island	February 4, 1994
Aha looking-glass tree	Okinawa	Northern part of Okinawa Island	December 16, 1959
Ogimiutaki fountain palm communities	Okinawa	Northern part of Okinawa Island	February 22, 1974
Kijoka Itashiki Coast's beach rock	Okinawa	Northern part of Okinawa Island	February 22, 1974
Hiji Kodama Forest plant communities	Okinawa	Northern part of Okinawa Island	April 2, 1991
Asahina's skipper	Okinawa	Iriomote Island	April 1, 1978
Atlas moth	Okinawa	Iriomote Island	March 29, 1985
Funauki Yaeyama roundleaf chastetree	Okinawa	Iriomote Island	December 16, 1959

2) Protection and Recovery of Endangered Species

(1) Survey and Research on Endangered Species

A large number of surveys and a great deal of research have been carried out by relevant government organizations, many other researchers, NPOs, etc. on relict endemic species, other endemic species, and threatened and other endangered species which constitute the Outstanding Universal Value of the nominated property. Scientific knowledge that contributes to the conservation of species is to be accumulated on a continuous basis.

(2) Promotion of the Protection and Recovery of Endangered Species of Wild Fauna and Flora

As a general rule, capturing, collecting, killing, damaging, or transferring national endangered species designated pursuant to the Act on Conservation of Endangered Species of Wild Fauna and Flora is legally prohibited. The nominated property has 31 animal species and 23 plant species that are designated as the national endangered species of wild fauna and flora. In addition, a number of efforts have been made and will continue to be promoted with regard to species considered particularly necessary based on the plans developed for the protection and recovery program. These include determining the inhabitation status of each respective species on a continuous basis, maintaining and improving the living environments in habitats, captive breeding and returning animals to the wild, monitoring habitats, raising public awareness, and ensuring coordination with related organizations.

The Kagoshima Prefectural Ordinance to Protect Endangered Wild Fauna and Flora was enacted for the Amami Island Group, which contains Amami-Oshima Island and Tokunoshima Island of the nominated property. It prohibits the capturing, collecting, and so forth of 7 animal species and 15 plant species. Also, the Ordinances to Protect Endangered Wild Fauna and Flora have been enacted commonly for five municipalities on Amami-Oshima Island and for three towns on Tokunoshima Island, respectively. They ban the capturing, collecting, and so forth of 22 animal species and 35 plant species on Amami-Oshima Island and five animal species and 26 plant species on Tokunoshima Island. Moreover, on-going efforts are being made by Okinawa Prefecture, three village governemnts in the northern part of Okinawa Island, and Taketomi Town, where Iriomote Island is located, toward the enactment of ordinances and other regulations that provide similar protection for endangered species of wild fauna and flora.

The management organizations will continue to promote measures concerning the protection and recovery of endangered species of wild fauna and flora in coordination based on the relevant laws, ordinances, etc.

(3) Prevention of Traffic Accidents and Other Incidents Involving Endangered Species

In the nominated property and its surrounding area, traffic accidents occur that involve endemic species and endangered species such as the Amami rabbit, Ryukyu long-haired rat, Okinawa rail, Iriomote cat, and crested serpent eagle. In addition, there are incidents of the chicks of the Okinawa rail or small animals such as the Anderson’s crocodile newt, Ryukyu black-breasted leaf turtle, and the Chinese box turtle falling into roadside ditches.

Therefore, in the four regions, active efforts have been made in coordination and cooperation with related local organizations to urge drivers to stay alert and to raise public awareness for the protection of endangered species. In the future, further efforts will be made in coordination and cooperation with local residents and tourism businesses.

Also, to prevent the impact of traffic accidents involving endangered species mainly in the northern part of Okinawa Island and on Iriomote Island, where roadkills of endangered species have been an issue conventionally, effective countermeasures to address traffic accidents have been considered and implemented, studying the ecological characteristics and the inhabitation status of protected endangered species, causes of traffic accidents, and road structures of sections where accidents frequently occur. In the future, similar measures will be taken for Amami-Oshima Island and Tokunoshima Island as well. In so doing, impact of such measures on the inhabitation status of other endangered species will be taken into consideration.

(4) Prevention of the Poaching and Illegal Collection of Endangered Species

The nominated property provides habitats for many endemic species that are only distributed in this region, which have differentiated into species and subspecies varying from island to

island. This used to attract collectors but, in recent years, the protection of plants and animals has been in place based on laws and ordinances, restricting collection of endangered species through designation as national endangered species of wild fauna and flora in accordance with the Endangered Species Act.

In addition, patrols will be continuously carried out to prevent the poaching and illegal collection of endangered species through coordination and cooperation of the management organizations, related local organizations, NPOs, local residents, and others.

Furthermore, information on endangered species for which poaching and collecting are prohibited by related laws, ordinances, etc. will be broadly disseminated to local residents and visitors to further implement activities to obtain their understanding and cooperation for the protection of endangered species.

3) Elimination and Reduction of Impact of Alien Species

(1) Monitoring, Prevention, and Emergency Responses to Address the Introduction of Invasive Alien Species

Some invasive alien species either pose direct threats to native ecosystems by preying on endangered species and other native species or pose or may pose indirect threats to habitats of endangered species and other native species by disrupting inter-specific balance, causing genetic disturbance, or carrying with them pathogens and parasites. Therefore, it is important to prevent the invasion of such invasive alien species before it happens.

Invasive alien species that cause or are likely to cause damage to native ecosystems are categorized as "specified invasive alien species" pursuant to the Act on the Prevention of Adverse Ecological Impacts Caused by Specified Invasive Alien Species and it is prohibited to carry, release, or plant them. However, the risk of unintentional introduction and dispersion is still present. Therefore, management organizations will continue to work to curb the introduction, establishment, and dispersion of invasive alien species by enforcing the existing laws and regulations properly, raising awareness to ensure compliance, and calling on individual stakeholders to take action to prevent unintentional introduction.

The management organizations will perform surveillance and monitoring on the status of introduction, with a particular attention to places which could potentially serve as routes of invasive alien species making incursions into the regions to be protected by this plan and other places where they may establish themselves in an effort to prevent introduction before it happens. In the event that it is affirmed that invasion has occurred, a mechanism is to be set up to take effective control measures immediately. Also, information will be provided to local residents, tourists, businesses, and other stakeholders on a continuous basis about the threats of alien species and also about preventive measures.

Local residents, tourists, businesses, and other stakeholders are to be informed about the threats that alien species pose to the natural environment and actions are to be taken to prevent their invasion to ensure that the aforementioned stakeholders do not introduce these species to the regions covered by this plan whether it is intentional or unintentional.

The management organizations continue to work to curb the introduction, establishment, and dispersion of invasive alien species through proper enforcement of the existing laws and ordinances and by calling on various players to act to prevent unintentional introduction.

(2) Systematic Promotion of Control Projects to Address Existing Invasive Alien Species

From among the invasive alien species that have been confirmed to have already made entry and are established in the regions covered by this plan, the small Indian mongoose has been

designated as a specified invasive alien species pursuant to the Act on the Prevention of Adverse Ecological Impacts Caused by Specified Invasive Alien Species, having been established on Amami-Oshima Island and the northern part of Okinawa Island. Control projects to address this species are being implemented, as they have had particularly significant impact on the ecosystem. To date, their habitat density has fallen substantially and their habitat area has shrinked as well.

The Phase II Mongoose Control Plan has been developed for both Amami-Oshima Island and the northern part of Okinawa Island, with the goal of completely eradicating the invasive species by FY2022. Control projects will be implemented on a continuous basis as a priority in accordance with the plan.

As for invasive alien species other than the small Indian mongoose that have already made entry, control measures are to be taken as a priority to address alien species for which necessity, urgency, and effectiveness of control measures are judged to be high in consideration of the potential impact on the Outstanding Universal Value of the nominated property, the degree of invasiveness, the inhabitation status of endangered species at and around the invaded area, the technical viability of the control techniques, etc.

(3) Elimination and Reduction of Impact of Cats and Dogs

It has been confirmed that cats and dogs prey on endangered species within the regions covered by this plan. Moreover, there are concerns over the transmission of feline immunodeficiency virus (FIV) from ordinary cats (*Felis silvestris catus*) on Iriomote Island to the Iriomote cat (*Prionailurus bengalensis iriomotensis*). Therefore, it is important to eliminate and mitigate the impact of cats and dogs to protect endangered species.

For this purpose, it is important to carry out upstream countermeasures for cats and dogs. Regarding cats and dogs, owners' responsibilities are specified under the Act on Welfare and Management of Animals and the Rabies Prevention Act. More specifically, five municipalities on Amami-Oshima Island and three towns on Tokunoshima Island have enacted the Ordinance on the Proper Keeping and Management of Pet Cats, three villages in the northern part of Okinawa Island have enacted the Ordinance on Cat Welfare and Management, and Taketomi Town, which has jurisdiction over Iriomote Island, enacted the Ordinance on the Keeping of Cats. Other actions are also implemented, including the registration and microchipping of pet cats, requirement for keeping pet cats indoors, and ban on abandoning pet cats. In addition, Kagoshima Prefecture has stipulated owners' obligation to keep pet dogs leashed, capture of unleashed dogs, and other matters under the Ordinance on Welfare and Management of Animals, and Amami City in Amami-Oshima Island, three villages in the northern part of Okinawa Island, and Taketomi Town where Iriomote Island is located have enacted ordinances on pet dogs, setting out similar provisions to those of Kagoshima Prefecture. The management organizations will continue to promote public awareness raising to improve the understanding and awareness of the local residents about these ordinances and work for proper enforcement.

Also, the ongoing coordination and cooperation among relevant government organizations, NPOs, etc. in exploring and implementing various measures are to be further promoted, including collection and sharing of information about cats and dogs within the habitats for endangered species (forests), the capturing, eliminating, or transferring of them to new owners, and the promotion of proper pet-keeping practices (registration obligation under the ordinance, recommendation of sterilization and indoor raising, and prohibition on abandonment).

(4) Prevention of Impact on Ecosystems of Animals and Plants Bred or Raised by Humans

Since many endemic species exist within the nominated property, it is anticipated with concern that, if related species of the mainland, native species of other islands within the

Central Ryukyus and South Ryukyus groups (alien species from within Japan), or groups of the same species or subspecies with different genetic characters are brought in, disturbance might happen because of hybridization.

Continuous efforts will be made to collect relevant information, enhance local people's awareness and understanding, and secure the mechanism for cooperation to prevent the intentional introduction of the aforementioned related species into the regions covered by this plan and thoroughly manage animals that have been bred and raised by humans (preventing their release, etc.), with a view to mitigating the risk of genetic disturbance due to hybridization between native species and related species.

4) Harmony with Livelihoods in the Buffer Zone and Surrounding Area

The forests existing in the regions covered by this plan have historically been used by people as part of their daily life and livelihoods since old times and have continued to supply necessary timber locally and also to outside the region. Also, there are some species existing in the region that have been using smartly the environment that has been maintained through a moderate level of human disturbance. In this region, an outstanding natural environment that boasts of rich biodiversity has been maintained to the present on the strength of high resilience that forests have, although exposed to human impact.

In light of this, a sustainable use of forest resources in the buffer zone and surrounding area is to be made, keeping in mind the restorative power of forests and giving due consideration to ensuring that the value of the Natural World Heritage property should not be affected by means of the relevant laws and ordinances as well as customary rules and methods, including the Natural Park Act. Furthermore, in consideration of the fact that, on Iriomote Island, the Iriomote cat uses arable land as habitat, the inhabitation status of important wildlife species will be determined. Based on this, studies and research are to be promoted to examine the necessary levels and ways of human involvement for maintaining biodiversity.

5) Proper Use and Ecotourism

(1) Strategic Promotion of Sustainable Tourism, Including Ecotourism

Tourism provides an opportunity to deepen understanding of the heritage value. On the other hand, the disorderly growth of tourism industry and excessive use are factors that could potentially affect the heritage value and lower visitors' expectations and satisfaction.

Local stakeholders, tourism business operators, and others strategically promote sustainable tourism, understanding that it is the heritage value that makes the region attractive and paying attention to its conservation at all times.

Mainly in the buffer zone and surrounding area, an appropriate capacity for receiving a large number of people in mass tourism is to be built up and the possibility of installing facilities to make interpretation of the attractiveness of the nominated property is also to be considered. Since raising people's awareness not only about the natural environment but also about a culture of co-existence between nature and people contributes to the sustainable development of local society as well as deep understanding of the heritage value, tourism combined with village walking, historical culture experience, and local products will be actively promoted.

In the nominated property area, a nature-experience type of tourism will also be promoted by using rich nature and native culture, including ecotourism under the rules of proper use. Artificial changes to nature will be limited to a minimal level to reduce the environmental burden of human use.

(2) Proper Enforcement of Use Control

To achieve sustainable tourism without compromising the conservation of the heritage value, appropriate use control measures will be taken, as needed, based on the sufficient knowledge of the characteristics of the attributes to be conserved, their changes, actual use, and situation relative to carrying capacity.

In introducing use control measures, a mechanism for cooperation and coordination is to be set up, building a consensus among management organizations, tourism business operators, local residents, and NPOs, and awareness raising is to be actively carried out to earn the understanding and cooperation of visitors. Once the control measures have been introduced, impacts on the natural environment and local society and economy are to be monitored and periodical evaluation is to be made.

(3) Awareness Raising Through Ecotour Guides etc.

Tourism business operators will promote initiatives such as human resource development for guides and the adoption of a system for certification and registration of excellent guides with a view to improving their skills including sufficient knowledge, information, and communication related to the heritage value and safety management.

Furthermore, recognizing that it is important to deepen the understanding of visitors about the heritage value for effective conservation, ecotour guides etc. provide effective explanation to visitors about the Outstanding Universal Value of the property and how individual component parts contribute to it and provide them with opportunities to perceive it in reality. Also, on the correct understanding about the history and culture of coexistence between nature and people, which is a product of a long history of local people making sustainable use of natural resources, including endemic plants and animals, interpretation is to be provided to visitors about this as one of the unique local resources.

6) Conservation and Management with the Participation and Collaboration of Local Communities

(1) Integration of Effective Environmental Consideration into Development Projects

In addition to the national Environmental Impact Assessment Act, prefectural ordinances concerning environmental impact assessments have been enacted for both Kagoshima Prefecture and Okinawa Prefecture. Mechanisms for the implementation of appropriate environmental conservation measures have also been established.

Even for relatively small development activities that are not controlled under the Environmental Impact Assessment Act or the ordinances concerning environmental impact assessments of the two prefectures, appropriate environmental consideration is to be ensured not to affect the Outstanding Universal Value as a Natural World Heritage property.

(2) Implementation of Conservation Activities in Collaboration with Local Communities

Various conservation activities have already been implemented in the regions covered by this plan through collaboration between the management organizations and local residents, related local organizations, NPOs, etc., including patrols to prevent poaching, illegal collection, and traffic accidents of endangered species and voluntary rules to reduce tourism pressures, etc.

As work to be implemented from now on, the Regional Liaison Committee, Sub-local Meetings, and other frameworks will be mobilized to further encourage voluntary activities of local communities for conservation and management and to strengthen the protection of endangered species, control of alien species, and monitoring of illegal activities through collaboration between governmental organizations and local communities.

Also, in the buffer zone and surrounding area, measures are to be promoted in cooperation with local communities to restore ecosystems as part of the heritage value, to improve, restore, and create habitats, and to reduce environmental load.

(3) Awareness Raising and Educational Activities

Each of the regions covered by this plan has its own culture of coexistence with nature. The nature in each region has been maintained up to the present through wisdom and practices of making sustainable use of nature's blessings.

It is extremely effective in promoting the participation and cooperation of local communities to ensure that local people understand that these exceptional local cultures contribute to the conservation of the value as a Natural World Heritage property and entertain enhanced interest in and awareness about the Natural World Heritage. Therefore, awareness raising and educational activities will be continued to raise awareness for the conservation of the value as a Natural World Heritage property and to foster understanding about exceptional local cultures.

7) Proper Monitoring and Utilization of Information

(1) Monitoring of Projects Related to Conservation and Management

To make adaptive management of the regions covered by this plan based on scientific knowledge, the management organizations obtain the necessary baseline data in cooperation with relevant government organizations, other stakeholders, and researchers before various measures for conservation and management are implemented and monitor changes in the natural environment properly during the implementation. Also, information obtained as a result is utilized to revise this plan and action plans by region and to develop subsequent actions.

Specific monitoring items are to be determined as indicators to manage the progress of individual action items that are set out in the action plans by region and are to be recorded by individual project undertakers. However, where proper monitoring techniques and indicators are not yet established, the development of a new monitoring technique is to be considered under the action item in question.

(2) Implementation of Study, Research, and Long-term Monitoring

Implementation of the adaptive conservation and management of the regions covered by this plan is not possible without basic study on the ecology of individual plants and animals and long-term monitoring to detect forest changes. Research and study are to be promoted through coordination between researchers and the management organizations.

For long-term monitoring, the results of the existing surveys by various organizations will be fully utilized, including 1000 monitoring sites (Ministry of the Environment) and the basic inventorying survey to quantitfy forest resources (Forestry Agency).

(3) Promotion of Information Sharing and Utilization

The management organizations and researchers will be encouraged to share the results of long-term monitoring surveys as well as information, knowledge, and technology which have been obtained from the results not only of conservation and management monitoring but also of other surveys and research. These results will also be used effectively in the conservation and management of the regions covered by this plan. For this purpose, information will be extensively collected and accumulated and an integrated system of management and disclosure will be secured by official web page etc.

6. Implementation Mechanism for Management

1) Structure for Coordination among Stakeholders

For proper conservation and management of the regions covered in this plan, it is necessary to make a unified effort through close coordination and cooperation of the management organizations. For this reason, the Regional Liaison Committee is established as the forum for liaison and coordination among the management organizations. The Regional Liaison Committee builds a consensus, ensures coordination, and checks the progress of implementation on the preparation and revision of the comprehensive management plan that covers the entire regions.

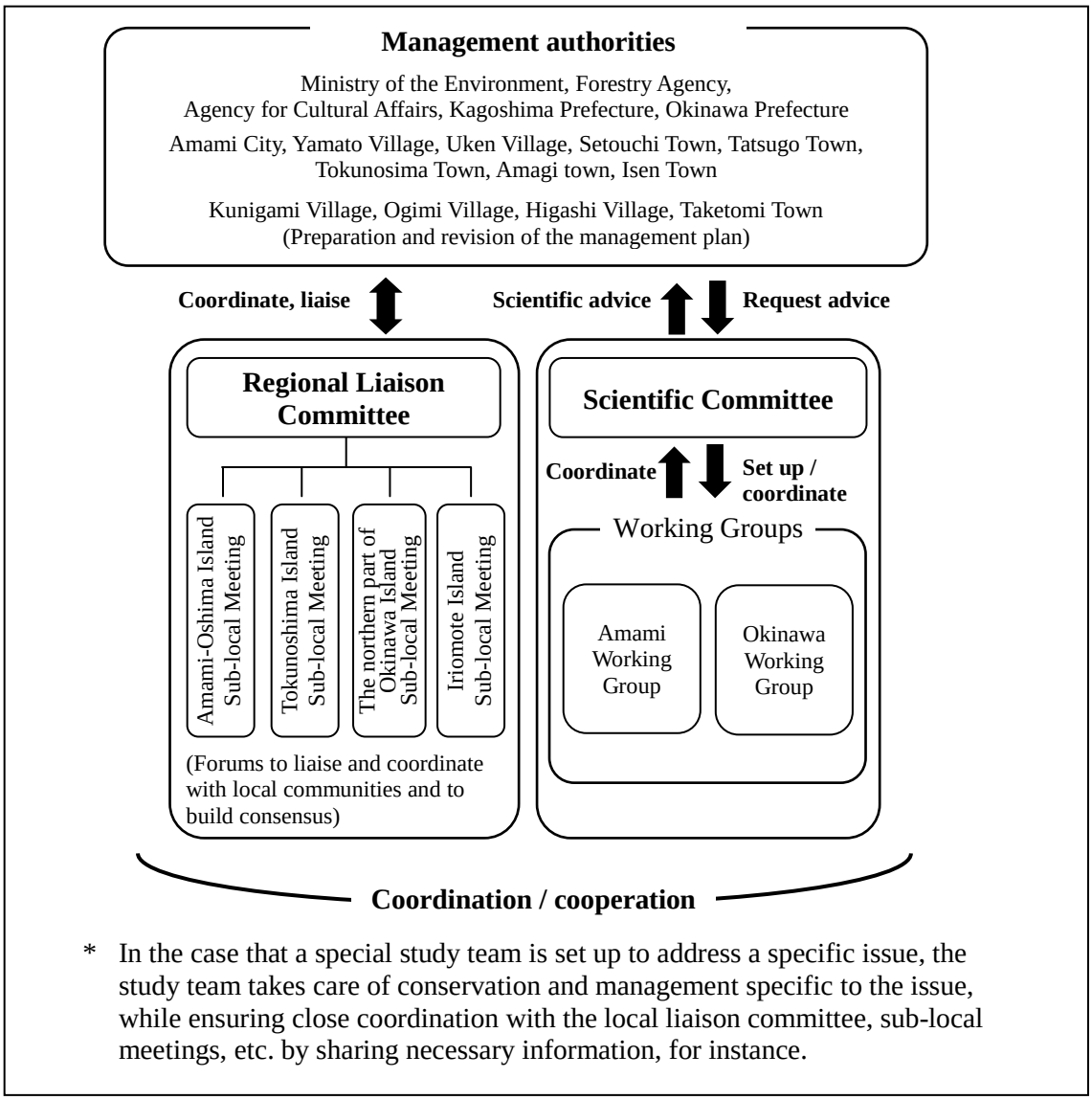
Furthermore, since the area covered by this plan consists of four separate regions, it is necessary to deliver conservation and management in coordination and cooperation based on the opinions of local communities in each region. Therefore, sub-local meetings are set up for each of the four regions under the Regional Liaison Committee to provide opportunities for liaison and coordination through the participation of the management organizations, other related local government organizations, NPOs, etc. The sub-local meetings ensure the proper conservation and management of the regions covered by this plan by building a consensus, facilitating liaison and coordination, managing progress, and making inspections and evaluations of the implementation of measures concerning the preparation and revision of action plans by region and report to and coordinate with the Regional Liaison Committee, as needed.

* The list of the member government organizations of the Regional Liaison Committee is attached as Reference Material 2; the lists of the member organizations of the Amami-Oshima Island Sub-local Meeting, Tokunoshima Island Sub-local Meeting, the Northern Part of Okinawa Island Sub-local Meeting, and Iriomote Island Sub-local Meeting are attached as Reference Material 3.

2) Mechanism for Adaptive Conservation and Management Based on Scientific Advice

For the conservation and management of the area covered by this plan, adaptive conservation and management is to be delivered based on the results of the monitoring mentioned in 5.7) and in consideration of advice from the Scientific Committee on Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island and Iriomote Island natural World Heritage nominated property, which was established in FY2013, consisting of experts, as well as the Amami Working Group and the Okinawa Working Group, which were established under the scientific council in FY2014 for the purpose of entertaining detailed discussions at the local level. The preparation and revision of the comprehensive management plans and action plans by region will be carried out with advice primarily from the working groups.

Also, issues for which individual study teams have been established, such as the small Indian mongoose control project and the protection and recovery programs of national endangered species, are to be addressed under the corresponding study teams. In addition, efforts will be made for close coordination with the Regional Liaison Committee and sub-local meetings to share necessary information about the comprehensive management plan and action plans by region.



* In the case that a special study team is set up to address a specific issue, the study team takes care of conservation and management specific to the issue, while ensuring close coordination with the local liaison committee, sub-local meetings, etc. by sharing necessary information, for instance.

Fig. 7. Implementation Mechanism for Management

3) Information Dissemination and Awareness Raising

For effective information provision and awareness raising, it is necessary to consider appropriate means of information sharing and awareness raising, depending on the target groups.

An official web page in multiple languages is to be set up on the Internet and broadly publicized to provide the audience within and outside Japan with various kinds of information about the natural property, "Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island", nominated for inscription on the World Heritage List, including the information about this plan and monitoring results.

Explanation by guides and at the existing related facilities will be actively promoted as a means to provide information and educational explanatory programs to visitors of the area covered by this plan. In addition, the possibility of establishing a new World Heritage center will be explored, as needed.

Moreover, for local people, a number of measures will be actively carried out, including the publication of information magazines and organization of seminars etc. about the conservation of World Heritage to ensure information provision, awareness raising, and communication.

Table 3. Existing major related facilities

Region	Facility name	Established by
Amami-Oshima Island	Amami Wildlife Conservation Center	Ministry of the Environment
	Amami Park	Kagoshima Prefecture
	Amami Nature Observation Forest	Tatsugo Town
	Amami Museum	Amami City
	“Kuroshio no Mori” Mangrove Park	Amami City
	Amami Forestpolis	Yamato Village
	Setouchi Town Folk Museum	Setouchi Town
Tokunoshima Island	Amagi Town History, Culture, Industry and Science Center Yui-no-Yakata	Amagi Town
	Amami Rabbit Observation Shed	Amagi Town
	Tokunoshima Town Folk Museum	Tokunoshima Town
	Isen Town Museum of History and Folklore	Isen Town
The northern part of Okinawa Island	Yambaru Wildlife Conservation Center	Ministry of the Environment
	Yambaru Discovery Forest	Kunigami Village
	Okinawa Rail Ecology Center	Kunigami Village
	Hiji Falls	Kunigami Village
	Kunigami Forest Park	Kunigami Village
	Bunagaya Museum	Okinawa General Bureau
	Higashi Museum	Higashi Village
	Fureai Hirugi Park	Higashi Village
Iriomote Island	Iriomote Wildlife Conservation Center	Ministry of the Environment

4) Roles of Individual Management Organizations

The individual roles of the management organizations that prepared this plan are shown below.

With a view to further enhancing conservation and management following the inscription on the World Heritage List, the management organizations will continue to secure necessary financial and human resources to the extent possible and further promote coordination, cooperation, and the division of roles. When needed, the possibility of introducing new mechanisms and systems for procuring financial and human resources will be explored.

(1) Naha Natural Conservation Office, Ministry of the Environment

The Amami Ranger Office for Nature Conservation, Tokunoshima Ranger Office for Nature Conservation, Yambaru Ranger Office for Nature Conservation, Ishigaki Ranger Office for

Nature Conservation, and Iriomote Ranger Office for Nature Conservation manage national parks, nature conservation areas, and national wildlife protection areas. They deliver management pursuant to the Act on Conservation of Endangered Species of Wild Fauna and Flora and the Act on the Prevention of Adverse Ecological Impacts Caused by Specified Invasive Alien Species. In addition, matters concerning the protection and recovery of endangered species and the protection and use of national parks that are mentioned in this plan and action plans by region will be delivered in coordination and cooperation with other management organizations.

It serves as the secretary-general and the secretariat for external affairs for the Regional Liaison Committee, the Scientific Council, the Amami Working Group, and the Okinawa Working Group, which are shown in Fig. 7 depicting the implementation mechanism for management.

(2) Kyusyu Regional Forest Office, Forestry Agency

The Kagoshima District Forest Office (Naze Forestry Office, Tokunoshima Forestry Office), Okinawa District Forest Office (Takae Forestry Office, Ohara Forestry Office, and Sonai Forestry Office), and the Iriomote Forest Ecosystem Conservation Center manage national forests.

In addition, matters to be carried out within national forests under this plan and action plans by region are addressed in coordination and cooperation with other management organizations.

(3) Kagoshima Prefecture

The Nature Conservation Division, Environment and Forestry Affairs Department, Kagoshima Prefecture and the Hygiene and Environment Office, Oshima Branch Office will take the lead in carrying out a variety of projects together with the divisions concerned with agriculture, forestry, and fisheries, civil engineering and construction, and tourism as well as the board of education. These include projects related to cooperating over the management of national parks; protecting wildlife; countermeasures to address alien species; promoting and establishing agriculture, forestry, and fisheries and resource management for these; installing and maintaining public facilities; promoting tourism; and protecting and managing cultural properties.

It serves as the secretary-general and the secretariat for external affairs for Amami-Oshima Island Sub-local Meeting and Tokunoshima Island Sub-local Meeting, which are shown in Fig. 7 depicting the implementation mechanism for management.

(4) Okinawa Prefecture

The Nature Conservation Division, Department of Environmental Affairs, Okinawa Prefecture will take the lead in carrying out a variety of projects together with the divisions concerned with agriculture, forestry, and fisheries, civil engineering and construction, and tourism as well as the board of education. These include projects related to cooperating over the management of national parks; countermeasures to manage wildlife and to address alien species; promoting and establishing agriculture, forestry, and fisheries and resource management; installing and maintaining public facilities; promoting tourism; and protecting and managing cultural properties.

It serves as the secretary-general and the secretariat for external affairs for the sub-local meetings for the northern part of Okinawa Island and Iriomote Island, which are shown in Fig. 7 depicting the implementation mechanism for management.

(5) Five Municipalities on Amami-Oshima Island (Amami City, Yamato Village, Uken Village, Setouchi Town, and Tatsugo Town)

The World Natural Heritage Promotion Office, Environmental Measure Section (Amami City), General Affairs and Planning Division (Yamato Village, Uken Village, and Tatsugo Town) and Setouchi Board of Education Department of Social Education World Natural Heritage Setouchi Promotion Office (Setouchi Town) will take the lead in carrying out a variety of projects together with the divisions concerned with agriculture, forestry, and fisheries, civil engineering and construction, and tourism as well as the board of education. These include projects related to managerial cooperation for national parks; countermeasures to manage wildlife and to address alien species; promoting and establishing agriculture, forestry, and fisheries and resource management; installing and maintaining public facilities; promoting tourism; providing user services and guidance; and protecting and managing cultural properties.

Wide Area Administration Association of Amami Islands is a special local public entity regulated under Article 1-3 of the Local Autonomy Act covering the entirety of the Amami Island Group, which include Amami-Oshima Island and Tokunoshima Island. It serves as a combined business union for one city, nine towns, and two villages, for which it is responsible for improving infrastructure and promoting various projects for the promotion of the Amami Island Group. It will also promote ecotourism related to the management of the Natural World Heritage property and carry out various projects related to tourism promotion.

(6) Three Municipalities on Tokunoshima Island (Tokunoshima Town, Amagi Town, and Isen Town)

The Planning Division (Tokunoshima Town and Amagi Town) and the Kyura-Machi Tourism Division (Isen Town) will take the lead in carrying out a variety of projects together with the divisions concerned with agriculture, forestry, and fisheries, civil engineering and construction, and tourism as well as the board of education. These include projects related to managerial cooperation for national parks; countermeasures to manage wildlife and to address alien species; promoting and establishing agriculture, forestry, and fisheries and resource management; installing and maintaining public facilities; promoting tourism; providing user services and guidance; and protecting and managing cultural properties.

(7) Three Villages on the northern part of Okinawa Island (Kunigami Village, Ogimi Village, and Higashi Village)

The World Natural Heritage Promotion Division (Kunigami Village), Planning and Tourism Division (Ogimi Village and Higashi Village) will take the lead in carrying out a variety of projects together with the divisions concerned with agriculture, forestry, and fisheries, civil engineering and construction, and tourism as well as the board of education. These include projects related to managerial cooperation for national parks; countermeasures to manage wildlife and to address alien species; promoting and establishing agriculture, forestry, and fisheries and resource management; installing and maintaining public facilities; promoting tourism; providing user services and guidance; and protecting and managing cultural properties.

(8) One Town on Iriomote Island (Taketomi Town)

In Taketomi Town, the Natural Environment Division will take the lead in carrying out a variety of projects together with the divisions concerned with agriculture, forestry, and fisheries, civil engineering and construction, and tourism as well as the board of education. These include projects related to protecting nature; countermeasures to manage wildlife and to address alien species; promoting and establishing agriculture, forestry, and fisheries and resource management; installing and maintaining public facilities; promoting tourism; providing user services and guidance; and protecting and managing cultural properties.

7. Preparation of Action Plans by Region

1) Methodology for the Preparation of Action Plans by Region

Action plans by region are prepared by sub-local meetings consisting of management organizations, other related local government organizations and groups, NPOs, etc. which are set up for each of the four regions of this plan, Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island with the participation of and based on the consensus of local communities.

Information about the history of discussion at the sub-local meetings and the content of the plan is widely disclosed. In addition, opportunities for information sharing and explanation are provided to local citizens and other stakeholders to obtain their understanding about and cooperation for the plan's objectives, content, and specific measures.

2) Action Plans by Region

The action plans have been developed by region for Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island:

(1) Action Plan for Amami-Oshima Island
* Attached as Annex 1.

(2) Action Plan for Tokunoshima Island
* Attached as Annex 2.

(3) Action Plan for the Northern Part of Okinawa Island
* Attached as Annex 3.

(4) Action Plan for Iriomote Island
* Attached as Annex 4.

8. Conclusion

Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island, which are collectively nominated for inscription on the World Heritage List, is a globally unique natural heritage that possesses Outstanding Universal Value based on criteria concerning ecosystem and biodiversity. Part of its value has been maintained not only on the strength of nature's high recovering power, but also as part of the daily life and livelihoods of local communities.

In order to nominate such place for inscription on the World Heritage List and pass on its value to future generations, it is essential to work, besides management organizations, in collaboration with local citizens, related local organizations, etc. It is with this shared recognition that efforts will be made to achieve proper conservation and management, so that Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island, nominated to be inscribed as a Natural World Heritage property, will be maintained with the participation and collaboration of local communities.

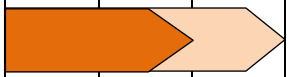
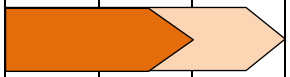
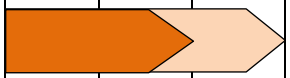
Annexes

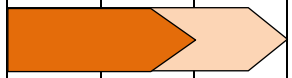
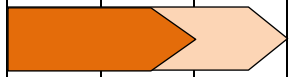
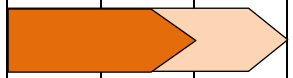
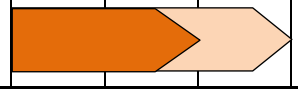
Annex 1

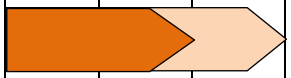
Action Plan
Amami-Oshima Island

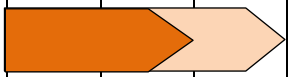
To be implemented as a priority
To be implemented on a continuous basis

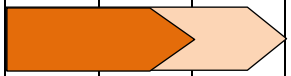
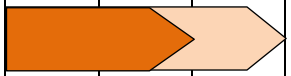
	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
1) Proper Enforcement of Protective Legal Instruments											
1	Designation and management of the Amami Gunto National Park	MOE				✓	✓	✓	Designation as a National Park is to be made on Amami-Oshima Island, centering on the area that constitutes the World Heritage value. Once designation has been made, management is to be properly carried out.	The value of the World Heritage property is conserved and legal control measures are in place to ensure the buffering functions.	
2	Management of the Amami Gunto Forest Ecosystem Reserve	Forestry Agency				✓	✓		Conservation and management of the Amami Gunto Forest Ecosystem Reserve is to be properly carried out.	The value of the World Heritage property is conserved and legal control measures are in place to ensure the buffering functions.	Amami Gunto Forest Ecosystem Reserve Conservation Management Committee
3	Management of the Wildlife Protection Area etc.	MOE Kagoshima Prefecture				✓	✓	✓	Management of National Wildlife Protection Areas and Prefectural Wildlife Protection Areas is to be properly carried out.	Compliance is made with regulations in wildlife protection areas and endangered wildlife species are conserved.	
2) Protection and Recovery of Endangered Species											
1	Protection of national endangered species based on the Act on Conservation of Endangered Species of Wild Fauna and Flora (Endangered Species Act)	MOE				✓	✓	✓	Measures for conservation of national endangered species of wild fauna and flora are to be taken by legally designating species of wild fauna and flora that are at risk of extinction as national endangered species under the Endangered Species Act.	National endangered species are properly conserved.	
2	Enforcement of ordinances for the protection of endangered species of wild fauna and flora	Kagoshima Prefecture, municipal govts.				✓	✓	✓	Prefectural and municipal ordinances for the protection of endangered species of wild fauna and flora are to be enforced appropriately to conserve the biodiversity of Amami-Oshima Island.	Ordinances are complied with and endangered species of wild fauna and flora are protected appropriately.	Amami Island Group Rare Wildlife Protection Program Council
3	Continuous implementation of protection and recovery programs etc.	MEXT, MAFF, MOE, Kagoshima Prefecture, municipal govts., related local organizations				✓	✓	✓	For species that are covered by protection and recovery programs (the Amami rabbit, the Amami woodcock, and the Amami thrush), the inhabitation status, habitats, and so forth are to be studied and analyzed. Efforts are to be made for the protection and recovery of their populations.	Stable subsistence in natural conditions is possible. [To be evaluated on a case-by-case basis at review committee meetings]	Amami Rare Species Protection and Recovery Review Conference

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
4	Protection and recovery of endangered species that are not covered by protection and recovery programs (the Ryukyu long-haired rat, the Amami spiny rat, etc.)	MOE, Kagoshima Prefecture, municipal govts., related local organizations				✓	✓	✓	The distribution of endangered species that are not covered by protection and recovery programs is to be studied on a continuous basis to accumulate scientific data. Protection and recovery measures are to be taken in coordination with other projects such as alien species eradication, traffic accident prevention, and patrol.	Stable subsistence in natural conditions is possible.	
5	Countermeasures to address traffic accidents involving endangered wild fauna	MOE, Forestry Agency, Kagoshima Prefecture, municipal govts., related local organizations				✓	✓	✓	The occurrence of accidents is to be avoided by means of road improvement and awareness raising—informing people of locations where there is a high risk of traffic accidents involving endangered species of wild fauna, installing signs, distributing leaflets, and campaigns.	Drivers of vehicles comply with speed limits to avoid endangered wild animals and no traffic accidents involving them happen.	Amami Island Group Rare Wildlife Protection Program Council
6	Rescue of sick or injured wildlife such as the Amami rabbit	MOE, Kagoshima Prefecture, municipal govts.				✓	✓	✓	Sick or injured birds and animals such as the Amami rabbit are to be rescued. Data are to be collected from rescued birds and animals. The possibility of exhibiting some of the individuals that cannot return to the wild for awareness-raising purposes. When dead individuals are found, the cause of death is to be identified whenever possible as information contributing to the development of future actions.	Populations are maintained. Ecological studies and care-taking techniques are established.	Amami Rare Species Protection and Recovery Review Conference
7	Patrol for the prevention of poaching and illegal collection	MOE, Forestry Agency, Kagoshima Prefecture, municipal govts., related local organizations				✓	✓	✓	Government organizations are to take the lead in carrying out patrols for the prevention of poaching and illegal collection and raising public awareness in coordination with local organizations and the police.	An effective monitoring system is established. No poaching or illegal collection takes place.	Amami Island Group Rare Wildlife Protection Program Council

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
3) Elimination and Reduction of Impact from Alien Species											
1	Enhancement of measures to address invasive alien species	MOE, Kagoshima Prefecture, municipal govts., related local organizations				✓	✓	✓	The status of invasion of already established invasive alien species is to be studied and, with a focus on species that particularly need addressing, countermeasures are to be taken. Information is to be collected of the sighting of invasive alien species that are not yet established on Amami-Oshima Island. Also, measures to prevent their establishment are to be taken, as needed.	Adverse effects are reduced or avoided by eliminating, or preventing the establishment of, alien species whose impact on the heritage value (ecosystem / biodiversity) is considered to be particularly significant.	
2	Implementation of measures to address the mongoose	MOE				✓	✓	✓	Measures are to be taken to control the mongoose that is greatly affecting the native ecosystems by preying on endangered species.	The mongoose is completely eradicated from Amami-Oshima Island.	Amami-Oshima Island Mongoose Control Project Review Conference and Control Strategic Meeting
3	Implementation of measures to address cats	MOE, Kagoshima Prefecture, municipal govts., related local organizations				✓	✓	✓	Government and private sectors coordinate at the local level, sharing information widely and building consensus to build and operate the system for excluding cats from the habitats of endangered species (forests) that delivers a series of actions ranging from capture and temporary keeping to transfer.	Cats are excluded from the habitats of endangered species; adverse effects on endangered species are avoided.	Amami Island Group Rare Wildlife Protection Program Council (Amami-Oshima Island Feral Dog and Feral Cat Control Measures Review Conference)
		MOE, Kagoshima Prefecture, municipal govts., related local organizations				✓	✓	✓	Attempt to prevent abandonment and escape of pet cats, spaying and neutering, appropriate animal breeding such as owner labels, and prevention of feeding cats, that except house cats, without reason.	Cats kept at human settlements are bred and managed appropriately and they do not enter forests any more.	Amami Island Group Rare Wildlife Protection Program Council (Amami-Oshima Island Feral Dog and Feral Cat Control Measures Review Conference)
4	Implementation of measures to address feral goats	Municipal govts.				✓	✓	✓	Measures are to be taken to control feral goats whose feeding damage can potentially affect ecosystems, including endangered species.	Feral goats are completely eradicated from Amami-Oshima Island.	Amami Island Group Rare Wildlife Protection Program Council

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
4) Harmony with Livelihoods in the Buffer Zone and Surrounding Area											
	1	Enforcement of the Biodiversity Strategy and Action Plan of Kagoshima Prefecture	Kagoshima Prefecture, municipal govts.			✓	✓	✓	Measures to strike a balance with industry and livelihoods are to be implemented in accordance with "the Biodiversity Strategy and Action Plan of Kagoshima Prefecture", which set outs policies and measures for biodiversity conservation in Kagoshima Prefecture.	A mechanism for the implementation of measures based on the strategy is established.	
	2	Enforcement of the Biodiversity Strategy and Action Plan of Amami-Oshima Island	Kagoshima Prefecture, municipal govts.			✓	✓	✓	Measures to strike a balance with industry and livelihoods are to be implemented in accordance with "the Biodiversity Strategy and Action Plan of Amami-Oshima Island", which sets out policies and measures for biodiversity conservation in Amami-Oshima Island.	A mechanism for the implementation of measures based on the strategy is established.	Amami-Oshima Nature Protection Council
	3	Implementation of forestry practices in consideration of biodiversity	Kagoshima Prefecture, municipal govts.					✓	Rules for forestry practices compatible with biodiversity conservation are to be established to strike a balance between the strengthening of buffering functions and forestry in the forests around the heritage property area. For this purpose, efforts are to be made to develop common forest management methods for forests owned by municipal governments and share them across the region.	Methods of economically viable forestry practices compatible with the conservation of the heritage value are established. [Progress of the development of forestry management methods; record of actual forestry practice based on the forestry management methods.]	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference
	4	Environmentally-conscious implementation of public works	MOE, Forestry Agency, Kagoshima Prefecture, municipal govts.			✓	✓	✓	A mechanism to integrate environmental consideration into public works is to be set up to prevent the World Heritage value from being affected by public works in the World Heritage property area or its surrounding area. For this purpose, the possibility of developing "environmental consideration guidelines" (provisional title) based on the actual experience of environmental consideration in the Amami Island Group and in consideration of special characteristics of nature and culture of the Amami Island Group is to be examined together with the possibility of putting in place a mechanism to support their implementation. These are to be shared among the national government, the prefectural government, municipal governments, and private businesses to improve the standards of environmental consideration in the entire region.	A mechanism is in place that ensures that appropriate environmental consideration is given when public works are carried out and that there is no impact on the World Heritage value. [Record of environmentally-conscious measures]	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
5) Proper Use and Ecotourism											
1	Development of a sustainable tourism master plan	Kagoshima Prefecture				✓	✓	✓	In preparation for inscription on the World Heritage List, visitor management is to be promoted based on a master plan that sets forth directions for planned mitigation of concentration in mass tourism and ecotourism, infrastructure installation, and desirable use in the Amami Island Group.	Infrastructure and capacity for receiving an increased number of tourists are in place.	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference
2	Use control	MOE, Forestry Agency, Kagoshima Prefecture, municipal govts., related local organizations				✓	✓		In areas where World Heritage inscription might result in increased use or concentrated use to the extent that tangible environmental impact could occur, use control measures such as restriction of the number of users, mandatory accompaniment of guides, and traffic restrictions are to be examined and necessary arrangements area to be made to ensure the conservation of the natural environment and the provision of high quality use.	The World Heritage value is conserved and the quality of users' experience is guaranteed.	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference
3	Installation of facilities that contribute to the reduction of environmental burden	MOE, Kagoshima Prefecture, municipal govts.				✓	✓	✓	To enable visitors to perceive the heritage value tangibly and to reduce environmental burden, the installation of user facilities and improvement of the existing facilities are to be examined as follows: ➢ Key facilities capable of receiving large numbers of users; ➢ Facilities that gives expression to the attractiveness of forest areas; and ➢ Necessary facilities that reduce environmental burdens for sustainable use, such as toilets and walking trails.	The World Heritage value is conserved and the quality of users' experience is guaranteed.	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference
4	Installation of the Amami World Natural Heritage Trail (provisional name)	Kagoshima Prefecture, municipal govts.				✓	✓	✓	Trails are to be installed to encourage walking, so that visitors can experience the nature, local lifestyle, and culture of the Amami Island Group and enjoy rich interactions with local communities, resulting in more overnight stays in the region. High-quality nature trips are to be promoted to contribute to raising awareness about the value of the Natural World Heritage.	The entire island group are connected by trails and tourists make repeated visits and enjoy high-quality uses of various types that meet different demands.	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference

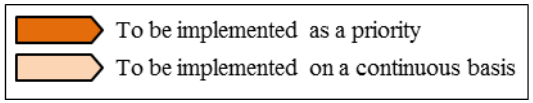
	Action item		Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
				Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
	5	Promotion of ecotourism	MOE, Kagoshima Prefecture, municipal govts., related local organizations				✓	✓	✓	In the World Heritage property area, tours of small groups of visitors accompanied by eco-tour guides are to be promoted to improve the satisfaction of visitors who come for genuine nature. High-quality nature trips are to be promoted to contribute to raising awareness about the value of the Natural World Heritage.	Small-group guided tours are provided in the property area etc.; tourists are satisfied with the nature of Amami-Oshima Island and make repeated visits.	Amami Island Group Ecotourism Promotion Council
	6	Training of guides	Kagoshima Prefecture, municipal govts., related local organizations				✓	✓	✓	High-quality guides (tourism information guides, eco-tour guides, and village eco-tour guides) are to be trained to build the capacity of Amami-Oshima Island for tourism. High-quality nature trips are to be promoted to contribute to raising awareness about the value of the Natural World Heritage.	High-quality guides are available; tourists are satisfied with tourism of Amami-Oshima Island and make repeated visits.	
6) Conservation and Management with the Participation and Collaboration of Local Communities												
	1	Implementation of forestry practices in consideration of biodiversity (intentionally listed repeatedly)	Kagoshima Prefecture, municipal govts.						✓	Rules for forestry practices compatible with biodiversity conservation are to be established to strike a balance between the strengthening of buffering functions and forestry in the forests around the heritage property area. For this purpose, efforts are to be made to develop common forest management methods for forests owned by municipal governments and share them across the region.	Methods of economically viable forestry practices compatible with the conservation of the heritage value are established. [Progress of the development of forestry management methods; record of actual forestry practice based on the forestry management methods.]	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
2	Environmentally-conscious implementation of public works (intentionally listed repeatedly)	MOE, Forestry Agency, Kagoshima Prefecture, municipal govts				✓	✓	✓	A mechanism to integrate environmental consideration into public works is to be set up to prevent the World Heritage value from being affected by public works in the World Heritage property area or its surrounding area. For this purpose, the possibility of developing "environmental consideration guidelines" (provisional title) based on the actual experience of environmental consideration in the Amami Island Group and in consideration of special characteristics of nature and culture of the Amami Island Group is to be considered together with the possibility of putting in place a mechanism to support their implementation. These are to be shared among the national government, the prefectural government, municipal governments, and private businesses to improve the standards of environmental consideration in the entire region.	A mechanism is in place that ensures that appropriate environmental consideration is given when public works are carried out and that there is no impact on the World Heritage value. [Record of environmentally-conscious measures]	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference
3	Dissemination of information to tourists and people outside the region	MOE, Forestry Agency, Kagoshima Prefecture, municipal govts., related local organizations					✓	✓	Information about attractive natural and cultural features, the World Heritage value, and rules for appropriate use is to be disseminated throughout Japan by means of various media to deepen people's understanding about the Amami Island Group.	Understanding about the Amami Island Group is improved throughout Japan. The environmental burden to the heritage property area is controlled below a certain level through tourism compatible with environmental consideration.	
4	Implementation of activities for the prevention of illegal dumping of waste etc.	MOE, Kagoshima Prefecture, municipal govts., related local organizations					✓	✓	Activities to prevent illegal dumping of waste, cleanup activities, and so forth are to be carried out for beautification of Amami-Oshima Island as a Natural World Heritage property.	The environment of Amami-Oshima Island is kept clean and beautiful both inside and outside the World Heritage property.	
5	Promotion of local people's actions through awareness raising etc.	MOE, Forestry Agency, Kagoshima Prefecture, municipal govts., related local organizations					✓	✓	Seminars and various events are to be carried out. Posters, brochures, etc. are to be made and distributed to have local people recognize the significance of World Heritage inscription and the need for endangered species protection and alien species countermeasures and to promote local people's actions.	Each member of local communities recognizes the significance of World Heritage inscription and the need for endangered species protection and alien species countermeasures and actively plays his/her own role.	

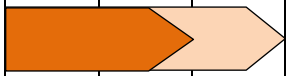
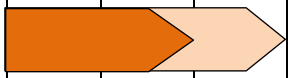
	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
6	Transmission of a culture that has coexisted with nature of the Amami Island Group to future generations	Kagoshima Prefecture, municipal govts., related local organizations					✓	✓	Since the nature of the Amami Island Group, unlike other natural heritage properties, has been maintained through a long history of close interactions with people through its long history, efforts are to be made to raise awareness to ensure that the nature is conserved and that the unique culture of the Amami Island Group that has co-existed with nature is passed on to future generations.	Each member of local communities is proud of the nature and culture of the Amami Island Group and contributes to passing them on to future generations.	
7	Promotion of environmental education activities	MOE, Kagoshima Prefecture, municipal govts., related local organizations					✓	✓	Special environmental education for a natural heritage property nominated for World Heritage inscription is to be explored to help children cultivate interest in local nature and culture.	Children are interested in local nature and culture and understand the need for endangered species protection and alien species countermeasures.	
7) Proper Monitoring and Utilization of Information											
1	Dissemination and utilization of information	MOE, Forestry Agency, Kagoshima Prefecture, municipal govts.				✓	✓	✓	Information about the results of, and knowledge obtained by, monitoring programs and other types of research by different project undertakers are to be collected and accumulated widely. A mechanism for one-stop information collection, management, and publication is to be set up, such as the official website.	Information, knowledge, and technical experiences concerning the heritage value are collected, accumulated, and utilized for conservation and management.	

Annex 2

Action Plan
Tokuonshima Island

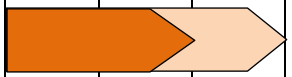


	Action item	Implementing agency	Time line: Short term	Time line: Middle term	Time line: Long term	Area: Property	Area: Buffer zone	Area: Surrounding area	Description	Target [evaluation indicator] Short term	Notes (relevant organization) Middle term
1) Proper Enforcement of Protective Legal Instruments											
1	Designation and management of the Amami Gunto National Park	MOE				✓	✓	✓	Designation as a National Park is to be made on Tokunoshima Island, centering on the area that constitutes the World Heritage value. Once designation has been made, management is to be properly carried out.	The value of the World Heritage property is conserved and legal control measures are in place to ensure the buffering functions.	
2	Management of the Amami GuntoForest Ecosystem Reserve	Forestry Agency				✓	✓		Conservation and management of the Amami Gunto Forest Ecosystem Reserve is to be properly carried out.	The value of the World Heritage property is conserved and legal control measures are in place to ensure the buffering functions.	Amami Gunto Forest Ecosystem Reserve Conservation Management Committee
3	Management of the Wildlife Protection Area etc.	Kagoshima Prefecture				✓	✓	✓	Management of Prefectural Wildlife Protection Areas is to be properly carried out.	Compliance is made with regulations in wildlife protection areas and endangered wildlife species are conserved.	
2) Protection and Recovery of Endangered Species											
1	Protection of national endangered species based on the Act on Conservation of Endangered Species of Wild Fauna and Flora (Endangered Species Act)	MOE				✓	✓	✓	Measures for conservation of national endangered species of wild fauna and flora are to be taken by legally designating species of wild fauna and flora that are at risk of extinction as national endangered species under the Endangered Species Act.	National endangered species are properly conserved.	
2	Enforcement of ordinances for the protection of endangered species of wild fauna and flora	Kagoshima Prefecture, town govts.				✓	✓	✓	Prefectural and municipal ordinances for the protection of endangered species of wild fauna and flora are to be enforced appropriately to conserve the biodiversity of Tokunoshima Island.	Ordinances are complied with and endangered species of wild fauna and flora are protected appropriately.	Amami Island Group Rare Wildlife Protection Program Council
3	Continuous implementation of protection and recovery programs etc.	MEXT, MAFF, MOE, Kagoshima Prefecture, town govts., related local organizations				✓	✓	✓	For species that are covered by protection and recovery programs (the Amami rabbit and the Amami woodcock), the inhabitation status, habitats, and so forth are to be studied and analyzed. Efforts are to be made for the protection and recovery of their populations.	Stable subsistence in natural conditions is possible. [To be evaluated on a case-by-case basis at review committee meetings]	Amami Rare Species Protection and Recovery Review Conference

Action item		Implementing agency	Time line			Area			Description	Target [evaluation indicator] Short term	Notes (relevant organization) Middle term
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
4	Protection and recovery of endangered species that are not covered by protection and recovery programs (the Ryukyu long-haired rat, the Tokunoshima spiny rat, etc.)	MOE, Kagoshima Prefecture, town govts., related local organizations				✓	✓	✓	The distribution of endangered species that are not covered by protection and recovery programs is to be studied on a continuous basis to accumulate scientific data. Protection and recovery measures are to be taken in coordination with other projects such as alien species eradication, traffic accident prevention, and patrol.	Stable subsistence in natural conditions is possible.	
5	Countermeasures to address traffic accidents involving endangered wild fauna	MOE, Forestry Agency, Kagoshima Prefecture, town govts., related local organizations				✓	✓	✓	The occurrence of accidents is to be avoided by means of road improvement and awareness raising—informing people of locations where there is a high risk of traffic accidents involving endangered species of wild fauna, installing signs, distributing leaflets, and campaigns.	Drivers of vehicles comply with speed limits to avoid endangered wild animals and no traffic accidents involving them happen.	Amami Island Group Rare Wildlife Protection Program Council
6	Rescue of sick or injured wildlife such as the Amami rabbit	MOE, Kagoshima Prefecture, town govts..				✓	✓	✓	Sick or injured birds and animals such as the Amami rabbit are to be rescued. Data are to be collected from rescued birds and animals. The possibility of exhibiting some of the individuals that cannot return to the wild for awareness-raising purposes. When dead individuals are found, the cause of death is to be identified whenever possible as information contributing to the development of future actions.	Populations are maintained. Ecological studies and care-taking techniques are established.	Amami Rare Species Protection and Recovery Review Conference
7	Patrol for the prevention of poaching and illegal collection	MOE, Forestry Agency, Kagoshima Prefecture, town govts., related local organizations				✓	✓	✓	Government organizations are to take the lead in carrying out patrols for the prevention of poaching and illegal collection and raising public awareness in coordination with local organizations and the police.	An effective monitoring system is established. No poaching or illegal collection takes place.	Amami Island Group Rare Wildlife Protection Program Council

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator] Short term	Notes (relevant organization) Middle term
			Short term	Middle term	Long term	Property	Buffer zone	Surrounding area			
3) Elimination and Reduction of Impact from Alien Species											
	1	Enhancement of measures to address invasive alien species	MOE, Kagoshima Prefecture, town govts., related local organizations	→	→	✓	✓	✓	The status of invasion of already established invasive alien species is to be studied and, with a focus on species that particularly need addressing, countermeasures are to be taken. Information is to be collected of the sighting of invasive alien species that are not yet established on Amami-Oshima Island. Also, measures to prevent their establishment are to be taken, as needed.	Adverse effects are reduced or avoided by eliminating, or preventing the establishment of, alien species whose impact on the heritage value (ecosystem / biodiversity) is considered to be particularly significant.	
	2	Implementation of measures to address cats	MOE, Kagoshima Prefecture, town govts., related local organizations	→	→	✓	✓	✓	Government and private sectors coordinate at the local level, sharing information widely and building consensus to build and operate the system for excluding cats from the habitats of endangered species (forests) that delivers a series of actions ranging from capture and temporary keeping to transfer.	Cats are excluded from the habitats of endangered species; adverse effects on endangered species are avoided.	Amami Island Group Rare Wildlife Protection Program Council (Tokunoshima Island Feral Dog and Feral Cat Control Measures Review Conference)
			MOE, Kagoshima Prefecture, town govts., related local organizations	→	→	✓	✓	✓	Attempt to prevent abandonment and escape of pet cats, spaying and neutering, appropriate animal breeding such as owner labels, and prevention of feeding cats, that except house cats, without reason.	Cats kept at human settlements are bred and managed appropriately and they do not enter forests any more.	Amami Island Group Rare Wildlife Protection Program Council (Tokunoshima Island Feral Dog and Feral Cat Control Measures Review Conference)
4) Harmony with Livelihoods in the Buffer Zone and Surrounding Area											
	1	Enforcement of the Biodiversity Strategy and Action Plan of Kagoshima Prefecture	Kagoshima Prefecture, town govts.	→	→	✓	✓	✓	Measures to strike a balance with industry and livelihoods are to be implemented in accordance with “the Biodiversity Strategy and Action Plan of Kagoshima Prefecture”, which set outs policies and measures for biodiversity conservation in Kagoshima Prefecture.	A mechanism for the implementation of measures based on the strategy is established.	

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator] Short term	Notes (relevant organization) Middle term
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
2	Reinforcement of biodiversity conservation functions of agricultural land adjacent to the heritage property area etc.	MOE, Forestry Agency, Kagoshima Prefecture, town govts.						✓	To strengthen buffering functions of the agricultural land in the adjacent areas of the heritage property, the following measures are to be considered and necessary actions are to be taken: ➢ Formation of green networks connecting small forests, rivers, etc.; ➢ Supportive measures to strike a balance between the habitation of endangered species (ex. the Amami rabbit) and agriculture; and ➢ Formation of ecological corridors to secure the continuity between the northern forests and the southern forests.	Buffering functions are strengthened, without compromising biodiversity conservation or agriculture.	
3	Implementation of forestry practices in consideration of biodiversity	Kagoshima Prefecture, town govts.						✓	Rules for forestry practices compatible with biodiversity conservation are to be established to strike a balance between the strengthening of buffering functions and forestry in the forests around the heritage property area. For this purpose, efforts are to be made to develop common forest management methods for forests owned by municipal governments and share them across the region.	Methods of economically viable forestry practices compatible with the conservation of the heritage value are established. [Progress of the development of forestry management methods; record of actual forestry practice based on the forestry management methods.]	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference
4	Environmentally-conscious implementation of public works	MOE, Forestry Agency, Kagoshima Prefecture, town govts.				✓	✓	✓	A mechanism to integrate environmental consideration into public works is to be set up to prevent the World Heritage value from being affected by public works in the World Heritage property area or its surrounding area. For this purpose, the possibility of developing “environmental consideration guidelines” (provisional title) based on the actual experience of environmental consideration in the Amami Island Group and in consideration of special characteristics of nature and culture of the Amami Island Group is to be examined together with the possibility of putting in place a mechanism to support their implementation. These are to be shared among the national government, the prefectural government, municipal governments, and private businesses to improve the standards of environmental consideration in the entire region.	A mechanism is in place that ensures that appropriate environmental consideration is given when public works are carried out and that there is no impact on the World Heritage value. [Record of environmentally-conscious measures]	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator] Short term	Notes (relevant organization) Middle term
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
5) Proper Use and Ecotourism											
1	Development of a sustainable tourism master plan	Kagoshima Prefecture				✓	✓	✓	In preparation for inscription on the World Heritage List, visitor management is to be promoted based on a master plan that sets forth directions for planned mitigation of concentration in mass tourism and ecotourism, infrastructure installation, and desirable use in the Amami Island Group.	Infrastructure and capacity for receiving an increased number of tourists are in place.	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference
2	Use control	MOE, Forestry Agency, Kagoshima Prefecture, town govts., related local organizations				✓	✓		In areas where World Heritage inscription might result in increased use or concentrated use to the extent that tangible environmental impact could occur, use control measures such as restriction of the number of users, mandatory accompaniment of guides, and traffic restrictions are to be examined and necessary arrangements area to be made to ensure the conservation of the natural environment and the provision of high quality use.	The World Heritage value is conserved and the quality of users' experience is guaranteed.	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference
3	Installation of facilities that contribute to the reduction of environmental burden	MOE, Kagoshima Prefecture, town govts..				✓	✓	✓	To enable visitors to perceive the heritage value tangibly and to reduce environmental burden, the installation of user facilities and improvement of the existing facilities are to be examined as follows: ➢ Key facilities capable of receiving large numbers of users; ➢ Facilities that gives expression to the attractiveness of forest areas; and ➢ Necessary facilities that reduce environmental burdens for sustainable use, such as toilets and walking trails.	The World Heritage value is conserved and the quality of users' experience is guaranteed.	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference
4	Installation of the Amami World Natural Heritage Trail (provisional name)	Kagoshima Prefecture, town govts..				✓	✓	✓	Trails are to be installed to encourage walking, so that visitors can experience the nature, local lifestyle, and culture of the Amami Island Group and enjoy rich interactions with local communities, resulting in more overnight stays in the region. High-quality nature trips are to be promoted to contribute to raising awareness about the value of the Natural World Heritage.	The entire island group are connected by trails and tourists make repeated visits and enjoy high-quality uses of various types that meet different demands.	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference

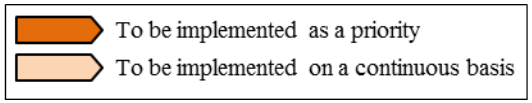
	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator] Short term	Notes (relevant organization) Middle term
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
5	Promotion of ecotourism	MOE, Kagoshima Prefecture, town govts., related local organizations				✓	✓	✓	In the World Heritage property area, tours of small groups of visitors accompanied by eco-tour guides are to be promoted to improve the satisfaction of visitors who come for genuine nature. High-quality nature trips are to be promoted to contribute to raising awareness about the value of the Natural World Heritage.	Small-group guided tours are provided in the property area etc.; tourists are satisfied with the nature of TokunoshimaIsland and make repeated visits.	Amami Island Group Ecotourism Promotion Council
6	Training of guides	Kagoshima Prefecture, town govts., related local organizations				✓	✓	✓	High-quality guides (tourism information guides, eco-tour guides, and village eco-tour guides) are to be trained to build the capacity of Tokunoshima Island for tourism. High-quality nature trips are to be promoted to contribute to raising awareness about the value of the Natural World Heritage.	High-quality guides are available; tourists are satisfied with tourism of Tokunoshima Island and make repeated visits.	
6) Conservation and Management with the Participation and Collaboration of Local Communities											
1	Implementation of forestry practices in consideration of biodiversity (intentionally listed repeatedly)	Kagoshima Prefecture, town govts..						✓	Rules for forestry practices compatible with biodiversity conservation are to be established to strike a balance between the strengthening of buffering functions and forestry in the forests around the heritage property area. For this purpose, efforts are to be made to develop common forest management methods for forests owned by municipal governments and share them across the region.	Methods of economically viable forestry practices compatible with the conservation of the heritage value are established. [Progress of the development of forestry management methods; record of actual forestry practice based on the forestry management methods.]	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference

Action item		Implementing agency	Time line			Area			Description	Target [evaluation indicator] Short term	Notes (relevant organization) Middle term
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
2	Environmentally-conscious implementation of public works (intentionally listed repeatedly)	MOE, Forestry Agency, Kagoshima Prefecture, town govts.				✓	✓	✓	A mechanism to integrate environmental consideration into public works is to be set up to prevent the World Heritage value from being affected by public works in the World Heritage property area or its surrounding area. For this purpose, the possibility of developing "environmental consideration guidelines" (provisional title) based on the actual experience of environmental consideration in the Amami Island Group and in consideration of special characteristics of nature and culture of the Amami Island Group is to be considered together with the possibility of putting in place a mechanism to support their implementation. These are to be shared among the national government, the prefectural government, municipal governments, and private businesses to improve the standards of environmental consideration in the entire region.	A mechanism is in place that ensures that appropriate environmental consideration is given when public works are carried out and that there is no impact on the World Heritage value. [Record of environmentally-conscious measures]	Amami Island Group Natural World Heritage Nominated Property Conservation and Utilization Review Conference
3	Dissemination of information to tourists and people outside the region	MOE, Forestry Agency, Kagoshima Prefecture, town govts., related local organizations					✓	✓	Information about attractive natural and cultural features, the World Heritage value, and rules for appropriate use is to be disseminated throughout Japan by means of various media to deepen people's understanding about the Amami Island Group.	Understanding about the Amami Island Group is improved throughout Japan. The environmental burden to the heritage property area is controlled below a certain level through tourism compatible with environmental consideration.	
4	Implementation of activities for the prevention of illegal dumping of waste etc.	MOE, Kagoshima Prefecture, town govts., related local organizations					✓	✓	Activities to prevent illegal dumping of waste, cleanup activities, and so forth are to be carried out for beautification of Tokunoshima Island as a Natural World Heritage property.	The environment of Tokunoshima Island is kept clean and beautiful both inside and outside the World Heritage property.	
5	Promotion of local people's actions through awareness raising etc.	MOE, Forestry Agency, Kagoshima Prefecture, town govts., related local organizations					✓	✓	Seminars and various events are to be carried out. Posters, brochures, etc. are to be made and distributed to have local people recognize the significance of World Heritage inscription and the need for endangered species protection and alien species countermeasures and to promote local people's actions.	Each member of local communities recognizes the significance of World Heritage inscription and the need for endangered species protection and alien species countermeasures and actively plays his/her own role.	

Action item			Implementing agency	Time line			Area			Description	Target [evaluation indicator] Short term	Notes (relevant organization) Middle term
				Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
	6	Transmission of a culture that has coexisted with nature of the Amami Island Group to future generations	Kagoshima Prefecture, town govts., related local organizations					✓	✓	Since the nature of the Amami Island Group, unlike other natural heritage properties, has been maintained through a long history of close interactions with people through its long history, efforts are to be made to raise awareness to ensure that the nature is conserved and that the unique culture of the Amami Island Group that has co-existed with nature is passed on to future generations.	Each member of local communities is proud of the nature and culture of the Amami Island Group and contributes to passing them on to future generations.	
	7	Promotion of environmental education activities	MOE, Kagoshima Prefecture, town govts., related local organizations					✓	✓	Special environmental education for a natural heritage property nominated for World Heritage inscription is to be explored to help children cultivate interest in local nature and culture.	Children are interested in local nature and culture and understand the need for endangered species protection and alien species countermeasures.	
7) Proper Monitoring and Utilization of Information												
	1	Dissemination and utilization of information	MOE, Forestry Agency, Kagoshima Prefecture, town govts..				✓	✓	✓	Information about the results of, and knowledge obtained by, monitoring programs and other types of research by different project undertakers are to be collected and accumulated widely. A mechanism for one-stop information collection, management, and publication is to be set up, such as the official website.	Information, knowledge, and technical experiences concerning the heritage value are collected, accumulated, and utilized for conservation and management.	

Annex 3

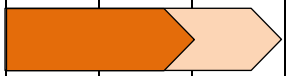
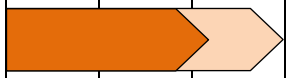
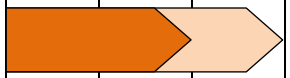
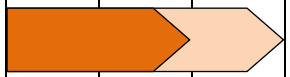
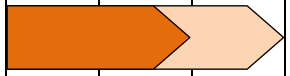
Action Plan
Northern Part of Okinawa Island



		Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
				Short term	Middle term	Long term	Property	Buffer zone	Surrounding area			
1) Proper Enforcement of Protective Legal Instruments												
	1	Management of Yambaru National Park	MOE	→	→	→	✓	✓	✓	Protection and management of Yambaru National Park is to be properly carried out.	The value of the World Heritage property is conserved and legal control measures are in place to ensure the buffering functions.	
	2	Management of wildlife protection areas etc.	MOE, Okinawa Prefecture	→	→	→	✓	✓	✓	Both national wildlife protection areas and Okinawa Prefectural wildlife protection areas are designated within forest areas inhabited by endangered species such as the Okinawa woodpecker and the Okinawa rail. Proper management is to be continued in the future. In addition, a mechanism is to be put in place to ensure the implementation of management measures.	Compliance is made with regulations in wildlife protection areas and endangered wildlife species are conserved.	
	3	Management of Mt. Yonahadake Natural Monument Protection Area etc.	Okinawa Prefecture	→	→	→	✓			Proper management is to be continued in the future of Mt. Yonahadake Natural Monument Protection Area, which provides habitats for natural monuments such as the Okinawa woodpecker and the Ryukyu robin. In addition, a mechanism is to be put in place to ensure the implementation of management measures.	Compliance is made with regulations in natural monument protection areas and endangered species of wild flora and fauna are conserved.	
2) Protection and Recovery of Endangered Species												
	1	Protection of national endangered species based on the Act on Conservation of Endangered Species of Wild Fauna and Flora (Endangered Species Act)	MOE	→	→	→	✓	✓	✓	Measures for conservation of national endangered species of wild fauna and flora are to be taken by legally designating species of wild fauna and flora that are at risk of extinction as national endangered species under the Endangered Species Act.	National endangered species are properly conserved.	

Action item			Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
				Short term	Middle term	Long term	Property	Buffer zone	Surrounding area			
	2	Enactment of ordinance etc. to protect endangered species of wild fauna and flora	Okinawa Prefecture, village govts.				✓	✓	✓	While the Endangered Species Act regulates the capture, transfer, and the like of national endangered species, there are species on the Red List that are not designated as national endangered species and therefore not legally protected. From among these species, those for which there is a particularly high risk of being poached are to be identified and measures to prevent and control illegal collection are to be strengthened by enacting prefectural or municipal ordinances.	Legal instruments are in place for the protection of endangered species.	
	3	Continuous implementation of protection and recovery programs etc.	MOE, MEXT, MAFF, MLIT, Okinawa Prefecture, village govts.				✓	✓	✓	For species that are covered by protection and recovery programs (the Okinawa rail, the Yambaru long-armed scarab beetle, and the Okinawa woodpecker), the inhabitation status, habitats, and so forth are to be studied and analyzed. Efforts are to be made for the protection and recovery of their populations.	Stable subsistence in natural conditions is possible. [To be evaluated on a case-by-case basis at review committee meetings]	• Yambaru Rare Species Protection and Recovery Review Conference • Yambaru Long-Armed Scarab Beetle Poaching Prevention Council
	4	Study of the inhabitation status of endangered species that are not covered by protection and recovery programs and the identification and implementation of protection measures	MOE, Forestry Agency, Okinawa Prefecture, village govts.				✓	✓	✓	For endangered species that are not covered by protection and recovery programs (including the Ryukyu long-haired rat and the Okinawa spiny rat, which are national natural monuments and national endangered species), their inhabitation status, habitats, and so forth are to be studied and analyzed. Efforts are to be made to identify and implement appropriate protection measures, as needed.	Endangered species that are not covered by protection and recovery programs are in stable subsistence in natural conditions. [Inhabitation status of endemic species and endangered species]	
	5	Enhancement of countermeasures to address traffic accidents and other incidents involving endangered wild fauna	MOE, Forestry Agency, Okinawa Prefecture, Okinawa General Bureau, village govts.				✓	✓	✓	The occurrence of accidents is to be reduced by means of awareness raising—informing people of locations where there is a high risk of traffic accidents involving endangered species of wild fauna, installing signs, distributing leaflets, and running roadkill prevention campaigns. In addition, measures to prevent accidents are to be taken—securing safe routes for the movement of animals and making improvements on the road to prevent animals from jumping out on the road.	In areas inhabited by endangered wildlife, drivers of vehicles are aware of the risk of traffic accidents involving species of wild fauna and comply with the legal speed limit, so that accidents would not occur. Road structures that make accidents less likely to happy are adopted. [To be evaluated on a case-by-case basis at review committee meetings]	• Yambaru Rare Species Protection and Recovery Review Conference • The Liaison Council on Yambaru Region Roadkill Prevention

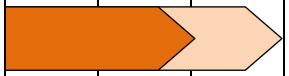
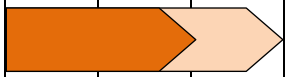
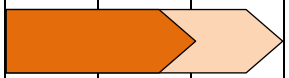
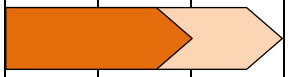
	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
6	Putting-in-place of a mechanism to rescue endangered wildlife individuals that are sick or injured	MOE, Okinawa Pref., related local organizations	→	→	→	✓	✓	✓	Endangered wildlife individuals that are sick or injured on the northern part of Okinawa Island are to be rescued and reintroduced to the wild.	A mechanism is available for appropriate implementation of measures to rescue endangered wildlife and reintroduce them to the wild.	
7	Prevention of the poaching and illegal collecting of endangered species of wild flora and fauna	MOE, Forestry Agency, Okinawa Pref., village govts., related local organizations	→	→	→	✓	✓	✓	Patrols are to be carried out primarily along the forest roads leading into the core forests to prevent the poaching and illegal collecting of species of wild flora and fauna in coordination with various organizations, including municipal governments, local organizations, and the police.	An effective monitoring system is established to address the poaching and illegal collecting of endangered species of wild flora and fauna. No poaching or illegal collecting happens. [Number of patrols carried out in one year, number of people participating in the patrols, etc.]	
8	Management of the Okinawa woodpecker protection area and deployment of rangers	Higashi Village		→	→			✓	Based on the Higashi Village Ordinance to Protect the Okinawa Woodpecker, rangers are deployed at the Higashi Village Okinawa woodpecker protection area to watch the protection area and monitor the breeding condition of the Okinawa woodpecker.	The habitat of the Okinawa woodpecker in Higashi Village (close to the southern limit of its distribution) is maintained to support its stable breeding.	
9	Enhancement of corridor functions for endangered species by linking the components of the nominated property	Kunigami Village, related local organizations	→	→	→	✓	✓	✓	In order to enhance the corridor functions for endangered species between the Mount Hedo area and the backbone mountain range, the status of movement of endangered species is to be studied and analyzed, measures to address alien species are to be taken, and the possibility of creating ecological corridors as a measure to secure the continuity of forests is to be explored.	Corridor functions for endangered species linking the Mount Hedo area and the backbone mountain range is strengthened.	
3) Elimination and Reduction of Impact from Alien Species											
1	Enhancement of measures to address invasive alien species	MOE, Forestry Agency, Okinawa Prefecture, village govts.	→	→	→	✓	✓	✓	The status of invasion of already established invasive alien species is to be studied and, with a focus on species that particularly need addressing, countermeasures are to be taken. Information is to be collected of the sighting of invasive alien species that are not yet established on the northern part of Okinawa Island and the database of alien species sighting information is to be updated as appropriate. Also, measures to prevent their establishment are to be taken, as needed.	Adverse effects are reduced or avoided by eliminating, or preventing the establishment of, alien species whose impact on the heritage value (ecosystem / biodiversity) is considered to be particularly significant.	

Action item			Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
				Short term	Middle term	Long term	Property	Buffer zone	Surrounding area			
	2	Implementation of measures to address mongooses	MOE, Okinawa Prefecture				✓	✓	✓	Mongooses, which are exerting a significant impact on the native ecosystems by preying on endangered species of wild fauna, are to be captured and eliminated. Also, completely mongoose-free areas are to be established and invasion prevention fences are to be managed to prevent new invasion of mongooses into these areas.	Mongooses are completely eliminated from the northern part of Okinawa Island and new invasion is prevented. [Catch per unit effort (CPUE) for the mongoose, the area of sighting, and case-by-case evaluation at review committee meetings]	Northern Okinawa Region Mongoose Control Project Review Committee
	3	Capture of feral cats	MOE, Okinawa Prefecture, village govts.				✓	✓	✓	Feral cats, which are exerting (or likely to exert) impact on the native ecosystems by preying on wild animals, are to be captured and eliminated. Also, the present state of distribution and predation is to be studied and effective methods of capturing them are to be explored.	Native ecosystems are conserved by eliminating feral cats.	
	4	Thorough enforcement of the Ordinance on Cat Welfare and Management	Village govts.				✓	✓	✓	Based on the Ordinance on Cat Welfare and Management enacted by individual village governments, registration is to be made of pet cats, microchip implantation and contraceptive castration are to be recommended, ownerless cats in and around settlements are to be captured for protection, and various awareness raising measures are to be taken. Effective activities are to be carried out in coordination with cat care facilities.	Adverse effects of pet cats on wild animals are prevented, progress is made toward complete elimination of ownerless cats in and around settlements, general awareness is raised regarding cats and endangered species of wild fauna, and new appearance of ownerless cats is prevented. [Number / ratio of microchipped pet cats]	
	5	Establishment and operation of facilities to care, keep, and transfer ownerless cats and dogs	Okinawa Prefecture, village govts.				✓	✓	✓	Efforts are to be made to establish facilities and mechanisms that can take the series of actions to care, keep, and transfer ownerless cats and dogs to new owners. Also, educational use of these facilities such as opportunities for children to play with animals is to be considered.	Facilities and mechanisms that care, keep, and transfer ownerless cats and dogs to new owners are available. New appearance of ownerless cats and dogs is prevented.	
	6	Thorough enforcement of the Pet Dog Ordinance	Village govts.						✓	Based on the Pet Dog Ordinance enacted by individual village governments, the appropriate management of pet dogs is to be thoroughly enforced. Effective activities are to be carried out in coordination with dog care facilities.	Adverse effects of pet dogs on wild animals are prevented. New appearance of ownerless dogs is prevented.	
	7	Enhancement of measures to prevent the release of pets	Okinawa Prefecture, village govts.						✓	Patrols and campaigns are to be carried out to prevent the release of pets that exert significant impacts on the native ecosystems (dogs, cats, reptiles, etc.). Enhancement of countermeasures is to be considered as necessary, without excluding the possibility of enacting new ordinances etc.	The release of pets is terminated, New release of pets is prevented.	

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surrounding area			
4) Harmony with Livelihoods in the Buffer Zone and Surrounding Area											
	1	Promotion of the Yambaru Model Forestry	Okinawa Prefecture, village govts., related local organizations	→	→	✓	✓	✓	In the forests on the northern part of Okinawa Island, the Yambaru Model Forestry which is a combination of sustainable, recycling-oriented "forestry and forest products industry" and environmentally harmonious "nature-experiencing activities", is to be promoted as a means of conserving the natural environment and environmentally-friendly use.	Forest functions are enhanced for each zone by setting up, or reviewing, the zoning of forests.	
	2	Protection of wildlife and coexistence with local communities	MOE, Okinawa Prefecture, village govts.	→	→			✓	In order to achieve coexistence between wildlife and local communities, biodiversity is to be maintained through appropriate protection and management of wildlife and necessary measures are taken to prevent damage to agriculture, forestry, and life of local communities.	Wildlife and local communities coexist as a result of habitat management and measures to prevent damage.	
	3	Promotion of agriculture that coexists with nature	Okinawa Prefecture, village govts., related local organizations	→	→			✓	A sustainable, nature-coexistent agriculture in which consideration is given to reducing environmental impact is to be promoted by improving the habitat of precious wildlife in individual villages, putting in place infrastructure that gives consideration to biodiversity, and making soil. The World Heritage brand is to be used to give added value to agricultural produces.	Biodiversity is conserved as a result of nature-coexistent agriculture taking root in local communities. Agriculture is promoted as a result of the brand value of agricultural produces being enhanced.	
	4	Promotion of measures to prevent red soil outflow	Okinawa Prefecture, village govts.	→	→		✓	✓	Thorough measures are to be taken to prevent red soil outflow due to various development projects by ensuring compliance with the Okinawa Prefecture Red Soil Erosion Prevention Ordinance . In addition, countermeasures are to be promoted to curb red soil outflow from the existing farmland due to rain.	Red soil outflow to rivers and coastal marine areas is curbed. [To be evaluated on a case-by-case basis at review committee meetings]	Okinawa Prefecture Committee on Measures to Prevent Red Soil Erosion

Action item			Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
				Short term	Middle term	Long term	Property	Buffer zone	Surrounding area			
5) Proper Use and Ecotourism												
	1	Promotion of sustainable tourism by developing the tourism vision concerning the World Heritage property	Okinawa Prefecture, village govts., related local organizations				✓	✓	✓	A balance is to be struck between maintaining the heritage value and promoting tourism by sharing information, exchanging opinions, and building consensus among stakeholders at council meetings and other opportunities with the participation of government organizations and related local organizations concerned with the Natural World Heritage to develop, based on coordination among the three villages on the northern part of Okinawa Island, the tourism vision describing how tourism, ecotourism, protection, and conservation should be for the World Heritage component on the northern part of Okinawa Island.	The tourism vision is developed for the area nominated for World Heritage inscription and a balance is struck between maintaining the heritage value and promoting tourism.	
	2	Establishment of tourism styles characterized by experience, stay, and exchange	Okinawa Prefecture, village govts., related local organizations				✓	✓	✓	Tourism styles characterized by experience, stay, and exchange are to be established for the northern part of Okinawa Island through coordination of the three villages, including the development of attractive programs together with the surrounding area of the World Heritage property by combining different styles of tourism such as ecotourism, green tourism, blue tourism, the use of vacant private houses as tourist accommodation, local village walk, and history- and culture-experiencing activities.	A mechanism that can provide attractive menus of experience, stay, and exchange, utilizing local natural and cultural resources together with the surrounding area of the World Heritage property.	
	3	Establishment of a mechanism for promoting forest tourism	Okinawa Prefecture, village govts., related local organizations				✓	✓	✓	Rules for appropriate use of forests are to be established; a mechanism for monitoring and field management is to be set up; and a guide system that can provide high quality tours is to be put in place in compliance with the rules. Sustainable financial resource is to be secured with the aim of establishing a mechanism or an organization (ex. council) that enables local communities to manage and operate the above independently.	A forest tourism promotion mechanism is in place that contributes to the promotion of mountain village areas, while striking a balance between heritage value conservation (biodiversity and ecosystems) and forest use.	

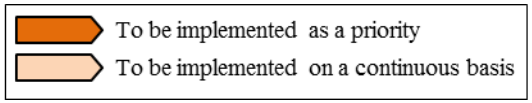
	Action item		Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
				Short term	Middle term	Long term	Property	Buffer zone	Surrounding area			
	4	Implementation of appropriate use control and establishment of and compliance with rules for appropriate use	MOE, Okinawa Prefecture, village govts., related local organizations				✓	✓	✓	In order to conserve the heritage value (biodiversity and ecosystems), environmental load associated with the use of natural resources is to be reduced by taking the following measures: ➢ Visitors are guided to the surrounding area as a measure to disperse the use; ➢ Common rules for the observation of endangered species etc. are to be set up; and ➢ Passage on the roads within the World Heritage property and access roads is to be controlled.	Environmental load associated with the use of natural resources is reduced and the heritage value (biodiversity and ecosystems) is conserved.	
	5	Strengthening of measures to improve the quality of use	Okinawa Prefecture, village govts., related local organizations				✓	✓	✓	Soft infrastructure is to be strengthened, including human resource development such as guides and program development, in order to achieve appropriate and high quality use at the World Heritage property.	Appropriate and high quality use is provided in a manner compatible with the World Heritage property.	
	6	Reduction of environmental load and promotion of appropriate use by facility installation	MOE, Okinawa Prefecture, village govts., related local organizations					✓	✓	In order to reduce the environmental load associated with use and promote appropriate use within the heritage property without compromising visitors' perception of the heritage value such as ecosystems and biodiversity, effective manners of utilizing the existing facilities are to be explored, together with the following management and installation of user facilities: ➢ Maintenance and management of Okinawa Rail Wild Forest; ➢ Operation of the Okinawa Rail Ecology Exhibition and Lerning Facilities; ➢ Establishment and operation of facilities for disseminating information etc. ➢ Installation of facilities that highlight the attractive features of forests; and ➢ Enhancement of educational facilities where ecological exhibits of endangered species are made.	A balance is struck between heritage value conservation and appropriate use. The quality of user experience is maintained. [Number of users of core facilities]	

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surrounding area			
6) Conservation and Management with the Participation and Collaboration of Local Communities											
1	Enforcement of the Biodiversity Strategy of Okinawa	Okinawa Prefecture				✓	✓	✓	Relevant measures are to be taken based on the Biodiversity Strategy of Okinawa, in which the policies and measures for biodiversity conservation in Okinawa Prefecture are set out.	The mechanism for the implementation of measures based on the strategy is in place.	
2	Implementation of laurel forest regeneration projects	Village govts., related local organizations					✓	✓	A series of forest management measures is to be taken to promote the sound recovery of laurel forests in the forested and idle areas surrounding the core area, including seed sowing, supplementary planting, top soil spraying, invasive plant elimination, and the planting and monitoring of the Okinawa woodpecker's foraging trees. Forest regeneration projects are to be implemented with the participation of and in collaboration with local forestry industry and local communities.	A forest management mechanism is in place together with forests with buffering functions to ensure that the value as a Natural World Heritage property be maintained.	
3	Implementation of the Ogimi Village Regional Biodiversity Conservation Plan	Ogimi Village, related local organizations				✓	✓	✓	Nature conservation efforts are to be made by implementing environmental education mainly for the youth as well as environmental monitoring based on the Regional Biodiversity Conservation Plan.	Not only citizens who live in the relevant villages but also other citizens of Okinawa Prefecture are aware of the value of the Natural World Heritage property. Activities for environmental conservation are carried out.	
4	Promotion of field surveys and nature restoration projects for rivers in the northern part of Okinawa Island	Okinawa Prefecture, village govts., related local organizations				✓	✓	✓	Field surveys are to be carried out for rivers whose degree of naturalness is decreasing in the northern part of Okinawa Island. Also, nature restoration projects are to be implemented for rivers such as the Oku River, Takasato River, and Gesashi River in accordance with the Okinawa Prefecture Guidelines on Natural Environment Restoration.	The river environments that are inhabited by diverse animals and plants, including aquatic organisms. [To be evaluated on a case-by-case basis at review committee meetings (Gesashi River)]	• Committee to Restore the Nature along the Oku River • Committee to Restore the Natural Environment along the Gesashi River
5	Implementation of awareness-raising activities	MOE, Okinawa Prefecture, village govts., related local organizations				✓	✓	✓	Awareness raising is to be carried out for local people about the Natural World Heritage inscription procedure, its significance, progress status, relevant activities, and the roles and responsibilities of local communities through different opportunities including symposia, lectures, and PR brochures. Particularly where the cooperation of local people is needed, priority is given to building their understanding.	Understanding and cooperation are obtained for matters that should need cooperation from local people, such as the state of progress of activities related to the Natural World Heritage property. [Number of (number of participants in) events such as the Northern Part of Okinawa Island Working Group, symposia related to the Natural World Heritage property and local natural and cultural resources, workshops and training courses]	

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
6	Enhancement of the education system	Forestry Agency, Okinawa Prefecture, village govts., related local organizations				✓	✓	✓	Study of the environment is to be enhanced at elementary and junior high schools with a view to stimulate children's interest in local nature and culture. Also, for the environment course of Hentona High School, the possibility of integrating World Heritage education into the curriculum is to be explored.	Children are interested in local nature and culture and understand the importance of conserving the value of the World Heritage property. In the future, the increasing number of local people find jobs related to the Natural World Heritage property.	
7	Environmentally-conscious implementation of public works	Okinawa Prefecture, village govts.					✓	✓	The Policy for Environmental Consideration which is set out in the Second Okinawa Prefecture Basic Plan for the Environment and the Guidelines on Natural Environment Conservation are to be properly enforced. In addition, the standards for environmental consideration will be upgraded on the occasion of their revision to ensure that public works should not affect the value of the World Heritage property.	Appropriate consideration is given when public works are implemented. The level of the standards for environmental consideration is high enough to ensure that biodiversity and ecosystems should be maintained up to standards for a Natural World Heritage property should be maintained. [Record of environmentally-conscious measures]	
8	Implementation of patrols and campaigns to prevent illegal dumping and removal of illegally dumped waste	Forestry Agency, Okinawa Prefecture, village govts.					✓	✓	As a proactive measure to address the possibility of increased illegal waste dumping due to increased use following World Heritage inscription, patrols and campaigns to prevent illegal dumping are to be carried out to raise awareness of citizens of Okinawa Prefecture widely. The possibility of removing already dumped waste is to be also considered.	No illegal dumping occurs, even if the number of users increases.	
7) Proper Monitoring and Utilization of Information											
1	Dissemination and utilization of information	MOE, Forestry Agency, Okinawa Prefecture, village govts.				✓	✓	✓	Information about the results of, and knowledge obtained by, monitoring programs and other types of research by different project undertakers are to be collected and accumulated widely. A mechanism for one-stop information collection, management, and publication is to be set up, such as the official website.	Information, knowledge, and technical experiences concerning the heritage value are collected, accumulated, and utilized for conservation and management.	

Annex 4

Action Plan
Iriomote Island



	Action item	Implementing agency	Time line: Short term	Time line: Middle term	Time line: Long term	Area: Property	Area: Buffer zone	Area: Surrounding area	Description	Target [evaluation indicator]	Notes (relevant organization)
1) Proper Enforcement of Protective Legal Instruments											
1	Management of Iriomote-Ishigaki National Park	MOE				✓	✓	✓	Protection and management of Iriomote Ishigaki National Park is to be properly carried out.	The value of the World Heritage property is conserved and legal control measures are in place to ensure the buffering functions.	
2	Management of the Iriomote Forest Ecosystem Reserve	Forestry Agency				✓	✓	✓	Conservation and management of the Iriomote Forest Ecosystem Reserve is to be properly carried out.	The value of the World Heritage property is conserved and legal control measures are in place to ensure the buffering functions.	Iriomote Forest Ecosystem Reserve Conservation Management Committee
3	Management of the Iriomote National Wildlife Protection Area etc.	MOE				✓	✓	✓	Proper management is to be continued in the future of the National Iriomote Wildlife Protection Area, which provides habitats for endangered species such as the Iriomote cat. In addition, a mechanism is to be put in place to ensure the implementation of management measures.	Compliance is made with regulations in wildlife protection areas and endangered wildlife species are conserved.	
2) Protection and Recovery of Endangered Species											
1	Protection of national endangered species based on the Act on Conservation of Endangered Species of Wild Fauna and Flora (Endangered Species Act)	MOE				✓	✓	✓	Measures for conservation of national endangered species of wild fauna and flora are to be taken by legally designating species of wild fauna and flora that are at risk of extinction as national endangered species under the Endangered Species Act.	National endangered species are properly conserved.	
2	Revision of the Taketomi Town Natural Environment Protection Ordinance	Taketomi Town				✓	✓	✓	In order to contribute to the conservation of the sound and rich natural environment of Taketomi Town and to secure its biodiversity, the existing ordinance is to be drastically revised and effectively enforced as a new ordinance that contains provisions for the protection of habitats for endangered species of wild flora and fauna, the implementation of protection and management projects, and regulations controlling the capture of special endangered species of wild flora and fauna and the release of designated alien species.	Biodiversity of Taketomi Town is conserved to meet specific characteristics of individual islands as a result of designation of reserves and specific species, compliance with regulations, and implementation of projects.	Taketomi Town Nature Protection Council

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
	3 Continuous implementation of protection and recovery programs etc.	MOE, MAFF, Okinawa Prefecture	→	→	→	✓	✓	✓	For species that is covered by protection and recovery programs (the Iriomote cat), the inhabitation status, habitats, and so forth are to be studied and analyzed. Efforts are to be made for the protection and recovery of their populations.	Stable subsistence in natural conditions is possible. [To be evaluated on a case-by-case basis at review committee meetings]	Iriomote Cat Protection and Recovery Review Conference
	4 Study of the inhabitation status of endangered species that are not covered by protection and recovery programs and the identification and implementation of protection measures	MOE, Forestry Agency, Okinawa Prefecture, related local organizations	→	→	→	✓	✓	✓	The inhabitation status and so forth of endangered species that are not covered by protection and recovery programs are to be studied on a continuous basis to obtain and accumulate data that contribute to appropriate protection measures. ➢ Monitoring of the *Satakentia liukiuensis* community at Ubundoru; ➢ Monitoring of the *Funaura nipa* palm communities at the forest reserve in Funaura; ➢ Survey on the inhabitation status of the crested serpent eagle; and ➢ Survey on the actual distribution of the Kishinoue's giant skink.	A mechanism is in place that can determine and monitor the inhabitation status of endangered species that are not covered by protection and recovery programs.	
	5 Enhancement of countermeasures to address traffic accidents and other incidents involving endangered wild fauna	MOE, Okinawa Prefecture, Taketomi Town, related local organizations	→	→	→		✓	✓	The occurrence of accidents is to be reduced by means of awareness raising—informing people of locations where there is a high risk of traffic accidents involving the Iriomote cat and other endangered species of wild fauna, installing signs, distributing leaflets, and running roadkill prevention campaigns. In addition, a basic plan for traffic accident prevention is to be developed. The functions of the routes for the movement of animals (animal pathways) are to be maintained and enhanced. The possibility of strengthening measures such as prevention of animals' entry onto the road and speed limits of vehicles is to be explored.	The occurrence of traffic accidents involving endangered species of wild fauna is prevented on major roads. [Number of traffic accidents involving the Iriomote cat. Number of the Iriomote cat and other animals killed in traffic accidents]	Iriomote Cat Traffic Accident Occurrence Prevention Liaison Conference
	6 Putting-in-place of a mechanism to rescue endangered wildlife individuals that are sick or injured	MOE, Okinawa Prefecture, related local organizations	→	→	→	✓	✓	✓	Endangered wildlife individuals that are sick or injured in the Iriomote region are to be rescued and reintroduced to the wild.	A mechanism is available for appropriate implementation of measures to rescue endangered wildlife and reintroduce them to the wild.	

	Action item		Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
				Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
	7	Prevention of the poaching and illegal collecting of endangered species of wild flora and fauna	MOE, Forestry Agency, Okinawa Prefecture, Taketomi Town, related local organizations				✓	✓	✓	Patrols are to be carried out to prevent the poaching and illegal collecting of endangered species of wild flora and fauna based on the relevant laws and ordinances through coordination among various stakeholders including government organizations and local related organizations. Information is to be provided to local people and tourists about the relevant legal provisions regulating the capture of endangered species of wild flora and fauna and the protected species. In addition, with the cooperation from private businesses and others, awareness-raising is to be carried out about protection of endangered species.	An effective monitoring system is established to address the poaching and illegal collecting of endangered species of wild flora and fauna. No poaching or illegal collecting happens. [Number of patrols carried out in one year, number of people participating in the patrols, etc.]	
3) Elimination and Reduction of Impact from Alien Species												
	1	Enhancement of measures to address invasive alien species	MOE, Forestry Agency, Okinawa Prefecture, Taketomi Town, related local organizations				✓	✓	✓	The status of invasion of already established invasive alien species is to be studied and, with a focus on species that particularly need addressing, countermeasures are to be taken. Information is to be collected of the sighting of invasive alien species that are not yet established on Iriomote Island and the database of alien species sighting information is to be updated as appropriate. Also, measures to prevent their establishment are to be taken, as needed, such as awareness-raising for local people, businesses, and tourists.	Adverse effects are reduced or avoided by eliminating, or preventing the establishment of, alien species whose impact on the heritage value (ecosystem / biodiversity) is considered to be particularly significant. Also, local people and tourists are fully aware of alien species issues.	
	2	Thorough enforcement of the Taketomi Town Ordinance on the Keeping of Cats	Taketomi Town					✓	✓	Measures to prevent the spread of infectious diseases from pet cats to the Iriomote cat are to be taken, such as microchipping, inoculation with vaccine, virus tests, castration or sterilization if needed, based on the Ordinance on the Keeping of Cats in cooperation with the related organizations.	Adverse effects of pet cats on the Iriomote cat are prevented. [Number / ratio of microchipped pet cats]	
	3	Implementation of projects to care, house, and extradite ownerless cats	Taketomi Town, related local organizations					✓	✓	Ownerless cats living on Iriomote Island are to be captured and extradited off the island in order to prevent the transmission of infectious diseases to the Iriomote cat and adverse effects on the ecosystem.	Adverse effects on the ecosystem are prevented by eliminating ownerless cats on Iriomote Island.	

	Action item		Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
				Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
	4	Enhancement of measures to prevent the release of pets	Okinawa Prefecture, Taketomi Town, related local organizations				✓	✓	✓	To prevent pets (dogs, cats, exotic animals, etc.) from escaping to become new alien species, the breeding status is to be checked and awareness-raising is to be carried out about proper breeding. In addition, measures are to be explored to prevent pets taken by tourists into forested areas from spreading pet-derived infectious diseases to, or feeding on, wild animals.	Progress is made in obtaining the knowledge of the breeding status of pets and owners are taking care of their pets appropriately. Risks of infectious diseases' spreading from pets to wild animals and pets' predating on wild animals are reduced.	
	5	Reduction of the risk of interbreeding with native animals	Taketomi Town, related local organizations				✓	✓	✓	With regard to interbreeding between the Ryukyu wild boar and wild/domesticated pig hybrids, the investigation of the current status is to be carried out as soon as possible and effective countermeasures are to be explored. In addition, efforts are to be made to facilitate understanding of local people and establish a mechanism for their cooperation for the prevention of intentional introduction of closely related species to Iriomote Island and strict management of domesticated animals.	The risk of interbreeding between the Ryukyu wild boar and wild/domesticated pig hybrids is reduced.	
4) Harmony with Livelihoods in the Buffer Zone and Surrounding Area												
	1	Monitoring and conservation of mangroves	Forestry Agency, Okinawa Prefecture, Taketomi Town, related local organizations					✓	✓	Mangroves that foster rich biota are to be monitored. Necessary measures are to be considered and implemented, depending on the extent of deterioration.	A mechanism is in place for continuous monitoring of mangrove ecosystems. The ecological processes of ecosystems are stable over time.	
	2	Implementation of management measures based on coastal forest regeneration guidelines	Forestry Agency					✓	✓	Coastal forests are to be managed properly based on coastal forest regeneration guidelines.	Enhanced functions of reserve forests, such as wind breaking and protection from sea water as well as biodiversity of regenerated coastal forests contribute to local industry.	

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
5) Proper Use and Ecotourism											
	1	Promotion of sustainable tourism by developing the tourism vision concerning the World Heritage property	Okinawa Prefecture, Taketomi Town, related local organizations	→		✓	✓	✓	A balance is to be struck between maintaining the heritage value and promoting tourism by sharing information, exchanging opinions, and building consensus among stakeholders at council meetings and other opportunities with the participation of government organizations and related local organizations concerned with the Natural World Heritage to develop the tourism vision clarifying the basic concept of tourism, ecotourism, protection, and conservation for the World Heritage component on Iriomote Island.	The tourism vision is developed for the area nominated for World Heritage inscription and a balance is struck between maintaining the heritage value and promoting tourism.	
	2	Reduction of environmental load and promotion of appropriate use by facility installation	MOE, Forestry Agency, Okinawa Prefecture, Taketomi Town, related local organizations	→		✓	✓	✓	In order to reduce the environmental load associated with use and promote appropriate use within the heritage property without compromising visitors' perception of the heritage value such as ecosystems and biodiversity, effective manners of utilizing the existing facilities are to be explored, together with the following management and installation of user facilities: ➢ Installation of boardwalks to prevent impacts of trekking and other uses on the natural environment; ➢ Consideration of setting up core facilities that deepen visitors' understanding of the Natural World Heritage property; ➢ Consideration for the improvement of infrastructure such as toilets; ➢ Installation of users' facilities as projects eligible for lump-sum grants for promotion of Okinawa; and ➢ Consideration of national park projects under the direct control of the MOE.	A balance is struck between heritage value conservation and appropriate use. The quality of user experience is maintained. [Number of visitors to Iriomote Island] [Number of users at core facilities] [User satisfaction]	

	Action item		Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
				Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
	3	Implementation of appropriate use control and establishment of and compliance with rules for appropriate use	MOE, Okinawa Prefecture, Taketomi Town, related local organizations				✓	✓	✓	In order to conserve the heritage value (biodiversity and ecosystems), environmental load associated with the use of natural resources is to be reduced by taking the following measures: ➢ Strengthened measures to address overuse from nature experience tours along the Hinai River and in the surrounding national forests; ➢ Appropriate enforcement of Nakama River Conservation and Utilization Agreement; ➢ Preparation of eco-tourism guidelines; and ➢ Consideration of setting up the zoning and usage rules that meet the specific characteristics of individual resources and the reality of the current uses.	Environmental load associated with the use of natural resources is reduced and the heritage value (biodiversity and ecosystems) is conserved.	
	4	Monitoring of positive and negative impacts of uses on the natural environment, local community and local economy	MOE, Okinawa Prefecture, Taketomi Town, related local organizations				✓	✓	✓	The status of uses such as tourism and eco-tours is to be checked. Effective monitoring methods are to be explored to evaluate the positive and negative impacts of various uses on the natural environment, local community, and local economy. A mechanism that can carry out monitoring and evaluation on a continuous basis is to be put in place.	The results of the monitoring and evaluation of the positive and negative impacts of uses on the natural environment, local community, and local economy are fed back as appropriate to individual plans and projects.	
	5	Strengthening of measures to improve the quality of use	MOE, Forestry Agency, Okinawa Prefecture, Taketomi Town, related local organizations				✓	✓	✓	Soft infrastructure is to be strengthened, including human resource development such as guides and program development, in order to achieve appropriate and high quality use at the World Heritage property.	Appropriate and high quality use is provided in a manner compatible with the World Heritage property.	

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
6	Procurement of sustainable financial resources for conservation and management by mobilizing funds and other sources	Taketomi Town	→	→	→			✓	In order to prepare for the potential increase in costs for conservation and management due to the foreseen increase of visitors following World Heritage inscription, fund-raising mechanisms are to be explored to be able to procure financial resources from a wide range of sources from beneficiaries such as tourism businesses and users to those who have understanding for the conservation of heritage value.	The budget necessary for the conservation and sustainable use of the natural environment of Iriomote Island is available.	
6) Conservation and Management with the Participation and Collaboration of Local Communities											
1	Enforcement of the Biodiversity Strategy of Okinawa	Okinawa Prefecture	→	→	→	✓	✓	✓	Relevant measures are to be taken based on the Biodiversity Strategy of Okinawa, in which the policies and measures for biodiversity conservation in Okinawa Prefecture are set out.	The mechanism for the implementation of measures based on the strategy is in place.	
2	Participatory implementation of conservation and management activities on the initiative of local community	MOE, Okinawa Prefecture, Taketomi Town, related local organizations	→	→	→	✓	✓	✓	Participatory conservation and management activities are to be carried out continuously on the initiative of local community. Issues concerning the relation between the World Heritage property and local community are to be identified from the perspective of local people. Guidance and support are to be provided to concrete measures to solve these issues.	Activities for the conservation and management of the World Heritage value are carried out continuously on the initiative of and with the participation of local community.	
3	Promotion of awareness raising and education for local people, tourists, and others	MOE, Forestry Agency, Okinawa Prefecture, Taketomi Town, related local organizations	→	→	→	✓	✓	✓	Awareness-raising and educational activities for local people, tourists, and other people are to be carried out on a continuous basis, including distribution of brochures, in order to foster awareness for the conservation of the World Heritage value and imbue them with respect for and pride in unique local culture in light of nature-culture linkage on Iriomote Island. Also, visitors are to be advised to pay attention to the proper use, particularly on their arrival at the island.	Local people, tourists, and other people show deeper understanding for World Heritage conservation and unique local culture. [Number of (number of participants in) events such as the Iriomote Island Working Group, symposia related to the Natural World Heritage property and local natural and cultural resources, workshops and training courses]	

	Action item	Implementing agency	Time line			Area			Description	Target [evaluation indicator]	Notes (relevant organization)
			Short term	Middle term	Long term	Property	Buffer zone	Surround-ing area			
4	Environmentally-conscious implementation of public works	Okinawa Prefecture, Taketomi Town	→	→	→		✓	✓	The Policy for Environmental Consideration which is set out in the Second Okinawa Prefecture Basic Plan for the Environment and the Guidelines on Natural Environment Conservation are to be properly enforced. In addition, the standards for environmental consideration will be upgraded on the occasion of their revision to ensure that public works should not affect the value of the World Heritage property.	Appropriate consideration is given when public works are implemented. The level of the standards for environmental consideration is high enough to ensure that biodiversity and ecosystems should be maintained up to standards for a Natural World Heritage property should be maintained. [Record of environmentally-conscious measures]	
5	Promotion of beautification activities etc.	MOE, Forestry Agency, Okinawa Prefecture, Taketomi Town, related local organizations	→	→	→		✓	✓	Various stakeholders who collaborate and cooperate, sharing responsibility and playing different roles appropriately, are to carry out activities, such as removal of seaborne waste, for the beautification of the environment and the conservation of ecosystems and biodiversity of Iriomote Island as part of a Natural World Heritage property.	The natural environment is conserved and landscapes appropriate for an island that constitutes a component of a Natural World Heritage property are maintained and conserved.	
7) Proper Monitoring and Utilization of Information											
1	Dissemination and utilization of information	MOE, Forestry Agency, Okinawa Prefecture, Taketomi Town	→	→	→	✓	✓	✓	Information about the results of, and knowledge obtained by, monitoring programs and other types of research by different project undertakers are to be collected and accumulated widely. A mechanism for one-stop information collection, management, and publication is to be set up, such as the official website.	Information, knowledge, and technical experiences concerning the heritage value are collected, accumulated, and utilized for conservation and management.	

Reference Materials

Reference Material 1: List and Overview of Laws, Ordinances, Plans, and Other Regulations Related to the Management Plan

Name of document	Responsible agency / enactor / preparer	Type of rule				Relevance to the component parts				Relevant zone / area			Document No.	Page No.
		Laws etc.	Ordinances	Other administrative plans etc.	Voluntary rules etc.	Amami-Oshima Island	Tokunoshima Island	The northern part of Okinawa Island	Iriomote Island	Nominated property	Buffer zone	Surrounding area		
Natural Parks Act	MOE	●				●	●	●	●	●	●	●	*1	—
Specifications and Park Plan for the Amami Gunto National Park	MOE	●				●	●			●	●	●	*1	—
Specifications and Park Plan for Yambaru National Park	MOE	●						●		●	●	●	*1	—
Specifications and Park Plan for Iriomote-Ishigaki National Park	MOE	●							●	●	●	●	*1	—
Law on the Administration and Management of National Forests	Forestry Agency	●				●	●	●	●	●	●	●	*1	—
National Forest Administration and Management Regulations	Forestry Agency	●				●	●	●	●	●	●	●	*1	—
Protected Forest Setting Rule	Forestry Agency	●				●	●	●	●	●	●	●	*1	—
Regional Administration and Management Plan (Amami-Oshima Island)	Kyusyu Regional Forest Office	●				●	●			●	●	●	*1	—
Regional Administration and Management Plan (the northern part of Okinawa Island)	Kyusyu Regional Forest Office	●						●		●	●	●	*1	—
Regional Administration and Management Plan (Miyako-Yaeyama)	Kyusyu Regional Forest Office	●							●	●	●	●	*1	—
Conservation Management Plan for Forest Ecosystem Reserve (Amami)	Kyusyu Regional Forest Office	●				●	●			●	●	●	*1	—
Conservation Management Plan for Forest Ecosystem Reserve (Iriomote)	Kyusyu Regional Forest Office	●							●	●	●	●	*1	—
Wildlife Protection, Control, and Hunting Management Act	MOE	●				●	●	●	●	●	●	●	*1	—
Designation Plan of Mt. Yuwandake National Wildlife Protection Area	MOE	●				●				●			*1	—
Designation Plan of Mt. Yuwandake National Wildlife Special Protection Area	MOE	●				●				●			*1	—
Designation Plan of Yambaru (Ada) National Wildlife Protection Area	MOE	●						●		●	●	●	*1	—
Designation Plan of Yambaru (Ada) National Wildlife Special Protection Area	MOE	●						●		●			*1	—
Designation Plan of Yambaru (Aha) National Wildlife Protection Area	MOE	●						●		●	●	●	*1	—
Designation Plan of Iriomote National Wildlife Protection Area	MOE	●							●	●	●		*1	—
Designation Plan of Iriomote National Wildlife Special Protection Area	MOE	●							●	●	●		*1	—
Law for the Protection of Cultural Properties	MEXT	●				●	●	●	●	●	●	●	*1	—
Kagoshima Prefectural Ordinance on Cultural Assets Protection	Kagoshima Prefecture		●			●	●			●	●	●	1	1-95

Name of document	Responsible agency / enactor / preparer	Type of rule				Relevance to the component parts				Relevant zone / area			Document No.	Page No.
		Laws etc.	Ordinances	Other administrative plans etc.	Voluntary rules etc.	Amami-Oshima Island	Tokunoshima Island	The northern part of Okinawa Island	Iriomote Island	Nominated property	Buffer zone	Surrounding area		
Okinawa Prefectural Ordinance on Cultural Assets Protection	Okinawa Prefecture		●					●	●	●	●	●	2	1-100
Act on Conservation of Endangered Species of Wild Fauna and Flora	MOE	●				●	●	●	●	●	●	●	*1	—
Plan for the Protection and Recovery Program (Amami Rabbit)	MEXT, MAFF, MOE	●				●	●			●	●	●	*1	—
Plan for the Protection and Recovery Program (Amami Woodcock)	MOE, MAFF	●				●	●			●	●	●	*1	—
Plan for the Protection and Recovery Program (Amami Thrush)	MOE, MAFF	●				●				●	●	●	*1	—
Plan for the Protection and Recovery Program (Okinawa Woodpecker)	MOE, MAFF MOE	●						●		●	●	●	*1	—
Plan for the Protection and Recovery Program (Okinawa Rail)	MEXT, MAFF, MLIT, MOE	●						●		●	●	●	*1	—
Plan for the Protection and Recovery Program (Yambaru Long-armed Scarab Beetle)	MOE, MEXT, MAFF	●						●		●	●	●	*1	—
Plan for the Protection and Recovery Program (Iriomote Cat)	MOE, MAFF	●							●	●	●	●	*1	—
Kagoshima Prefectural Ordinance to Protect Endangered Wild Fauna and Flora	Kagoshima Prefecture		●			●	●			●	●	●	*1	—
Amami City Ordinance to Protect Endangered Wild Fauna and Flora	Amami City		●			●				●	●	●	*1	—
Yamato Village Ordinance to Protect Endangered Wild Fauna and Flora	Yamato Village		●			●				●	●	●	*1	—
Uken Village Ordinance to Protect Endangered Wild Fauna and Flora	Uken Village		●			●				●	●	●	*1	—
Setouchi Town Ordinance to Protect Endangered Wild Fauna and Flora	Setouchi Town		●			●				●	●	●	*1	—
Tatsugo Town Ordinance to Protect Endangered Wild Fauna and Flora	Tatsugo Town		●			●				●	●	●	*1	—
Tokunoshima Town Ordinance to Protect Endangered Wild Fauna and Flora	Tokunoshima Town		●				●			●	●	●	*1	—
Amagi Town Ordinance to Protect Endangered Wild Fauna and Flora	Amagi Town		●				●			●	●	●	*1	—
Isen Town Ordinance to Protect Endangered Wild Fauna and Flora	Isen Town		●				●			●	●	●	*1	—
Higashi Village Ordinance to Protect Okinawa Woodpecker	Higashi Village		●					●				●	3	1-105
Act on Prevention of Adverse Ecological Impacts Caused by Specified Invasive Alien Species	MOE	●				●	●	●	●	●	●	●	*1	—
Phase 2 Spotted Mongoose Control Plan for Amami-Oshima Island	MOE	●				●				●	●	●	*1	—
Phase 2 Mongoose Control Plan for the Northern Part of Okinawa Island	MOE, Okinawa Prefecture	●						●		●	●	●	*1	—

Name of document	Responsible agency / enactor / preparer	Type of rule				Relevance to the component parts				Relevant zone / area			Document No.	Page No.
		Laws etc.	Ordinances	Other administrative plans etc.	Voluntary rules etc.	Amami-Oshima Island	Tokunoshima Island	The northern part of Okinawa Island	Iriomote Island	Nominated property	Buffer zone	Surrounding area		
Cane Toad Control Plan for the Yaeyama Region, Okinawa	MOE	●							●	●	●	●	*1	—
Amami City Ordinance on the Proper Keeping and Management of Pet Cats	Amami City		●			●				●	●	●	*1	—
Yamato Village Ordinance on the Proper Keeping and Management of Pet Cats	Yamato Village		●			●				●	●	●	*1	—
Uken Village Ordinance on the Proper Keeping and Management of Pet Cats	Uken Village		●			●				●	●	●	*1	—
Setouchi Town Ordinance on the Proper Keeping and Management of Pet Cats	Setouchi Town		●			●				●	●	●	*1	—
Tatsugo Town Ordinance on the Proper Keeping and Management of Pet Cats	Tatsugo Town		●			●				●	●	●	*1	—
Tokunoshima Town Ordinance on the Proper Keeping and Management of Pet Cats	Tokunoshima Town		●				●			●	●	●	*1	—
Amagi Town Ordinance on the Proper Keeping and Management of Pet Cats	Amagi Town		●				●			●	●	●	*1	—
Isen Town Ordinance on the Proper Keeping and Management of Pet Cats	Isen Town		●				●			●	●	●	*1	—
Kunigami Village Ordinance on Cat Welfare and Management	Kunigami Village		●					●		●	●	●	*1	—
Ogimi Village Ordinance on Cat Welfare and Management	Ogimi Village		●					●		●	●	●	*1	—
Higashi Village Ordinance on Cat Welfare and Management	Higashi Village		●					●		●	●	●	*1	—
Taketomi Town Ordinance on the Keeping of Cats	Taketomi Town		●						●	●	●	●	*1	—
Biodiversity Strategy of Kagoshima Prefecture	Kagoshima Prefecture			●		●	●			●	●	●	*1	—
Biodiversity Strategy of Okinawa	Okinawa Prefecture			●				●	●	●	●	●	*1	—
The Biodiversity Strategy and Action Plan of Amami-Oshima Island	Amami City, Yamato Village, Uken Village, Setouchi Town, Tatsugo Town			●		●				●	●	●	4	1-107
Amami Island Group Nature Symbiotic Society Plan	Kagoshima Prefecture			●		●	●			●	●	●	*1	—
Regional Biodiversity Conservation Plan (Ogimi Village Regional Cooperation Conservation Action Plan)	MOE, Ogimi Village			●				●		●	●	●	5	1-116
Policy for the Promotion of the Yambaru Model Forestry	Okinawa Prefecture			●				●		●	●	●	6	1-129
Okinawa Prefecture Red Soil Erosion Prevention Ordinance	Okinawa Prefecture		●					●	●	●	●	●	7	1-142
Act on Special Measures for the Amami Islands Promotion and Development	MLIT	●				●	●			●	●	●	*1	—

Name of document	Responsible agency / enactor / preparer	Type of rule				Relevance to the component parts				Relevant zone / area			Document No.	Page No.
		Laws etc.	Ordinances	Other administrative plans etc.	Voluntary rules etc.	Amami-Oshima Island	Tokunoshima Island	The northern part of Okinawa Island	Iriomote Island	Nominated property	Buffer zone	Surrounding area		
Amami Islands Promotion and Development Plan (FY2014 - FY2018)	Kagoshima Prefecture	●				●	●			●	●	●	*1	—
Kagoshima Prefecture Basic Plan for Tourism Promotion	Kagoshima Prefecture			●		●	●			●	●	●	*1	—
Act on Special Measures for the Promotion and Development of Okinawa	Cabinet Office	●						●	●	●	●	●	*1	—
Basic Plan for 21st Century Vision of Okinawa (Okinawa Promotion Plan) (FY2012 - FY2021)	Okinawa Prefecture	●						●	●	●	●	●	*1	—
Okinawa Prefecture Basic Plan for Tourism Promotion	Okinawa Prefecture			●				●	●	●	●	●	*1	—
Mt. Ibudake District Conservation and Utilization Agreement	Tourism business operators, Okinawa Prefecture				●			●		●	●		*1	—
Nakama River Conservation and Utilization Agreement	Tourism business operators, Okinawa Prefecture				●				●	●	●	●	*1	—
Gesashi Mangrove Tourism Use [Guide / Business Operator Rules]	Higashi Village Tourism Promotion Council				●			●				●	8	1-150
Iriomotejima Canoe Association Rulebook	Iriomotejima Canoe Association				●				●	●	●	●	9	1-154
Okinawa Prefecture Guidelines on Natural Environment Restoration	Okinawa Prefecture			●				●	●		●	●	10	1-158
Second Okinawa Prefecture Basic Plan for the Environment	Okinawa Prefecture			●				●	●	●	●	●	11	1-170
Guidelines on Natural Environment Conservation	Okinawa Prefecture			●				●	●	●	●	●	12	1-183

*1. Refer to the documents attached to the nomination dossier.

Document 1. Kagoshima Prefectural Ordinance on Cultural Assets Protection
(Excerpt)

(Ordinance No.48 of December 26, 1955)

Amendments

(Ordinance No.42 of October 15, 1962)

(Ordinance No.50 of December 22, 1975)

(Ordinance No.74 of March 29, 2005)

(Ordinance No.47 of December 25, 2015)

The Kagoshima Prefectural Ordinance on Cultural Assets Protection is hereby promulgated.

Kagoshima Prefectural Ordinance on Cultural Assets Protection

Table of Contents (the excerpted parts have been **bolded**.)

Chapter 1 General Provisions (Articles 1–Articles 3)

Chapter 2 Designated Tangible Cultural Properties (Articles 4–Articles 18)

Chapter 3 Designated Intangible Cultural Properties (Articles 19–Articles 24)

Chapter 4 Designated Tangible Folk Cultural Assets and Designated Intangible Folk Cultural Assets (Articles 25–Articles 29)

Chapter 5 Designated Historic Sites, Places of Scenic Beauty, and Natural Monuments (Articles 30–Articles 35)

Chapter 6 Auxiliary Provisions (Articles 36– Articles 37)

Chapter 7 Penal Provisions (Articles 38–Articles 40)

Supplementary Provisions

Chapter 1 General Provisions

(Purpose)

Article 1

This ordinance is based on the provision of paragraph 2 of Article 182 in the Act on the Protection of Cultural Properties (the Act No. 214 of 1950, hereinafter referred to as the "Act"). The purpose of this ordinance is to take the necessary measures for preservation and use with regard to the cultural properties which exist within the area of the prefecture and are of importance to the prefecture, except for those designated pursuant to the provisions of the Act, thereby contributing to the cultural enhancement of the public in the prefecture, as well as contributing to the advancement of Japanese culture.

(Definitions)

Article 2

The term "cultural properties" as used in this ordinance means the tangible cultural properties, intangible cultural properties, folk cultural assets, and monuments set forth in the items 1 to 4 of paragraph 1 of Article 2 in the Act.

(Respect for Property Rights, etc. and Coordination with Other Public Interests)

Article 3

In the execution of this ordinance, the Kagoshima Prefectural Board of Education (hereinafter referred to as the "Board of Education") must respect the ownership and other property rights of the stakeholders as well as pay due regard to the protection of cultural properties and the coordination with other public interests.

(Omitted)

Chapter 5 Designated Historic Sites, Places of Scenic Beauty, and Natural Monuments

(Designation)

Article 30

The Board of Education may designate the monuments which exist within the area of the prefecture and are of importance to the prefecture (except for those designated as Historic Sites, Places of Scenic Beauty, and Natural Monuments pursuant to the provision of paragraph 1 of Article 109 in the Act) as Kagoshima Prefecture Designated Historic Sites, Kagoshima Prefecture Designated

Places of Scenic Beauty, and Kagoshima Prefecture Designated Natural Monuments (hereinafter collectively referred to as the "Designated Historic Sites, Places of Scenic Beauty, and Natural Monuments).

2 The provisions of paragraphs 2 to 5 of Article 4 shall apply mutatis mutandis to the designation prescribed in the preceding paragraph.

(Rescission)

Article 31

When any Designated Historic Site, Place of Scenic Beauty, or Natural Monument has lost the value as a Designated Historic Site, Place of Scenic Beauty, or Natural Monument, or when there are any other special grounds, the Board of Education may cancel its designation.

2 When any Designated Historic Site, Place of Scenic Beauty, or Natural Monument is designated as a Historic Site, Place of Scenic Beauty or Natural Monument pursuant to the provisions of paragraph 1 of Article 109 in the Act, the designation of said Designated Historic Site, Place of Scenic Beauty, or Natural Monument shall be deemed to be cancelled.

3 With regard to the cancellation of designations pursuant to the provision of paragraph 1, the provision of paragraph 2 of Article 5 shall apply mutatis mutandis, while the provision of paragraph 4 of the same article shall apply mutatis mutandis to cases falling under the provision in the preceding paragraph.

(Installation of Signs, etc.)

Article 32

The owner of a Designated Historic Site, Place of Scenic Beauty, or Natural Monument shall install signs, description plates, boundary posts, enclosing fence, and other facilities needed for the administration of the Designated Historic Site, Place of Scenic Beauty, or Natural Monument, in accordance with the standards specified in the Rules of the Board of Education.

(Notification of Changes Pertaining to the Location etc. of Land)

Article 33

When there are changes to the location, parcel number, land category, or parcel area with regard to the land within the designated area of a Designated Historic Site, Place of Scenic Beauty, or Natural Monument, the owner (or the administrator, if any, who has been chosen as provided for by the

provision of paragraph 2 of Article 6 which is applied mutatis mutandis pursuant to the provision of Article 35) must promptly give notification to the Board of Education to that effect.

(Restrictions on Alteration of the Current States, etc.)

Article 34

With regard to Designated Historic Sites, Places of Scenic Beauty, and Natural Monuments, any person who intends to alter the current state, or to engage in acts that have an impact on their preservation, must obtain the permission of the Board of Education. However, this does not apply to cases in which such person takes measures for maintenance, or emergency measures necessitated by unforeseen disasters, with regard to the alteration of current states, or where the impacts are minor with regard to the acts that have an impact on their preservation.

2 The scope of the measures for maintenance stipulated in the proviso in the preceding paragraph shall be specified in the Rules of the Board of Education.

3 In granting the permission pursuant to the provision of paragraph 1, the provisions of paragraphs 3 and 4 of Article 13 shall apply mutatis mutandis.

4 Where a person has incurred losses due to the inability to obtain the permission set forth in paragraph 1, or due to the addition of conditions of permission set forth in the provision of paragraph 3 of Article 13, which is applied mutatis mutandis under the preceding paragraph, the prefecture shall compensate the person for the losses that would normally be incurred in such a case.

(Provisions Applied Mutatis Mutandis)

Article 35

The provisions of Articles 6 to 8, Articles 10 to 12-2, Article 14, Article 17, and paragraph 1 of Article 18 shall apply mutatis mutandis to Designated Historic Sites, Places of Scenic Beauty, and Natural Monuments.

(Omitted)

Chapter 7 Penal Provisions

(Criminal Punishment)

Article 38

A person who damages, disposes, or conceals any designated tangible cultural property shall be punished by a fine of not more than 50,000 yen or a petty fine.

Article 39

A person who alters the current state or engages in acts that have an impact on the preservation of any designated Historic Site, Place of Scenic Beauty, or Natural Monument, and thereby causes loss, damage, or deterioration, shall be punished by a fine of not more than 50,000 yen or a petty fine.

Article 40

If the representative of a juridical person, or the agent, the employee, or any other worker of a juridical person or an individual has committed a violation referred to in the preceding two articles in connection with the business or the management of assets of the juridical person or the individual, in addition to the offender being punished, the juridical person or the individual shall be liable to pay a fine set forth in each article.

(Omitted hereafter)

Document 2. Okinawa Prefecture Ordinance on Cultural Assets Protection
(Excerpt)

(Ordinance No. 25 from May 15, 1972)
Amendments
(Ordinance No. 12 from March 30, 1976)
(Ordinance No. 47 from July 26, 2005)

The Okinawa Prefecture Ordinance on Cultural Assets Protection is hereby promulgated.

Okinawa Prefecture Ordinance on Cultural Assets Protection

Table of Contents (the excerpted parts have been **bolded**)

Chapter 1 **General Provisions (Article 1–Article 3)**

Chapter 2 Prefectural Tangible Cultural Properties (Article 4–Article 19)

Chapter 3 Prefectural Intangible Cultural Properties (Article 20–Article 26)

Chapter 4 Prefectural Tangible Folk Cultural Properties and Prefectural Intangible Folk Cultural Properties (Article 27–Article 31)

Chapter 5 **Prefectural Historic Sites, Places of Scenic Beauty, and Natural Monuments (Article 32–Article 37)**

Chapter 6 Preservation Techniques Selected by the Prefecture (Article 38–Article 42)

Chapter 7 Auxiliary Provisions (Article 43)

Chapter 8 **Penalties (Article 44–Article 47)**

Supplementary Provisions

Chapter 1 General Provisions

(Purpose)

Article 1

The purpose of this ordinance is to take the necessary measures for the conservation and use of the important cultural properties found within the prefecture other than those cultural properties that have been designated via legal provisions pursuant to the provisions of Paragraph 2, Article 182 of the Act on Protection of Cultural Properties (Act No. 214 from 1950; hereafter referred to as the "Act"), thereby contributing to cultural improvements for the prefectural residents as well as the advancement of Japanese culture.

(Definitions)

Article 2

The "cultural properties" mentioned in this ordinance refer to the tangible cultural properties, intangible cultural properties, folk cultural properties, and monuments listed in Items 1–4, Paragraph 1, Article 2 of the Act.

(Respect for Property and Other Rights and Coordination with the Public Interest)

Article 3

For the enforcement of this ordinance, the Board of Education must respect the ownership and other property rights of the related parties, and must also give forethought to the protection of the cultural properties and coordination with other public interests.

(Omitted)

Chapter 5 Prefectural Historic Sites, Places of Scenic Beauty, and Natural Monuments

(Designation)

Article 32

The Board of Education can designate important monuments found within the prefecture (excluding those designated as historical sites, places of scenic beauty, or natural monuments per the provisions of Paragraph 1, Article 109 of the Act) as Okinawa Prefectural historic sites, Okinawa Prefectural places of scenic beauty, or Okinawa Prefectural natural monuments (hereafter referred to as "prefectural historic sites, places of scenic beauty, and natural monuments").

2. The provisions of Paragraphs 2 through 5, Article 4 shall apply regarding the designation through the provisions of the preceding paragraph.

(Rescission)

Article 33

The Board of Education may rescind these designations in the event that the value of the prefectural historic sites, places of scenic beauty, or natural monuments has been tarnished, or if there is another particular reason for doing so.

2. If a prefectural historic site, place of scenic beauty, or natural monument has been designated as a historic site, place of scenic beauty, or natural monument through the provisions of Paragraph 1, Article 109 of the Act, said designation shall be rescinded.
3. The provisions of Paragraphs 3–5, Article 4 shall apply for rescissions of designations through the provisions of Paragraph 1, and the provisions of Paragraph 4, Article 5 shall apply in the case of the preceding paragraph.

(Installation of Signs, etc.)

Article 34

The owners of prefectural historic sites, places of scenic beauty, and natural monuments (if there is a management body designated through the provisions of Paragraph 1, Article 7-2 applied mutatis mutandis via Article 37, then said body) shall install the signs, description plates, boundary indicators, enclosures, and other facilities necessary for the management of the prefectural historic sites, places of scenic beauty, and natural monuments pursuant to the standards established by the regulations of the Board of Education.

(Notification on Changes in the Whereabouts of the Land, etc.)

Article 35

When there have been changes in the whereabouts of the land, its lot number, land classification, or acreage for land within the designated region of prefectural historic sites, places of scenic beauty, and natural monuments, the owner (if there is a management administrator that has been appointed through the provisions of Paragraph 2, Article 6 applied mutatis mutandis via Article 37, then said person, or if there is a management body designated through the provisions of Paragraph 1, Article 7-2 applied mutatis mutandis via Article 37, then said body) must promptly send notification to this effect to the Board of Education.

(Restrictions on Changes to the Current Conditions, etc.)

Article 36

When attempting to make changes to the current conditions of prefectural historic sites, places of scenic beauty, and natural monuments or to take actions that would impact their conservation,

permission must be obtained from the Board of Education. However, when it comes to changes to the current conditions, this shall not apply in cases where maintenance measures or emergency measures needed in response to extraordinary disasters are taken, or in cases where the impact from actions that will affect conservation is minor.

2. The scope of the maintenance measures stipulated in the provisos of the preceding paragraph shall be established via the regulations of the Board of Education.
3. In cases where permission is granted through the provisions of Paragraph 1, then the provisions of Paragraphs 3 and 4, Article 14 shall apply.
4. The prefecture shall provide compensation to persons who have suffered a loss because they could not receive the permission from Paragraph 1, or because the requirement to obtain permission from Paragraph 3, Article 14 applied mutatis mutandis via the preceding paragraph was imposed on them, for any losses they would ordinarily suffer.

(Applicable Provisions)

Article 37

The provisions of Articles 6 through 8, Articles 10 through 13, Article 15, Article 18, and Paragraph 1, Article 19 shall apply with regard to prefectural historic sites, places of scenic beauty, and natural monuments.

(Omitted)

Chapter 8 Penalties

(Penalties)

Article 44

A fine or fee of up to 50,000 yen shall be imposed on anyone who destroys, damages, or conceals a prefectural tangible cultural property.

Article 45

A fine or fee of up to 50,000 yen shall be imposed on anyone who changes the current conditions of prefectural historic sites, places of scenic beauty, and natural monuments; or takes actions that impact their conservation; or causes their destruction, damage, or decline.

Article 46

A fine or fee of up to 30,000 yen shall be imposed on anyone who, in violation of the provisions of Article 14 or Article 36, changes the current conditions of prefectural tangible cultural properties or

prefectural historic sites, places of scenic beauty, and natural monuments or takes actions that impact their conservation without the permission of the Board of Education or by failing to comply with the conditions of said permission; or fails to comply with orders from the Board of Education to stop engaging in actions that would impact their conservation or changes to the current conditions or their conservation.

Article 47

If the representative of a corporation or a corporation, or a personal agent, user, or other employee should engage in the violations from the preceding three articles in relation to the management of said corporation, personal business, or assets, then the perpetrator shall be punished and the penalties from each of these articles shall be imposed on the corporation or individual.

(Omitted hereafter)

Document 3. Higashi Village Ordinance to Protect the Okinawa Woodpecker

(Ordinance No. 11 from June 18, 2010)

(Intent)

Article 1

This ordinance shall establish the necessary items in relation to the protection of the Okinawa woodpecker, which is a national special natural monument as well as a national endangered species of wild fauna and flora, within Higashi Village pursuant to the Act on Protection of Cultural Properties (Act No. 214 from 1950) and the Act on Conservation of Endangered Species of Wild Fauna and Flora (Act No. 75 from 1992).

(Obligations of the Village)

Article 2

The village must make the appropriate efforts for the protection of the Okinawa woodpecker and the conservation and management of its habitat.

(Protection Area)

Article 3

The village mayor may designate an area necessary for the conservation of the Okinawa woodpecker's habitat as the Higashi Village Okinawa woodpecker protection area (hereafter referred to as the "protection area").

(Designation Procedures for the Protection Area)

Article 4

When bestowing this designation pursuant to the preceding article, the village mayor must receive the consent of the owner of the land and seek out the opinions of the village's council for the protection of cultural properties. What is more, the mayor shall coordinate with the related agencies at the prefectural and national levels when necessary.

(Prohibitions)

Article 5

The following actions are prohibited within the protection area and in its surrounding regions. However, this shall not apply in cases where permission has been received from the village mayor in advance.

(1) Trespassing within the protection area without permission.

(2) Actions that threaten the habitation of the Okinawa woodpecker, such as making noise in the protection area or its surrounding regions, which constitute actions established via regulations.

(Establishment of Protection Monitors)

Article 6

The village mayor can establish protection monitors, who will offer guidance for the sake of protecting the Okinawa woodpecker and conserving its habitat.

(Duties of the Protection Monitors)

Article 7

The protection monitors will regularly patrol and survey the habitat and offer guidance to or remove persons engaging in the actions prescribed in Article 5.

(Penalties)

Article 8

A fine of up to 300,000 yen will be imposed on anyone in violation of the provisions of Article 5.

(Delegation)

Article 9

The provisions of this ordinance and other necessary items shall be established via regulations.

Supplementary provisions

This ordinance shall enter into force on the day it is promulgated.

Supplementary provisions (Ordinance No. 13 from December 22, 2011)

This ordinance shall enter into force on the day it is promulgated.

Supplementary provisions (Ordinance No. 11 from October 15, 2012)

This ordinance shall enter into force on the day it is promulgated.

Document 4. The Biodiversity Strategy and Action Plan of Amami-Oshima Island

(Excerpt)

Preparer: Amami City, Yamato Village, Uken Village, Setouchi Town and Tatsugo Town

Date: 2015

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(Omitted)

2. Objectives and Roles of the Biodiversity Strategy and Action Plan of Amami-Oshima Island

(1) Objectives and natures of the strategy

The Biodiversity Strategy and Action Plan of Amami-Oshima Island (hereinafter referred to as "this Strategy") is formulated by five municipalities on Amami-Oshima Island acting in coordination with each other based on the fundamental law, and will be the general plan for conservation and sustainable use of biodiversity in Amami-Oshima Island.

This Strategy aims to ensure the enhancement of quality of biodiversity in Amami-Oshima Island, while at the same time to promote regional revitalization through conserving and using it.

Various measures will be undertaken, based on the views that regional revitalization is to be achieved by nurturing the uniqueness of communities and that its foundation is natural environment and history and culture, aiming to make Amami-Oshima Island Japan's "model community of the society where people and nature genuinely coexist."

(2) Roles of the strategy

This Strategy intends to ensure the alignment with the prefecture's strategy, as well as to be a guideline on conservation and use of biodiversity in implementing the General Promotion Plans of the related municipalities, the Amami Island Group Promotion and Development Plan , etc., in light of the intent of the fundamental law and national strategies. Moreover, it will be a guideline for community-driven activities to build a society where people and nature genuinely coexist.

3. Structure of the Strategy and Basic Concepts for Implementing Projects

This Strategy, which is based on the basic principles of co-existence and recycling, clarifies the issues on conservation and use of biodiversity in Amami-Oshima Island, and then puts together a set of measures to be taken while bearing the strategical propositions in mind. With regard to those measures, it sets three basic policies for implementing projects and, in accordance with them, specifies the action plans which the respective regional parties will undertake in collaboration with each other, as well as the priority measures which five municipalities will focus on within the plans.

In addition, with regard to the projects of which the national government, the prefecture, etc. are the responsible entities, the items for which collaboration and support will be requested to the national government, the prefecture, etc. in order to accomplish the projects will be identified after sorting out the roles of five municipalities.
(Omitted)

Chapter 4 Basic Items and Targets

1. Basic Items

(1) Targeted areas

Targeted areas of this Strategy are Amami-Oshima's main island and other included islands under the jurisdiction of Amami City, Yamato Village, Uken Village, Setouchi Town, and Tatsugo Town, as well as their surrounding waters.

(2) Planning period

Planning period of this Strategy is ten years from FY 2015 (Heisei 27) to FY 2024 (Heisei 36).

(3) Basic principles

Basic principles are to both conserve biodiversity in Amami-Oshima Island as an appropriate place for a Natural World Heritage, and to create a society where people respect the culture that has co-existed with nature, sustainably enjoy its benefits, and live more enriched organisms.

(4) Basic policies

In crystallizing the basic principles and achieving the goals, the following three basic policies are set to pursue the endeavors.

2. Targets

(1) Short-term targets (a picture of Amami-Oshima Island in 10 years' time or in 2024)

Both the social infrastructure needed to achieve the long-term target to become Japan's "model community of the society where people and nature genuinely coexist" and the foundation of the community activities to be undertaken as an inscribed Natural World Heritage site will be constructed.

[Situations to aim for]

・No further emergence of degradation of biodiversity, and efforts to lead the already lost diversity to better conditions are underway.

・Habitat environments of fauna and flora including endangered species have been improved, illegal collecting etc. have been eliminated, and no additional emergence of species to conserve.
・A structure is established in which feral cats, feral dogs, and feral goats no longer newly emerge and their population decreases. Mongooses (Small Indian mongooses) have also been eradicated.
・As a result of the heightened awareness among islanders and visitors about alien species, no further intentional addition of alien species due to pet relinquishment, planting and afforestation, transferal of people and objects, or other causes occurs, and the numbers of the already existing alien species are decreasing.
・A capturing system staffed with the capturing personnel who can scientifically manage the wildlife population is established and wildlife population is under proper control.
・Awareness of biodiversity is increasing among islanders and visitors.
・Adequate numbers of places and opportunities are provided where people are able to experience and learn the benefits of biodiversity and nature.
・The primary industries are operated with due consideration to conservation of biodiversity, and the island's local products including traditional vegetables are actively utilized.
・Various stakeholders such as islanders, business operators, academic experts, visitors, and each municipal government share roles and collaborate with each other, working to conserve biodiversity in the respective positions.
・The area has become a vibrant community where, for example, sustainable tourism is provided by taking advantage of the wisdom and skills of people who co-exist with rich nature, and such facts are being publicized both domestically and internationally.

(2) Long-term targets (a picture of Amami-Oshima Island in 50 years' time (2064)

The area is already Japan's "model community of the society where people and nature genuinely coexist."

[Situations to aim for]

・Multi-faceted superior nature, such as rich nature continuously spreading from mountains to the ocean and nature formed through interaction with people, is maintained and various fauna and flora live there.
・Nature is utilized and, under such circumstances, people interact with nature and live spiritually affluent organisms by taking advantage of Amami-Oshima Island's traditional recycling systems and culture.
・A large number of visitors come to Amami-Oshima Island, and an environment has been constructed where they can deeply acknowledge Amami's attractiveness by being embraced within nature and enjoying, tasting, and experiencing it, and can express the gratefulness for it.

・A society has been formed where people are grateful to nature while moderately utilizing it and also undertake the efforts to carefully hand it down to the next generations, while considering it as a matter of course.
・The profiles of Amami-Oshima Island's society where people and nature co-exist in better conditions are widely publicized to the world.

Chapter 5 Priority Measures

[Priority Measure 1] Conservation activities of endangered wildlife and universalization projects of biodiversity

In order to conserve the endangered wildlife living on Amami-Oshima Island, various research on fauna and flora and conservation activities will be conducted in collaboration with the related organizations. At the same time, development of environmental learning hubs, leadership training, and program development will be conducted so that the residents are able to learn about Amami-Oshima Island's biodiversity, and thus the projects to pursue the deeper understanding of biodiversity (= universalization) will be actively undertaken.

・Proper enforcement of the ordinance to protect endangered wild fauna and flora, and promotion of conservation activities
・Monitoring surveys on biodiversity and information gathering
・Development of environmental learning hubs and enhancement of environmental learning
・Establishment of the networks for conservation of biodiversity

[Priority Measure 2] Countermeasures against feral cats, feral goats and alien species

Given such facts that cats reverting to wild (feral cats) are causing serious damage to ecosystems such as predation of endangered species, that the impact of goats reverting to wild (feral goats) on ecosystems is of concern, and that other alien species' invasion is suspected of bringing some impacts on ecosystems, each municipal government has taken a variety of measures including enactment of ordinances. In the coming years, while the countermeasures based on the local characteristics will be pursued, all the municipalities will work in collaboration and effectively facilitate the countermeasures.

・Development of the counteracting projects against feral cats and goats
・Countermeasures against alien species

[Priority Measure 3] Project for the Amami-Oshima Island Environmental Culture and Nature Restoration Field Museum

An ecosystem model based on Amami-Oshima Island's local characteristics will be set up and the conservation of biodiversity will be moved ahead. Additionally, handover and creation of environmental culture will be progressed through information gathering, etc., utilization of the entire island as a field museum for environmental learning will be endeavored, and the pursuit of projects that unify science and culture will be considered.

・Model projects for reclamation of forests, sato-umi (a coastal area where biological productivity and biodiversity has increased through human interaction), and mangroves
・Activities to hand over the environmental culture of coexistence of nature and people
・Development of information hubs of Amami-Oshima Island's environmental culture

[Priority Measure 4] Construction project of the Amami-Oshima Island Biodiversity Nature Trails

On the axis of the "Amami-Oshima Island Biodiversity Nature Trails" (provisional name) that go around Amami-Oshima Island, the possible development of the places where visitors can not only fully enjoy the precious and diverse ecosystems but also experience the environmental culture nurtured by the community, will be examined.

[Priority Measure 5] Construction project of the bases for In-the-village Eco-tours

As visitors are expected to increase following the designation as a quasi-national park and the inscription as a Natural World Heritage site, the selection of a hub location for each municipality will be facilitated in order to promote the resident-driven operation of "In-the-village Eco-tours" for learning and experiencing the environmental culture that remains in colonies at various locations on the island.

[Priority Measure 6] Industrial development and biodiversity promotion projects

The establishment of tourism from new viewpoints and the promotion of environmentally-conscious tourism (e.g. ecotourism) will be conducted in cooperation with the private sector, related organizations, and other parties because visitors are expected to increase following the designation as a national park and the inscription as a Natural World Heritage site, which causes concern over the impacts on the ecosystems of Amami-Oshima Island. Furthermore, environmentally-conscious agricultural production, conservation of fishery resources, and forest maintenance will be

implemented. At the same time, production of processed agricultural, forestry and fishery products will be promoted.

・Development of a new tourism master plan and promotion of experience-based tourism
・Sixth sector industrialization and biodiversity promotion projects

[Priority Measure 7] Exchanges and disseminating information

In order to ensure the dissemination of this Strategy, it will be pursued as an inscribed Natural World Heritage site to have exchanges with a large number of people and the related organizations, etc. both at home and abroad, as well as to actively dispatch the local information.

・Creation of Amami-Oshima Island Nature Ambassador
・Exchanges with other inscribed Natural World Heritage sites
・Promotion of international exchanges
・Exchanges with universities and researchers
・Spreading information

[Priority Measure 8] Invitation of research bases on the Amami Island Group's environmental culture

With regard to the research on the Amami Island Group's environmental culture which is conducted by the Kagoshima Prefecture, invitation of its research bases will be furthered, while the post-inscription measures as a Natural World Heritage site on the Amami Island Group's biodiversity will be carried out in cooperation with the prefecture and other parties.

(Omitted)

Chapter 7 Steering Structure and Progress Management

1. Steering Structure of the Strategy

"Amami-Oshima Island Biodiversity Promotion Council" (provisional name) composed of the five municipalities, i.e. Amami City, Yamato Village, Setouchi Town, Uken Village and Tatsugo Town, will be formed to undertake progress management, review, etc. of the strategy, and it will also be positioned as the steering entity for liaison and coordination with the national and prefectural

governments, the related organizations, etc. as well as for the various measures and projects incorporated within the strategy.

Additionally, in order to get guidance and advice in pursuing the strategy, the possible formation of the “Expert Committee for Amami-Oshima Island Biodiversity Strategy” (provisional name) comprised of academic experts will be examined.

(Omitted hereafter)

Document 5. Regional Biodiversity Conservation Plan (Ogimi Village Regional Cooperation Conservation Action Plan) (Excerpt)

Preparer: Ministry of the Environment and Ogimi Village

Date: March 2014

Table of Contents (the excerpted parts have been **bolded**)

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2. Orientation of the Ogimi Village Regional Cooperation Conservation Action Plan

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1. Characteristics of the Nature in Ogimi Village's Limestone Area

2. Regional Activities related to Nature

3. Ecosystem Services

4. Creation of a Structure to Enable Coordination over the Activities

5. Orientation of Initiatives by Ogimi Village

6. Action Plan

7. Promotion Structure

Chapter 1 Project Details

1. What Are Regional Biodiversity Conservation Plans?

1) Background to and Positioning of the Plan

Regional Biodiversity Conservation Plans express policies that encourage and support initiatives to continue maintaining and passing down the biological diversity found in each respective region in order to conserve the diverse nature found in each and every part of a changing Japan. As one such policy, this policy is based on the Promotion of Activities for Biodiversity Conservation through the Cooperation among Regional Diversified Actors (Act on Biodiversity Conservation through Regional Cooperation; Act No. 72 from 2010). Specifically, the aim is to enact and put into practice Regional Cooperation and Conservation Action Plans that establish modalities and create initiatives for biodiversity in each region, while also achieving the objective of the law (conserving regional biological diversity and contributing to securing a healthy and cultured lifestyle for the public).

The Ogimi Village Regional Cooperation Conservation Action Plan was created by Ogimi Village with the support and cooperation of organizations that are active in the local region. The targeted region primarily consists of the limestone mountain mass in the central part of the village, and its target period is about ten years in the future. The plan is to continue implementing this by setting in place a structure whereby related organizations and Ogimi Village cooperate and coordinate with one another, mainly in fields where pacesetting organizations are active.

Given such circumstances, in FY2011 experts were commissioned to perform a survey of natural characteristics in the seven fields of amphibious reptiles, geological features, plants, birds, insects, butterflies, and land snails. This focused mainly on Mt. Nekumachiji, which has the most abundant nature out of the village's hilly areas. In addition, previous related surveys and plans, as well as local proposals, were organized to carry out a survey on regional characteristics regarding the status of natural conservation and usage initiatives that have been promoted in the region. In FY2012, based on recommendations from the experts from the previous survey, a supplementary survey was performed on the natural characteristics for nine fields, in which the two fields of mammals and aquatic creatures were added to the seven fields mentioned above. As for the regional characteristics, field observations were carried out on those areas that are environments that are closely connected to the life within the village and that have particularly promising natural environments. Recommendations on conservation and use were received from local experts on current challenges. However, that year the region was buffeted by a typhoon the likes of which have been rare in recent years, and so satisfying results could not be obtained regarding the survey on natural characteristics.

Given the fact that adequate results could not be obtained for the survey on natural characteristics due to natural disasters in FY2013, another supplementary survey was carried out by excluding some of the fields. The survey results from FY2011 through FY2013 were compiled in order to both clarify the characteristics of the natural environment in said region and also offer proposals for activities to conserve the region. What is more, the regional conservation activities currently being carried out based on the policies set forth from the survey results were observed together with the local experts, and consideration was given to the future direction of conservation. The Regional Biodiversity Conservation Plan (Ogimi Village Regional Cooperation Conservation Action Plan) (Draft) was recently created by arranging these in a comparative manner.

(Omitted)

2. Orientation of the Ogimi Village Regional Cooperation Conservation Action Plan

(Omitted)

(4) Importance in terms of the Project

This project aims to connect the nature within human habitations on Okinawa that had been thought about in a partial and localized manner, such as oceans and forests, and popularize the region as an important location for maintaining the biodiversity of Okinawa. Therefore, it was important to clarify the natural environment within the plan region.

What is more, it is necessary to clarify how the local people that have made use of this environment have utilized the nature and surrounding conditions found in the limestone mountains, where a diverse array of natural environments remain. It is also necessary to go about rebuilding connections with nature in a manner suited to the modern age in order to continue to preserve satoyama (border regions between arable land and mountain foothills) environments on into the future. This project began by clarifying the natural characteristics. Next, its goal was to create a specific action plan for awareness-raising activities to extend environmental conservation to the region and for conservation activities, as well as a promotion structure to manage this.

The objective of the project is to make the region one where sound and vigorous pursuits are fostered by maintaining natural diversity and the benefits received from the natural environment.

(Omitted)

Chapter 2 Regional Cooperation and Conservation Action Plan (Draft)

(Omitted)

4. Creation of a Structure to Enable Coordination over the Activities

1) Rationale behind Creating the Structure

In order to give concrete shape to biodiversity conservation activities, the village residents' understanding of the survey on natural characteristics should be deepened. In addition, the action plan necessary to cultivate activities to be carried out in the target region and for developing environments with the desired biological diversity, as well as a structure for promoting said action plan, should be created.

(Omitted)

3) Creating the Structure

In order to instantiate the Regional Biodiversity Conservation Plan, regional cooperation and conservation activities must be promoting in an ongoing manner. For this, it will be necessary to get the local region concerned with and interested in nature and the environment, while also getting the local region to undertake the activities voluntarily.

For this, a process must be established whereby each of the conservation activities is developed and deployed in a coordinated manner. This is to ensure that the regional biodiversity can be secured with the help of expert advice and with a focus on the activities that are being voluntarily carried out in the region.

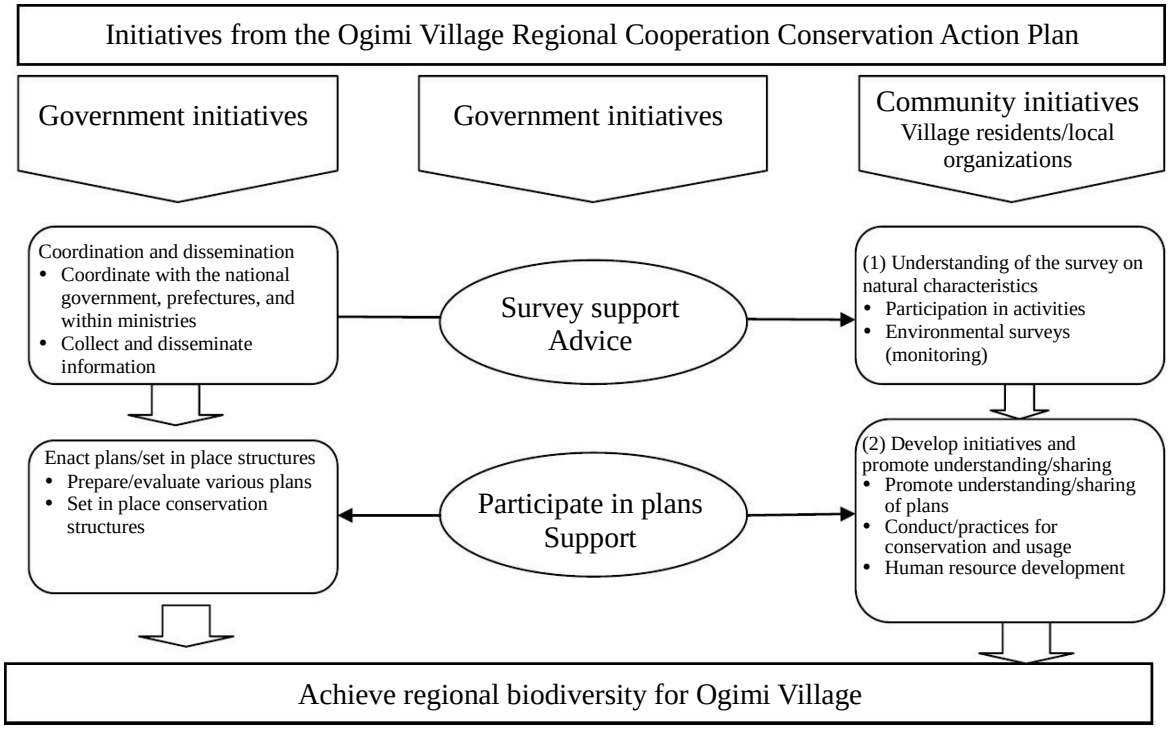


Fig. Flow of initiatives

(Omitted)

5. Orientation of Initiatives by Ogimi Village

At the conclusion of the three-year survey, the natural characteristics of the planned region for the biodiversity conservation project within the village had become clear. By setting the goal as being to conserve these highly diverse natural resources, the expectation is that future projects will feature major initiatives that cover a wide range. However, even if grand plans with multiple interrelated facets contain superior content, they tend to remain nothing more than plans due to factors like budget and personnel shortfalls in some cases.

This project will consider the overall framework for the activities needed in order to promote conservation. In addition to this, it will also start out with those undertakings that it can implement under its current structure, then consider methods for reaching its ultimate goals by amassing the results from this. For example, we are confident that by steadily amassing results one by one from even small-scale undertakings, we will be able to achieve our ultimate goals of conserving the biodiversity in the planned region and promoting the village.

It is hoped that, rather than laying out major goals and striving to achieve them right from the outset, instead amassing experience through small, specific undertakings for individual matters and continuing to accumulate knowledge will serve as a shortcut to reaching our goals.

Activities to observe butterflies were carried out on an experimental basis through the across-the-board cooperation of Shioya Elementary School in the Yako Region as part of outreach activities and regional observation activities. Attention was paid to this for the reasons that the biodiversity in the Yako Region has been recognized as being extremely high in its capacity as a satoyama region, children who were motivated to observe nature are found there, and Shioya Elementary School made efforts to promote this. What is more, it was also because the Yako Region adopted a positive and welcoming attitude with respect to these activities, and there were absolutely no problems regarding project implementation. Therefore, it will be possible to implement specific projects almost immediately starting from the following fiscal year.

The decision has been made to have the village adopt an approach of initiating this sort of method of amassing experience in those areas where it is feasible to do so in the village, then ultimately tying this in with activities for the conservation of biodiversity that cover the entire village.

6. Action Plan

1) Objectives of the activities

The activities that are necessary to promote the Ogimi Village Regional Cooperation Conservation Action Plan have been compiled below. Here, the objectives of the activities will be shown based around the major axes of “Satoyama conservation,” “Collecting information on nature,” “Exchanges,” and “Education and learning.”

(1) Satoyama conservation

With the goal of coexisting with environments that are high in biodiversity, perform conservation based on the appropriate considerations for regions inhabited by rare living creatures, make use of the diverse nature found in regions inhabited by humans, and work to maintain and restore the environment.

(Omitted)

(2) Collecting information on nature

Collect nature information on this region, which is rich in biodiversity, and put it to good use in conserving the environment. In addition, disseminate the aggregated information in order to encourage industrial development in the village.

(Omitted)

(3) Exchanges

With the goal of conserving satoyama regions, hold ecotours and events aimed at people from outside the village and work to revitalize the region. In addition, hold exchanges with regions that are working to address biodiversity to create a network for maintaining biodiversity.

(Omitted)

(4) Education and learning

Increase opportunities for people to come into contact with the nature all around them to realize the importance of regions with an abundance of biodiversity, and carry out initiatives to cultivate a mentality of taking pride in the region.

(Omitted)

2) About the activities

Activities for specifically promoting “Satoyama conservation,” “Collecting information on nature,” “Exchanges,” and “Education and learning,” which have been established for each target, are shown below.

Ogimi Village Regional Cooperation Conservation Action Plan on Biodiversity

(1) Satoyama conservation	
Objective	With the goal of coexisting with environments that are high in biodiversity, perform conservation based on the appropriate considerations for regions inhabited by rare living creatures, make use of the diverse nature found in regions inhabited by humans, and work to maintain and restore the environment.
Activities	(1) Establish the Ogimi brand by capitalizing on its biodiversity

	(2) Establish mountain roads and clean-up the region
	(3) Develop the site for a satoyama butterfly garden

(2) Collecting information on nature	
Objective	Collect nature information on this region, which is rich in biodiversity, and put it to good use in conserving the environment. In addition, disseminate the aggregated information in order to encourage industrial development in the village.
Activities	(1) Collect and disseminate nature information

(3) Exchanges	
Objective	With the goal of conserving satoyama regions, hold ecotours and events aimed at people from outside the village and work to revitalize the region. In addition, hold exchanges with regions that are working to address biodiversity to create a network for maintaining biodiversity.
Activities	(1) Create and engage in tourism
	(2) Coordinate with other regions working to address biodiversity

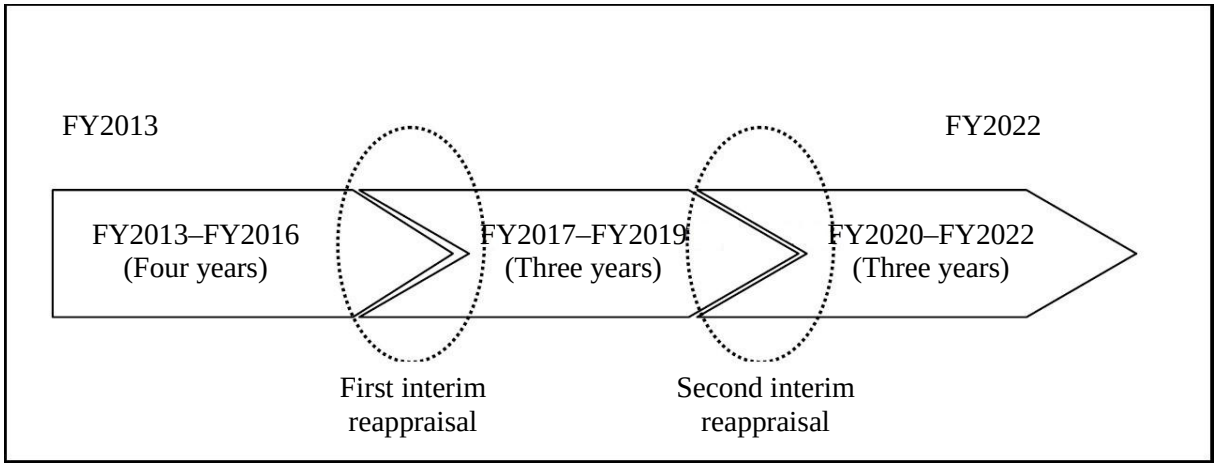
(4) Education and learning	
Objective	Increase opportunities for people to come into contact with the nature all around them to realize the importance of regions with an abundance of biodiversity, and carry out initiatives to cultivate a mentality of taking pride in the region.
Activities	(1) Hold observation tours that involve having local children take records on living creatures
	(2) Hold symposia and lectures

3) Period of activities

For the project period for Ogimi Village Regional Cooperation Conservation Action Plan, this fiscal year, which corresponds to the final fiscal year of the survey, was set as a trial period. Including this, the project period was set at ten years, to conclude in FY2022.

What is more, it was decided that reappraisals would be carried out, with the aim being to do this after three years have elapsed. This is designed to accommodate factors like changes in the activity sponsor and the social conditions.

The contents of activities starting on the next page list the specific initiatives for the four-year period lasting from FY2013 to FY2016.



Plan period

(Omitted)

4) Contents of activities

(Omitted)

(2) Collecting information on nature

Initiative	(1) Collect and disseminate information on nature
Contents of the initiative	In order to promote biodiversity conservation activities, it will be important to make records and amass data on environmental changes. For these initiatives, the most desirable thing is to have a structure whereby local residents carry these out on a daily basis. To start with, nature information on the region will be collected and aggregated based primarily around the butterfly observations by Shioya Elementary School that are currently carried out in the Yako area. Catching site of butterflies will be taken as an indicator for biodiversity. In addition, a structure will be created whereby informational placards on living creatures are installed in the village, and local people who catch sight of living creatures or hear their calls will be asked to write this down on them. The information will be aggregated and periodically disseminated to local residents once more via the placards in the form of notices. If the trial run in Yako is successful, it will be sequentially expanded out to the other settlements within the village. The information collected here will be analyzed in cooperation with experts, and the results will be put to good use in conservation activities. Moreover, it will be necessary to foster NPOs to perform monitoring together with the residents in order to promote this in a sustainable manner.
Activity (1)	
Sponsor	Ogimi Village/NPO Yambaru House
Implementation period/ location	Period: Year round Location: Yako area
Implementation details	Nature information on the region will be collected and aggregated based primarily on the butterfly observations by Shioya Elementary School. A structure will be created whereby informational placards on living creatures are installed, and local people who catch sight of living creatures or hear their calls will be asked to write this down on them to exchange information. The Monitoring Sites 1000 Satoyama survey manual from the Biodiversity Center, Nature Conservation Bureau, Ministry of the Environment will be used for the monitoring methods. Experts will be invited and monitoring lectures will be held.

(Omitted)

(4) Education and learning

Initiative	(1) Hold observation tours that involve having local children take records on living creatures
Contents of the initiative	It was learned that the results of the outreach activities from this fiscal year and the activities to deepen awareness of biodiversity in the form of environmental education for the elementary school produced significant outcomes for the region. For the future, one of the most momentous challenges will be working to promote the understanding of village residents in the nature all around them for Ogimi Village, which forms a corner of the Yambaru Region that is slated for registration as a Natural World Heritage Site. The butterfly observations in the Yako community that were carried out this fiscal year on a trial basis by Shioya Elementary School will be performed in an ongoing manner. What is more, it was decided that the regular observation records taken by the children will be used to collect information on nature, which is stipulated in the plan. The collected information will be analyzed in cooperation with experts, and the results of the investigations will be put to good use in conservation activities. The intention is to foster understanding of the importance of biodiversity as the source of life in the children by providing them with an understanding of the region in which they live and considering the environment around them through the specific approach of observing butterflies. With this initiative forming the core, the circle of activities to conserve biodiversity will be widened to regions where observations are carried out, as well as the school districts that encompass these, or even the village as a whole.
Activity (1)	
Sponsor	Village-run Shioya Elementary School
Implementation period/ location	Period: About ten times a year Location: Yako area
Implementation details	Hold nature observation club events. The butterflies in the Yako area will be observed.

(Omitted)

7. Promotion Structure

1) Establish the Ogimi Village Biodiversity Center

In order to boost the effectiveness of the Ogimi Village Regional Cooperation Conservation Action Plan, the entities within Ogimi Village must each fully understand their own roles and work to undertake said roles.

The village enacted the Ogimi Village Basic Plan for Tourism Promotion in FY2009, which set goals for promoting a style of tourism that would conserve the environment and contributing to the development of the region. This would be done by opening the excavation of Nejame Fortress, which is considered to be the fortress for the northernmost part of the main island of Okinawa, as well as the registration of the Yambaru Region (Ogimi Village, Kunigami Village, and Higashi Village), which has garnered global attention for its biodiversity, as a Natural World Heritage Site.

As the village is being considered for designation as a natural park and registration as a Natural World Heritage Site, in the future the Ogimi Village Biodiversity Center (provisional title) should be established as a base for creating a structure that can accommodate this. In striving to promote this plan, the Ogimi Village Biodiversity Center will play the following roles and move ahead with activities through the combined efforts of the public and private sectors.

(1) Ogimi Village Biodiversity Center

○ The center will undertake the following roles when it comes to promoting the plan and promoting conservation activities.

1. Collect and disseminate information related to biodiversity
2. Coordinate among a diverse array of activity sponsors in relation to conservation activities
3. Introduce scientific knowledge from experts, etc.
4. Support education and learning
5. Ensure volunteers and other human resources
6. Support human resource development
7. Create a network with other regions with biodiversity

In working to conserve and restore the biodiversity in the planned region for which this plan was established, ideally the environment in the local region will either be allowed to maintain its intrinsic capabilities or will be restored to its ideal conditions. What is more, activities should be carried out

to make the local people grateful for the nature all around them amidst the connections between their daily lives and nature, and to urge them to take a concern and interest in it.

Therefore, the decision was made to have the entire region band together by seeking the participation and cooperation of a diverse array of entities, including village residents, local organizations, business operators, specialized agencies, and the government. It is not enough to just have mainly ecotourism business operators and some local organizations involve themselves with the natural environment, as has been seen so far. Instead, it will be necessary to seek the participation of a wide range of village residents, with this including local farmers and those related to trade and welfare, in order to promote conservation activities for the biodiversity in Ogimi Village.

In addition, a network will be created with various other regions that are working to address biodiversity and a wide range of information will be collected. What is more, the expectation for the future is that the village will serve to function as a think-tank capable of drafting measures and plans and offering advice to allow it to promote the conservation of biodiversity while still using local resources, even as the village develops.

(Omitted hereafter)

Document 6. Policy for the Promotion of the Yambaru Model Forestry: Aiming to Create Environmentally Friendly Forests (Measures and Policies)

Preparer: Forests and Greenery Division, Department of Agriculture, Forestry and Fisheries, Okinawa Prefecture

Date: October 2013

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   (1) Forest Usage Divisions (Zoning)
   (2) Improving Forest Management and Forest Development
   (3) New Uses for Forests (Promoting Activities for Experiencing Nature)
5. Other Forest Conservation Initiatives
   (1) Use Special Trees and Cleared Land that Is Currently Unused
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1. Promoting the Conservation and Environmentally Friendly Use of the Natural Environment

The Yambaru forest that extends to Kunigami Village, Ogimi Village, and Higashi Village plays a large number of important roles in its capacity as a forest containing water sources, a forest supplying forest products, a forest housing wildlife, a forest offering public health and culture, and a forest with regional resources.

Given this, in recent years the social demands surrounding the Yambaru forest have been growing more diverse.

The forests in Yambaru's three villages require appropriate management to enable the forests to exhibit their multi-functionality at a high level while also maintaining and augmenting this. They also require the revitalization of forestry as a local industry, and new forest uses to secure labor and employment.

On the other hand, there have been increasing calls seeking the conservation of this outstanding natural environment that is teeming with biodiversity.

Therefore, for the Yambaru forest "Yambaru-style Forestry" will continue to be promoted. This combines sustainable, recycling-oriented forestry and forest products industry with activities for experiencing nature in harmony with the environment as a means of conserving the natural environment and achieving its environmentally-friendly use.

When it comes to the promotion of this Yambaru-style Forestry, reference will be made to the opinions of knowledgeable experts based on scientific data. Coordination will be carried out with the government at the national, prefectural, and local levels, as well as forestry corporations, related organizations, and others. Measures will be carried out based on the various views and opinions of the prefectural residents.

2. Ideal Vision for the Forests in Yambaru's Three Villages

The forest in Yambaru's three villages has a variety of functions, which include cultivating water sources, producing lumber and other forest products, and public health and culture arising from coming into contact with nature. In addition, they play a large number of roles, including as a habitat for highly endemic wild flora and fauna and as forests that underpin the lifestyles and lives of the local residents.

Therefore, the forests in Yambaru's three villages will be put to use for the lifestyles and lives of the local residents while conserving the outstanding natural environment that is teeming with biodiversity. What is more, it will aim for forestry whereby the prefectural residents can enjoy the various public interest benefits that the forest offers in a continuous manner.

○ Forest containing water sources that nurtures the water of life

Aim for a forest containing water sources whereby the forests extending into the mountains catch the incessant rainfall, the tree roots creeping along the ground store the water droplets, and where ample cool and clear water bubbles up, sustaining the lives of the prefectural residents.

○ Forest supplying forest products in which its abundant gifts persist and are recycled

Aim for a forest supplying forest products that underpins the rich lifestyles, industry, and culture of the prefectural residents through the judicious use of the various benefits brought about by the flourishing forest and through the sustainable recycling of resources that strikes a balance with nature.

○ Forest housing wildlife in which living creatures are protected and nurtured

Aim for a forest housing wildlife where the various richly diverse and highly endemic living creatures are born into and nurtured by forests that are protected in a sustainable manner.

○ Forest offering public health and culture in which people can rest and relax

Aim for a forest offering public health and culture where people gather in a flourishing forest, experience nature through their five senses (sight, sound, smell, taste, and touch), play, learn, and are healed.

○ Forest that features regional resources that underpin people's lifestyles and protect and nurture the region

Aim for a forest with regional resources in which the ample benefits of the forest are maintained and the region is protected and nurtured with care.

3. Forest and Forestry Measures for Yambaru's Three Villages

The region as well as a broad range of prefectural residents enjoy the benefits from the forest in Yambaru's three villages, which include supplying water and forest products and as a location that promotes health and recreation.

Therefore, efforts will be made for the appropriate cultivation and management of the forest in an effort to promote and augment forest functions with a view towards allowing the forest to express its multi-functionality at a high level and express this in a sustainable manner.

○ Forest containing water sources (water and soil conservation function)

In the interest of supplying high-quality water in a stable manner, work to conserve water conservation forests and perform the management needed in order to improve water source protection functions.

○ Forest supplying forest products (function for producing lumber and other products)

In the interest of supplying lumber and other products in a sustainable and stable manner, perform forest conservation suitable for the birth and growth of forest trees and properly maintain them. In addition, make efforts for forest management and forest development that take the conservation of the natural environment into consideration.

○ Forest housing wildlife (biodiversity conservation function)

In the interest of maintaining a sound ecosystem, make efforts for the conservation of primeval natural forests and the habitats of rare wildlife, as well as the prevention of environmental disturbances.

○ Forest offering public health and culture (public health and culture function)

In the interest of using the natural environment in a reasonable manner, promote recreation as a place for residents to relax and use in the form of promoting health and for environmental education while giving forethought to the impact this has on the environment.

○ Forest that features regional resources (function for contributing to regional promotion)

In the interest of securing venues for labor and employment and promoting settlement in the region, promote sustainable, recycling-oriented forestry and forest products industry and continue working to develop activities for experiencing nature.

4. Forest Initiatives and Policies for Yambaru's Three Villages

(1) Forest Usage Divisions (Zoning)

Conservation and usage divisions will be established according to functions that should be emphasized from among the functions that the forest possesses. This is to allow for the forest's multi-functionality to be adequately exhibited, while promoting the planned use of the forest and appropriate forest management.

For the forests in Yambaru's three villages, four classifications will be established in order to divide up usage: "Natural environment conservation districts," "Water and soil conservation districts," "Forestry production districts," and "Forest usage districts." These accord with the multi-functionality possessed by the forest, particularly its "Biodiversity conservation function," "Water source protection function," "Function for producing lumber and other products," and "Public health and culture function." This will be done with the goals of maintaining diverse forest ecosystems, maintaining and augmenting functions that stably underpin the dams and rivers that serve as water holders in regions of the main island of Okinawa, and promoting sustainable, recycling-oriented forestry.

- **Thinking behind the usage divisions for Yambaru's three villages**

Usage divisions		Thinking behind the usage divisions
I. Natural environment conservation districts		
	(1) Core areas	Districts with ecosystems that include highly endemic, rare wild creatures like the Okinawa woodpecker, Yambaru long-armed scarab beetle, Okinawa spiny rat, and other animals that only inhabit the primeval natural forest within the forests of Yambaru [areas where primeval natural forests will be maintained and passed down (core areas)]
	(2) Buffer zones	Districts corresponding to core areas as buffer zones with the goals of linking core areas with other districts and stably maintaining the core areas [areas for ensuring the continuity and buffer-like characteristics of the natural environment conservation districts (buffer zones)]
II. Water and soil conservation districts		
	(3) Water and soil conservation districts	Water source forest districts where dams and rivers will be maintained with the goal of stably providing the water that underpins the prefectural residents' lifestyles and industry [areas where the emphasis is on the high-level expression of water and soil conservation functions, such as water source protection and the prevention of mountain disasters, etc.]
III. Forestry production districts		
	(4) Emphasizing the natural environment	Districts in regions where the objective is forestry production where more environmentally friendly management is to be carried out by emphasizing the conservation of the natural environment because they adjoin natural environment conservation districts and water and soil conservation districts [areas where forestry production that emphasizes conservation of the natural environment is carried out]

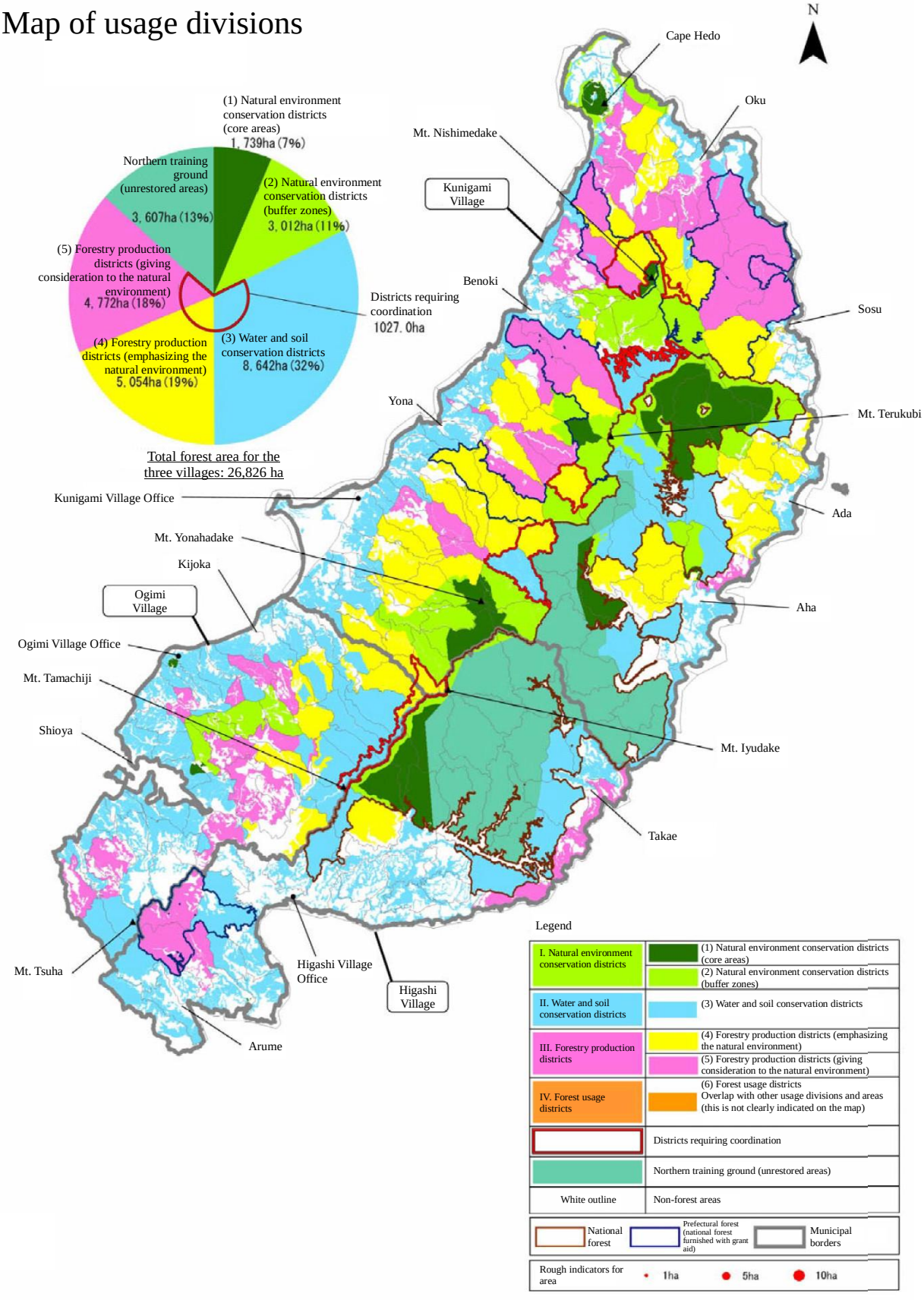
	(5) Giving consideration to the natural environment	Districts in regions where the objective is forestry production where logging areas are decentralized (made non-continuous), where efforts for conservation are made for the forest zones along ridges and the understory vegetation in valleys, and where management that is friendly to the natural environment is carried out while supplying lumber products in a stable manner [areas where forestry production that is friendly to the natural environment is carried out]
IV. Forest usage districts		
	(6) Forest usage districts	Districts where the forests are used as tools to create new industries (tourism industry) by those engaged in the forestry industry and local residents, to serve as districts for deploying activities to experience nature [areas where activities to experience nature by using forests while taking the natural environment into consideration are carried out]

For the time being, some parts of the forestry production districts and water and soil conservation districts (backbone mountain range areas and area surrounding Mt. Nishimedake) will be classified as “Districts requiring coordination,” which require coordination between the conservation and use of the natural environment. This will be done in the interest of conserving biodiversity and securing continuity between environmental conservation districts, as well as from the perspective of maintaining forest functions and conserving forests. Considerations over this will continue to be held between the concerned parties.

Furthermore, national forests will be managed based on the Regional Administration and Management Plan for Northern Okinawa, which was enacted by the national government (Forestry Agency). What is more, it was decided that part of the unrestored national forest from the northern training ground will be treated as a forest ecosystem reserve after it is restored.

As for prefectural forests, roughly 90% of these are national forests furnished with grant aid, and so therefore additional coordination with the national government will be needed for establishing the conservation and usage divisions.

Map of usage divisions



(2) Improving Forest Management and Forest Development

Efforts will be made to improve forest management and forest development according to the usage divisions based on continuity with the environmental conservation initiatives taken to date in order to further improve environmental conservation measures and mitigate the environmental impacts.

- **Basic policies for forest management and management policies for each usage division**

Usage divisions	Definitions/basic policies/management policies
I. Natural environment conservation districts <Definition> Areas where the emphasis is on the conservation of primeval natural forests	
(1) Core areas	<Basic policy> Work to maintain and pass down primeval natural forests without engaging in forest management
	<Management policy> • Do not harvest, conduct afforestation, or install road systems
(2) Buffer zones	<Basic policy> Carry out the bare minimum forest management while maintaining primeval natural forests
	<Management policy> • Perform long rotation forest management and develop multi-storied forests through the use of selective cutting of single trees and natural forces
II. Water and soil conservation districts <Definition> Areas where the emphasis is on the high-level exhibition of water and soil conservation functions, such as water source protection and the prevention of mountain disasters, etc.	
(3) Water and soil conservation districts	<Basic policy> Forest management that strives to maintain and improve water and soil conservation functions serves as the foundation
	<Management policy> • Develop multi-storied forests or single-storied forests through selective cutting, with long rotation forest management serving as the foundation for this • Perform clear cutting on small areas less than 1 ha large so long as it does not have an effect on water and soil conservation functions

III. Forestry production districts <Definition> Areas where the emphasis is on the production of lumber and other products in aiming for sustainable forestry production		
	(4) Emphasizing the natural environment	<Basic policy> Engage in forest management that emphasizes the conservation of the natural environment and conserve and create diverse forest environments
		<Management policy> • Primarily carry out long rotation forest management and standard rotation forest management (the longer the rotation, the less the impact on the environment) • When performing clear cutting, it must be based on management regulations pursuant to the relevant laws and regulations. In addition, it should be minimized to small areas of 5 ha or smaller to the extent possible, and single-storied and multi-storied forests should be developed • When performing selective cutting, multi-storied forests should be developed as a general rule
	(5) Giving consideration to the natural environment	<Basic policy> Engage in forest management that gives consideration to the natural environment and conserve and create diverse forest environments
		<Management policy> • Primarily carry out long rotation forest management and standard rotation forest management • When performing clear cutting, it must be based on management regulations pursuant to the relevant laws and regulations. In addition, it should be minimized to small areas of 5 ha or smaller to the extent possible, and single-storied and multi-storied forests should be developed • When performing selective cutting, the development of multi-storied forests should be promoted • Promote the use of cleared land that is currently unused

- **Basic policies for forest management and management policies for each usage division**

<table>
<tr><th colspan="3">Usage divisions / Management items</th><th>(1) Natural environment conservation districts (core areas)</th><th>(2) Natural environment conservation districts (buffer zones)</th><th>(3) Water and soil conservation districts</th><th>(4) Forestry production districts (emphasizing the natural environment)</th><th>(5) Forestry production districts (giving consideration to the natural environment)</th></tr>
<tr><td rowspan="11">Harvest management</td><td rowspan="3">[Forest management rotation]</td><td>Long rotation</td><td rowspan="8">○Do not perform harvest management (cutting prohibited)</td><td>○Promote long rotation forest management</td><td colspan="3">○Perform long rotation forest management in some areas</td></tr>
<tr><td>Standard rotation</td><td></td><td></td><td colspan="2">○Perform standard rotation forest management</td></tr>
<tr><td>Short rotation</td><td></td><td></td><td>○Perform short rotation forest management in some areas</td><td>○Promote short rotation forest management</td></tr>
<tr><td rowspan="2">[Cutting method]</td><td>Clear cutting</td><td colspan="2">○Avoid clear cutting as a general rule</td><td>○Small clear cutting area (less than 1 ha)</td><td>○Clear cutting (perform on a single area less than 1 ha large, minimize the area to the extent possible)</td></tr>
<tr><td>Selective cutting</td><td>○Perform selective cutting of single trees</td><td colspan="3">○Perform selective cutting to the extent possible (single trees, zones, copses)</td></tr>
<tr><td rowspan="3">[Harvesting method]</td><td>Cable</td><td></td><td></td><td colspan="2">○Logging using cables (endless-Tyler system)</td></tr>
<tr><td>Machinery</td><td></td><td></td><td colspan="2">○Logging using grapples</td></tr>
<tr><td>High performance forestry machinery</td><td colspan="4">○Promote logging using tower yarders, swing yarders, and winched grapples</td></tr>
<tr><td colspan="2">[Environmental conservation measures]</td><td>○Perform the necessary maintenance</td><td colspan="4">○Conserve trees along valleys and along ridges, avoid and discontinue logging during the breeding season, decentralize logging locations, etc.</td></tr>
<tr><td colspan="3"></td><td></td><td></td><td></td><td></td><td></td></tr>
<tr><td rowspan="3">Clearing management</td><td rowspan="3">[Regeneration]</td><td>Natural regeneration</td><td>○Do not perform clearing management</td><td>○Perform natural regeneration (germination, natural seeding)</td><td></td><td></td><td></td></tr>
<tr><td>Artificial clearing</td><td></td><td colspan="4">○Regenerate via artificial clearing (germination, natural seeding according to the conditions)</td></tr>
<tr><td>Single/multi-storied forests</td><td></td><td>○Promote multi-storied forest management</td><td colspan="3">○Promote single-storied or multi-storied forest management</td></tr>
</table>

<table>
<tr><td rowspan="5"></td><td rowspan="2">[Planting]</td><td>Broad-leafed/evergreen trees</td><td rowspan="2"></td><td>○Plant broad-leafed trees as a general rule</td><td colspan="3">○Plant broad-leafed trees or evergreen trees (Okinawa pine, etc.)</td></tr>
<tr><td colspan="2">[Cultivated natural management]</td><td></td><td colspan="3">○Perform this by giving consideration to the environment and water/soil conservation functions</td></tr>
<tr><td colspan="3">[Environmental conservation measures]</td><td rowspan="2">○Perform the necessary maintenance</td><td>○Plant pre-existing species as a general rule</td><td colspan="3">○Plant tree species (native species) with consideration for the environment</td></tr>
<tr><td colspan="3"></td><td></td><td></td><td></td><td>○Use cleared land that is currently unused</td></tr>
<tr><td colspan="4"></td><td></td><td></td><td></td><td></td></tr>
<tr><td colspan="3" rowspan="2">Road system installation</td><td rowspan="2">○Do not install a road system</td><td colspan="2"></td><td colspan="2">○Install the bare minimum road system necessary</td></tr>
<tr><td colspan="4">○Use the existing road system, install service roads by taking the environment into consideration</td></tr>
</table>

(3) New Uses for Forests (Promoting Activities for Experiencing Nature)

Continue to promote activities for experiencing nature that make use of the abundant forest resources in Yambaru, including forest tourism, forest therapy, forest environmental education, and hands-on forestry, that treat forests as places where prefectural residents and numerous other people can come into contact with nature (by playing, learning, and being healed).

- **Usage policies for each usage division**

<table>
<tr><th colspan="2">Usage divisions</th><th>Contents</th></tr>
<tr><td rowspan="2">I. Natural environment conservation districts</td><td>(1) Core areas</td><td><Definition>
• Areas in which primeval natural forests are maintained and passed down
<Usage policy>
• Restrict access (use only for academic research, etc.)
<Usage method>
• Essentially refrain from using it</td></tr>
<tr><td>(2) Buffer zones</td><td><Definition>
• Areas where the continuity and buffer-like characteristics of natural environment conservation districts are secured
<Usage policy>
• Aim to restrict, regulate, and supervise their use by treating primeval natural forests as resources, and use them based on the bare minimum development
<Usage method>
• Mainly forest tourism, forest therapy, forest environmental education, etc.</td></tr>
<tr><td>II. Water and soil conservation districts</td><td>(3) Water and soil conservation districts</td><td rowspan="3"><Definition>
• Areas where efforts are made towards high-level expression of functions such as water source protection and the prevention of mountain disasters, etc.
• Areas where the emphasis is on conservation of the natural environment or forestry production that gives consideration to the natural environment is carried out
<Usage policy>
• Aim to use these by installing walking paths and</td></tr>
<tr><td rowspan="2">III. Forestry production districts</td><td>(4) Emphasizing the natural environment</td></tr>
<tr><td>(5) Giving consideration to the natural environment</td></tr>
</table>

		facilities with consideration for the environment by treating the diverse forest resources and connections between people and the forest as resources <Usage method> • Forest tourism, forest therapy, forest environmental education, forestry experiences, etc.

5. Other Forest Conservation Initiatives

(1) Using Special Trees and Cleared Land that is Currently Unused

The decision was made to work to reclaim forests in the form of a conservation-oriented forestry and forest products industry with minimal environmental impact through a variety of initiatives. These include the use of special trees by using their fruits, leaves, stems, flowers, and more without cutting them down, and planting tree species that ripen early through the use of cleared land that is currently unused such as deserted arable land (non-farmland) and the sites of former lodging and amusement facilities.

(2) Promoting Selective Cutting

Efforts will be made to improve conditions for performing selective cutting, such as by establishing harvesting techniques suited to the actual sites, developing human resources to support the acquisition of techniques, and the adoption of forestry machinery. In addition, selective cutting will continue to be promoted through trials by conducting repeated demonstration tests on selective cutting and working to resolve the various challenges with the technique.

Document 7. the Okinawa Prefecture Red Soil Erosion Prevention Ordinance (Excerpt)

(Ordinance No. 36 from October 20, 1994)

(Omitted)

(Purpose)

Article 1

The purpose of this ordinance is to prevent the contamination of the water in public water areas by outflows of red clay (with this including the degradation of the sediment at the sea or river bed; the same hereafter), thereby contributing to securing a favorable living environment. This will be done by regulating outflows of red clay that arise as a result of construction work, promoting appropriate management of soil, and other such efforts.

(Definitions)

Article 2

For this ordinance, the definitions of the terms listed in the following items shall be used for the stipulations in each of the applicable items hereafter.

(1) Red clay: Refers all soils such as Kunigami merge (excluding pebbles and sand content) and the caustic materials from soil base rock similar to this.

(2) Outflows of red clay: Refers to cases where red clay flows out into public water areas as a result of rain water or the like.

(3) Construction work: Refers to work that alters the form and nature of plots of land.

(4) Construction sites: Refers to areas of land where construction work is carried out.

(5) Specified construction workers: Refers to people who perform construction work on a patch of land that is 1,000 m^2 or larger in size (excluding the national government and other organizations stipulated in regulations (hereafter referred to as the "national government and others")).

(6) Construction contractors: Refers to people to whom works related to construction work is contracted by specified construction workers (including people subcontracted to perform work via a subcontract).

(7) Public water areas: Refers to public water areas as prescribed in Paragraph 1, Article 2 of the Water Pollution Prevention Act (Act No. 138 from 1970).

(8) Facilities for preventing outflows of red clay: Refers to facilities (including provisional facilities) that store water that has been contaminated by red clay or that prevent outflows of red clay.

(9) Equipment for preventing outflows of red clay: Refers to equipment with functions for filtering water contaminated with red clay or equipment stipulated in other regulations.

(Preventing Outflows of Red Clay)

Article 3

Those who perform construction work must strive to take the necessary measures to prevent outflows of red clay from the construction site in question.

(Standards for Facilities for Preventing Outflows of Red Clay, etc.)

Article 4

The Governor must establish standards concerning facilities for preventing outflows of red clay and standards concerning the management of said facilities via regulations in an effort to prevent the contamination of the water in public water areas as a result of outflows of red clay.

2. The Governor must first hear the opinions of the Okinawa Prefecture Environmental Council when working to establish standards concerning facilities for preventing outflows of red clay and standards concerning the management of said facilities. The same shall apply when attempting to alter or abolish these standards.

(Obligation to Establish Facilities for Preventing Outflows of Red Clay, etc.)

Article 5

When performing the construction work in question, specified construction workers must establish facilities for preventing outflows of red clay that conform to the standards concerning facilities for preventing outflows of red clay stipulated per the regulations in Paragraph 1 of the preceding article (hereafter referred to as "facility standards"). They must also perform management of the facilities in question per the standards concerning the management of the facilities for preventing outflows of red clay established per the regulations in this same paragraph (hereafter referred to as "management standards").

2. Regardless of the regulations from the preceding paragraph, when specified construction workers perform the construction work stipulated in the regulations, the Governor may deem it suitable so long as there is equipment for preventing outflows of red clay and in light of the conditions at the construction site in question.

(Notification of Construction Work)

Article 6

When working to carry out the construction work in question, specified construction workers must notify the Governor of the following matters per the stipulations found in the regulations.

(1) Full name or name and title, address, and the name of the representatives of corporations

(2) Project name

(3) Location of the construction site

(4) Area of the construction site

(5) Contents of the construction work

(6) Structures, arrangements, and management methods for facilities for preventing outflows of red clay, or the types and usage methods for equipment for preventing outflows of red clay

(7) Other matters stipulated via the regulations

(Notification of Changes to the Area of the Construction Site, etc.)

Article 7

(Omitted)

(Notification of Changes to the Name, etc.)

Article 8

(Omitted)

(Construction Work Notices)

Article 9

When the national government and others work to carry out construction work on a patch of land that is 1,000 m^2 or larger in size, they shall provide notice to the Governor regarding the matters listed in the items in Article 6.

2. When the national government and others would like to make changes to any of the matters listed in Items 4–6, Article 6 regarding the notices per the provisions of the preceding paragraph (excluding any minor changes stipulated in the regulations), or there have been changes to the matters listed in Items 1, 2, or 7 of said article, then they shall provide notice to the Governor to this effect.

3. The Governor shall consult with the national government and others regarding matters pertaining to the notices per the provisions of the preceding two paragraphs when it has been deemed necessary to do so.

4. The provisions of the preceding three paragraphs shall apply to local governments and other organizations stipulated in the regulations, regardless of the provisions of Article 6.

(Orders to Change Plans)

Article 10

In cases where notification has been provided as per the provisions of Articles 6 or 7, the Governor may order the person who provided said notification to make changes to plans concerning facilities for preventing outflows of red clay or their management methods, or to equipment for preventing outflows of red clay. Such orders can be given when the facility for preventing outflows of red clay for which notification was provided has been deemed as failing to conform to the facility standards, or when their management methods have been deemed as failing to conform to the facility standards, or when prevention measures by using equipment for preventing outflows of red clay have been deemed to be insufficient, so long as it is within 45 days from the date the notification was received.

(Restrictions on the Performance of Construction Work)

Article 11

People who have provided notification per the provisions of Article 6 and those who have provided notification per the provisions of Article 7 must refrain from performing the construction work for which notification was provided or performing matters for which notification was provided for said changes, respectively, unless more than 45 days have elapsed from the date on which the notification was received.

2. When the contents of the matters for which notification was provided per the provisions of Articles 6 or 7 have been deemed suitable, the Governor can shorten the period stipulated in the preceding paragraph.

(Appointment of Supervisors in Charge of Preventing Outflows of Red Clay, etc.)

Article 12

Specified construction workers must appoint supervisors in charge of preventing outflows of red clay and construction contractors must appoint red clay outflow prevention managers, respectively.

2. The supervisors in charge of preventing outflows of red clay and red clay outflow prevention managers must make efforts to offer guidance and supervision for the workers engaged in the work as well as to implement the matters stipulated in the regulations when it comes to measures to prevent outflows of red clay.

(Transfer of Approval)

Article 13

(Omitted)

(Improvement Orders, etc.)

Article 14

When the person who provided notification per the provisions of Article 6 or their construction contractors carry out construction work or construction in violation of the matters for which notification was provided per the provisions of said article, matters for which notification was provided per the provisions of Article 7, or matters ordered per the provisions of Article 10, the Governor may order said people to take the necessary improvements within a set timeframe or order a temporary suspension of the construction work or construction.

(Measures Resulting from the Discontinuation of Construction Work, etc.)

Article 15

In the event that the person who provided notification per the provisions of Article 6 wishes to discontinue or suspend the construction work for which notification was provided, they must take the appropriate measures in light of the condition at the construction site in question using the method stipulated in the regulations to prevent outflows of red clay from the construction site for which they are attempting to discontinue or suspend construction. They must also notify the Governor to this effect.

2. When the Governor deems that the measures for which notification was provided per the provisions of the preceding paragraph were not adequate in light of the conditions at the construction site in question, they may order the person who provided said notification to take the measures necessary in order to prevent outflows of red clay.

(Orders to Suspend Construction Work Without Notice, etc.)

Article 16

When a person who should have provided notification per the provisions of Article 6 is carrying out construction work without having provided the notification stipulated in this article, the Governor may order said person to either suspend the construction work or take the measures necessary to prevent outflows of red clay.

(Management of Land Provided for Purposes of Cultivation, etc.)

Article 17

Persons who manage land provided for purposes of cultivation (hereafter referred to as “cultivated land”) must work to manage the land in question by installing things like ridges in the surrounding areas to ensure that red clay outflows do not occur from said land, promoting aggregation of the soil, and so on.

2. In cases where debris basins, check dams, and other structures have been installed due to the clearing of cultivated land, the persons managing the facilities in question must make efforts to manage them so as to ensure that said facilities can function smoothly.

(Management of Other Land)

Article 18

Persons managing land other than cultivated land (hereafter referred to as "other land") must make efforts to manage the land in question through measures like planting lawn grass or laying gravel out on said land when there are concerns over outflows of red clay occurring from this land. In addition, when facilities for preventing outflows of red clay and the like are installed, they must make efforts to manage them so as to ensure that said facilities can function smoothly.

(Guidance for the Managers of Cultivated Land, etc.)

Article 19

In the event that considerable outflows of red clay are occurring from cultivated land or other land, the Governor may give orders to the person managing the land in question to prevent said outflows of red clay.

(On-site Investigations)

Article 20

The Governor can request reports on the status of measures to prevent outflows of red clay from persons who have provided notification per the provisions of Article 6, persons who are performing construction work even though they failed to provide notification per the provisions of Article 6 despite the fact that they should have done so, or their construction contractors. Additionally, the Governor may also have said personnel go on-site to the construction sites or offices of said persons and have them investigate things like the facilities for preventing outflows of red clay, equipment for preventing outflows of red clay, and so on. These may be done within the extent needed in order to enforce this ordinance.

2. The personnel who perform the on-site investigations per the provisions in the preceding paragraph must carry with them a personal identification card and present this to the concerned parties.
3. The jurisdiction for the on-site investigations per the provisions of Paragraph 1 may not be interpreted as being the same as those recognized for the sake of criminal investigations.

(Exemptions)

Article 21

This ordinance shall not apply to construction work carried out as part of emergency measures necessary due to extraordinary disasters.

(Enactment of Comprehensive Policies, etc.)

Article 22

The Governor shall enact comprehensive policies concerning measures to prevent outflows of red clay and implement these. The Governor shall also promote research related to measures to prevent outflows of red clay, and make efforts to disseminate the results of this.

(Delegation to Regulations)

Article 23

Matters necessary for the enforcement of this enforcement will be stipulated in regulations.

(Transitional Measures)

Article 24

In the event that regulations are enacted or abolished pursuant to the provisions of this ordinance, the required transitional measures (including transitional measures concerning penalties) can be established through said regulations within the scope deemed necessary in a rational sense as a result of their enactment or abolition.

(Penalties)

Article 25

Fines of up to 500,000 yen will be imposed upon anyone who violates the orders per the provisions of Article 10, Article 14, Paragraph 2, Article 15, or Article 16.

2. Fines of up to 200,000 yen will be imposed upon anyone who fails to provide notification per the provisions of Article 6, Article 7, or Paragraph 1, Article 15, or who provides a false notification.
3. Fines of up to 100,000 yen will be imposed upon anyone to whom the following items apply.
   (1) Anyone who violates the provisions of Paragraph 1, Article 11
   (2) Anyone who fails to provide a report per the provisions of Paragraph 1, Article 20 or who provides a false report; or anyone who refuses, obstructs, or evades an on-site investigation

(Dual Liability)

Article 26

If the representative of a corporation or a corporation, or a personal agent, user, or other employee should engage in the violations from the preceding three articles in relation to the management of said corporation, or personal business, then the perpetrator shall be punished and the penalties from each of these articles shall be imposed on the corporation or individual.

Supplementary provisions

(Effective date)

1. This ordinance will enter into force starting from the date stipulated in the regulations within a period not to exceed one year from the date of promulgation. However, the provisions of Paragraph 2, Article 4 will enter into force on November 1, 1994.

(Regulation No. 63 from October 1995; entered into force on October 15, 1995)

(Omitted hereafter)

Document 8. Gesashi Mangrove Tourism Use
[Guide/Business Operator Rules]

■ **Regions where the rules apply:**

These rules cover tourism use and activities in the Gesashi River flood plain (Minatobaru 569/691—former Gesashi Fishing Harbor) and the Fureai Hirugi Park area.

■ **Persons targeted:**

These rules apply to guides and business operators who have applied for registration with or been approved for registration by the Higashi Village Tourism Promotion Office.

○ **Shared rules on environmental conservation**

1) The collection (and picking) of flora and fauna is prohibited within the designated region.
2) Visitors must not go down into the tidal flats. In addition, warnings must be issued to anyone seen heading down to them.
3) The feeding of wildlife is prohibited.
4) If anyone picks up a fallen plant to observe it, they must return it to its original location. The temporary capture of animals for purposes of observation may only be performed by first requesting to change the current conditions in advance and be carried out through the approved observation methods.
5) Environmental monitoring activities in the field must be carried out periodically.
6) If any environmental impacts should arise, they must be eliminated as part of environmental conservation activities by means of taking procedures to apply to change the current status of natural monuments through consultations with the concerned parties, such as by altering the tour route.
8) Clean-up activities must be carried out in the field periodically and as needed.
9) Alternate fields must continue to be used in a proactive manner in order to prevent the fields used from being concentrated in a single location in Gesashi.
10) Power boats for purposes of tourism and leisure are prohibited from entering. However, this shall not apply in the event of emergencies or evacuations. The opinions of the local residents must be reflected when it comes to other instances where power boats may enter the area.
11) Lectures on environmental conservation must be carried out when the tours start on matters like the natural monuments and usage rules.
12) Visitors must go to the restroom before the tour starts.
13) All garbage must be brought back.

14) Vehicles must be turned off when parked in the parking lot.
15) Smoking is prohibited during the tours.

○ **Shared rules on safety management**

1) Tour operators must enroll in damage insurance for the tour participants, and must also enroll in liability insurance of 100 million yen or more as a countermeasure against liability for damages when accidents occur.
2) Weather information must be confirmed before tours leave. The decision to either suspend tours or carry on with them must be made by confirming the onsite conditions when warnings (heavy rains, flooding, snow, wave surges, storms) and advisories are issued. At the same time, decisions to resume the tours must be made by looking at the onsite conditions and weather (prediction) maps when said warnings are called off.
3) Responses must be taken quickly when emergencies occur, and the emergency contacts that have been listed up must be notified.
4) Guides must carry emergency supplies with them.
5) Guides must encourage visitors to stay hydrated and wear hats in order to prevent heatstroke and sunstroke.
6) If a guide catches site of any dangerous spots or dangerous animals (beehives, pit vipers, etc.), after first confirming that it is safe they must warn other guides in the area, while also informing the Higashi Village Tourism Promotion Office and the Village Office (Environmental Health and Sanitation Department) and requesting their eradication. The Promotion Office will promptly alert the various operators of this.
7) Before embarking on a tour, the participants must undergo a health check, and if the operator determines that someone's participation will pose a hindrance to the tour, they may bar said person from participating in the tour. With regard to individual tours, guides must provide the participants with warnings regarding participation in the tour and have them sign a liability waver prior to the start of the tour. For group tours, they must gain the participants' understanding, such as by verbally warning them of and explaining to them the contents of this consent form verbally.
8) Before the tour starts, guides must warn the participants that they are prohibited from engaging in conduct like smoking, drinking alcohol, or exposing their top half. They may bar participants from participating if they fail to heed said warnings. After the tour starts, guides are to warn participants when they engage in risky behaviors like intentionally capsizing their boats, and if they fail to heed said warnings the guide must stop the tour.

○ **Rules for embarking on canoe tours**

1) When traveling with the canoes, participants must comply with traveling on the left-hand side.

2) The limit for the number of participants that a single guide can lead shall be set at five double boats.

3) The canoes must be ridden with the proper posture, including the seating position, and participants must maintain said posture when riding in them.

4) The canoers must faithfully adhere to and be proficient at the basic method of rowing.

5) The canoers must know the techniques for freely operating their canoes, such as for moving forward, moving backward, stopping, and changing direction.

6) The canoers must be able to quickly right themselves when they capsize. They must also be able to quickly right other boats when they capsize and aid people who have fallen out.

7) The canoers must be able to pull other boats and passengers who have been rendered incapable of rowing under their own power as is.

8) No one may enter the tidal flats, except when emergencies occur (strong winds, lightning, physical incapacitation, accidents, injuries, etc.).

9) No one may enter the tidal flats at location No. 5. Likewise, no one may pass through them from this same location from either the upstream or downstream directions.

10) For group tours, as a general rule (the guide will make a decision on this by observing the users' skill at operating their canoes and the congestion on the river) groups of ten boats must use the mangroves as their final turnaround point, while groups of 20 boats must use the section right before the curve in the river as their final turnaround point (they will reach the location numbers on the map).

11) Tour groups must reduce their speed and slow down when traveling upstream from the large bridge at Gesashi, with guides instructing the participants to do so.

○ **Safety management rules for canoe tours**

1) Participants must thoroughly comply with wearing life jackets.

2) They must wear clothing underneath their life jackets.

3) They must wear clothing and footwear that can handle changes in the weather when riding in the canoes.

4) The number of guides must be increased when the weather conditions warrant it.

5) Participants must undergo a health check prior to boarding, and the guides must give them a lecture on precautions for safety management.

6) The guides must carry a cell phone, wireless radio, and tow ropes with them.

7) Each operator must have at least one or more guides attend a lecture on water safety techniques and rescue given by the Japanese Red Cross Society. They must also uphold the renewal deadline and constantly maintain their knowledge and skills with regard to rescue and relief.

8) The guides must attend the rescue courses periodically held by the Higashi-son Eco-Tourism Association.

Document 9. Iriomotejima Canoe Association Rulebook (Excerpt)

1. General Provisions

1) Environmental conservation

(1) Canoe touring and similar activities must be carried out by striving to conserve the natural environment on Iriomote Island (Memorandum on the Protection of Flora and Fauna and the Conservation of the Natural Environment from October 25, 1999).

(2) Trash may not be thrown out. Association members must work to clean up the locations where they hold tours (Voluntary Rules from April 14, 2006).

(3) Participants may not recklessly collect plants and animals during the tours (Voluntary Rules from April 14, 2006).

(Omitted)

4) Tour operation

Association members must comply with the provisions found in the rulebook. Together with this, they must also monitor the guides affiliated with their business establishments to ensure they are complying with the provisions (Voluntary Rules from April 14, 2006).

2. Regions surrounding Pinaisara and Funaura Bay

(1) Guides must carry with them the guide certification cards issued by the Association while giving tours (Voluntary Rules from April 14, 2006).

(2) The requirements for the issuance of guide certification cards are listed below.

a) They must attend lifesaving courses held by the Fire and Disaster Management Agency and others.

b) Only one guide certification card per person (guides cannot possess guide certification cards for several shops at the same time).

(Regular general meeting from March 28, 2011)

(3) For-profit guided tours using non-motorized boats must have no more than eight people per party (Special general meeting from January 10, 2007).

(4) A single operator can guide up to a maximum of 14 guests per day. However, the number of people that a single guide can guide shall be limited to no more than seven people. For eight or more people, several groups must be sent out independently (Voluntary Rules from September 1, 2002).

With up to three guides per day, the maximum number of guests is 14 people. If there are four or more guides, then they will be counted among the number of guests (for example, if there are four guides then the maximum number of guests would then be 13 people).

The number of people that can be guided per day by business operators that have newly enrolled shall be considered to be half the number from these Voluntary Rules for one year, unless wharfs or the like are set in place (Voluntary Rules from October 16, 2003/Revised on April 14, 2006 and January 10, 2007).

(5) For guided tours and rental canoes together, the maximum number of guests per operator per day shall be 14 people. However, elementary school students and younger children (less than six years old) will not be included in this number. The requirement is that elementary school students and younger children must not be given a paddle. If they are given a paddle, then they will be included in the number of guests (Voluntary Rules from September 10, 2003/Revised at the regular general meeting on April 5, 2005/Revised on April 14, 2006/Revised at the special general meeting on January 10, 2007).

(6) When the schools and children's associations within Taketomi Town go on guided tours, the provisions from 2-2, 2-3, 2-4, 2-5, and 2-6 shall not apply. However, they must be accompanied by at least one guide who belongs to the Association, and ten children must be accompanied by one or more chaperones. Guides who belong to the Association, teachers, and parents of the children can serve as chaperones (Revisions to the Voluntary Rules from April 14, 2006).

(7) Operators offering rentals of canoes and the like are to prepare guide maps that include the usage rules, which they are to distribute to users and ensure their compliance with them (Memorandum).

(8) Guests must comply with the following rules when they bring animals (especially dogs) with them on the tour.

a) Animals must be kept on a leash.

b) Guests must be responsible for animal's feces and the like to ensure that this does not pose a problem for others.

c) Animals may not be allowed to swim in the plunge basin below the waterfall. However, the state of affairs resulting from these voluntary rules will be observed, and will be reconsidered if any problems should arise (Voluntary Rules from April 25, 2003).

(9) Camping and bonfires are prohibited in the area around Funaura Bay and Pinaisara (Voluntary Rules from April 14, 2006).

(10) The use of megaphones is prohibited except when they are needed for safety reasons (Memorandum).

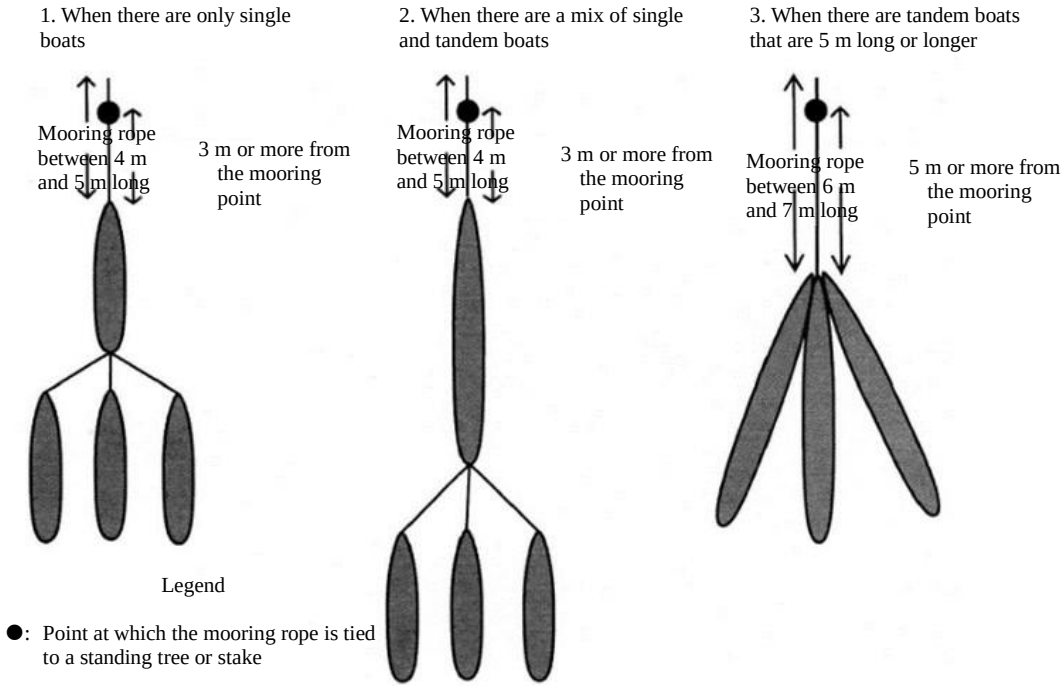
(11) When participants are allowed to swim in the plunge basin below waterfalls, due consideration must be given to safety. Moreover, the following activities are prohibited.

a) Standing directly under the waterfall at Pinaisara Falls so that the water strikes you.

b) Jumping into the plunge pool from atop the tall rocks at Pinaisara Falls and Nishida Falls.

(Voluntary Rules from April 14, 2006)

(12) Mooring ropes that are between 4 m and 5 m long (for tandem boats with a length of about 5 m, then mooring ropes between 6 m and 7 m long) are to be used, and a distance of 3 m or more should be left between the mooring point and the boats (for tandem boats with a length of about 5 m, 5 m or more). The mooring should be performed as shown in the diagram. When there are a large number of boats they can be divided up to ensure that they do not get in the way when mooring the other canoes and so forth. Guidance should be given so that the mooring of rental canoes is done in the same way (Voluntary Rules from March 15, 2004/Voluntary Rules from April 14, 2006).



(13) No other means of for-profit forest entry within natural recreation forests may be used aside from existing mountain roads.

(Regular general meeting from April 5, 2005)

These existing mountain roads refer to the mountain roads listed below.

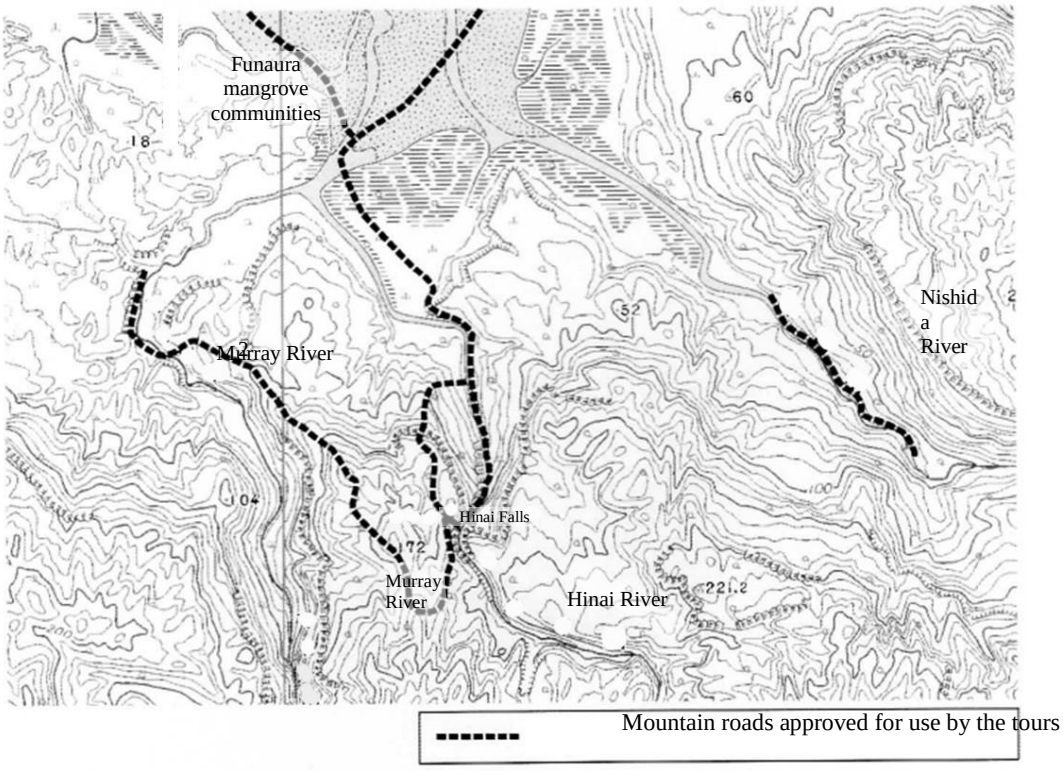
a) Between Pinai River canoe yard–Pinaisara Falls plunge basin

b) Between Pinai River canoe yard–upper Pinaisara Falls

c) Between Funaura Bay–Pinai River canoe yard

d) Between the Murray River canoe yard–upper Pinaisara Falls

e) Between the Nishida River canoe yard–Nishida Falls



(14) Guides must not hold tours while leaving their canoe platform trucks (trailers) parked along Kaichu Road or the Funaura Harbor slope. Tours should start after trailers have been moved to the Funaura Harbor parking lot.

(Omitted hereafter)

Document 10. Okinawa Prefecture Guidelines on Natural Environment Restoration: Restoring a Lush Natural Environment and Handing Down a Beautiful Island to Future Generations (Excerpt)

Preparer: Okinawa Prefecture
Date: March 2015

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Part 1 Aiming to Restore the Natural Environment Unique to Okinawa

Chapter 1 Aim of the Guidelines on Natural Environment Restoration

(Omitted)

1. Background and Objectives behind the Formulation of the Guidelines

(Omitted)

As part of this, Japan entered the Act on the Promotion of Nature Restoration into force in 2005 with the goal of restoring the ecosystems and other natural environments that had been tarnished in the past. Based on this law, projects to restore the natural environment and other such initiatives have been carried out nationwide.

In Okinawa Prefecture, initiatives for the Sekisei Lagoon, which is one of the largest coral reef regions in Japan, have been advanced on the basis of this law. However, there were no guidelines that systematically arranged information like the characteristics of natural environments that had been lost, challenges concerned with the restoration of the natural environment, and points to keep in mind when promoting projects to restore the natural environment. Therefore, the Guidelines on Natural Environment Restoration were recently enacted, to compile together these necessary matters.

2. Positioning of the Guidelines

The Act on Special Measures for the Promotion and Development of Okinawa (Act No. 14, 2002) stipulates that "The national and local governments shall take measures that aim to maintain and rehabilitate ecosystems, as well as all other necessary measures, in order to contribute to the conservation and restoration of the natural environment in Okinawa." What is more, it advocates for the "Conservation, restoration, and appropriate use of the natural environment," which is a fundamental measure found in the Basic Plan for 21st Century Vision of Okinawa (2012), which was enacted pursuant to this law.

Okinawa Prefecture enacted various guidelines, plans, and so forth as shown in Fig. 1-1 to promote these measures. Up until that point, nothing had been enacted that placed emphasis on measures concerning the restoration of the natural environment.

Therefore, these guidelines were enacted as a specific initiative in an effort to promote and strengthen projects to restore the natural environment. It will be necessary to continue working to restore the natural environment unique to Okinawa while coordinating with related plans, as well as plans and measures for each sector.

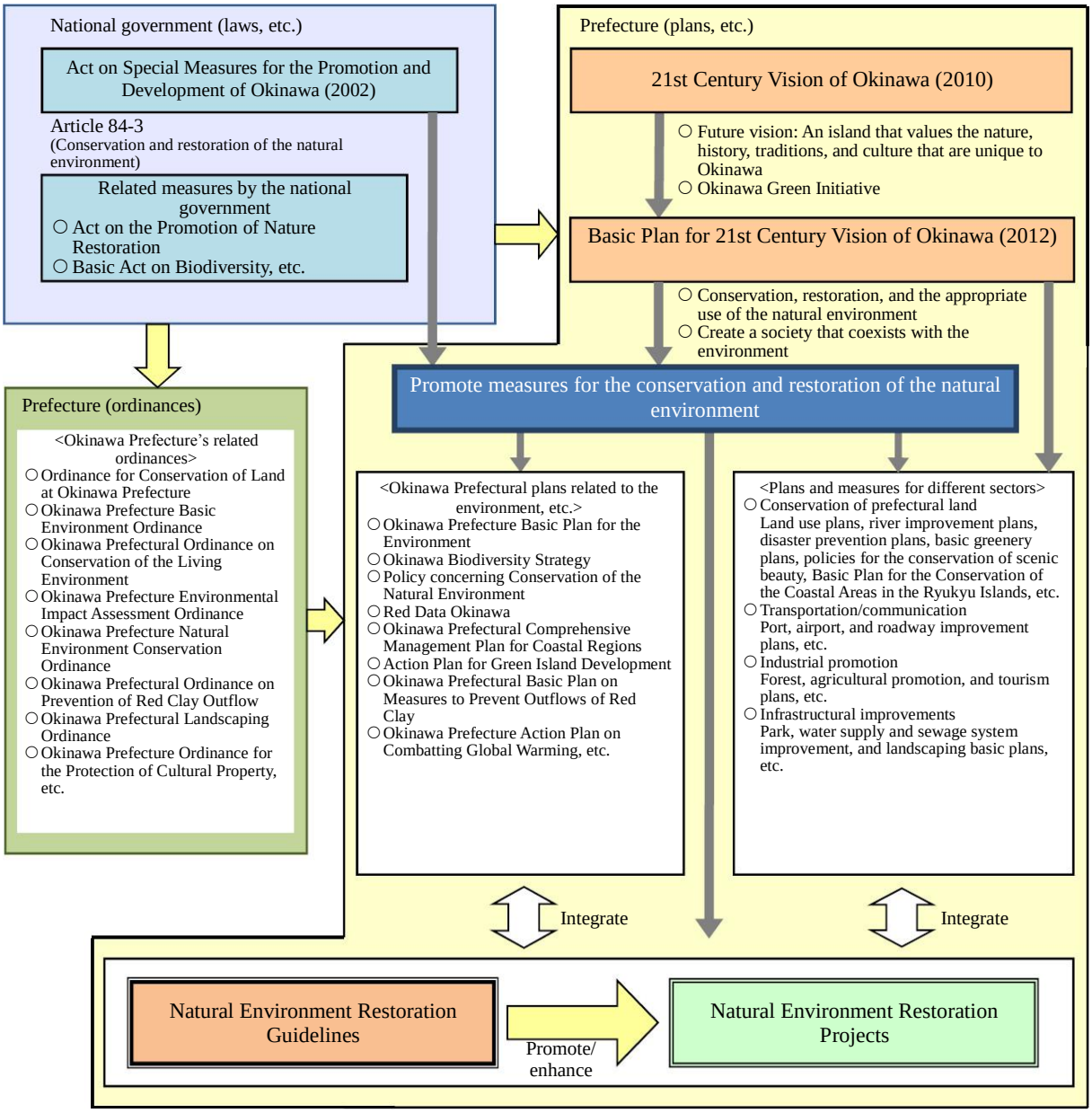

Fig. 1-1 Positioning of the Guidelines on Natural Environment Restoration

3. Fundamental Principle of the Guidelines

Human activity is one element found within ecosystems that comes about as a result of the influence exerted by nature and our dependence on nature. There is also the fact that since time immemorial humans have lived within nature, maintained connections between people and nature, and preserved this harmony, thereby maintaining the natural environment.

The natural environment has brought about numerous benefits for mankind and has served as the source of a culture of abundance. For this reason, we have made it the fundamental principle of these

guidelines to restore the abundant natural environment that has been tarnished as a result of the industrial and human activities carried out in the past so as to pass down a beautiful island to future generations. For this, we will restore the lost soundness and biodiversity of ecosystems, further deepen connections between people and nature, and maintain and improve these conditions.
What is more, in order to restore the natural environment based on these fundamental principles, "Restoring sound ecosystems," "Ensuring biodiversity," "Contributing to the creation of venues for interacting with nature," and "Contributing to disaster prevention and mitigation" were defined as basic policies, and will continue to be promoted.

(Omitted)

Part 2 Basic Thinking on Projects to Restore the Natural Environment

Chapter 1 Implementation Details for Projects to Restore the Natural Environment

(Omitted)

2. Implementation Procedures for Projects to Restore the Natural Environment

The basic procedure for projects to restore the natural environment is shown in Fig. 2-2 and Table 2-1. This starts with an idea and drafting, then considering a concept and plan, performing construction work based on the concept and plan, and then striving to make use of the restored natural environment while maintaining it as well. There are projects that emphasize natural restoration and projects coordinated with infrastructural improvements, which differ in terms of points like whether or not an overall concept is created for them and the manner in which they are involved in the local region. An outline of their implementation procedures is shown in (1)–(4) below.

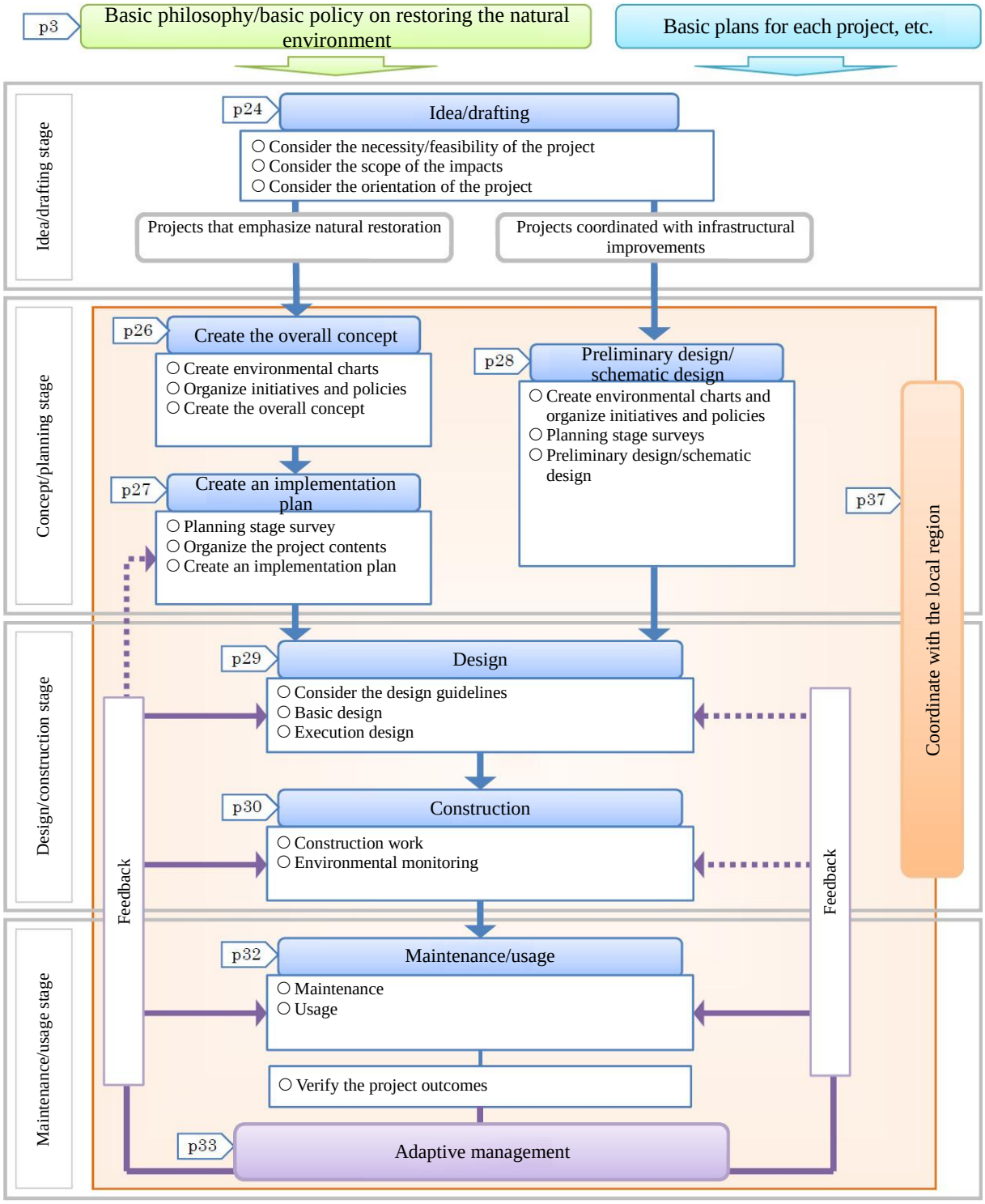

Fig. 2-2 Overall flow for projects to restore the natural environment

Table 2-1. Implementation procedures for projects to restore the natural environment

<table>
<tr><th></th><th>Projects that emphasize natural restoration</th><th>Projects coordinated with infrastructural improvements</th></tr>
<tr><td>Idea/ drafting stage</td><td colspan="2">○ Idea/drafting
In aiming to instantiate initiatives for restoring the natural environment, engage in the considerations necessary in order to clarify the project’s category and the need for coordination with other projects. This is to be done before considering the concept and plans for restoring the natural environment.</td></tr>
<tr><td rowspan="2">Concept/planning stage</td><td>○ Create the overall concept
Prepare environmental charts that organize the conditions in the natural environment and social environment. Then, based on their contents, organize policy guidelines for natural environment restoration, and create the “overall concept” by aiming to build consensus with the local region.</td><td rowspan="2">○ Preliminary design/schematic design
Organize the conditions in the natural environment and social environmental, as well as content concerning the restoration of the natural environment while aiming for integration with the basic plans (higher-level plans) of each project. Then, incorporate this into the preliminary design and the schematic design.</td></tr>
<tr><td>○ Create an implementation plan
Perform planning stage surveys with a view towards formulating an implementation plan. Based on the results of these surveys and the overall concept that has been created, create an “implementation plan” that instantiates the project contents.</td></tr>
<tr><td rowspan="2">Design/construction stage</td><td colspan="2">○ Design
Based on the results of the examinations from the concept/planning stage, create designs (basic design/execution design) that incorporate the items necessary to get started on the project (start construction).</td></tr>
<tr><td colspan="2">○ Construction
Carry out the construction work onsite based on the designs. In addition, perform the necessary surveys to confirm the impact on the environment (environmental monitoring) regarding the construction work.</td></tr>
</table>

Maintenance/ usage stage	○ Maintenance/usage After the construction work is finished, strive for the maintenance and usage of the natural environment based on the content from the concept/planning stage, and verify the project outcomes.

* In promoting projects, it is important to continue to carry out initiatives based on the "Regional ecosystem networks" discussed in this section, as well as those based on the thinking behind the "Adaptive management" and "Coordination with the local region" discussed in Chapter 2.

(Omitted)

Chapter 2 Points to Keep in Mind regarding the Implementation of Projects to Restore the Natural Environment

(Omitted)

1. Adaptive Management

In order to implement projects to restore the natural environment, it will be necessary to continue making progress with a philosophy of "adaptive management" serving as the foundation. Adaptive management involves performing monitoring and evaluations on the state of the natural environment and reflecting this into things like the design, construction, and maintenance/usage in order to achieve the project's targets.

(1) The Adaptive Management Approach

Adaptive management refers to an approach of setting appropriate management targets, performing verifications and assessments by monitoring whether these targets have been achieved or not through the construction work and maintenance/usage, and flexibly adapting through coordination with the local region in order to achieve the project's targets. This takes into consideration the fact that the ecosystems and other natural environments that are targeted by projects to restore the natural environment are constantly changing, and that unforeseen circumstances arise (Fig. 2-5).
The items shown below are considered and arranged when implementing adaptive management.

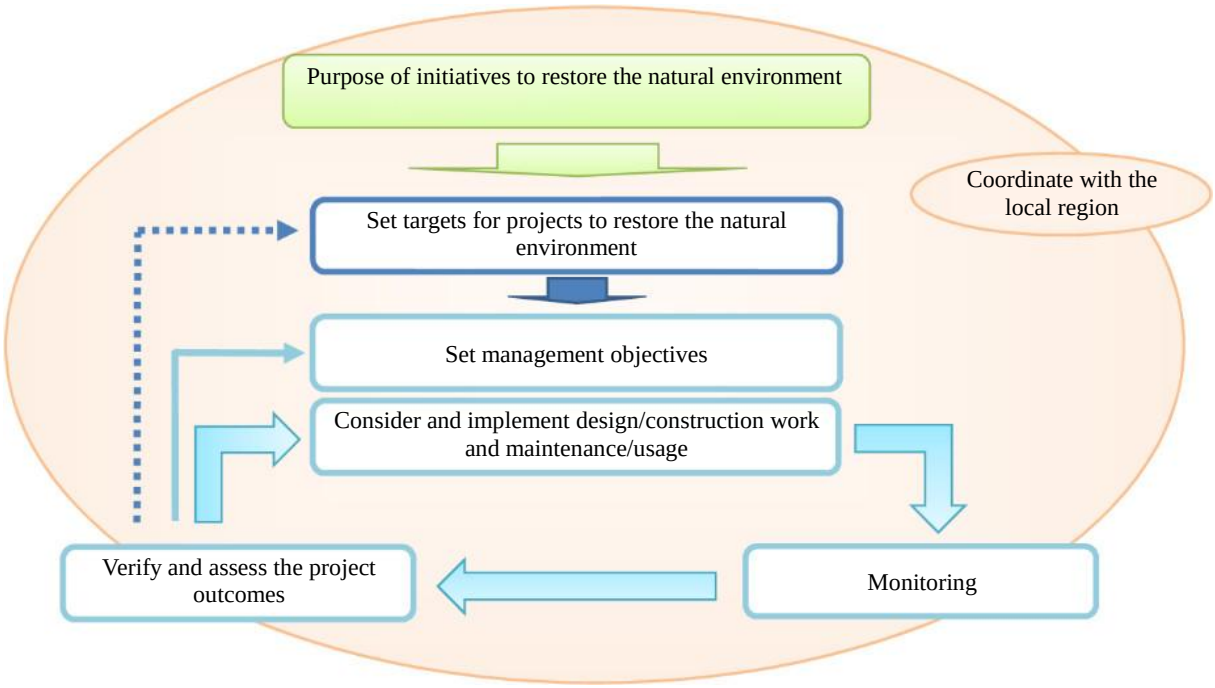

Fig. 2-5 Image showing the process of adaptive management

(Omitted)

(2) Creating Cooperative Structures

It will be important to create structures for ensuring sustainability in order to promote adaptive management. Therefore, consideration will be given to the items indicated below based on "2. Coordination with the Local Region" in order to create cooperative structures for this.

1) Creating Structures to Perform Monitoring

(1) Cooperative Structures with the Local Region

Monitoring and maintenance are exacting tasks that must be performed by manual effort, and which require a long-term perspective attuned to the cycle of natural transitions. Therefore, it is necessary to seek the cooperation of local residents, various organizations, and others in creating sustained arrangements that are rooted in the local region.

(2) Consider Establishing the Natural Environment Restoration Monitoring Review Committee (provisional title)

Scientific verifications will be performed on the monitoring results, and the contents of projects will be revised on the basis of these results. A Natural Environment Restoration Monitoring

Review Committee (provisional title) that is comprised of experts, academics, and other specialists should be established for this.

2) Division of Roles

Ideally, an arrangement should be created whereby the local residents, various organizations, the government, and others take part from the initial maintenance/usage stage by discussing and sharing the targets and monitoring methods.

Table 2-4 and Fig. 2-7 show an image of the division of roles for monitoring.

Table 2-4. Image of the division of roles for monitoring

Participant	Role
Local residents, various organizations, etc.	Perform surveys to get a grasp of the day-to-day environmental changes in the targeted regions by using simplified monitoring. If there are people with expert knowledge present in the region, consider arranging it so that project implementers carry out the surveys.
Researchers, etc.	Promote research of a high degree of difficulty, and assess the results of projects to restore the natural environment. Offer proposals concerning points of improvement for and feedback on design/construction work and maintenance/use.
Project implementers	Periodically make efforts to get a grasp of the natural environment over a broad area.

(Omitted)

2. Coordination with the Local Region

In each of the stages of “Concept/plan,” “Design/construction,” and “Maintenance/usage” of projects to restore the natural environment, the projects will be promoted by working to ensure the participation of and coordination between a diverse array of entities in the local region. This shall be done via coordination with the local region suited to each stage. The basic thinking behind this will be indicated in this section.

(Omitted)

(2) Basic Thinking behind Coordination with the Local Region

(Omitted)

2) Image of Local Participation in Projects to Restore the Natural Environment

(1) Participating Entities

The people listed below are thought of as participating entities (individuals or organizations/corporations) for projects to restore the natural environment.

○ Project implementers (people who would like to implement the project)
○ Participants (people who would like to participate in the project)
  - Local residents, NPOs and other similar organizations, as well as various other organizations (unions/associations)
  - People involved in education, people with expert knowledge (researchers and other experts)
  - Land managers
  - People who are active locally (people who come to the region from outside and are active there on a regular basis), etc.
○ Related administrative agencies (those who contribute to the project from an administrative standpoint (position with jurisdiction over related laws, ordinances, and plans; position as a contact point for coordinating with the local region))

(2) Goal-based Coordination with the Local Region

For projects to restore the natural environment, it is important to continue to maintain and use the restored natural environment through sustainable connections with the local region.
Therefore, as opposed to projects coordinated with infrastructural improvements, projects that emphasize natural restoration, for which the goal is the restoration of the natural environment itself, need to continue to deepen coordination with the local region to a greater extent.
Conversely, with projects coordinated with infrastructural improvements, for which the main goals are improving lives, preventing and mitigating disasters, and safety, it is envisioned that they will strive for comparatively looser coordination, given the differences in their main goals.

(3) Image of the Committee

It will be necessary to consider what sort of committee should be created based on modalities for how coordination with the local region should function.
For example, in the case of projects that emphasize natural restoration, it is envisioned that efforts will be made for adequate coordination with the local region by establishing a committee at as early

a stage as possible and making efforts to share information and build consensus. This should be established as a committee that will serve as a venue for continued development together with projects to restore the natural environment.
It is envisioned that projects coordinated with infrastructural improvements will feature comparatively looser coordination. As such, it is envisioned that a committee that will serve as a venue for adequately reflecting opinions from the local region and calling for its cooperation with maintenance and monitoring will be established so that the restored natural environment continues to be properly used.
An image of this committee is shown on the following page.

(Omitted hereafter)

Document 11. Second Okinawa Prefecture Basic Plan for the Environment
(Excerpt)

Preparer: Okinawa Prefecture
Date: April 2013

Table of Contents (the excerpted parts have been **bolded**)

Chapter1 Basic Items of the Plan

1. Background to the Enactment of the Plan
2. **Goals of the Plan**
3. Objectives of the Plan
4. **Nature/Roles of the Plan**
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Chapter 2 Current Status of and Challenges for the Environment

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1. Vision of the Environment Desired by Prefectural Residents
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Chapter 4 Roles of Each Entity and Guidelines for Environmental Considerations

1. Roles of Each Entity

2. Guidelines for Entity-specific Environmental Considerations/Examples of Initiatives

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Chapter 5 Promotion Structure for the Plan

1. Promotion Structure for the Plan
2. Promoting Coordination and Cooperation with and the Participation of Each Entity
3. Disseminating Plans and Raising Awareness
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5. Checking on and Reassessing the Plan's State of Progress
6. Promoting Research and Study/Enhancing Monitoring and Observation Structures

Chapter 1 Basic Items of the Plan

(Omitted)

2. Goals of the Plan

This plan is based on the provisions of Article 8 of the Okinawa Prefecture Basic Environment Ordinance. Its goals are listed below.

- ■ Promote environmental conservation by diverse entities that include prefectural residents, businesses, and the government by clearly defining comprehensive, long-term targets and measures related to environmental conservation and creation based on the current status of and challenges for the environment in Okinawa.
- ■ Promote various specific measures related to environmental conservation and creation in a comprehensive and systematic manner with a view towards achieving "A safe, secure Okinawa that is calm, pleasant, and blessed with a lush natural environment" based on partnerships with various entities.

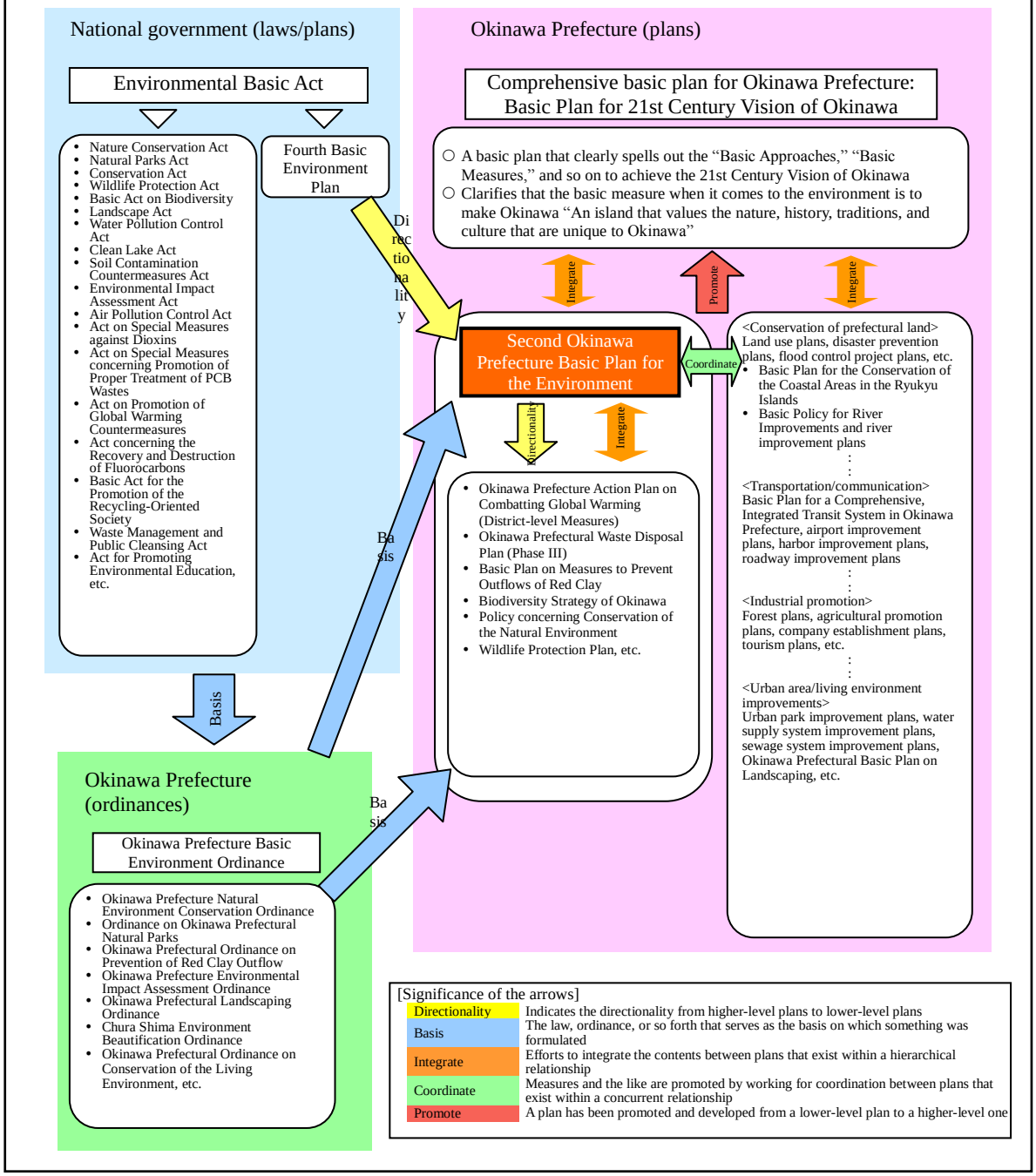
(Omitted)

4. Nature/Roles of the Plan

The role of the plan's content is to serve as a plan for promoting the 21st Century Vision of Okinawa (which is a basic concept of Okinawa Prefecture) and the Basic Plan for 21st Century Vision of Okinawa (which is a comprehensive basic plan) from an environmental standpoint.

Therefore, plans designed for purposes of conserving the environment in Okinawa Prefecture must be enacted, developed, and promoted in line with this plan. What is more, it was decided that items related to the environment in other plans will be enacted in accordance with the basic thinking behind this plan, just like with plans designed for purposes of conserving the environment, to maintain harmony with this plan.

[Position and Roles of Laws, Ordinances, Plans, and More for Environmental Conservation]



5. Plan Period

The target period for the plan shall last for ten years from FY2013 to FY2022. The plan will promote the Basic Plan for 21st Century Vision of Okinawa and other related plans in line with the Okinawa Prefecture Basic Environment Ordinance from an environmental standpoint.

In addition, this plan will be revised as needed based on the reappraisals to the implementation plan for the 21st Century Vision of Okinawa and changes in the environmental and socioeconomic conditions in the prefecture.

6. Region Targeted by the Plan

The region targeted by this plan shall consist of the entirety of Okinawa Prefecture, including its coastal and ocean areas.

(Omitted)

Chapter 4 Roles of Each Entity and Guidelines for Environmental Considerations

1. Roles of Each Entity

(Omitted)

1-1. Administrative Agencies

The prefecture will promote measures for environmental conservation, restoration, and creation that is both comprehensive and effective based on the basic plan. Moreover, it will offer suggestions for the roles of each entity and guidelines for environmental considerations in order to incorporate various entities, such as businesses, prefectural residents, NPOs and other civil organizations, tourists, and the US military, into environmental conservation activities in a voluntary and proactive manner. In addition, it will also promote initiatives for awareness-raising activities aimed at these entities. Furthermore, it will provide support to enhance the base of activities for environmental conservation measures by setting in place social capital, as well as promoting other environmental conservation activities.

The existence and application of the vast, overcrowded US military base occupying space on Okinawa Prefecture is prominently involved in the lives of the residents and the natural environment

in the surrounding region. Therefore, for its part the prefecture will continue to request that the US military give consideration to the importance of its role here, as well as to the environment.

Initiatives in local regions are crucial for promoting environmental conservation, restoration, and creation. As the decentralization of power advances, the roles played by the municipalities closest to the local residents will continue to grow in importance.

For this reason, the municipalities must enact comprehensive plans concerning environmental conservation, restoration, and creation in accordance with their respective local characteristics. In addition, they must also promote initiatives through cooperation and coordination with the prefecture, businesses, prefectural residents, NPOs and other civil organizations, tourists, the US military, and others.

(Omitted)

2. Guidelines for Entity-specific Environmental Considerations/Examples of Initiatives

(Omitted)

2-1. Administrative Agencies

Target	Guidelines for Considerations
Recycling	◆ For the implementation of projects, give consideration to reducing the environmental impact, such as by the effective use of energy and curbing emissions of pollutants. ◆ For the implementation of projects and office activities, give consideration to recycling, proactively use environmentally friendly products and recycled products, thoroughly follow the 3Rs, and promote efforts to reduce the weight of waste. ◆ For the installation and management of buildings, give consideration to reducing the environmental impact, such as by adopting renewable energies and ESCO projects and effectively using water. ◆ Enact and implement various measures such as those for the installation of facilities, regulations, surveys and research, dissemination and awareness-raising, and countermeasures, in order to reduce the environmental impact from socioeconomic activities in the local region.

Target	Guidelines for Considerations
Coexistence	◆ Enact and implement various measures related to things like the installation of facilities, regulations, surveys and research, and raising public awareness, in an effort to conserve water and greenery, ensure habitat spaces for wildlife, and ensure places for interacting with nature. ◆ For the implementation of projects, give consideration to the conservation of water and greenery and ensuring habitat spaces for wildlife by performing environmental impact assessments. ◆ Promote greening in public lands, such as greenery conservation zones, parks, roads, and within public facilities. ◆ For river improvements, give consideration to habitat spaces for living creatures through nature-oriented river works. ◆ For the installation of public facilities, give consideration to the historical topography and landscapes in the local region. ◆ Promote initiatives geared towards developing local regions that are appealing by harnessing the history, culture, topography, and other characteristics fostered in said local regions. ◆ Promote land use that takes the natural environment into consideration.
Participation	◆ For the implementation of projects in the local region, promote initiatives related to environmental conservation, restoration, and creation in line with the Guidelines for Project-specific Considerations and Guidelines for Region-specific Considerations established in this plan, as well as the Guidelines Concerning Conservation of the Natural Environment. ◆ Promote environmental conservation activities and work to develop human resources by promoting environmental learning and environmental education, providing information related to the environment, and more. ◆ Make efforts to raise public awareness concerning the adoption of environmental management systems (Eco Action 21/ISO) and environmental accounting, the preparation of environmental reports, and so forth. ◆ Work to raise awareness in the local region on issues like how the government itself is taking the lead in green purchasing and proactively using recycled products, and promote the adoption of environmentally friendly products. ◆ Promote the environmental conservation activities of staff members by providing training opportunities and information.

Target	Guidelines for Considerations
Global environmental conservation	◆ When using official vehicles, make efforts aimed at proper driving and proper management for fuel efficiency (tire pressure, onboard weight, etc.), such as by striving to engage in eco driving that includes eliminating sudden acceleration, engine revving, and unnecessary idling. In addition, promote the adoption of low-emission vehicles, such as electric vehicles. ◆ Work to create favorable pedestrian spaces and to promote the use of bicycles as well as the use of public transportation like buses and monorails. ◆ Work to promote transportation demand management (TDM) measures and smooth the flow of traffic. ◆ Implement various measures for environmental problems at the global scale, such as global warming and the depletion of the ozone layer. ◆ Work towards global environmental conservation measures and initiatives at the regional level, while also promoting efforts like seminars and support programs for prefectural residents, businesses, and more. ◆ For the installation and management of buildings, adopt renewable energies and ESCO projects, effectively use water, and work to cut down on greenhouse gases.
The environment and the economy	◆ Work to disseminate the principle of harmony between the environment and the economy to the local region, businesses, and so forth. ◆ Promote corporate social responsibility (CSR) among the companies within the prefecture. ◆ Work to raise awareness of the cost burden for environmental conservation among the prefectural residents, local region, businesses, and so forth. ◆ Work to disseminate and expand environmental management systems at companies. ◆ Strive to disseminate and promote energy-saving equipment. ◆ Support initiatives to expand recycling businesses and improve their technical capacities. ◆ Promote the use of biomass.

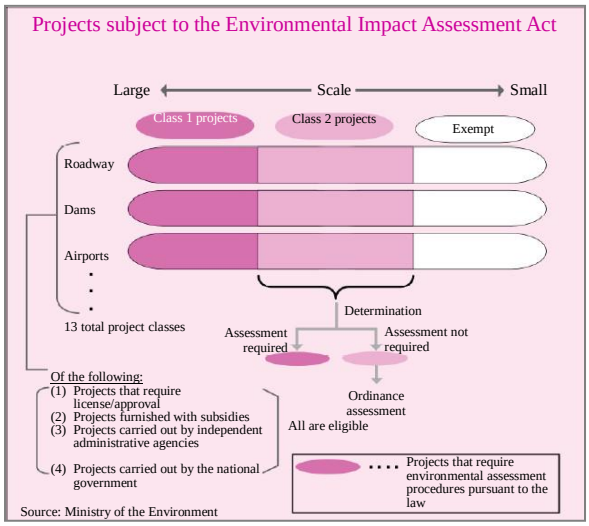
(Omitted)

3. Guidelines for Project-specific Considerations

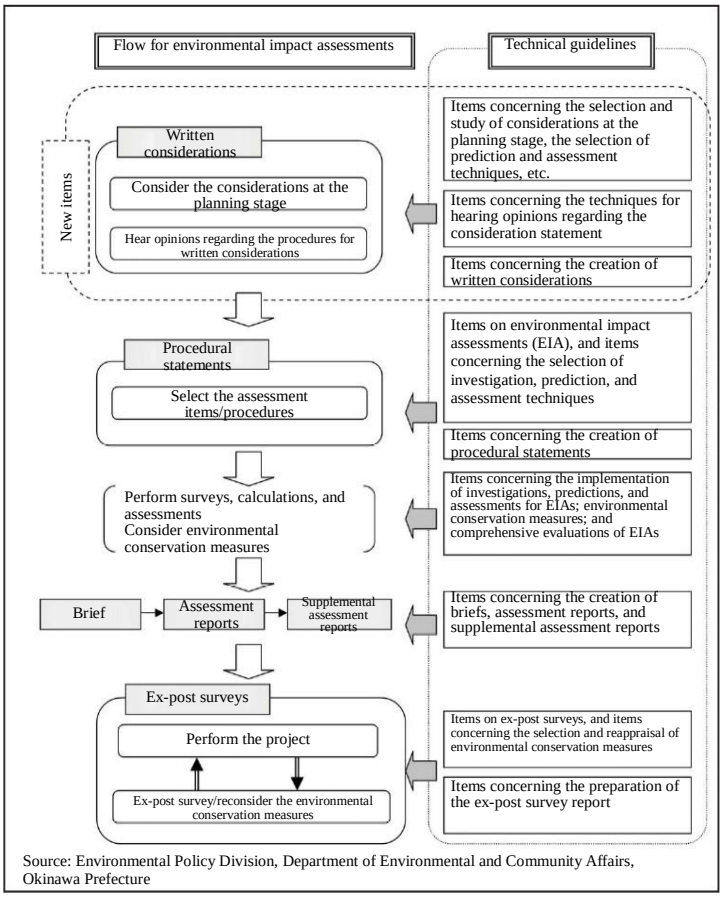
(Omitted)

3-2. Guidelines for Environmental Considerations for the Implementation of Projects

Okinawa Prefecture has lush, invaluable natural environments that are inhabited by a diverse array of many kinds of flora and fauna. But the prefecture's lush natural environments are being lost as a result of the rising population and number of tourists, as well as the advancing socioeconomic activities.



Therefore, large-scale projects for which the extent of their impact on the environment could potentially be considerable must undergo environmental impact assessment procedures pursuant to the Environmental Impact Assessment Act and the Okinawa Prefecture Environmental Impact Assessment Ordinance. Then when the projects are carried out, environmental conservation measures that were considered as part of these procedures must be taken. Doing so has achieved some measure of results in avoiding and reducing environmental impacts as a result of the implementation of such projects.



However, the environmental impact assessment scheme thus far has been focused mainly on environmental conservation measures at the project implementation stage. As a result, environmental considerations have come to be sought starting from the planning stage.

To compensate for such limitations with environmental impact assessments at the project implementation stage, the revisions to the Environmental Impact Assessment Act of 2011 introduced "consideration statement procedures at the planning stage," whereby environmental considerations are offered at an earlier stage in the project. At the prefectural level as well, in March 2013 this ordinance was amended to introduce a similar procedure, thus revising its scheme so that considerations could be given starting from the planning stage.

Consideration must be given to the prefecture's environment when implementing projects based on the flow for environmental impact assessments shown in the figure to the right, shared and individual items, and the Guidelines Concerning Conservation of the Natural Environment, which constitutes measures for conserving the natural environment in Okinawa Prefecture.

(Omitted)

4. Guidelines for Region-specific Considerations

With a view towards environmental conservation, restoration, and creation in Okinawa Prefecture, the prefectural government must implement environmental conservation measures in a comprehensive and systematic manner. In addition, various entities such as administrative agencies, businesses, prefectural residents, NPOs and other civil organizations, tourists, and the US military must address environmental conservation measures according to the circumstances in each respective region in line with the fundamental orientation of basic plans for the environment.

For this, the prefecture will be divided up into five regions: The Northern Okinawa Island, Central Okinawa Island, Southern Okinawa Island, Miyako, and Yaeyama Regions, and items warranting environmental consideration will be indicated for each of the regions with consideration given to consistency with related plans.

(Omitted)

Region	Environmental considerations
Shared items for all regions	● For river improvements, the installation of embankments and revetments, land reclamation and other development projects, and the development of farmland, pay careful attention to things like the project location, scale, structures, and construction methods so as to reduce outflows of red clay, the disruption of ecosystems, and the impact on the scenery.

Region	Environmental considerations
	● Make efforts to restore natural environments that have been lost as a result of past development or the like, and to conserve the remaining nature. ● Make efforts to eradicate and control alien species like mongooses and prevent the abandonment of pets (dogs, cats, etc.) in order to prevent the disruption of ecosystems. ● With respect to sewage disposal, work to ensure that drainage is disposed of properly, such as by installing community wastewater treatment units in regions where sewage systems, community sewage facilities, and other forms of communal treatment facilities have not been installed. This is to ensure that rivers and ocean areas are not polluted by drainage from homes, business establishments, barns, and so on. ● For the tourism industry, give rise to diverse, distinctive, and lush natural environments and outstanding historical and cultural regional resources. In addition, work on initiatives such as creating rules that would allow environmental conservation activities and economic activities to coexist based on the environmental carrying capacity. ● Reduce the final disposal volume of waste by means of recycling and effectively using it, and make efforts to create sustainable, recycling-oriented societies. ● Work to preemptively prevent the illegal dumping of waste and provide guidance on its proper disposal in cooperation with the related agencies.
Northern Okinawa Island	● In the mountainous regions farther north of the isthmus that extends from Shioya Bay in Ogimi Village to Taira Bay in Higashi Village, continuous forests with trees that are 40 years old or older have been observed, and this region contains areas that are important as habitats for rare species such as the Okinawa woodpecker. Therefore, make efforts to conserve the natural environments here. ● Strive to conserve the rich ocean area ecosystems by preventing damage from the crown-of-thorns starfish and other problems. ● Work to prevent precious wild flora and fauna from dying out as a result of being illegally dug up and collected by other means. ● Make efforts to eradicate and control alien species like mongooses and prevent the abandonment of pets (dogs, cats, etc.) in order to prevent the disruption of ecosystems. ● Make efforts to restore natural environments that have been lost as a result of past development or the like, and to conserve the remaining nature. ● For river improvements, the installation of embankments and revetments, land reclamation and other development projects, and the development of farmland, pay

Region	Environmental considerations
	careful attention to things like the project location, scale, structures, and construction methods so as to reduce outflows of red clay, the disruption of ecosystems, and the impact on the scenery. ● For the construction of dams and intake weirs, give due consideration to the habitats of precious wild flora and fauna, as well as ecosystems. ● Work to prevent wildlife from entering roadways, utilize gutters that make it easy for them to escape, and avoid roadkill. ● For the tourism industry, give rise to diverse, distinctive, and lush natural environments and outstanding historical and cultural regional resources. In addition, work on initiatives such as creating rules that would allow environmental conservation activities and economic activities to coexist based on the environmental carrying capacity. ● For forestry, develop and use prefectural lumber and promote forest development that gives consideration to forest ecosystems to allow forests to exhibit the diverse functionality they possess in a sustainable manner. In addition, strive for their multifaceted use through forest tourism and the like. ● Aim to create industries that are environmentally friendly. Work on initiatives geared towards demonstration tests and practical implementation when it comes to the adoption of renewable energies such as solar power, wind power, and biomass. ● Regarding the use of regions like the Northern Training Area and Aha Training Area after they are returned, take initiatives for the appropriate conservation of the natural environment and the conservation and improvement of forest regions. Also, strive to make use of these by harnessing the resources of the Yambaru forests. ● With respect to sewage disposal, work to ensure that drainage is disposed of properly, such as by installing community wastewater treatment units in regions where sewage systems, community sewage facilities, and other forms of communal treatment facilities have not been installed. This is to ensure that rivers and ocean areas are not polluted by drainage from homes, business establishments, barns, and so on. ● Work to maintain and improve townscapes and village scenery, such as by conserving utaki (sacred) forests, Hogo Forest, and homestead forests and using them as hedges enclosing gardens. ● For development and other projects, make efforts to prevent noise, vibration, low-frequency sound, and air pollution from arising. ● Quarry operators are to make efforts to prevent the discharge of dust, such as by sprinkling water around and washing off dust adhering to vehicles.

Region	Environmental considerations
	● Reduce the final disposal volume of waste by means of recycling and effectively using it, and make efforts to create sustainable, recycling-oriented societies.
Yaeyama Region	● For river improvements, the installation of embankments and revetments, land reclamation and other development projects, and the development of farmland, pay careful attention to things like the project location, scale, structures, and construction methods so as to reduce outflows of red clay, the disruption of ecosystems, and the impact on the scenery. ● Work to maintain and improve scenery by conserving utaki forests and homestead forests. ● Strive to create a comfortable residential environment, such as by promoting improvements to sewage systems in urban areas and implementing land readjustment projects in accordance with the formation of outer borders around urban areas. ● With respect to sewage disposal, work to ensure that drainage is disposed of properly, such as by installing community wastewater treatment units in regions where sewage systems, community sewage facilities, and other forms of communal treatment facilities have not been installed. This is to ensure that rivers and ocean areas are not polluted by drainage from homes, business establishments, barns, and so on. ● Strive to conserve the rich ocean area ecosystems by preventing damage from the crown-of-thorns starfish and other problems. ● Work on initiatives such as creating rules that would allow environmental conservation activities and economic activities to coexist based on the environmental carrying capacity. ● Make efforts to restore natural environments that have been lost as a result of past development or the like, and to conserve the remaining nature. ● Work to prevent wildlife from entering roadways, utilize gutters that make it easy for them to escape, and avoid roadkill. ● Make efforts to eradicate and control alien species like the green iguana and prevent the abandonment of pets (dogs, cats, etc.) in order to prevent the disruption of ecosystems. ● Reduce the final disposal volume of waste by means of recycling and effectively using it, and make efforts to create sustainable, recycling-oriented societies.

(Omitted hereafter)

Document 12. Guidelines Concerning Conservation of the Natural Environment
(Excerpt)

Preparer: Okinawa Prefecture
Date: 1998

(Omitted)

○ **Goals of the Guidelines**

At present, the natural environment continues to undergo transformations, and there are concerns over the impact on ecosystems and the decline of precious wildlife, as a result of development projects and similar undertakings everywhere throughout the prefecture.

What is more, the nature found all around us continues to decline, as evidenced by the fact that wildlife that people used to catch site of regularly, such as dragonflies and butterflies, are no longer seen as a result of advancing urbanization.

Therefore, these guidelines will clearly lay out the nature that should be conserved based on determinations of the current status and characteristics of the nature in each region, and set forth modalities for proper conservation. This is designed to ensure that the diverse ecosystems on each respective island can be maintained in sound condition.

(Omitted)

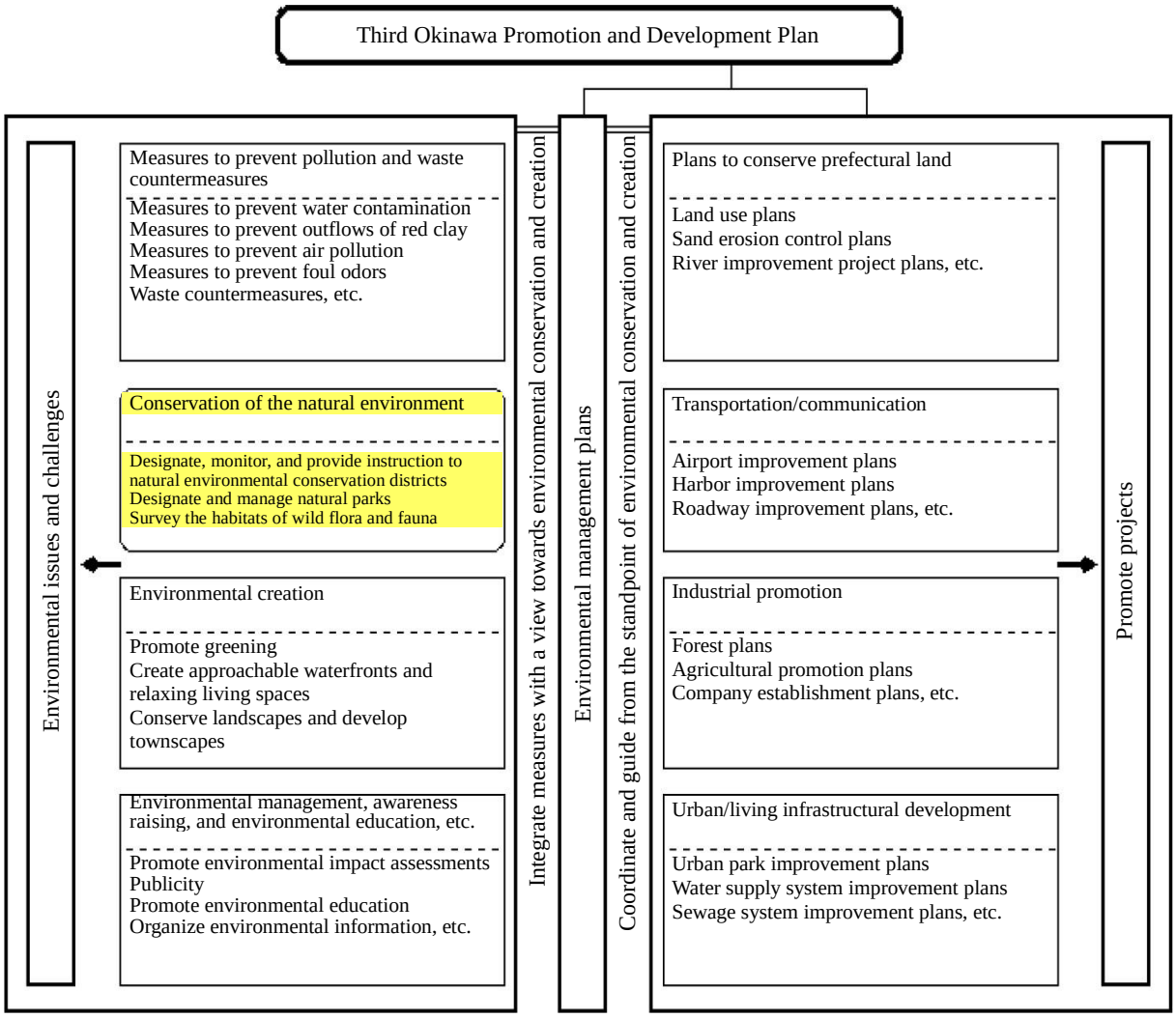
○ **Positioning of the Guidelines**

Okinawa Prefecture's Environmental Management Plan was enacted in 1993 to serve as a basic plan for achieving a desirable environment in Okinawa Prefecture.

Environmental problems in Okinawa Prefecture and comprehensive measures for resolving these are indicated within the plan. As such, the Guidelines Concerning Conservation of the Natural Environment has been positioned as another measure for conserving the natural environment.

The Guidelines Concerning Conservation of the Natural Environment also serves as indicators for the considerations to be undertaken by prefectural residents, businesses, and administrative agencies

from their own respective positions concerning the protection and moderate use of favorable natural environments in the prefecture to achieve a desirable environment in Okinawa Prefecture.



(Omitted)

○ **Application of the Guidelines**

1. Promote notifications for prefectural residents and consideration by businesses

For the future, efforts will be made to notify prefectural residents and the like through the use of the internet, and they will be called upon to provide information related to the environment.

Moreover, businesses will be encouraged to give consideration to the environment based on the guidelines when drafting the plans for projects and implementing projects.

2. Establish venues for coordination and consultations with related agencies

For the future application of the guidelines, coordination and consultations with related agencies will be performed at the promotion committee for Okinawa Prefecture's Environmental Management Plan. Here they will be encouraged to give consideration to the protection and moderate use of the natural environment.

In addition, coordination will be carried out with businesses as needed, and they will be instructed to draw up business plans that give consideration to the environment.

3. Promote surveys concerning the natural environment

Efforts will be made to promote surveys on the natural environment in aiming to augment information on the natural environment. This will include surveys to determine the ecology and habitats of precious species excluded from the surveys that have been carried out to date, such as basic surveys on conservation of the natural environment and surveys on special birds, and also surveys to determine the existing vegetation and the extent and age of vegetation, surveys to determine the ecology and habitats of coral, and more.

4. Create databases of information on the natural environment

The creation of a database of literature related to the natural environment will be promoted in order to facilitate the smooth provision of such information in aiming to use information on the natural environment effectively. What is more, efforts will be made to create a database of information on the natural environment, such as the distribution of precious flora and fauna.

5. Designate and expand protection areas

The designation and expansion of natural environmental conservation districts, natural parks, and wildlife protection areas will be promoted based on the assessments of the guidelines and the results of surveys on the natural environment.

(Omitted hereafter)

Reference Material 2: List of Member Government Organizations of the Regional Liaison Committee

Naha Natural Conservation Office, Ministry of the Environment
Kyusyu Regional Forest Office, Forestry Agency
Kagoshima Prefecture
Okinawa Prefecture

Amami-Oshima Island Region
Amami City, Yamato Village, Uken Village, Setouchi Town, Tatsugo Town

Tokunoshima Island Region
Tokunoshima Town, Amagi Town, Isen Town

The Northern Part of Okinawa Island Region
Kunigami Village, Ogimi Village, Higashi Village

Iriomote Island Region
Taketomi Town

Reference Material 3: Lists of Member Organizations of the Amami-Oshima Island Sub-local Meeting, Tokunoshima Island Sub-local Meeting, Northern Part of Okinawa Island Sub-local Meeting, and Iriomote Island Sub-local Meeting

List of Member Organizations of Amami-Oshima Island Sub-local Meeting (as of November 2016)

Member organizations
Naha Natural Conservation Office, Ministry of the Environment
Kagoshima District Forest Office, Kyushu Regional Forest Office, Forestry Agency
Nature Conservation Division, Kagoshima Prefecture
Islands Development Division, Kagoshima Prefecture
Tourism Division, Kagoshima Prefecture
General Affairs and Planning Division, Oshima Branch Office, Kagoshima Prefecture
Hygiene and Environment Office, Oshima Branch Office, Kagoshima Prefecture
World Natural Heritage Promotion Office, Environmental Measure Section, Amami City
General Affairs and Planning Division, Yamato Village
General Affairs and Planning Division, Uken Village
World Natural Heritage Setouchi Promotion Office, Education Department of Social Education, Setouchi Town
General Affairs and Planning Division, Tatsugo Town
Wide Area Administration Association of Amami Islands
Amami-Oshima Island Chamber of Commerce and Industry
Amami Islands Tourism and Product Association
Amami-Oshima Tourism Association
Setouchi-cho Tourism and Product Association
Amami-Oshima Island Ecotourism Promotion Council
Amami-Oshima Island Ecotour Guide Liaison Council
Amami Ornithologists' Club
Amami Mammalogical Society
Environmental Network Amami
Amami Association for the Consideration of Nature

List of Member Organizations of Tokunoshima Island Sub-local Meeting (as of November 2016)

Member organizations
Naha Natural Conservation Office, Ministry of the Environment
Kagoshima District Forest Office, Kyushu Regional Forest Office, Forestry Agency
Nature Conservation Division, Kagoshima Prefecture
Islands Development Division, Kagoshima Prefecture
Tourism Division, Kagoshima Prefecture
General Affairs and Planning Division, Oshima Branch Office, Kagoshima Prefecture
Hygiene and Environment Office, Oshima Branch Office, Kagoshima Prefecture
General Affairs Division, Tokunoshima Office, Kagoshima Prefecture
Planning Division, Tokunoshima Town
Planning Division, Amagi Town
Kyura-Machi Tourism Division, Isen Town
Wide Area Administration Association of Amami Islands
Amami Islands Tourism and Product Association
Tokunoshima Tourism Federation
Tokunoshima Island Ecotourism Promotion Council
Tokunoshima Island Ecotour Guide Liaison Council
Tokunoshima Niji no Kai
Amami Rabiit Village

List of Member Organizations of the Northern Part of Okinawa Island Sub-local Meeting (as of November 2016)

Member organizations
Naha Natural Conservation Office, Ministry of the Environment
Okinawa District Forest Office, Kyushu Regional Forest Office, Forestry Agency
Nature Conservation Division, Department of Environment Affairs, Okinawa Prefecture
District Forest Office, Department of Agriculture, Forestry and Fisheries, Okinawa Prefecture
Tourism Promotion Division, Department of Culture, Tourism and Sports, Okinawa Prefecture
World Natural Heritage Promotion Division, Kunigami Village
Planning and Tourism Division, Ogimi Village
Planning and Tourism Division, Higashi Village
Kunigami Village Forestry Cooperative
Kunigami Village Commerce and Industry Association
JA Okinawa Kunigami Branch
Kunigami Village Forest Tourism WG
Ogimi Village Regional Association
Ogimi Village Commerce and Industry Association
NPO Yambarusha
NPO Ogimi Marugoto Tourism Association
Ogimi Village Agricultural Committee
Higashi Village Commerce and Industry Association
JA Okinawa Higashi Branch
Higashi Village Agricultural Committee
Higashi Village Regional Association
NPO Higashi Village Tourism Promotion Office
Conservation & Animal Welfare Trust
Yona Field, Faculty of Agriculture, University of the Ryukyus

List of Member Organizations of the Iriomote Island Sub-local Meeting (as of November 2016)

Member organizations
Naha Natural Conservation Office, Ministry of the Environment
Okinawa District Forest Office, Kyushu Regional Forest Office, Forestry Agency
Iriomote Forest Ecosystem Conservation Center, Kyushu Regional Forest Office, Forestry Agency
Nature Conservation Division, Department of Environment Affairs, Okinawa Prefecture
Tourism Promotion Division, Department of Culture, Tourism and Sports, Okinawa Prefecture
Yaeyama Regional Public Works Office, Okinawa Prefecture
Natural Environment Division, Taketomi Town
Trade and Tourism Division, Taketomi Town
General Affairs Division, Board of Education, Taketomi Town
Engineering Division, Ishigaki Port Office, Okinawa General Bureau, Cabinet Office
Environmental Division, Ishigaki City
Taketomi Town Public Hall Liaison Committee
Taketomi Town Commerce and Industry Association
Taketomi Town Tourist Association
Taketomi Diving Association
Iriomote Island Ecotourism Association
Iriomotejima Canoe Association
Okinawa Ryoyukai - Taketomi Town Region
Iriomotejima Koutu Co., Ltd.
Iriomote Kanko Corp.
Urauchigawa Kanko
Anei Kanko Co., Ltd.
Yaeyama-Kanko-Ferry Co., Ltd.
Ishigaki Dream Tours
Conservation & Animal Welfare Trust
Iriomote Station, Tropical Biosphere Research Center, University of the Ryukyus
Okinawa Regional Research Center, Tokai University

Appendix 2

Vegetation maps and Species lists of the nominated property

2-1: Vegetation maps

2-2: Species lists

- 2-2-1. Vascular plants
- 2-2-2. Terrestrial mammals
- 2-2-3. Birds
- 2-2-4. Terrestrial reptiles
- 2-2-5. Amphibians
- 2-2-6. Inland water fishes
- 2-2-7. Insects
- 2-2-8. Inland water decapod crustaceans

2-1 Vegetation maps

Legend

I Forest Vegetation

I.1 Natural forest

I.1.1 Evergreen broadleaved forest

01 Lasiantho-Castanopsietum sieboldii association

02 Arisaemato heterocephali-Castanopsietum sieboldii association

03 Illicio anisati-Castanopsietum sieboldii association

04 Ainsliaeo okinawaensis-Pasanietum association

05 Adinandro yaeyamensis-Castanopsietum sieboldii association

06 Quercetum miyagii association

07 *Myrsine seguinii -Symplocos confusa* community

08 *Garcinia subelliptica -Castanopsis sieboldii* community

I.1.2 Evergreen broadleaved forest on the coral limestone

09 Fico microcarpae-Pongamietum pinnatae association

10 *Quercus glauca* var. *amamiana* community

11 Psychotrio manilensis-Diospyrion maritimae alliance

I.1.3 *Livistona chinensis* var. *subglobosa* forest

12 *Livistona chinensis* var. *subglobosa* community

I.1.4 Scrub on the wind-exposed site

13 Planchonello-Litseetum japonicae association

I.1.5 Forest behind the coastal dune

14 Hernandietum sonorae association

I.1.6 Moist forest

15 Barringtonietum racemosae/Heritieretum littoralis association

I.1.7 Mangrove vegetation

16 Mangrove

I.1.8 Coastal scrub

17 Messerschmidio-Scaevoletum taccadae association

18 Hibiscus tiliaceus association

19 *Cycas revoluta* community

20 *Nypa fruticans* community

21 Pandanion tectorii alliance

I.2 Secondary forest

I.2.1 Secondary evergreen broadleaved forest

22 Adinandro yaeyamensis-Castanopsietum sieboldii association (Secondary forest)

23 Tarenno-Castanopsietum sieboldii association

24 *Psychotria rubra*-*Schima wallichii* community

25 *Psychotria manillensis*-*Cinnamomum japonicum* community

I.2.2 Secondary evergreen coniferous forest

26 *Pinus luchuensis* community

I.2.3 Secondary deciduous broadleaved forest

27 Villebruno pedunculatae-Tremion orientalis alliance (secondary forest)

28 *Cyathea lepifera* community

I.2.4 Bamboo forest

29 *Pleioblastus linearis* community

I.2.5 Alien secondary forest

30 *Leucaena leucocephala* community

I.3 Planted forest

31 *Cryptomeria japonica* /*Chamaecyparis obtusa* /*Chamaecyparis pisifera* planted forest

32 *Calophyllum inophyllum* planted forest

33 *Alnus japonica* planted forest

34 *Acacia confusa* planted forest

35 Casuarina planted forest

36 *Bambusa glaucescens* /*Phyllostachys aurea* planted forest

37 Other planted forest

II. Grassland Vegetation

II.1 Natural grassland

II.1.1 Coastal cliff grassland

38 *Miscanthus sinensis* var. *condensatus* community

39 Peucedanion japonici alliance

40 Coastal cliff vegetation

II.1.2 Coastal dune grassland

41 *Ipomoea pes-caprae* community

42 Ixerido-Thuareion involutae alliance

43 Sand dune vegetation

II.1.3 Streamside vegetation

44 Streamside vegetation

II.1.4 Low moor community

45 *Phragmites karka* community

46 *Cladium chinense* community

47 Phragmitetea class

II.1.5 Herbaceous community on the coral limestone

48 *Crossostephium chinense* community

49 *Zoysia pacifica* community

50 Vegetation on raised coral reef

II.1.6 Salt marsh vegetation

51 Salt marsh vegetation

II.2 Secondary grassland

II.2.1 Secondary grassland

52 *Imperata cylindrica-Miscanthus sinensis* community

53 Lygodio-Miscanthion sinensis alliance

54 *Arundo donax* community

II.2.2 Herb or shrub community after clear cutting

55 Herb or shrub community after clear cutting

II.2.3 Liana community

56 *Pueraria lobata* community

II.2.4 Weed community in open area

57 Weed community in open area

II.2.5 Field weed community

58 Field weed community

59 Abandoned field weed community

II.2.6 Weed community in paddy field

60 Weed community in paddy field

61 Weed community in abandoned paddy field

II.3 Artificial grassland

62 Artificial grassland

III. Other land use classification etc.

63 Orchard

64 Tea plantation

65 Park, cemetery, etc. with forest

66 Residential area

67 Urban area

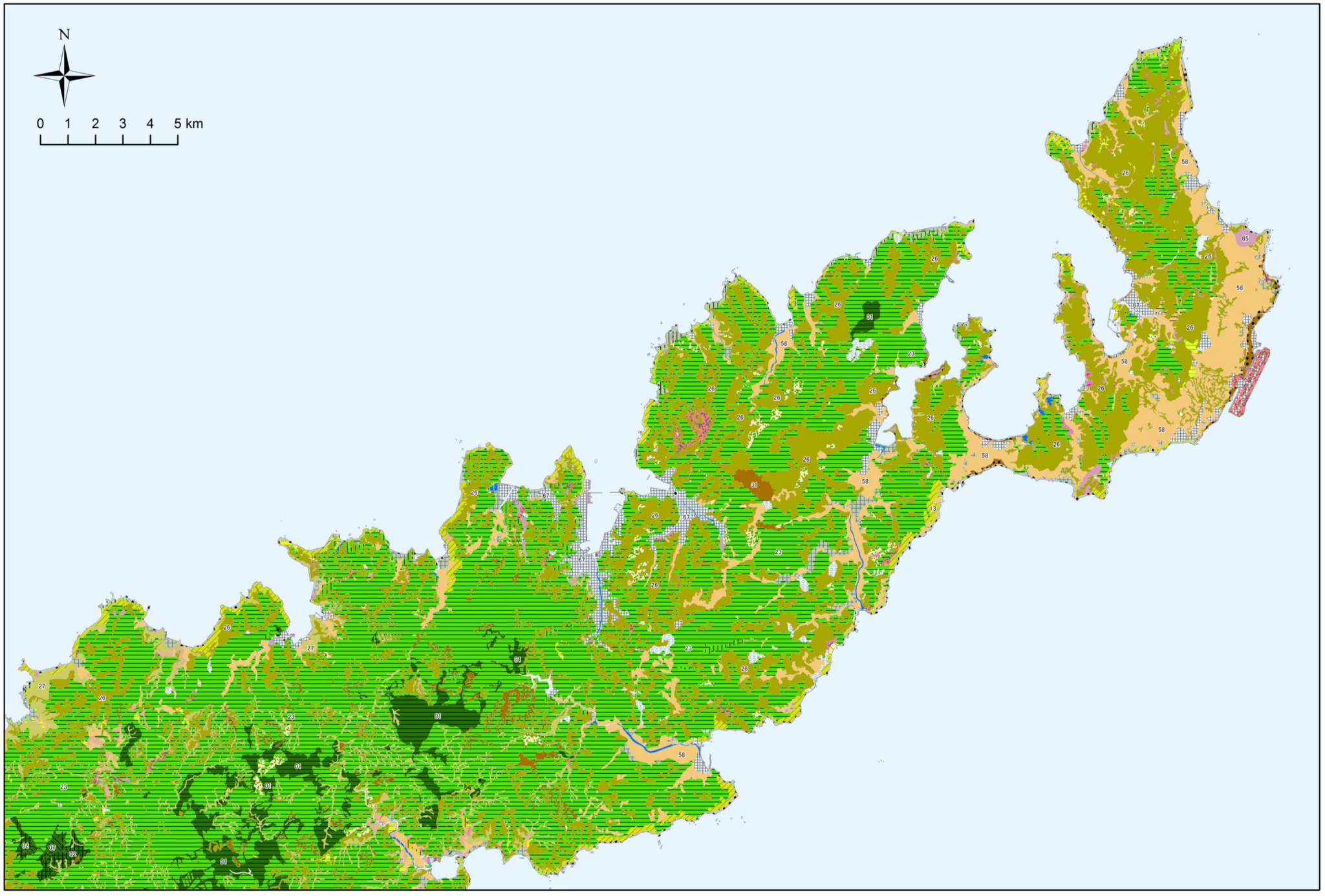
68 Factory zone

69 Natural bareland

70 Developed/reclaimed land

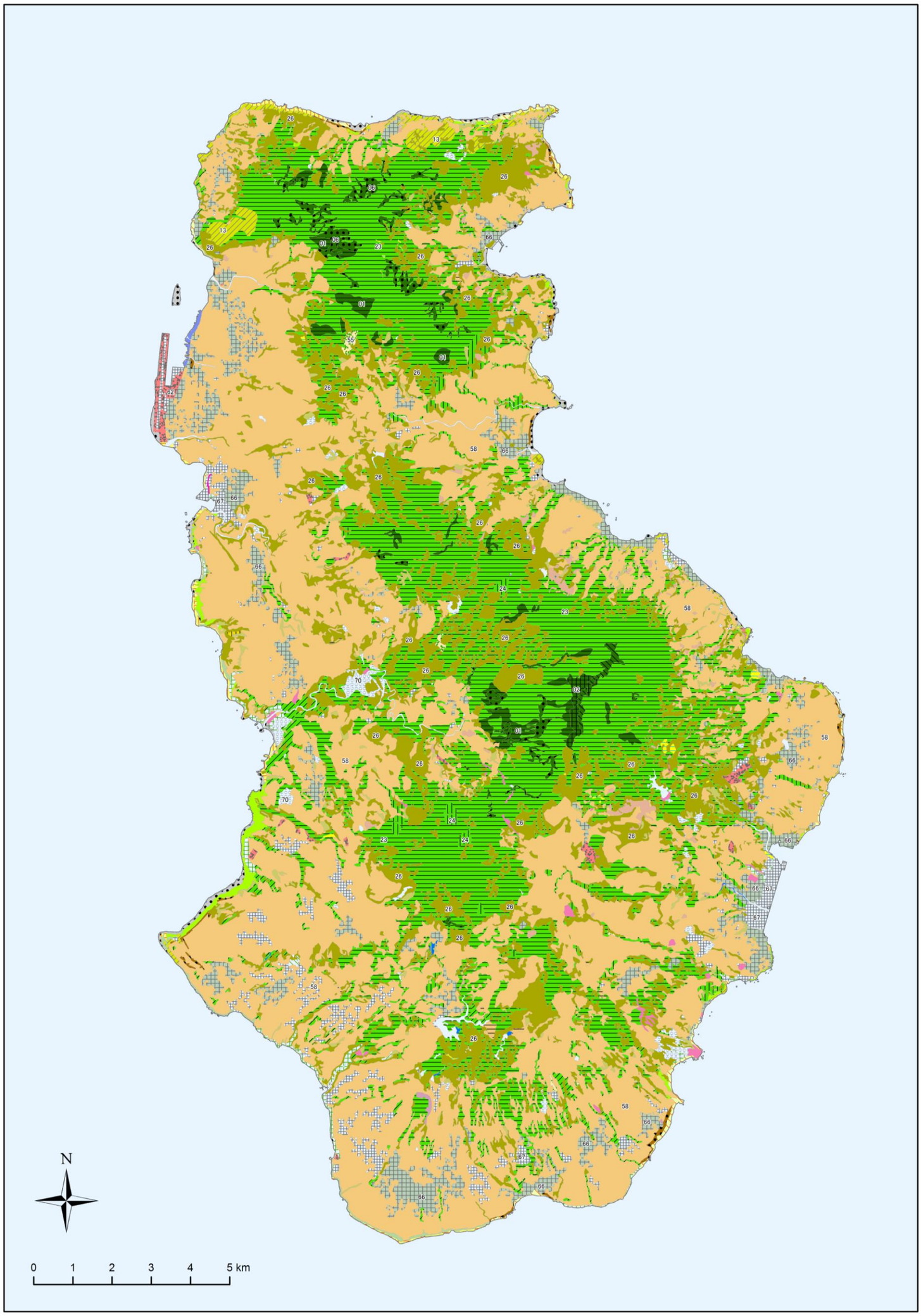
71 Open water

2-1-1 (1). Vegetation map of Amami-Oshima Island (northern part)

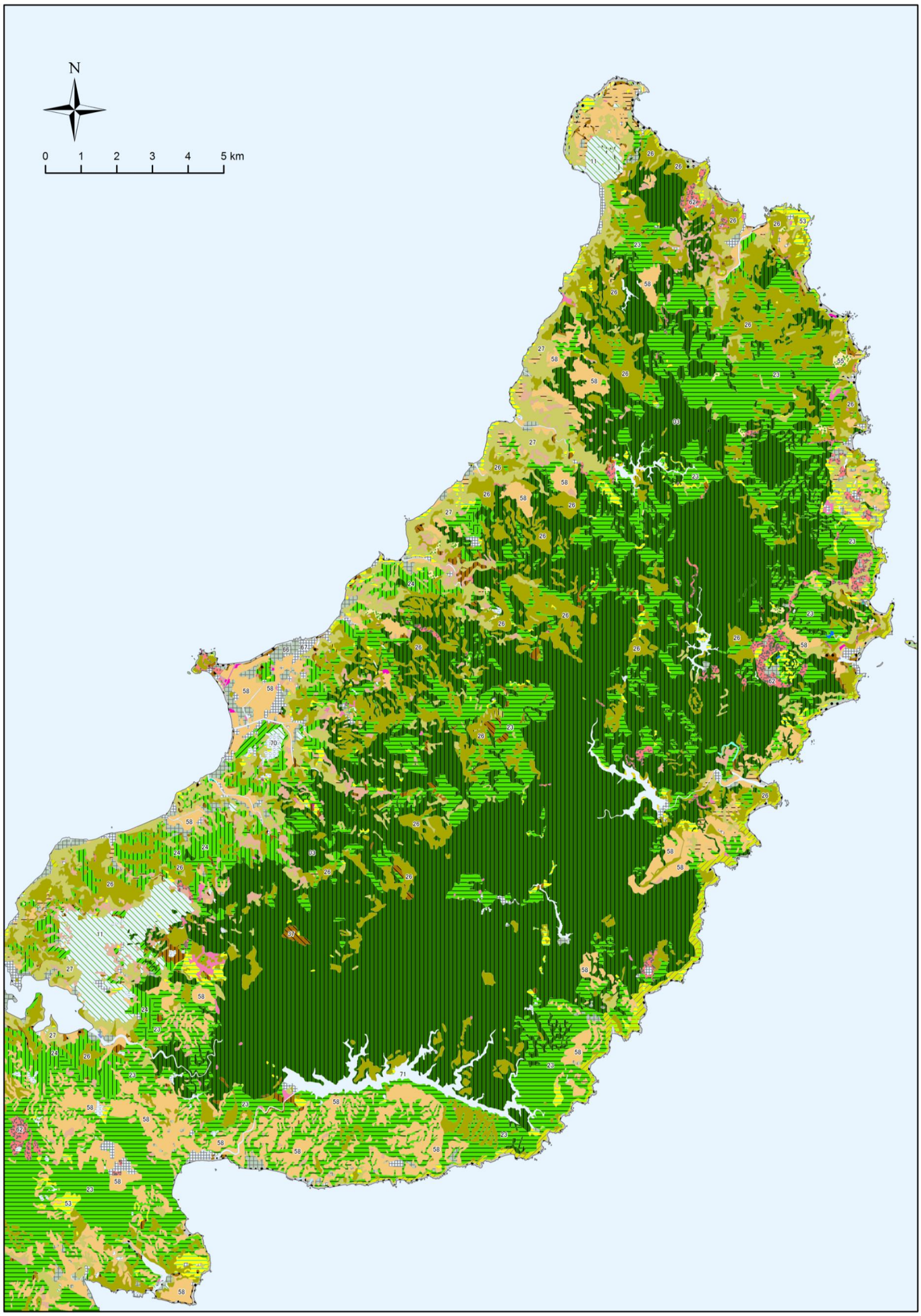


2-1-1 (2). Vegetation map of Amami-Oshima Island (southern part)

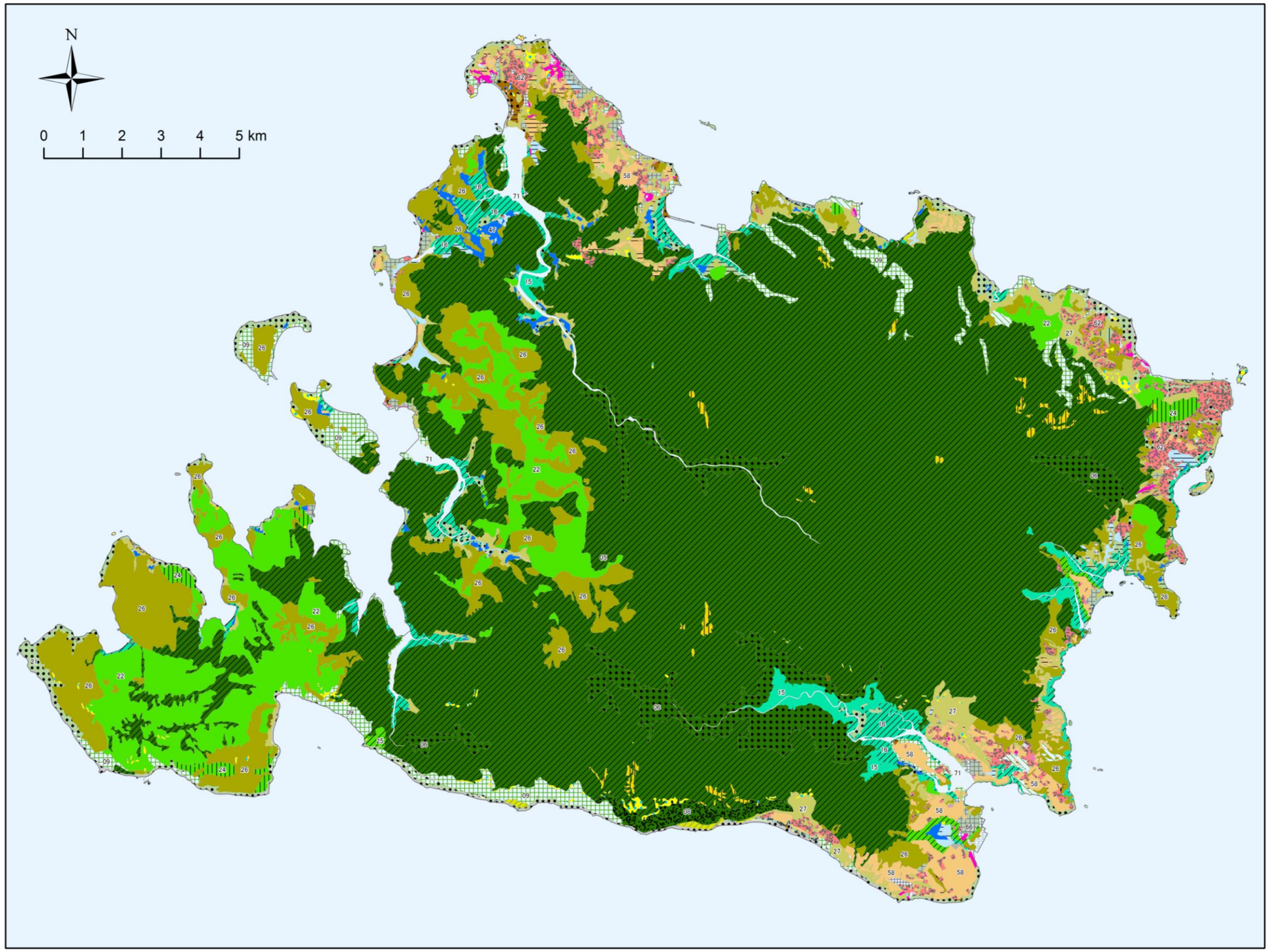
2-1-2. Vegetation map of Tokunoshima Island



2-1-3. Vegetation map of northern part of Okinawa Island



2-1-4. Vegetation map of Iriomote Island



2-2 Species Lists

2-2-1 Vascular plants

2-2-2 Terrestrial mammals

2-2-3 Birds

2-2-4 Terrestrial reptiles

2-2-5 Amphibians

2-2-6 Inland water fishes

2-2-7 Insects

2-2-8 Inland water decapod crustaceans

2-2-1. Vascular plants of Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island[*1] (including subspecies, varieties, and hybrids)

*1: As for the National Endangered Species, species that require special attention in handling distribution information are excluded from this list.

*2: As for Red List categories of IUCN, details are given on the last page.

*3: As for Red List categories of Ministry of the Environment Government of Japan, details are given on the last page.

*4: SNM: Special National Monument, NM: Natural Monument

*5: E: Endemic

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
PTERIDOPHYTA										
PSILOTALES										
PSILOTACEAE										
Psilotum nudum		NT			●	●	●	●	●	
LYCOPODIALES										
LYCOPODIACEAE										
Lycopodium cernuum					●	●	●	●	●	
Lycopodium clavatum					●	●				
Lycopodium cryptomerinum		VU			●	●				
Lycopodium hamiltonii					●	●	●	●	●	
Lycopodium laxum		CR			●				●	
Lycopodium phlegmaria		EN			●	●		●	●	
Lycopodium serratum					●	●	●			
Lycopodium serratum var. *longipetiolatum*					●	●	●	●	●	
Lycopodium sieboldii var. *christensenianum*		CR			●	●	●	●	●	
Lycopodium sieboldii var. *sieboldii*		EN			●	●	●	●		
SELAGINELLALES										
SELAGINELLACEAE										

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Selaginella biformis		NT			●			●		
Selaginella doederleinii					●	●	●		●	
Selaginella involvens					●	●	●	●	●	
Selaginella leptophylla		VU			●				●	
Selaginella limbata		VU		E	●	●				
Selaginella lutchuensis					●	●	●	●	●	
Selaginella moellendorffii		VU			●				●	
Selaginella remotifolia					●	●	●		●	
Selaginella tamariscina					●	●	●	●	●	
EQUISETALES										
EQUISETACEAE										
Equisetum ramosissimum					●	●				
OPHIOGLOSSALES										
OPHIOGLOSSACEAE										
Botrychium formosanum		NT			●	●	●			
Botrychium ternatum					●	●				
Helminthostachys zeylanica		EN			●				●	
Ophioglossum pendulum		EN			●	●	●	●	●	
Ophioglossum petiolatum					●	●			●	
Ophioglossum thermale					●	●		●	●	
MARATTIALES										
MARATTIACEAE										
Angiopteris lygodiifolia					●	●	●	●	●	
Angiopteris palmiformis					●	●	●		●	
FILICALES										
OSMUNDACEAE										
Osmunda banksiifolia					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Osmunda japonica					●	●				
PLAGIOGYRIACEAE										
Plagiogyria adnata					●	●		●	●	
Plagiogyria adnata var. *yakushimensis*					●	●				
Plagiogyria adnata × *Plagiogyria*					●	●				
Plagiogyria euphlebia					●	●				
Plagiogyria japonica					●	●				
Plagiogyria japonica var. *pseudo-japonica*					●	●				
Plagiogyria pseudojaponica × *Plagiogyria*					●	●				
Plagiogyria × *neointermedia*					●	●				
Plagiogyria yakumonticola					●	●				
GLEICHENIACEAE										
Dicranopteris linearis					●	●	●	●	●	
Gleichenia japonica					●	●	●	●	●	
SCHIZAEACEAE										
Lygodium japonicum					●	●	●	●		
Lygodium japonicum var. *microstachyum*					●				●	
Lygodium microphyllum	LC				●				●	
Schizaea dichotoma		EN			●			●	●	
HYMENOPHYLLACEAE										
Cephalomanes apiifolium		CR			●				●	MOEJ-RL: *Callistopteris apiifolia*
Cephalomanes atrovirens		CR			●				●	
Cephalomanes javanicum var. *asplenioides*					●			●	●	
Cephalomanes obscurum					●	●	●	●	●	
Cephalomanes obscurum var. *siamense*					●				●	
Cephalomanes thysanostoma					●				●	
Crepidomanes auriculatum					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Crepidomanes bipunctatum					●				●	
Crepidomanes birmanicum					●	●	●	●	●	
Crepidomanes humile					●				●	
Crepidomanes kurzii					●				●	
Crepidomanes latealatum		NT			●	●	●	●		MOEJ-RL: *Crepidomanes makinoi*
Crepidomanes latemarginale		NT			●				●	
Crepidomanes liukiuense					●	●		●	●	
Crepidomanes maximum	LC	EN			●	●		●	●	MOEJ-RL: *Vandenboschia maxima*
Crepidomanes minutum		EN			●	●	●	●	●	MOEJ-RL: *Crepidomanes bonincola*
Crepidomanes radicans var. *naseanum*					●	●	●	●		
Crepidomanes subclathratum				E	●	?		●	●	?: Unverified information
Hymenophyllum badium					●	●	●			
Hymenophyllum barbatum					●	●	●	●		
Hymenophyllum polyanthos					●	●	●	●		
Hymenophyllum riukiuense					●	●	●	●		
Trichomanes motleyi		VU			●				●	MOEJ-RL: *Didymoglossum motleyi*
Trichomanes tahitense					●	●	●	●	●	
CYATHEACEAE										
Cyathea hancockii					●	●	●	●		
Cyathea lepifera					●	●	●			
Cyathea metteniana					●	●	●	●	●	
Cyathea podophylla					●	●	●	●	●	
Cyathea spinulosa					●	●	●	●	●	
Sphaeropteris lepifera					●			●	●	
DICKSONIACEAE										
Cibotium barometz					●			●	●	
DENNSTAEDTIACEAE										

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Histiopteris incisa					●	●	●	●	●	
Hypolepis alpina					●	●		●		
Hypolepis punctata					●	●		●		
Microlepia hookeriana		NT			●			●		
Microlepia marginata					●	●	●	●		
Microlepia obtusiloba		VU			●			●	●	MOEJ-RL: *Microlepia obtusiloba* var. *obtusiloba*
Microlepia speluncae		VU			●			●	●	
Microlepia strigosa					●	●	●	●	●	
Microlepia substrigosa		NT			●	●		●		
Microlepia × *bipinnata*					●	●		●		
Pteridium aquilinum var. *latiusculum*					●	●	●	●	●	
LINDSAEACEAE										
Lindsaea cambodgensis		VU			●	?		●		?: Unverified information
Lindsaea chienii					●	●	●	●	●	
Lindsaea chienii var. *recedens*					●	●	●		●	
Lindsaea ensifolia		CR			●	●		●	●	
Lindsaea heterophylla		NT			●	●		●	●	
Lindsaea javanensis					●	●	●			
Lindsaea lucida					●				●	
Lindsaea merrillii					●	●			●	
Lindsaea odorata var. *japonica*					●	●	●	●	●	
Lindsaea orbiculata		NT			●	●	●	●	●	MOEJ-RL: *Lindsaea orbiculata* var. *orbiculata*
Lindsaea orbiculata var. *commixta*					●	●	●	●	●	
Lindsaea simulans		EN			●	●	●			
Odontosoria yaeyamensis		CR		E	●				●	
Sphenomeris biflora					●	●	●	●	●	
Sphenomeris chinensis					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Sphenomeris gracilis				E	●				●	
Sphenomeris intermedia				E	●				●	
Sphenomeris minutula		CR		E	●	●				MOEJ-RL: *Odontosoria minutula*
Tapeinidium pinnatum					●			●	●	
DAVALLIACEAE										
Davallia mariesii					●	●	●	●	●	
Pachypleuria repens		VU			●	●	●	●	●	MOEJ-RL: *Humata repens*
Pachypleuria trifoliata					●	●		●	●	
OLEANDRACEAE										
Arthropteris palisotii		CR			●	●		●		
Nephrolepis auriculata					●	●	●	●	●	
Nephrolepis auriculata × N. biserrata					●	●		●		
Nephrolepis biserrata					●	●	●	●	●	
Nephrolepis biserrata × N. hirsutula					●				●	
Nephrolepis hirsutula					●		●	●	●	
PARKERIACEAE										
Adiantum capillus-veneris	LC				●	●	●	●	●	
Adiantum diaphanum		NT			●			●		
Adiantum flabellulatum					●	●		●	●	
Coniogramme gracilis		CR		E	●	●				
VITTARIACEAE										
Antrophyum formosanum		CR			●	●			●	
Vittaria ensiformis		VU			●			●	●	MOEJ-RL*: Haplopteris ensiformis*
Vittaria flexuosa					●	●	●	●		
Vittaria zosterifolia					●	●	●	●	●	
PTERIDACEAE										
Acrostichum aureum	LC	EN			●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Ceratopteris thalictroides	LC				●	●	●	●	●	
Onychium japonicum					●	●	●	●		
Pteris cadieri		VU			●	●	●	●	●	
Pteris dispar					●	●	●	●	●	
Pteris ensiformis					●	●	●	●	●	
Pteris fauriei					●	●	●	●	●	
Pteris formosana		CR			●		●			
Pteris grevilleana		CR			●		●	●	●	
Pteris multifida					●	●		●		
Pteris nipponica					●		●	●		
Pteris oshimensis					●	●	●			
Pteris ryukyuensis					●	●	●	●	●	
Pteris ryukyuensis × *Pteris satsumana*					●	●				
Pteris semipinnata					●	●	●	●	●	
Pteris vittata	LC				●	●	●	●	●	
Pteris wallichiana					●	●	●	●		
Pteris × *namegatae*					●			●		
ASPLENIACEAE										
Asplenium antiquum		VU			●	●	●	●		
Asplenium apogamum		NT			●				●	MOEJ-RL: *Hymenasplenium apogamum*
Asplenium australasicum					●			●	●	
Asplenium cataractarum					●	●	●		●	
Asplenium cheilosorum					●	●		●	●	
Asplenium excisum		EN			●	●		●	●	MOEJ-RL: *Hymenasplenium excisum*
Asplenium filipes					●		●			
Asplenium hondoense					●	●	●			
Asplenium incisum					●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Asplenium laserpitiifolium					●			●	●	
Asplenium nidus		NT			●	●	●	●		
Asplenium normale					●	●	●	●		
Asplenium oligophlebium					●	●	●			
Asplenium pekinense					●			●		
Asplenium ritoense					●	●		●	●	
Asplenium shikokianum					●	●				
Asplenium wilfordii					●	●	●	●		
Asplenium wrightii					●	●	●	●	●	
BLECHNACEAE										
Blechnum orientale					●	●	●	●	●	
Woodwardia harlandii		VU			●			●	●	
Woodwardia orientalis var. *formosana*					●	●	●	●	●	
LOMARIOPSIDACEAE										
Bolbitis appendiculata	LC				●	●	●	●	●	
Bolbitis heteroclita					●				●	
Bolbitis subcordata					●	●	●	●	●	
Bolbitis × *laxireticulata*					●	●		●	●	
Elaphoglossum yoshinagae		VU			●	●	●			
Lomariopsis leptocarpa		CR			●				●	MOEJ-RL: *Lomariopsis spectabilis*
DRYOPTERIDACEAE										
Arachniodes amabilis var. *fimbriata*					●	●	●	●	●	
Arachniodes amabilis var. *yakusimensis*					●	●	●	●	●	
Arachniodes aristata					●	●	●	●		
Arachniodes dimorphophylla				E	●			●		
Arachniodes sporadosora					●	●	●	●	●	
Arachniodes × *clivorum*					●		●			

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Ctenitis eatoni					●	●	●		●	
Ctenitis eatoni var. *iriomotensis*		VU		E	●				●	MOEJ-RL: *Ctenitis iriomotensis*
Ctenitis subglandulosa					●	●	●	●	●	
Cyrtomium falcatum					●	●	●	●	●	
Dryopteris formosana		NT			●		●			
Dryopteris hasseltii	EN				●			●		
Dryopteris indusiata					●			●		
Dryopteris koidzumiana					●	●	●	●	●	
Dryopteris labordei					●			●		
Dryopteris labordei var. *purpurascens*		CR			●	●		●		
Dryopteris sordidipes					●	●	●	●	●	
Dryopteris sparsa					●	●	●		●	
Dryopteris sparsa var. *ryukyuensis*					●	●	●	●	●	
Dryopteris varia					●	●	●		●	
Dryopteris varia var. *hikonensis*					●	●				
Dryopters hayatae					●	●	●	●	●	
Drypteris melanocarpa					●	●				
Hemigramma decurrens					●			●	●	
Polystichum formosanum					●				●	
Polystichum hancockii					●	●		●	●	
Polystichum hancockii var. *yaeyamense*				E	●				●	
Polystichum lepidocaulon					●	●				
Polystichum obae		CR		E	●	●				
Tectaria decurrens					●		●	●	●	
Tectaria devexa					●		●	●	●	
Tectaria phaeocaulis					●		●	●	●	
Tectaria simonsii					●			●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Tectaria subtriphylla					●				●	
THELYPTERIDACEAE										
Pronephrium liukiuense					●			●	●	
Pronephrium × *pseudo-liukiuense*					●				●	
Stegnogramma griffithii var. *wilfordii*					●	●		●	●	
Stegnogramma gymnocarpa ssp. *amabilis*		NT			●	●	●	●	●	
Stegnogramma pozoi					●	●		●		
Thelypteris acuminata					●	●	●	●	●	
Thelypteris acuminata var. *kuliangenesis*					●			●		
Thelypteris acuminata × *T. parasitica*					●				●	
Thelypteris angulariloba					●	●		●	●	
Thelypteris angustiflons					●	●	●	●	●	
Thelypteris castanea		VU			●				●	
Thelypteris cystopteroides					●	●	●	●		
Thelypteris decursive-pinnata					●	●		●	●	
Thelypteris dentata					●	●	●	●		
Thelypteris esquirolii var. *esquirolii*					●	●	●	●	●	
Thelypteris glanduligera					●	●	●	●		
Thelypteris interrupta					●	●	●	●	●	
Thelypteris laxa					●	●				
Thelypteris liukiuensis × *T. triphylla*					●				●	
Thelypteris parasitica					●	●	●	●	●	
Thelypteris simplex					●	●	●	●	●	
Thelypteris subaurita					●	●	●	●		
Thelypteris subpubescens					●	●	●	●		
Thelypteris taiwanensis					●	●	●	●	●	
Thelypteris torresiana var. *calvata*					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Thelypteris triphylla					●	●	●	●	●	
Thelypteris triphylla var. *parishii*					●	●		●	●	
Thelypteris truncata					●			●	●	
Thelypteris uraiensis		EN			●	●				
Thelypteris × *insularis*					●	●	●	●		
ATHYRIACEAE										
Acystopteris japonica					●			●		
Deparia petersenii					●			●	●	
Diplazium amamianum				E	●	●				
Diplazium chinense					●		●			
Diplazium crassiusculum		NT			●			●	●	
Diplazium dilatatum					●	●	●	●	●	
Diplazium dilatatum var. *heterolepis*					●		●	●		
Diplazium dilatatum var. *uraiense*					●			●		
Diplazium doederleinii					●	●	●	●	●	
Diplazium donianum					●	●	●	●	●	
Diplazium donianum var. *aphanoneuron*					●	●	●	●	●	
Diplazium hachijoense					●	●	●	●		
Diplazium incomptum					●	●	●	●	●	
Diplazium lobatum					●	●	●	●	●	
Diplazium mettenianim var. *fauriei*					●	●	●			
Diplazium mettenianum					●	●	●	●	●	
Diplazium petri					●	●	●	●		
Diplazium pullingeri		NT			●	●	●	●	●	
Diplazium subsinuatum					●	●	●	●	●	
Diplazium taiwanense		VU			●	●	●	●		
Diplazium tomitaroanum					●			●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Diplazium virescens					●	●		●	●	
Diplazium virescens var. *conterminum*					●		●	●	●	
Diplazium virescens var. *okinawaensis*		NT			●	●	●	●		
Diplazium wichurae					●	●		●		
Diplazium × *hutohanum*				E	●	●	●			
Diplazium × *kinsakubalense*				E	●	●				
Diplazium yakumontanum					●	●				
Diplazium yaoshanense					●			●		
Hypodematium fordii		CR			●			●		
Lunathyrium petersenii var. *itoana*					●	●	●			
DIPTERIDACEAE										
Dipteris conjugata					●				●	
CHEIROPLEURIACEAE										
Cheiropleuria bicuspis					●	●	●	●	●	
POLYPODIACEAE										
Colysis elliptica					●	●		●		
Colysis hemionitidea		VU			●	●			●	
Colysis pothifolia					●	●	●	●	●	
Colysis shintenensis					●	●	●		●	
Colysis wrightii					●	●	●	●	●	
Colysis × *megalolepis*					●			●		
Crypsinus hastatus					●	●	●	●	●	
Crypsinus hastatus var. *longisquamatus*					●			●	●	
Crypsinus yakushimensis					●			●	●	
Lemmaphyllum microphyllum					●	●	●			
Lemmaphyllum microphyllum var. *obovatum*					●	●	●	●	●	
Lepisorus onoei					●	●	●			

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Lepisorus thunbergianus					●	●	●	●	●	
Lepisorus uchiyamae					●	●	●		●	
Loxogramme salicifolia					●	●	●	●		
Microsorium buergerianum					●	●	●	●	●	
Microsorium dilatatum					●	●	●	●	●	
Microsorium pteropus					●				●	
Microsorium rubidum		EN			●	●		●	●	MOEJ-RL: *Phymatosorus nigrescens*
Microsorium scolopendria					●			●	●	
Polypodium amamianum		CR		E	●	●	●			MOEJ-RL: *Goniophlebium amamianum*
Polypodium formosanum					●				●	
Pseudodrynaria coronans		CR			●				●	MOEJ-RL: *Aglaomorpha coronans*
Pyrrosia linearifolia var. *heterolepis*		CR			●			●		
Pyrrosia lingua					●	●	●	●	●	
GRAMMITIDACEAE										
Grammitis dorsipila		EN			●	●	●	●		
Prosaptia kanashiroi				E	●				●	
MARSILEALES										
MARSILEACEAE										
Marsilea crenata	LC	EN			●	●	●	●	●	
Marsilea quadrifolia	LC	VU			●	●	●		●	
SALVINIALES										
AZOLLACEAE										
Azolla imbricata		EN			●	●		●	●	
GYMNOSPERMAE										
CYCADALES										
CYCADACEAE										
Cycas revoluta	LC				●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
CONIFERALES										
PINACEAE										
Pinus luchuensis	LC			E	●	●	●	●	●	
CUPRESSACEAE										
Juniperus taxifolia var. *lutchuensis*					●	●	●	●		
PODOCARPACEAE										
Podocarpus macrophyllus	LC				●	●	●	●	●	
Podocarpus nagi	NT				●	●	●	●	●	
ANGIOSPERMAE										
MAGNOLIALES										
MAGNOLIACEAE										
Michelia compressa					●	●	●	●	●	
Michelia compressa var. *cumingii*					●				●	
ANNONACEAE										
Polyalthia liukiuensis		CR			●				●	
ILLICIACEAE										
Illicium anisatum var. *tashiroi*					●				●	
Kadsura japonica					●	●	●	●	●	
TROCHODENDRACEAE										
Trochodendron aralioides					●	●	●		●	
LAURACEAE										
Beilschmiedia erythrophloia		NT			●	●	●	●	●	
Cassytha filiformis					●	●	●	●	●	
Cinnamomum camphora					●	●	A	●		
Cinnamomum daphnoides		NT			●	●				
Cinnamomum doederleinii				E	●	●	●	●	●	
Cinnamomum doederleinii var.				E	●	●				

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Cinnamomum japonicum	LR/nt				●	●	●	●	●	
Cinnamomum sieboldii		NT		E	●		●	●		
Cinnamomum × *takushii*					●			●		
Lindera communis var. *okinawensis*		VU			●			●		
Litsea acuminata					●	●	●	●	●	
Litsea citriodora					●	●	●			
Litsea coreana					●	●	●	●	●	
Litsea japonica					●	●	●	●	●	
Machilus japonica					●	●	●	●	●	
Machilus thunbergii					●	●	●	●	●	
Neolitsea aciculata					●	●	●	●	●	
Neolitsea sericea					●	●	●	●	●	
Neolitsea sericea var. *aurata*					●	●	●		●	
HERNANDIACEAE										
Hernandia nymphaeifolia					●	●		●	●	
CHLORANTHACEAE										
Sarcandra glabra					●	●	●	●	●	
Sarcandra glabra f. *flava*					●			●		
PIPERALES										
SAURURACEAE										
Saururus chinensis					●	●	●	●	●	
Peperomia japonica					●	●	●	●	●	
Peperomia japonica f. *okinawensis*		EN			●		●			
Piper kadzura					●	●	●	●	●	
ARISTOLOCHIALES										
ARISTOLOCHIACEAE										
Aristolochia debilis					●	●				

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Aristolochia liukiuensis				E	●	●	●	●	●	
Asarum celsum	EN	EN		E	●	●				
Asarum fudsinoi	VU	VU		E	●	●				
Asarum fudsinoi var. *gigantea*	VU	(VU)*		E	●	●				*MOEJ-RL: *Asarum fudsinoi*
Asarum fudsinoi var. *yamma*	VU	(VU)*		E	●	●				*MOEJ-RL: *Asarum fudsinoi*
Asarum gelasinum				E	●				●	
Asarum gusk	CR	CR		E	●	●				
Asarum hatsushimae	EN	EN		E	●		●			
Asarum lutchuense	EN	EN		E	●	●	●			
Asarum monodoriflorum	CR	CR		E	●				●	
Asarum nazeanum	EN	EN		E	●	●				
Asarum pellucidum	CR	CR		E	●	●				
Asarum simile	VU	VU		E	●		●			
Asarum tabatanum	CR	CR		E	●	●				
Asarum trinacriforme	EN	EN		E	●	●				
Asarum yaeyamense		EN		E	●				●	
Asarum leucosepalum				E	●		●			
RAFFLESIALES										
RAFFLESIACEAE										
Mitrastemon yamamotoi					●	●	●		●	
RANUNCULALES										
CERATOPHYLLACEAE										
Ceratophyllum demersum	LC				●	●			●	
RANUNCULACEAE										
Clematis chinensis					●				●	
Clematis grata var. *ryukyuensis*				E	●	●	●	●	●	
Clematis leschenaultiana					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Clematis meyeniana					●	●	●	●	●	
Clematis pierotii					●	●				
Clematis tashiroi					●	●	●	●	●	
Clematis terniflora var. *robusta*					●	●	●	●		
Ranunculus extorris var. *lutchuensis*		CR		E	●	●	●			MOEJ-RL:*Ranunculus ternatus* var. *lutchuensis*
Ranunculus sceleratus					●	●	●	●	●	
Ranunculus sieboldii					●	●	●	●	●	
Ranunculus silerifolius					●	●	●	●	●	
Thalictrum minus var. *hypoleucum*					●	●				
LARDIZABALACEAE										
Stauntonia hexaphylla					●	●	●	●	●	
MENISPERMACEAE										
Cocculus laurifolius					●	●	●	●	●	
Cocculus sarmentosus		CR			●		●			MOEJ-RL: *Cocculus orbiculatus*
Cocculus trilobus					●	●		●	●	
Paracyclea insularis					●	●	●		●	
Sinomenium acutum					●	●		●		
Stephania japonica					●	●			●	
Stephania japonica var. *australis*					●	●	●			
Stephania longa					●			●	●	
GUTTIFERALES										
ACTINIDIACEAE										
Actinidia rufa					●	●	●	●	●	
Saurauria roxburghii					●				●	
THEACEAE										
Adinandra ryukyuensis				E	●			●		
Adinandra yaeyamensis				E	●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Camellia japonica	LC				●	●	●	●	●	
Camellia japonica f. *leucanyha*					●	●	●			
Camellia japonica var. *macrocarpa*					●	●				
Camellia lutchuensis	LC			E	●		●	●	●	
Camellia sasanqua	LC				●	●	●	●	●	
Cleyera japonica					●	●	●	●	●	
Cleyera japonica var. *morii*					●			●	●	
Eurya emarginata					●	●	●	●	●	
Eurya emarginata var. *minutissima*		VU		E	●	●	●	●		MOEJ-RL: *Eurya minutissima*
Eurya emarginata var. *ryukyuensis*					●				●	
Eurya japonica					●	●	●	●	●	
Eurya japonica f. *australis*					●	●	●	●		
Eurya osimensis				E	●	●	●	●	●	
Eurya osimensis var. *kanehirae*				E	●	●	●	●	●	
Eurya sakishimensis				E	●				●	
Eurya yaeyamensis				E	●				●	
Eurya zigzag		CR		E	●			●		
Schima wallichii					●	●	●			
Schima wallichii ssp. *liukiuensis*					●			●	●	
Ternstroemia gymnanthera					●	●	●	●	●	
Tutcheria virgata				E	●			●	●	
GUTTIFERAE										
Calophyllum inophyllum	LR/lc				●	A	A	●	●	
Hypericum erectum					●	●	●	●	●	
Hypericum sampsonii		EN			●	●				
Sarothra japonica					●	●	●	●	●	
Sarothra laxa					●	●		●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
ELATINACEAE										
Elatine triandra	LC				●	●			●	
MALVALES										
ELAEOCARPACEAE										
Elaeocarpus japonicus					●	●	●	●	●	
Elaeocarpus multiflorus		EN			●				●	
Elaeocarpus sylvestris var. *ellipticus*					●	●	●	●	●	
TILIACEAE										
Triumfetta procumbens					●				●	
Triumfetta rhomboidea					●	●	●	●	●	
Triumphetta japonica					●	●				
MALVACEAE										
Abutilon asiaticum					●	●		●	●	
Hibiscus hamabo					●	●				
Hibiscus makinoi					●	●	●	●	●	
Hibiscus tiliaceus					●	●	●	●	●	
Sida rhombifolia ssp. *insularis*					●	●	●	●	●	
Thespesia populnea					●	●	●	●	●	
Urena lobata var. *tomentosa*					●	●	●	●	●	
STERCULIACEAE										
Firmiana simplex					●	●	●	●	●	
Heritiera littoralis	LC				●	●		●	●	
Kleinhovia hospita		DD			●				●	
Melochia corchorifolia					●	●	●	●		
PAPAVERALES										
PAPAVERACEAE										
Corydalis heterocarpa					●				●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Corydalis heterocarpa var. *brachystyla*					●	●	●	●	●	
Corydalis heterocarpa var. *japonica*					●	●	●			
Corydalis heterocarpa var. *koidzumiana*					●			●		
Corydalis incisa					●	●		●		
Corydalis tashiroi					●	●	●	●	●	
CAPPARIDACEAE										
Crataeva religiosa					●	●	●	●	●	
CRUCIFERAE										
Capsella bursa-pastoris					●	●		●		
Cardamine flexuosa					●	●	●		●	
Coronopus integrifolius					●	●	●	●	●	
Rorippa dubia					●	●	●	●	●	
Rorippa indica					●	●	●	●	●	
Rorippa islandica	LC				●	●				
VIOLALES										
FLACOURTIACEAE										
Idesia polycarpa					●	●	●	●	●	
Scolopia oldhamii					●				●	
Xylosma congestum					●	●				
VIOLACEAE										
Viola amamiana	CR	CR		E	●	●				
Viola betonicifolia var. *oblongo-sagittata*					●	●	●	●	●	
Viola diffusa					●			●		
Viola grypoceras					●	●	●	●	●	
Viola grypoceras f. *albiflora*					●	●	●			
Viola grypoceras var. *exilis*					●	●	●			
Viola iwagawai				E	●	●	●	●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Viola mandshurica var. *triangularis*					●	●				
Viola pseudo					●	●	●		●	
Viola sp.		CR		E	●			●		
Viola tashiroi				E	●				●	
Viola tashiroi f. *takushii*					●				●	
STACHYURACEAE										
Stachyurus praecox var. *lancifolia*					●	●	●			
BEGONIACEAE										
Begonia fenicis		VU			●				●	
Begonia formosana		NT			●				●	
CUCURBITALES										
CUCURBITACEAE										
Diplocyclos palmatus					●	●	●	●	●	
Gynostemma pentaphyllum					●	●	●	●	●	
Melothria liukiuensis					●	●	●	●	●	
Melothria maderaspatana					●	●		●	●	
Trichosanthes boninensis		EN			●			●		MOEJ-RL: *Trichosanthes ovigera* var. *boninensis*
Trichosanthes bracteata					●	●		●	●	
Trichosanthes kirilowii var. *japonica*					●	●				
Trichosanthes miyagii				E	●	●	●	●		
Trichosanthes rostrata					●	●	●		●	
CARYOPHYLLALES										
NYCTANGINACEAE										
Pisonia aculeata					●				●	
Pisonia umbellifera					●	●	●	●	●	
MOLLUGINACEAE										
Mollugo pentaphylla					●	●	●	●	●	

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						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
AIZOACEAE										
Tetragonia tetragonoides					●	●	●	●	●	
PORTULACACEAE										
Portulaca okinawensis		VU		E	●	●	●			
Portulaca oleracea					●	A	A	●	●	
CARYOPHYLLACEAE										
Arenaria serpyllifolia					●	A		●	●	
Cerastium holosteoides var. *hallaisanense*					●	●	●	●		
Dianthus kiusianus					●	●	●			
Sagina japonica					●	●	●	●	●	
Sagina maxima					●	●	●			
Silene firma f. *pubescens*					●				●	
Stellaria alsine var. *undulata*					●	A	A	●	●	
Stellaria aquatica					●	A	A	●	●	
Stellaria media var. *procera*					●				●	
CHENOPODIACEAE										
Atriplex maximowicziana					●				●	
Chenopodium virgatum					●	●	●	●	●	
Salsola komarovii					●	A	●	●		
Suaeda maritima					●		●		●	
AMARANTHACEAE										
Achyranthes aspara var. *rubrofusca*					●		●	●	●	
Achyranthes aspera					●		●	●	●	
Achyranthes bidentata					●	●	●	●	●	
Achyranthes bidentata var. *hachijoensis*					●	●	●	●	●	
Achyranthes bidentata var. *tomentosa*					●		●			
Deeringia polysperma		CR			●				●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Philoxerus wrightii					●	●	●	●	●	
POLYGONALES										
POLYGONACEAE										
Antenoron filiforme					●	●		●		
Persicaria barvatum					●	●	●		●	
Persicaria chinensis					●	●	●	●	●	
Persicaria conspicua					●	●	●			
Persicaria conspicua var. *lutchuense*				E	●	●				
Persicaria dichotoma	LC				●	●	●	●	●	
Persicaria glabra					●	●		●	●	
Persicaria hastato-auriculata					●	●	●	●	●	
Persicaria hydropiper	LC				●	●	●	●	●	
Persicaria japonica					●	●		●		
Persicaria longiseta					●	●	●	●	●	
Persicaria longiseta f. *albiflorum*					●	●	●			
Persicaria perfoliata					●	●	●		●	
Persicaria pubescens	LC				●	●				
Persicaria scabra					●	●				
Persicaria senticosa					●	●	●	●	●	
Persicaria tenellum var. *kawagoeana*					●	●		●	●	
Persicaria thunbergii					●	●				
Polygonum aviculare var. *vegetum*					●			●		
Polygonum hydropiper var. *filiforme*					●			●		
Polygonum plebeium	LC				●	●				
Polygonum pubescens	LC				●				●	
Polygonum sterile					●			●		
Reynoutria japonica					●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Reynoutria japonica var. *amamiensis*				E	●	●	●			
Rumex acetosa					●	●				
Rumex japonicus					●	●	●	●	●	
Rumex nipponicus		VU			●			●		MOEJ-RL: *Rumex dentatus* subsp. *nipponicus*
HAMAMELIDALES										
CRASSULACEAE										
Kalanchoe integra		EW			●	●				MOEJ-RL: *Kalanchoe spathulata*
Sedum bulbiferum					●	●		●		
Sedum formosanum		NT			●	●	●	●	●	
Sedum oryzifolium					●	●				
Sedum rosulatobulbosum					●	●				
Sedum uniflorum					●	●	●	●	●	
SAXIFRAGACEAE										
Cardiandra amamiohsimensis	EN	EN		E	●	●				
Cardiandra moellendorffii		VU			●				●	
Deutzia naseana				E	●	●	●			
Deutzia naseana var. *macrantha*				E	●		●			
Hydrangea chinensis					●				●	
Hydrangea kawagoeana					●	●	●			
Hydrangea liukiuensis		VU		E	●			●		
Itea oldhamii					●	●	●	●	●	
Penthorum chinense		NT			●	●				
Pileostegia viburnoides					●	●	●	●	●	
PITTOSPORACEAE										
Pittosporum tobira					●	●	●	●	●	
HAMAMELIDACEAE										
Distylium racemosum					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
SARRACENIALES										
DROSERACEAE										
Drosera peltata var. *nipponica*		NT			●				●	
Drosera spathulata					●	●	●	●	●	
ROSALES										
ROSACEAE										
Agrimonia pilosa var. *japonica*					●	●	●	●		
Duchesnea chrysantha					●	●	●	●	●	
Osteomeles anthyllidifolia		VU			●	●	●	●	●	MOEJ-RL: *Osteomeles anthyllidifolia* var. *subrotunda*
Photinia serrulata		CR			●	●	●			MOEJ-RL: *Photinia serratifolia*
Photinia wrightiana		NT			●	●	●	●	●	
Prunus zippeliana					●	●	●	●	●	
Rhaphiolepis indica var. *liukiuensis*				E	●	●	●	●		
Rhaphiolepis indica var. *umbellata*					●	●	●		●	
Rosa bracteata					●				●	
Rosa wichuraiana					●	●	●	●		
Rosa wichuraiana var. *glandulifera*					●	●	●			
Rubus amamianus				E	●	●	●			
Rubus amamianus var. *minor*		CR		E	●	●	●			
Rubus amamianus × *R. sieboldii*					●		●			
Rubus croceacanthus var. *maximowiczii*					●	●	●		●	
Rubus grayanus					●	●	●	●	●	
Rubus nesiotes					●		●	●		
Rubus parvifolius					●	●	●	●	●	
Rubus parvifolius var. *concolor*					●			●	●	
Rubus rosaefolius var. *formosanus*					●			●		
Rubus sieboldii					●	●	●	●		

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Rubus utchinensis					●			●		
Rubus × *tawadanus*					●		●			
LEGUMINOSAE										
Aeschynomene indica	LC				●	●	●	●	●	
Albizia julibrissin var. *glabrior*					●	●				
Albizia kalkora		EN			●	●				
Albizia retusa		EN			●				●	
Alysicarpus vaginalis					●	●	●	●	●	
Atylosia scarabaeoides					●			●	●	
Bauhinia japonica					●	●	●	●	●	
Caesalpinia bonduc					●				●	
Caesalpinia crista					●	●	●	●	●	
Caesalpinia decapetala var. *japonica*					●	●	●			
Caesalpinia globulorum					●			●	●	
Canavalia cathartica					●	●		●	●	
Canavalia lineata					●	●	●	●	●	
Canavalia lineata f. *albiflora*					●	●				
Canavalia rosea					●				●	
Cassia mimosoides		EN			●				●	
Cassia mimosoides ssp. *nomame*					●	●				
Christia obcordata					●				●	
Crotalaria calycina		CR			●				●	
Crotalaria linifolia		CR			●				●	MOEJ-RL: *Crotalaria montana* var. *angustifolia*
Crotalaria sessiliflora					●	●	●		●	
Dalbergia candenatensis					●				●	
Derris trifoliata					●	●	●	●	●	
Desmodium caudatum					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Desmodium gangeticum					●				●	
Desmodium heterocarpon					●	●	●	●	●	
Desmodium laxum					●	●	●	●	●	
Desmodium laxum					●	●	●	●	●	
Desmodium podocarpum					●	●	●	●		
Desmodium triflorum					●	●	●	●	●	
Desmodium umbellatum					●				●	
Dunbaria villosa					●	●				
Entada phaseoloides		CR			●	●	●		●	MOEJ-RL: *Entada tonkinensis*
Euchresta formosana		CR			●			●	●	
Flemingia prostrata					●				●	
Galactia tashiroi					●	●	●	●	●	
Galactia tashiroi f. *yaeyamensis*					●				●	
Indigofera trifoliata					●	●	●	●	●	
Indigofera zollingeriana					●				●	
Intsia bijuga	VU	CR			●				●	
Kummerowia striata					●	●	●	●	●	
Lathyrus japonicus					●	●	●	●		
Lespedeza juncea var. *serpens*					●	●				
Lespedeza juncea var. *subsessilis*	LC				●	●	●	●	●	
Lespedeza pilosa					●	●				
Lotus australis					●	●	●		●	
Lotus corniculatus var. *japonicus*					●	●	●	●		
Maackia tashiroi					●	●	●	●	●	
Millettia japonica					●	●				
Mucuna macrocarpa					●	●	●	●		
Mucuna membranacea					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Ormocarpum cochinchinense					●	●	●	●	●	
Pithecellobium bigeminum					●				●	
Pongamia pinnata	LC				●	●	●	●	●	
Pueraria lobata					●	●	●			
Pueraria montana					●	●	●	●	●	
Pycnospora lutescens					●	●			●	
Rhynchosia minima	LC				●		●	●	●	
Rhynchosia volubilis					●	●	●	●	●	
Smithia ciliata		DD			●	●	●			
Sophora tomentosa		EN			●	●	●		●	
Thermopsis chinensis					●	●	●		●	
Uraria crinita					●				●	
Uraria lagopodioides		EN			●				●	
Vicia angustifolia var. *segetalis*					●	A	A	●		
Vicia hirsuta					●	A	A	●	●	
Vicia tetrasperma					●	A	A	●	●	
Vigna luteola					●	●			●	
Vigna marina					●	●	●	●	●	
Vigna reflexo-pilosa					●	●	●	●	●	
Vigna riukiuensis					●				●	
Wisteria floribunda					●	●				
GERANIALES										
OXALIDACEAE										
Oxalis amamiana		CR		E	●	●				MOEJ-RL: *Oxalis exilis*
Oxalis corniculata					●	●	●	●	●	
GERANIACEAE										
Geranium nepalense					●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
RUTALES										
RUTACEAE										
Citrus depressa					●	●	●	●	●	
Citrus tachibana		NT			●	●			●	
Euodia ailanthifolia					●	●				
Euodia glauca					●	●	●	●	●	
Glycosmis pentaphylla					●				●	
Melicope triphylla					●	●		●	●	
Murraya paniculata					●	●	●	●	●	
Skimmia japonica var. *lutchuensis*				E	●	●	●			
Toddalia asiatica					●	●		●	●	
Zanthoxylum ailanthoides					●	●	●	●	●	
Zanthoxylum amamiense				E	●	●	●			
Zanthoxylum armatum var. *subtrifoliolatum*					●			●		
Zanthoxylum beecheyanum					●			●	●	
Zanthoxylum nitidum					●				●	
Zanthoxylum scandens					●	●		●	●	
Zanthoxylum schinifolium var. *okinawensis*		NT			●	●		●		
SIMAROUBACEAE										
Picrasma quassioides					●	●	●	●	●	
MELIACEAE										
Melia azedarach var. *subtripinnata*					●	●	●	●	●	
MALPIGHIACEAE										
Tristellateia australasiae		NT			●			●	●	
POLYGALACEAE										
Polygala chinensis		CR			●	●	●		●	MOEJ-RL: *Polygala polifolia*
Polygala japonica					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
SAPINDALES										
ANACARDIACEAE										
Rhus javanica		CR			●				●	MOEJ-RL: *Rhus javanica* var. *javanica*
Rhus javanica var. *roxburgii*					●	●	●			
Rhus succedanea					●	●	●	●	●	
ACERACEAE										
Acer amamianum		CR		E	●	●				MOEJ-RL: *Acer amamiense*
Acer insulare				E	●	●	●			
Acer oblongum var. *itoanum*		VU		E	●		●	●		MOEJ-RL: *Acer oblongum* subsp. *itoanum*
SAPINDACEAE										
Allophylus timorensis					●				●	
Dodonaea viscosa					●	●	●		●	
Sapindus mukorossi					●	●		●	●	
SABIACEAE										
Meliosma oldamii var. *rhoifolia*				E	●	●	●	●	●	
Meliosma rigida					●	●	●		●	
Meliosma squamulata					●	●	●	●	●	
CELASTRALES										
AQUIFOLIACEAE										
Ilex dimorphophylla		CR		E	●	●				
Ilex goshiensis					●	●	●	●	●	
Ilex integra					●	●	●	●	●	
Ilex integra var. *brachypoda*					●	●		●	●	
Ilex integra var. *undulata*				E	●	●				
Ilex liukiuensis	EN				●	●	●	●	●	
Ilex macrocarpa		CR			●	●				
Ilex maximowicziana					●	●	●		●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Ilex maximowicziana var. *kanehirae*					●	●	●	●		
Ilex rotunda					●	●	●	●	●	
Ilex warburgii				E	●	●	●	●	●	
CELASTRACEAE										
Celastrus kusanoi					●	●	●			
Celastrus kusanoi var. *glaber*					●			●	●	
Celastrus punctatus					●	●	●	●	●	
Euonymus chibae		EN			●			●		
Euonymus fortunei var. *austroliukiuensis*		VU		E	●	●	●		●	
Euonymus fungosus				E	●	●	●	●	●	
Euonymus japonicus					●	●	●	●	●	
Euonymus lutchuensis					●	●	●	●	●	
Euonymus tanakae					●	●	●	●	●	
Euonymus tashiroi					●			●	●	
Euonymus trichocarpus					●	●	●			
Maytenus diversifolia		NT			●	●	●	●	●	
Microtropis japonica					●	●	●	●	●	
Microtropis japonica var. *sakaguchiana*					●	●		●		
STAPHYLEACEAE										
Euscaphis japonica					●	●	●	●	●	
Turpinia ternata					●	●	●	●	●	
ICACINACEAE										
Nothapodytes amamianus		CR		E	●	●				
Nothapodytes foetida		EN			●				●	MOEJ-RL: *Nothapodytes nimmonianus*
RHAMNALES										
RHAMNACEAE										
Berchemia lineata					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Berchemia racemosa f. *stenosperma*				E	●	●	●	●	●	
Colubrina asiatica		EN			●				●	
Paliurus ramosissimus		VU			●	●			●	
Rhamnella franguloides var. *inaequilatera*		VU		E	●	●	●	●	●	
Rhamnus liukiuensis					●	●	●	●	●	
Sageretia theezans					●	●	●	●	●	
VITACEAE										
Ampelopsis brevipedunculata					●				●	
Ampelopsis brevipedunculata var. *glabrifolia*					●	●	●	●	●	
Cayratia japonica					●	●	●	●	●	
Cayratia tenuifolia					●	●				
Cayratia yoshimurai					●	●	●			
Parthenocissus heterophylla					●	●	●	●		
Tetrastigma liukiuense					●	●	●		●	
Vitis ficifolia					●	●	●	●	●	
Vitis flexuosa					●	●			●	
OLEALES										
OLEACEAE										
Fraxinus floribunda					●	●	●	●		
Fraxinus griffithii					●			●	●	
Jasminum sinense		VU		E	●	●	●	●		
Ligustrum japonicum					●	●	●	●	●	
Ligustrum japonicum var. *pubescens*					●	●	●			
Ligustrum japonicum var. *spathulatum*					●	●				
Ligustrum liukiuense				E	●	●	●	●	●	
Osmanthus heterophyllus var. *iriomotensis*					●				●	
Osmanthus insularis					●	●	●		●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Osmanthus marginatus					●	●	●	●	●	
Osmanthus okinawensis		EN		E	●	●		●		MOEJ-RL: *Osmanthus insularis* var. *okinawensis*
UMBELLIFLORAE										
CORNACEAE										
Aucuba japonica var. *ovoidea*					●	●	●	●		
Benthamidia japonica					●	●				
Cornus yaeyamensis		CR			●				●	MOEJ-RL: *Cornus kousa* var. *chinensis*
Helwingia japonica var. *liukiuensis*		NT		E	●	●	●	●		*MOEJ-RL: Helwingia japonica* subsp. *liukiuensis*
ALANGIACEAE										
Alangium premnifolium					●	●	●	●	●	
UMBELLIFERAE										
Angelica japonica					●	●	●	●	●	
Angelica japonica var. *hirsutiflora*					●				●	
Centella asiatica	LC				●	●	●	●	●	
Cryptotaenia japonica					●	●		●		
Glehnia littoralis					●	●	●	●	●	
Hydrocotyle dichondroides					●	●	●	●	●	
Hydrocotyle javanica	LC				●	●				
Hydrocotyle maritima					●	●		●		
Hydrocotyle sibthorpioides	LC				●	●	●	●	●	
Hydrocotyle sibthorpioides var. *tuberifera*					●				●	
Oenanthe chinensis					●	●				
Oenanthe javanica	LC				●	●	●	●	●	
Peucedanum japonicum					●			●	●	
Peucedanum japonicum var. *australis*					●	●	●			
Sanicula chinensis					●	●		●		
Sanicula lamelligera					●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Torilis japonica					●	●	●	●	●	
Torilis scabra					●		●			
ARALIACEAE										
Aralia elata					●			●		
Dendropanax trifidus					●	●	●	●	●	
Fatsia japonica var. *liukiuensis*				E	●	●	●	●		
Hedera rhombea					●	●	●	●		
Kalopanax septemlobus var. *lutchuensis*					●			●	●	
Schefflera octophylla					●	●	●	●	●	
ELAEAGNACEAE										
Elaeagnus glabra					●	●	●	●	●	
Elaeagnus liukiuensis				E	●	●	●			
Elaeagnus macrophylla					●	●		●	●	
Elaeagnus umbellata					●	×	●			
THYMELAEACEAE										
Daphne kiusiana					●	●	●			
Diplomorpha phymatoglossa		CR		E	●	●	●			
Wikstroemia retusa					●	●		●	●	
LYTHRACEAE										
Ammannia multiflora	LC				●	●		●		
Lagerstroemia subcostata		NT			●	●	●			MOEJ-RL: *Lagerstroemia subcostata* var. *subcostata*
Pemphis acidula	LC				●	●	●	●	●	
Rotala indica var. *uliginosa*	LC				●	●	●	●	●	
Rotala littorea	LC	VU			●	●	●	●		MOEJ-RL: *Rotala rosea*
Rotala pusilla	LC	VU			●	●			●	MOEJ-RL: *Rotala mexicana*
MYRTACEAE										
Syzygium buxifolium					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
SONNERATIACEAE										
Sonneratia alba	LC	NT			●				●	
LECYTHIDACEAE										
Barringtonia asiatica	LR/lc	CR			●				●	
Barringtonia racemosa					●	●	●	●	●	
MELASTOMATACEAE										
Blastus cochinchinensis		VU			●	●				
Bredia hirsuta					●	●	●	●	●	
Bredia okinawensis		VU		E	●			●		
Bredia yaeyamensis				E	●				●	
Melastoma candidum					●	●	●	●	●	
Osbeckia chinensis		VU			●		●	●	●	
RHIZOPHORACEAE										
Bruguiera gymnorhiza	LC				●	●	●	●	●	
Kandelia obovata	LC				●	●	●	●	●	
Rhizophora stylosa	LC				●			●	●	
COMBRETACEAE										
Lumnitzera racemosa	LC	CR			●				●	
Terminalia catappa					●	●		●	●	
Terminalia nitens	VU	CR			●				●	
ONAGRACEAE										
Ludwigia adscendens		VU			●			●		
Ludwigia epilobioides					●	●	●	●	●	
Ludwigia greatrexii		NT			●	●			●	MOEJ-RL: *Ludwigia epilobioides* subsp. *greatrexii*
Ludwigia octovalvis var. *sessiliflora*	LC				●	●	●	●	●	
Ludwigia ovalis					●	●				
URTICALES										

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
ULMACEAE										
Aphananthe aspera					●			●		
Celtis boninensis					●	●	●	●	●	
Trema cannabina					●	●		●		
Trema orientalis					●	●	●	●	●	
MORACEAE										
Broussonetia kazinoki					●	●				
Broussonetia papyrifera					●	A	●	●	●	
Fatoua villosa					●	●			●	
Ficus ampelas					●	●	●	●	●	
Ficus caulocarpa					●				●	
Ficus erecta					●	●	●	●	●	
Ficus erecta var. *beecheyana*					●	●	●	●	●	
Ficus irisana					●	●	●	●	●	
Ficus microcarpa					●	●	●	●	●	
Ficus nipponica					●	●	●	●	●	
Ficus pumila					●	●	●	●	●	
Ficus septica					●	●	●	●	●	
Ficus superba var. *japonica*					●	●	●	●	●	
Ficus thunbergii					●	●	●	●	●	
Ficus variegata var. *sycomoroides*					●				●	
Ficus virgata					●	●	●	●	●	
Humulus japonicus					●	●				
Maclura cochinchinensisr var. *gerontogea*					●	●	●	●	●	
Morus australis					●	●	●	●	●	
URTICACEAE										
Boehmeria amamiana				E	●	●	●			

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Boehmeria densiflora					●			●		
Boehmeria formosana		VU			●	●	●	●	●	
Boehmeria gigantea					●	●	●			
Boehmeria hirtella					●	●	●			
Boehmeria holosericea					●	●	●			
Boehmeria nivea var. *nipononivea*					●			●	●	
Boehmeria nivea var. *nipononivea* f.					●			●	●	
Boehmeria nivea var. *nipononivea* f. *viridula*					●			●	●	
Boehmeria yaeyamensis		NT		E	●				●	
Debregeasia edulis					●	●	●	●	●	
Elatostema oshimense		CR		E	●	●				
Elatostema platyphyllum		EN			●				●	
Elatostema suzukii		NT		E	●			●		
Gonostegia hirta					●	●	●	●	●	
Nanocnide lobata					●	●			●	
Oreocnide pedunculata					●	●	●	●	●	
Pellionia minima					●	●	●			
Pellionia radicans					●	●			●	
Pellionia scabra					●	●	●	●	●	
Pellionia × *keitaoensis*					●				●	
Pilea aquarum ssp. *brevicornuta*					●			●	●	
Pilea brevicornuta					●	●	●			
Pilea peploides					●	●	●		●	
Pilea petiolaris					●			●	●	
Pipturus arborescens					●				●	
Pouzolzia zeylanica					●	●	●	●	●	
MYRICALES										

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
MYRICACEAE										
Myrica rubra					●	●	●	●	●	
FAGALES										
FAGACEAE										
Castanopsis sieboldii					●			●	●	
Castanopsis sieboldii var. *lutchuensis*				E	●	●	●			
Lithocarpus edulis					●	●	●	●		
Quercus glauca var. *amamiana*				E	●	●	●	●		
Quercus miyagii				E	●	●	●	●	●	
Quercus phillyraeoides					●	●				
Quercus salicina					●	●	●	●		
Quercus × *miyagiisalicina*					●		●			
BETULACEAE										
Alnus firma	DD				●	●				
Alnus japonica	LC				●	A		●		
PROTEALES										
PROTEACEAE										
Helicia cochinchinensis					●	●	●	●	●	
SANTALALES										
OLACACEAE										
Schoepfia jasminodora					●	●	●	●	●	
SANTALACEAE										
Thesium chinense					●	●	●		●	
LORANTHACEAE										
Korthalsella opuntia					●	●	●		●	
Scurrula yadoriki					●	●	●	●		
Taxillus nigrans		NT			●				●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
BALANOPHORALES										
BALANOPHORACEAE										
Balanophora fungosa					●				●	
Balanophora tobiracola					●	●	●	●	●	
Balanophora yuwanensis				E	●	●	●			
EUPHORBIALES										
DAPHNIPHYLLACEAE										
Daphniphyllum macropodum					●		●			
Daphniphyllum teijsmannii					●	●	●	●	●	
Daphniphyllum teijsmannii var.					●	●	●			
EUPHORBIACEAE										
Acalypha australis					●	●	●	●	●	
Alchornea liukiuensis				E	●	●		●	●	
Antidesma japonicum					●	●	●	●	●	
Antidesma pentandrum					●			●	●	
Bischofia javanica					●	●	●	●	●	
Breynia offcinalis					●	●	●	●	●	
Bridelia glauca f. *balansae*					●				●	
Croton cascarilloides					●		●	●	●	
Discocleidion ulmifolium		CR			●	●	●		●	
Drypetes matsumurae					●	●	●	●	●	
Euphorbia chamissonis					●	●	●	●	●	
Euphorbia helioscopia					●	A	A	●		
Euphorbia jolkinii					●	●	●	●	●	
Euphorbia sieboldiana var. *amamiana*		CR		E	●	●				MOEJ-RL: *Euphorbia* sp.
Excoecaria agallocha	LC				●	●	●	●	●	
Glochidion acuminatum					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Glochidion lanceolatum					●	●		●	●	
Glochidion obovatum					●	●	●	●		
Glochidion rubrum					●				●	
Glochidion zeylanicum					●	●	●	●	●	
Glochidion zeylanicum var. *tomentosum*					●			●	●	
Macaranga tanarius					●	●		●	●	
Mallotus japonicus					●	●	●	●	●	
Mallotus paniculatus					●				●	
Mallotus philippensis					●	●	●	●	●	
Margaritaria indica		CR			●		●	●	●	
Melanolepis multiglandulosa					●			●	●	
Mercurialis leiocarpa					●	●	●			
Phyllanthus urinaria					●	●	●	●	●	
Sapium japonicum					●	●	●	●	●	
Sapium japonicum var. *ryukyuense*					●	●	●			
Securinega suffruticosa var. *amamiensis*					●	●	●	●	●	
BUXACEAE										
Buxus liukiuensis		VU			●	●		●		
Buxus microphylla ssp. *sinica*		CR			●			●		MOEJ-RL: *Buxus sinica* var. *sinica*
HALORAGACEAE										
Haloragis chinensis		EN			●			●		
Haloragis micrantha					●	●	●	●	●	
Myriophyllum spicatum	LC				●	●			●	
CALLITRICHACEAE										
Callitriche japonica					●	●		●		
Callitriche palustris					●	●			●	
PRIMULALES										

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
MYRSINACEAE										
Ardisia chinensis		VU			●	●	●			
Ardisia crenata					●	●	●	●	●	
Ardisia montana		EN			●	●	●			MOEJ-RL: *Ardisia walkeri*
Ardisia pusilla					●	●	●	●	●	
Ardisia quinquegona					●	●	●	●	●	
Ardisia sieboldii					●	●	●	●	●	
Maesa tenera					●	●	●	●	●	
Myrsine seguinii					●	●	●	●	●	
Androsace umbellata					●	●	●	●	●	
Lysimachia decurrens		NT			●	●	●		●	
Lysimachia japonica					●	●	●	●	●	
Lysimachia liukiuensis		CR		E	●	●				
Lysimachia mauritiana					●	●	●	●	●	
Lysimachia sikokiana					●	●	●	●	●	
Stimpsonia chamaedryoides		EN			●	●		●		
PLUMBAGINALES										
PLUMBAGINACEAE										
Limonium sinense		CR			●				●	
Limonium wrightii		VU			●	●	●		●	MOEJ-RL: *Limonium wrightii* var. *wrightii*
Limonium wrightii var. *luteum*					●	●	●	●	●	
ERICALES										
DIAPENSIACEAE										
Shortia rotundifolia					●			●	●	
Shortia rotundifolia f. *amamiana*		CR		E	●	●				MOEJ-RL: *Shortia rotundifolia* var. *amamiana*
PYROLACEAE										
Monotropa hypopithys					●	●				

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Monotropastrum humile					●	●	●	●	●	
ERICACEAE										
Pieris amamiana				E	●	●				
Pieris japonica var. *koidzumi*		CR		E	●			●		*MOEJ-RL: Pieris koidzumiana*
Rhododendron amamiense		CR		E	●	●				*MOEJ-RL: Rhododendron latoucheae* var. *amamiense*
Rhododendron amanoi				E	●				●	
Rhododendron latoucheae					●				●	
Rhododendron scabrum		VU		E	●	●		●		
Rhododendron scabrum var. *angusstifolium*				E	●	●				
Rhododendron simsii					●	●	●	●	●	
Rhododendron tashiroi					●	●	●	●		
Rhododendron tashiroi f. *leucanthum*					●	●	●			
Rhododendron tashiroi var. *lasiophyllum*					●		●			
Vaccinium bracteatum					●	●		●	●	
Vaccinium wrightii					●	●	●	●	●	
EBENALES										
SAPOTACEAE										
Pouteria obovata					●	●	●	●	●	
EBENACEAE										
Diospyros egbert-walkeri		NT			●	●	●	●	●	
Diospyros japonica					●	●	●	●	●	
Diospyros maritima					●		●	●	●	
Diospyros morrisiana					●	●	●	●	●	
Diospyros oldhamii					●				●	
STYRACACEAE										
Styrax japonicus					●	●	●	●	●	
SYMPLOCACEAE										

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Symplocos anomala				E	●			●		
Symplocos caudata				E	●	●	?	●		?: Unverified information
Symplocos cochinchinensis					●	●	●	●	●	
Symplocos confusa		VU			●	●	●	●		MOEJ-RL: *Symplocos sonoharae*
Symplocos glauca					●	●	●	●	●	
Symplocos konishii		EN			●				●	
Symplocos lucida					●	●	●	●	●	
Symplocos microcalyx				E	●	●	●	●		
Symplocos nakaharae				E	●	●	●	●	●	
Symplocos prunifolia				E	●	●	●	●	●	
Symplocos stellaris					●			●		
Symplocos sumuntia					●				●	
GENTIANALES										
GENTIANACEAE										
Centaurium japonicum					●	●	●	●	●	
Gentiana scabra var. *smsmisns*				E	●	●	●			
Gentiana squarrosa var. *liukiuensis*		VU			●	●	●			MOEJ-RL: *Gentiana satsunanensis*
Swertia japonica var. *amaiensis*				E	●	●				
Swertia makinoana		VU		E	●				●	
Swertia tashiroi					●	●	●	●		
APOCYNACEAE										
Anodendron affine					●	●	●	●	●	
Cerbera manghas					●	●	●	●	●	
Ecdysanthera utilis		CR			●				●	MOEJ-RL: *Urceola micrantha*
Neisosperma oppositifolia		CR		E	●				●	MOEJ-RL: *Ochrosia iwasakiana*
Parsonsia laevigata					●	●	●	●	●	
Trachelospermum asiaticum var. *liukiuense*					●			●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Trachelospermum gracilipes var. *liukiuense*					●	●	●			
Trachelospermum jasminoides var.					●			●		
ASCLEPIADACEAE										
Cynanchum auriculatum var. *amamianum*		CR		E	●	●	●			MOEJ-RL: *Cynanchum boudieri*
Cynanchum japonicum					●	●	●			
Cynanchum liukiuense				E	●				●	
Cynanchum matsumurae		EN		E	●			●		MOEJ-RL: *Vincetoxicum matsumurae*
Cynanchum paniculatum		NT			●		●			MOEJ-RL: *Vincetoxicum pycnostelma*
Hoya carnosa					●	●	●	●	●	
Marsdenia formosana		DD			●				●	
Marsdenia tinctoria var. *tomentosa*					●	●	●	●	●	
Marsdenia tomentosa					●	●	●	●		
Stephanotis lutchuensis					●		●	●	●	
Stephanotis lutchuensis var. *japonica*					●	●	●			
Tylophora japonica					●	●	●	●	●	
Tylophora tanakae					●	●	●	●	●	
RUBIALES										
CAPRIFOLIACEAE										
Abelia chinensis var. *ionandra*		CR			●	●		●		
Lonicera affinis					●	●		●	●	
Lonicera japonica var. *miyagusukiana*		CR		E	●		●	●		
Sambucus chinensis					●			●	●	
Sambucus formosanum					●	●	●			
Sambucus racemosa ssp. *sieboldiana*					●	●				
Viburnum japonicum					●	●		●		
Viburnum odoratissimum var. *awabuki*					●	●	●	●	●	
Viburnum suspensum				E	●	●	●	●		

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Viburnum tashiroi		VU		E	●	●	●			
RUBIACEAE										
Argostemma solaniflorum					●				●	
Coptosapelta diffusa					●	●	●	●	●	
Damnacanthus biflorus				E	●	●	●	●		
Damnacanthus indicus					●	●	●	●	●	
Damnacanthus indicus ssp. *major*					●	●				
Damnacanthus indicus var. *intermedius*					●	●	●	●		
Damnacanthus indicus var. *microphyllus*					●	●	●			
Damnacanthus indicus var. *okinawensis*					●			●		
Damnacanthus indicus var. *parvispinus*					●	●	●			
Galium gracilens					●	●	●	●	●	
Galium gracilens var. *lutchuense*					●	●	●			
Galium spurium var. *echinospermon*					●	●		●	●	
Gardenia jasminoides f. *grandiflora*					●	●	●	●	●	
Gardneria liukiuensis		CR		E	●	●		●		
Guettarda speciosa					●				●	
Hedyotis coreana var. *parvifolia*					●				●	
Hedyotis diffusa					●	●	●	●	●	
Hedyotis diffusa var. *longipes*					●				●	
Hedyotis paniculata					●				●	
Hedyotis strigulosa var. *parvifolia*					●	●	●	●	●	
Hedyotis tenelliflora					●	●	●	●	●	
Hedyotis tenelliflora var. *longipes*					●				●	
Hedyotis verticillata		VU			●				●	
Lasianthus bunzanensis		NT			●				●	MOEJ-RL: *Lasianthus hispidulus*
Lasianthus curtisii					●	●	●		●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Lasianthus cyanocarpus					●	●	●	●	●	
Lasianthus fordii					●	●	●	●	●	
Lasianthus fordii var. *pubescens*					●	●	●	●		
Lasianthus japonicus					●			●		
Lasianthus japonicus var. *satrumensis*					●			●		
Lasianthus obliquenervis					●	●	●	●	●	
Lasianthus wallichii					●	●	●	●	●	
Mitrasacme pygmaea					●	●	●	●	●	
Morinda citrifolia		VU			●			●	●	
Morinda umbellata					●	●	●	●	●	
Mussaenda parviflora					●	●	●	●	●	
Mussaenda parviflora var. *yaeyamensis*					●				●	
Neanotis hirsuta					●				●	
Nertera yamashitae		CR		E	●	●				MOEJ-RL: *Ophiorrhiza yamashitae*
Ophiorrhiza japonica					●	●	●	●	●	
Ophiorrhiza japonica var. *amamiana*				E	●	●	●	●		
Ophiorrhiza japonica var. *cantoniensis*					●	●	●	●		
Ophiorrhiza japonica var. *tashiroi*					●				●	
Ophiorrhiza kuroiwai					●	●		●	●	
Ophiorrhiza pumila					●	●	●	●	●	
Paederia scandens					●	●	●	●	●	
Paederia scandens var. *maritima*					●	●	●			
Psychotria manillensis					●	●	●	●	●	
Psychotria rubra					●	●	●	●	●	
Psychotria serpens					●	●	●	●	●	
Randia canthioides					●	●	●	●	●	
Sinoadina racemosa					●		●	●		

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						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Tarenna gracilipes					●	●	●	●	●	
Thysanospermum difusum					●	●	●			
Tricalysia dubia					●	●	●	●	●	
Wendlandia formosana					●	●	●	●	●	
SOLANALES										
CONVOLVULACEAE										
Calystegia hederacea					A	A	A			
Calystegia soldanella					●	●	●	●	●	
Dichondra repens					●	●	●	●	●	
Erycibe henryi					●	●	●	●		
Evolvulus alsinoides		EN			●				●	MOEJ-RL: *Evolvulus alsinoides* var. *rotundifolius*
Evolvulus alsinoides var. *decumbens*					●				●	
Ipomoea gracilis					●	●	●	●	●	
Ipomoea indica					●	●	●	●	●	
Ipomoea pes-caprae					●	●	●	●	●	
Ipomoea stolonifera					●	●	●	●	●	
Stictocardia tiliifolia	LC				●				●	
MENYANTHACEAE										
Nymphoides coreana		VU			●				●	
BORAGINACEAE										
Argusia argentea	LR/lc				●	●	●	●	●	
Bothriospermum tenellum					●	●	●	●	●	
Carmona retusa					●	●	●	●	●	
Cordia cumingiana		CR			●				●	MOEJ-RL: *Cordia aspera* subsp. *kanehirae*
Cordia dichotoma					●	●		●	●	
Cynoglossum lanceolatum var. *formosanum*		CR			●	●	●			
Ehretia dichotoma		CR			●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Ehretia dicksonii					●	●	●	●	●	
Ehretia obovata					●	●	●	●	●	
Trigonotis peduncularis					●	●		●		
SOLANACEAE										
Lycianthes biflorum var. *glabrum*		EN			●				●	
Solanum biflorum					●	●	●	●	●	
Solanum erianthum					●	●	●	●	●	
Solanum lyratum					●	●		●		
Solanum maximowiczii					●	●		●		
Tubocapsicum anomalum					●	●		●	●	
Tubocapsicum anomalum var. *obtusum*					●	●	●	●	●	
BUDDLEJACEAE										
Buddleja curviflora					●	●				
SCROPHULARIACEAE										
Centranthera cochinchinensis		VU			●	●	●		●	
Deinostema adenocaulum		VU			●	●				
Dopatrium junceum	LC				●	●	●		●	
Gratiola fluviatilis		EN			●	●				
Limnophila aromatica	LC				●	●	●	●	●	
Limnophila fragrans		EN			●				●	
Limnophila rugosa	LC				●				●	
Limnophila sessiliflora	LC				●	●			●	
Lindernia anagallis	LC				●	●	●	●	●	
Lindernia angustifolia	LC				●	●	●	●	●	
Lindernia antipoda	LC				●	●	●	●	●	
Lindernia ciliata	LC				●			●	●	
Lindernia crustacea	LC				●	●	●		●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Lindernia procumbens	LC				●	●	●		●	
Lindernia ruellioides	LC				●		●	●	●	
Lindernia setulosa					●	●	●			
Lindernia tenuifolia	LC	DD			●				●	
Mazus goodenifolius		EN			●	●				
Mazus pumilus					●	●	●	●	●	
Microcarpaea minima	LC	VU			●	●	●		●	
Pseudolysimachion sieboldianum		VU			●	●	●			MOEJ-RL: *Veronica sieboldiana*
Siphonostegia chinensis					●				●	
Torenia concolor var. *formosana*		EN			●	●				
Torenia glabra					●	●				
Veronica didyma var. *lilacina*		VU			●	●	●	●	●	MOEJ-RL: *Veronica polita* subsp. *lilacina*
Veronica javanica		VU			●	●		●	●	
Veronica peregrina					●	●		●		
Veronica undulata		NT			●	●		●	●	
Veronicastrum liukiuense		CR		E	●	●		●		
ACANTHACEAE										
Codonacanthus pauciflorus					●	●	●	●	●	
Dicliptera chinensis					●	●	●	●	●	
Hygrophila salicifolia	LC				●	●	●		●	
Justicia procumbens					●	●		●	●	
Justicia procumbens var. *hayatae*					●	●		●		
Justicia procumbens var. *riukiuensis*					●	●	●	●	●	
Lepidagathis formosensis					●				●	
Lepidagathis inaequalis					●			●	●	
Staurogyne concinnula					●				●	
Strobilanthes glandulifer					●			●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Strobilanthes tashiroi				E	●	●		●		
GESNERIACEAE										
Conandron ramondioides					●	●			●	
Cyrtandra yaeyamae					●				●	
Hemiboea bicornuta					●				●	
Rhynchotechum discolor					●	●	●	●	●	
Rhynchotechum discolor var. *austrokiushiuense*					●	●	●		●	
Titanotrichum oldhamii		CR			●				●	MOEJ-RL: *Titanotrichum oldhamii*
OROBANCHACEAE										
Aeginetia indica					●	●	●	●	●	
Aeginetia sinensis					●	●				
Lathraea japonica					●	●				
Orobanche coerulescens		VU			●	●				
LENTIBULARIACEAE										
Utricularia aurea	LC	VU			●	●				
Utricularia australis	LC				●			●	●	
Utricularia bifida	LC				●	●	●	●	●	
Utricularia exoleta		VU			●	●	●		●	
Utricularia tenuicaulis		NT			●	●				MOEJ-RL: *Utricularia australis*
MYOPORACEAE										
Myoporum bontioides		VU			●	●			●	
PLANTAGINACEAE										
Plantago asiatica					●	●	●	●	●	
Plantago asiatica var. *yakushimensis*					●	●				
VERBENACEAE										
Avicennia marina	LC	VU			●				●	
Callicarpa japonica var. *luxurians*					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Callicarpa oshimensis				E	●	●	●		●	
Callicarpa oshimensis var. *iriomotensis*				E	●				●	
Callicarpa oshimensis var. *okinawensis*		VU		E	●			●		
Clerodendron trichotomum					●			●		
Clerodendrum inerme					●	●	●	●	●	
Clerodendrum trichotomum var. *esculentum*					●		●	●	●	
Clerodendrum trichotomum var. *fargesii*					●	●	●	●	●	
Lippia nodiflora	LC				●	●	●	●	●	
Premna corymbosa var. *obtusifolia*					●	●	●		●	
Premna microphylla					●	●	●			
Premna nauseosa					●				●	
Verbena officinalis					●	●	●	●	●	
Vitex quinata		CR			●				●	
Vitex rotundifolia					●	●	●	●	●	
Vitex rotundifolia var. *subtrisecta*					●	●		●	●	
Vitex trifolia					●	●	●	●	●	
Vitex trifolia var. *bicolor*		CR			●				●	MOEJ-RL: *Vitex bicolor*
LABIATAE										
Ajuga decumbens					●	●				
Ajuga dictyocarpa					●	●	●			
Ajuga pygmaea					●	●	●	●	●	
Ajuga taiwanensis					●				●	
Anisomeles indica					●	●	●	●	●	
Clinopodium chinense					●	●	●	●	●	
Clinopodium gracile					●	●	●	●	●	
Eusteralis stellata		NT			●	●	●	●		MOEJ-RL: *Pogostemon stellatus*
Lamium amplexicaule					●	●				

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Lamium chinense var. *tuberiferum*		VU			●	●				MOEJ-RL: *Lamium tuberiferum*
Leonurus japonicus					●	●	●		●	
Leucas mollissima var. *chinensis*					●	●	●	●	●	
Leucas mollissima var. *riukiuensis*					●			●		
Mosla dianthera					●	●	●	●	●	
Mosla punctulata					●				●	
Salvia japonica					●	●				
Salvia plebeia		NT			●	●			●	
Salvia pygmaea				E	●	●	●	●	●	
Salvia pygmaea var. *simplicior*		EN		E	●	●	●			
Scutellaria guilielmii		VU			●	●	●	●		
Scutellaria indica var. *parvifolia*					●	●	●			
Scutellaria kikai-insularis		EN		E	●	●				
Scutellaria kikai-insularis f. *albiflora*				E	●	●				
Scutellaria rubropunctata				E	●	●	●	●		
Teucrium japonicum					●	●				
Teucrium viscidum					●	●	●	●	●	
Teucrium viscidum var. *miquelianum*					●	●	●			
CAMPANULALES										
CAMPANULACEAE										
Adenophora triphylla					●	●	●	●		
Adenophora triphylla var. *insularis*		EN			●	●	●			MOEJ-RL: *Adenophora tashiroi*
Campanumoea lancifolia					●	●	●	●	●	
Lobelia chinensis					●	●	●	●	●	
Lobelia loochooensis		EN		E	●	●				
Platycodon grandiflorus		VU			●	●				MOEJ-RL: *Platycodon grandiflorus*
Wahlenbergia marginata					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
GOODENIACEAE										
Scaevola sericea					●	●	●	●	●	
ASTERALES										
COMPOSITAE										
× *Crepidiastrixeris denticulato-lanceolata*					●	●				
Adenostemma lavenia					●	●	●	●	●	
Adenostemma lavenia var. *parviflorum*					●				●	
Ainsliaea macroclinidioides					●	●				
Ainsliaea macroclinidioides var. *oblonga*		VU			●			●	●	MOEJ-RL: *Ainsliaea oblonga* var. *oblonga*
Ainsliaea macroclinidioides var.					●	●	●	●	●	
Ainsliaea oblonga var. *latifolia*		CR		E	●	●				
Artemisia campestris					●	●	●	●		
Artemisia capillaris					●	●	●	●	●	
Artemisia indica					●	●		●	●	
Artemisia japonica					●	●	●	●	●	
Artemisia princeps					●	●	●			
Aster asa-grayi		EN		E	●	●				MOEJ-RL: *Aster asagrayi* var. *asagrayi*
Aster miyagii	VU	VU		E	●	●	●	●		
Aster taiwanensis var. *lucens*				E	●				●	
Bidens tripartita	LC				●	●	●			
Blumea conspicua					●	●	●	●	●	
Blumea hieraciifolia					●	●	●	●	●	
Blumea lacera					●	●	●	●	●	
Blumea laciniata					●	●	●	●	●	
Blumea lanceolaria					●		●		●	
Blumea oblongifolia					●				●	
Blumea riparia var. *megacephala*					●				●	

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						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Blumea × *oblongifolia*					●				●	
Carpesium abrotanoides					●	●				
Carpesium cernuum					●	●	●	●	●	
Carpesium divaricatum					●	●	●	●	●	
Carpesium glossophyllum					●	●	●	●		
Centipeda minima	LC				●	●	●	●	●	
Cirsium brevicaule				E	●	●	●	●		
Cirsium brevicaule f. *albescens*				E	●	●	●			
Cirsium brevicaule var. *irumtiense*				E	●				●	
Cirsium brevicaule var. *oshimense*				E	●	●	●			
Cirsium spinosum					●	●				
Conyza aegyptiaca		CR			●				●	
Conyza japonica		VU			●	●		●	●	
Conyza leucantha		EN			●				●	
Crepidiastrum lanceolatum					●	●	●	●	●	
Crepidiastrum lanceolatum f. *pinnatilobum*					●	●	●	●	●	
Crossostephium chinense		VU			●	●	●	●	●	
Dendranthema crassum		VU		E	●	●	●			MOEJ-RL: *Chrysanthemum crassum*
Dichrocephala integrifolia					●	●	●	●	●	
Eclipta prostrata	DD				●	●	●	●	●	
Emilia sonchifolia					●	●	●	●	●	
Eupatorium cannabium ssp. *asiaticum*					●			●	●	
Eupatorium lindleyanum					●	●	●	●		
Eupatorium luchuense					●	●	●	●	●	
Eupatorium luchuense var. *kiirunense*					●				●	
Eupatorium variabile					●	●	●			
Eupatorium × *tawadae*					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Farfugium japonicum					●	●	●	●	●	
Farfugium japonicum var. *luchuense*		NT		E	●	●		●	●	
Gnaphalium affine					●	●	●	●	●	
Gnaphalium japonicum					●	●	●	●	●	
Hemistepta lyrata					●	●			●	
Heteropappus hispidus ssp. *insularis*					●	●				
Inula britanica					●	●				
Ixeris debilis					●	●	●	●	●	
Ixeris debilis f. *sinuata*					●				●	
Ixeris debilis var. *liuchuensis*				E	●	●	●	●		
Ixeris dentata var. *gracilior*					●	●				
Ixeris laevigata		VU			●			●	●	MOEJ-RL: *Ixeridium laevigatum*
Ixeris polycephala					●	●			●	
Ixeris repens					●	●	●	●	●	
Ixeris stolonifera					●	●	●			
Ixeris × *nakazonei*					●	●				
Kalimeris indica					●	●	●	●	●	
Kalimeris yomena					●	●	●			
Lactuca formosana					●			●	●	
Lactuca indica f. *indivisa*					●				●	
Lactuca indica var. *indica*					●	●	●	●	●	
Lagenophora lanata		CR			●	●	●		●	
Lapsana apogonoides					●	●				
Rhynchospermum verticillatum					●	●	●			
Sigesbeckia orientalis					●	●	●	●	●	
Sigesbeckia glabrescens					●	●				
Solenogyne mikadoi		VU		E	●	●		●		

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						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Solidago virgaurea ssp. *leiocarpa*					●				●	
Solidago virgaurea var. *insularis*					●	●	●	●		
Solidago yokusaiana					●			●		
Taraxacum japonicum					A	A				
Vernonia cinerea					●	●	●	●	●	
Wedelia biflora					●			●	●	
Wedelia biflora var. *ryukyuensis*					●	●	●			
Wedelia chinensis	LC				●	●	●	●	●	
Wedelia prostrata					●	●	●	●	●	
Wedelia robusta					●	●	●	●	●	
Xanthium strumarium		VU			●	●	●		●	
Youngia japonica					●	●	●	●	●	
ALISMATALES										
ALISMATACEAE										
Alisma canaliculatum					●	●	●	●	●	
Caldesia parnassiifolia	LC	VU			●		●			
Sagittaria pygmaea	LC				●	●	●		●	
Sagittaria trifolia	LC				●	●	●	●	●	
HYDROCHARITALES										
HYDROCHARITACEAE										
Blyxa aubertii	LC	VU			●	●	●	●	●	
Blyxa echinosperma		VU			●	●			●	
Blyxa japonica	LC				●	●	●			
Cymodocea rotundata	LC	NT			●	●			●	
Cymodocea serrulata	LC	NT			●	●	●		●	
Enhalus acoroides	LC	VU			●				●	
Halodule pinifolia	LC	NT			●	●			●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Halodule uninervis	LC	NT			●	●			●	
Halophila decipiens	LC	VU								
Halophila ovalis	DD	NT			●	●			●	
Hydrilla verticillata	LC				●	●	●			
Hydrocharis dubia	LC	NT			●	●				
Ottelia alismoides	LC				●	●		●	●	
Ottelia japonica		VU			●	●	●			MOEJ-RL: *Ottelia alismoides*
Syringodium isoetifolium	LC	NT			●	●			●	
Thalassia hemprichii	LC	NT			●	●	●		●	
HELOBIAE										
NAJADACEAE										
Najas graminea	LC				●	●	●		●	
Najas japonica		NT			●				●	MOEJ-RL: *Najas gracillima*
Najas marina	LC				●	●				
Najas minor	LC	VU			●	●	●		●	
POTAMOGETONACEAE										
Potamogeton berchtoldii	LC	NT			●	●			●	
Potamogeton crispus	LC				●	●		●	●	
Potamogeton distinctus	LC				●	●	●	●	●	
Potamogeton malaianus					●	●	●		●	
Potamogeton octandrus	LC				●	●				
Potamogeton octandrus var. *miduhikimo*					●	●			●	
Potamogeton oxyphyllus					●	●				
Potamogeton pectinatus		NT			●	●				
Ruppia maritima var. *japonica*		NT			●	●			●	MOEJ-RL: *Ruppia maritima*
Zannichellia palustris	LC	VU			●				●	MOEJ-RL: *Zannichellia palustris* var. *indica*
ZOSTERACEAE										

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Zostera japonica	LC				●	●	●		●	
PRINCIPES										
PALMAE										
Arenga engleri					●	●	●	●		
Arenga tremula					●				●	
Livistona chinensis var. *subglobosa*					●	●	●	●	●	
Nypa fruticans	LC	CR			●				●	
Satakentia liukiuensis	DD	NT		E	●				●	
PANDANALES										
PANDANACEAE										
Freycinetia formosana					●				●	
Freycinetia williamsii		EN			●				●	
Pandanus odoratissimus					●	●	●	●	●	
Pandanus odoratissimus f. *ferreus*					●				●	
Pandanus odoratissimus f. *laevis*					●				●	
SPATHIFLORAE										
ARACEAE										
Acorus calamus	LC				●	●				
Acorus gramineus	LC				●		●			
Alocasia cucullata					●	●			●	
Alocasia gageana					●				●	
Alocasia odora	LC				●	●	●	●	●	
Amorphophalus hirtus var. *kiusianus*		VU			●	●	●			MOEJ-RL: *Amorphophallus kiusianus*
Arisaema heterocephalum	EN	EN		E	●	●	●			MOEJ-RL: *Arisaema heterocephalum* subsp. *heterocephalum*
Arisaema heterocephalum var. *majus*	EN	CR		E	●		●			MOEJ-RL: *Arisaema heterocephalum* subsp. *majus*
Arisaema kawashimae	CR	CR		E	●		●			
Arisaema ringens					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Pinellia ternata					●	●		●	●	
Pinellia tripartita					●	●		●		
Rhaphidophora pinnata					●			●	●	
Typhonium divaricatum					●	●	●	●	●	
LEMNACEAE										
Lemna aequinoctialis	LC				●	●			●	
Lemna perpusilla	LC				●			●		
Spirodela polyrhiza	LC				●	●	●	●	●	
TYPHALES										
TYPHACEAE										
Typha angustifolia	LC				●	●	●	●	●	
Typha orientalis	LC				●	●				
TRIURIDALES										
TRIURIDACEAE										
Sciaphila japonica		VU			●	●		●	●	MOEJ-RL: *Sciaphila nana*
Sciaphila takakumensis		EN			●	●		●		MOEJ-RL: *Sciaphila tenella*
Sciaphila tosaensis		VU			●	●		●		MOEJ-RL: *Sciaphila secundiflora*
LILIIFLORAE										
LILIACEAE										
Aletris spicata					●	●	●	●	●	
Allium grayi					●	●	●	●	●	
Allium pseudojaponicum					●	●				
Asparagus cochinchinensis					●	●	●	●	●	
Dianella ensifolia					●	●	●	●	●	
Disporum sessile var. *micrantha*					●	●	●			
Heloniopsis kawanoi		VU		E	●	●		●	●	MOEJ-RL: *Helonias kawanoi*
Heloniopsis leucantha		VU		E	●		●	●	●	MOEJ-RL: *Helonias leucantha*

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Hemerocallis fulva var. *lomgituba*					●	●	●			
Heterosmilax japonica					●	●	●	●	●	
Lilium alexandrae		CR		E	●	●				
Lilium leichtlinii var. *maximowiczii*					●	●				
Lilium longiflorum					●	●	●	●	●	
Liriope minor					●	●	●			
Liriope platyphylla					●	●	●	●	●	
Ophiopogon jaburan					●	●	●	●	●	
Polygonatum falcatum					●	●	●			
Polygonatum tenuiflorum				E	●	●				
Protolirion sakuraii		EN			●	●				MOEJ-RL: *Petrosavia sakuraii*
Rohdea japonica var. *latifolia*		CR		E	●	●				
Scilla scilloides					●	●	●	●	●	
Smilax biflora var. *amamiana*				E	●	●				
Smilax bracteata					●	●	●	●	●	
Smilax bracteata var. *verruculosa*		EN			●			●		MOEJ-RL: *Smilax bracteata* subsp. *verruculosa*
Smilax china var. *kuru*					●			●	●	
Smilax nervomarginata					●	●	●	●	●	
Smilax sebeana					●	●	●	●	●	
Tricyrtis formosana var. *stolonifera*		CR			●				●	MOEJ-RL: *Tricyrtis formosana*
AMARYLLIDACEAE										
Crinum asiaticum var. *japonicum*					●	●	●	●	●	
Lycoris traubii				E	●	●	●	●		
HYPOXIDACEAE										
Curculigo orchioides					●	●	●		●	
Hypoxis aurea					●	●	●			
STEMONACEAE										

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Croomia japonica					●	●	●			
DIOSCOREACEAE										
Dioscorea cirrhosa					●				●	
Dioscorea pentaphylla					●			●		
Dioscorea pseudojaponica					●	●	●			
Dioscorea quinqueloba					●	●				
Dioscorea tabatae		CR		E	●	●				
Dioscorea zentaroana		CR		E	●	●				
PONTEDERIACEAE										
Monochoria vaginalis	LC				●	A	A	●	●	
Philydrum lanuginosum					●	●	●	●	●	
IRIDALES										
IRIDACEAE										
Belamcanda chinensis					●	●	●			
BURMANNIACEAE										
Burmannia championii					●	●		●		
Burmannia cryptopetala					●	●		●	●	
Burmannia itoana					●	●		●	●	
Burmannia liukiuensis		VU			●	●				
Oxygyne shinzatoi	CR	CR		E	●			●		
MICROSPERMAE										
ORCHIDACEAE										
Acanthephippium sylhetense		CR			●		●		●	
Acanthephippium sylhetense var. *pictum*		CR			●	●	●	●	●	MOEJ-RL: *Acanthephippium pictum*
Amitostigma lepidum		VU			●	●	●	●		
Aphyllorchis montana		EN			●	●		●	●	
Arundina graminifolia		EN			●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Bletilla striata var. *kotoensis*					●				●	
Bulbophyllum affine		CR			●	●			●	
Bulbophyllum drymoglossum		NT			●	●	●	●	●	
Bulbophyllum macraei		EN			●	●	●	●	●	MOEJ-RL: *Bulbophyllum macraei* var. *macraei*
Calanthe alismifolia		VU			●	●				
Calanthe amamiana		CR		E	●	●				
Calanthe densiflora		CR			●		●		●	
Calanthe discolor f. *kanashiroi*					●		●	●		
Calanthe discolor var. *divaricatipetala*				E	●		●			
Calanthe lyroglossa		VU			●	●	●	●	●	
Calanthe masuca		VU			●	●	●	●		
Calanthe tokunoshimensis		EN		E	●		●			
Calanthe triplicata		VU			●	●	●	●	●	
Cephalantheropsis gracilis		NT			●	●	●	●	●	
Cheirostylis liukiuensis		VU			●	●		●		
Cheirostylis takeoi		CR			●	●		●		
Corymborkis veratrifolia		VU			●				●	
Cymbidium ensifolium		CR			●			●		
Cymbidium javanicum var. *aspidistrifolium*		EN			●	●				MOEJ-RL: *Cymbidium lancifolium*
Cymbidium kanran		EN			●	●		●		
Cymbidium lancifolium		VU			●	●	●	●	●	
Cymbidium macrorhizon		VU			●	●				
Cymbidium sinense		CR			●	●				
Dendrobium tosaense					●	●				
Didymoplexis minor		EN			●	●		●		
Didymoplexis pallens		NT			●	●			●	
Diploprora championii		CR			●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Disperis philippinensis		CR			●				●	MOEJ-RL: *Disperis neilgherrensis*
Epipactis thunbergii					●	●				
Epipogium roseum		NT			●				●	
Eria corneri		EN			●	●		●	●	
Eria ovata		EN			●	●			●	
Eria ovata var. *retroflexa*					●				●	
Eria reptans		VU			●	●		●		MOEJ-RL: *Eria japonica*
Eulophia graminea					●			●		
Eulophia taiwanensis	EN	CR			●			●		
Eulophia zollingeri		EN			●	●		●		
Galeola altissima	LC	CR			●	●	●	●	●	MOEJ-RL: *Erythrorchis altissima*
Gastrochilus japonicus		VU			●	●	●		●	
Gastrodia javanica		VU			●				●	
Gastrodia nipponica		VU			●	●			●	
Gastrodia shimizuana		CR			●				●	
Geodorum densiflorum		EN			●			●	●	
Goodyera foliosa var. *commelinoides*					●	●	●		●	
Goodyera foliosa var. *laevis*					●	●				
Goodyera grandis		VU			●				●	
Goodyera hachijoensis					●	●	●		●	
Goodyera hachijoensis var. *matsumurana*					●	●	●		●	
Goodyera longibracteata					●				●	
Goodyera procera					●	●	●		●	
Goodyera schlechtendaliana					●	●				
Goodyera sonoharae		EN			●		●			
Goodyera viridiflora var. *ogatae*		VU			●	●	●		●	MOEJ-RL: *Goodyera viridiflora*
Habenaria dentata		EN			●	●	●		●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Habenaria lacertifera					●	●	●		●	
Habenaria pantlingiana					●	●	●	●	●	
Habenaria polytricha					●	●	●		●	
Habenaria robustior		EN			●	●	●			MOEJ-RL: *Peristylus flagellifer*
Herminium lanceum var. *longicrure*		EN			●	●	●			MOEJ-RL: *Herminium lanceum*
Hetaeria cristata		VU			●	●	●			MOEJ-RL: *Hetaeria yakusimensis*
Lecanorchis flavicans		CR		E	●				●	MOEJ-RL: *Lecanorchis flavicans* var. *flavicans*
Lecanorchis japonica var. *tubiformis*		CR		E	●				●	
Lecanorchis kiusiana		NT			●	●				
Lecanorchis nigricans					●	●			●	
Lecanorchis trachycaula		CR			●	●				
Lecanorchis triloba		NT			●	●			●	
Liparis bituberculata var. *formosana*					●	●	●		●	
Liparis bootanensis		VU			●	●	●		●	
Liparis nervosa					●	●	●			
Liparis paradoxa		EN			●	●	●			MOEJ-RL: *Liparis odorata*
Listera japonica					●	●	●		●	
Luisia teres		NT			●	●	●			
Malaxis bancanoides					●				●	
Malaxis kandae		EN			●			●	●	MOEJ-RL: *Crepidium kandae*
Malaxis latifolia		CR			●				●	MOEJ-RL: *Dienia ophrydis*
Malaxis macgregorii					●			●		
Malaxis purpurea		CR			●			●		MOEJ-RL: *Crepidium purpureum*
Microtis unifolia					●	●			●	
Neofinetia falcata		VU			●	●	●	●		
Nervilia aragoana		VU			●				●	
Nervilia nipponica		EN			●	●	●	●		

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Oberonia anthropophora var. *arisanensis*		EN			●				●	
Oberonia japonica					●	●	●			
Oberonia makinoi		CR			●			?	●	?: Unverified information
Phaius flavus		VU			●			●		
Phaius tankervilleae		VU			●	●	●		●	
Platanthera amamiana		VU			●	●				MOEJ-RL: *Platanthera mandarinorum* subsp. *hachijoensis var. amamiana*
Platanthera brevicalcarata					●	●				
Platanthera brevicalcarata ssp. *yakumontana*		EN			●	●				
Platanthera japonica					●	●				
Pristiglottis rubricentra		CR		E	●	●				
Sedirea japonica		EN			●	●	●	●		
Spathoglottis plicata		VU			●				●	
Spiranthes sinensis	LC				●	●			●	
Spiranthes sinensis var. *australis*					●	●	●		●	
Stereosandra javanica		VU			●				●	
Taeniophyllum aphyllum					●	●				
Tainia laxiflora		VU			●	●	●			
Thrixspermum pricei		CR			●	●				MOEJ-RL: *Thrixspermum saruwatarii*
Trichoglottis lutchuensis		EN			●				●	
Tropidia calcarata		EN			●		●		●	MOEJ-RL: *Tropidia angulosa*
Tropidia nipponica		EN			●	●	●			MOEJ-RL: *Tropidia nipponica* var. *nipponica*
Vexillabium yakushimense		NT			●	●	●			MOEJ-RL: *Kuhlhasseltia yakushimensis*
x Luisaerides liukiuensis					●			●		
Zeuxine agyokuana		NT			●	●			●	
Zeuxine gracilis var. *sakagutii*		VU			●	●				
Zeuxine gracilis var. *tenuifolia*		NT			●	●			●	
Zeuxine strateumatica	LC				●	●	●			

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						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
SCITAMINEAE										
ZINGIBERACEAE										
Alpinia flabellata					●				●	
Alpinia formosana					●	●		●	●	
Alpinia intermedia					●	●	●	●	●	
Alpinia japonica					●	●				
Alpinia zerumbet					●	A	A	●		
COMMELINALES										
COMMELINACEAE										
Commelina auriculata					●	●	●	●	●	
Commelina benghalensis	LC				●	●	●	●	●	
Commelina communis					●	●		●		
Commelina communis var. *ludens*					●	●				
Commelina diffusa	LC				●	●	●	●	●	
Commelina paludosa					●	●	●			
Forrestia chinensis					●	●	●	●	●	
Murdannia angustifolia					●			●		
Murdannia keisak					●	●	●	●	●	
Murdannia loriformis					●	●	●	●	●	
Pollia japonica var. *minor*					●	●	●	●	●	
Pollia secundiflora		VU								
ERIOCAULALES										
ERIOCAULACEAE										
Eriocaulon amanoanum		CR			●	●	●	●		
Eriocaulon buergerianum					●	●	●	●		
Eriocaulon cinereum					●	●	●	●	●	
Eriocaulon decemflorum					●	●				

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						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Eriocaulon miquelianum var. *lutchuense*		EN			●	●		●		
Eriocaulon nigrum var. *suishaense*		CR			●		●	●		MOEJ-RL: *Eriocaulon truncatum*
Eriocaulon parvum		VU			●	●				
Eriocaulon sexangulare					●			●	●	
JUNCALES										
JUNCACEAE										
Juncus effusus var. *decipiens*	LC				●	●	●	●		
Juncus effusus var. *decipiens* f. *filiformis*		CR			●			●		MOEJ-RL: *Juncus decipiens* f. *filiformis*
Juncus krameri					●			●		
Juncus leschenaultii					●	●				
Juncus monticola					●			●		
Juncus wallichianus	LC				●	●	●	●	●	
CYPERALES										
CYPERACEAE										
Bulbostylis barbata					●	●	●		●	
Bulbostylis densa	LC				●				●	
Carex alliiformis					●	●	●	●		
Carex arisanensis		CR			●			●		
Carex breviculmis					●	●	●	●	●	
Carex breviculmis f. *aphanandra*					●			●		
Carex breviculmis f. *filiculmis*					●			●		
Carex breviculmis var. *discoidea*					●	●	●	●	●	
Carex breviculmis var. *fibrillosa*					●	●	●	●	●	
Carex breviscapa					●			●	●	
Carex brunnea					●	●	●	●	●	
Carex cf.				E	●	●				
Carex collifera	CR	CR		E	●			●		

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						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Carex dolichostachya					●			●	●	
Carex doniana					●	●		●	●	
Carex ischnostachya					●	●	●			
Carex kimurae				E	●		●			
Carex kobomugi					●	●				
Carex maculata	LC				●	●		●	●	
Carex maculata var. *tetsuoi*				E	●			●		
Carex nemostachys					●	●	●	●	●	
Carex phacota	LC				●	●				
Carex pumila					●	●			●	
Carex rhynchachaenium		CR			●			●		
Carex sacrosancta var. *tamakii*		NT			●			●		MOEJ-RL: *Carex tamakii*
Carex sakonis		NT		E	●	●	●	●		
Carex scabrifolia					●	●				
Carex sociata					●	●	●	●	●	
Carex tenuior				E	●	●				
Carex tristachya var. *pocilliformis*					●	●			●	
Carex wahuensis var. *robusta*					●	●	●	●	●	
Cladium chinense					●	●	●	●	●	
Cyperus brevifolius					●	●	●	●	●	
Cyperus brevifolius var. *leiolepis*					●	●		●		
Cyperus compressus	LC				●	●	●	●	●	
Cyperus cyperinus					●	●	●	●	●	
Cyperus cyperoides	LC				●	●	●	●	●	
Cyperus difformis	LC				●	●	●	●	●	
Cyperus digitatus	LC	CR			●				●	
Cyperus distans	LC	CR			●	●	●	●	●	

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						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Cyperus flavidus					●	●	●	●	●	
Cyperus haspan					●	●	●	●	●	
Cyperus imbricatus	LC				●			●	●	
Cyperus iria	LC				●	●	●	●	●	
Cyperus javanicus					●				●	
Cyperus kyllingia					●	●		●	●	
Cyperus nutans var. *subprolixus*		CR			●	●			●	
Cyperus odoratus					●	●	●	●	●	
Cyperus pilosus	LC				●	●	●	●	●	
Cyperus polystachyos	LC				●	●	●	●	●	
Cyperus rotundus	LC				●	●	●	●	●	
Cyperus sanguinolentus					●	●	●	●	●	
Cyperus serotinus					●	●	●	●	●	
Cyperus sesquiflorus var. *subtriceps*					●				●	
Cyperus tenuispica	LC				●	●	●	●	●	
Diplacrum caricinum	LC	VU			●				●	
Eleocharis acicularis	LC				●	●	●	●	●	
Eleocharis acutangula		EN			●	●	●		●	
Eleocharis attenuata					●	●				
Eleocharis congesta	LC				●	●	●		●	
Eleocharis congesta ssp. *japonica*					●	●	●	●		
Eleocharis geniculata	LC				●			●	●	
Eleocharis kuroguwai					●	●				
Eleocharis ochrostachys	LC				●			●	●	
Eleocharis tetraquetra					●	●				
Eleocharis wichurae					●	●	●			
Eleocharis wichurae var. *liukiuensis*				E	●			●		

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						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Fimbrestylis dichotoma f. *diphylla*					●			●		
Fimbristylis autumnalis					●	●	●			
Fimbristylis complanata	LC				●	●		●	●	
Fimbristylis complanata f. *exaltata*					●				●	
Fimbristylis cymosa	LC				●	●	●	●	●	
Fimbristylis dichotoma	LC				●	●				
Fimbristylis dichotoma var. *floribunda*					●	●	●	●	●	
Fimbristylis dichotoma var. *floribunda* f.					●				●	
Fimbristylis dichotoma var. *tikushiensis*					●				●	
Fimbristylis diphylloides					●	●				
Fimbristylis ferruginea var. *sieboldii*					●	●	●	●	●	
Fimbristylis fimbristyloides		CR			●			●	●	
Fimbristylis miliacea	LC				●	●	●	●	●	
Fimbristylis miliacea var. *koidzumiana*					●	●	●		●	
Fimbristylis nutans	LC	CR			●				●	
Fimbristylis ovata	LC	NT			●	●	●	●	●	
Fimbristylis pacifica					●	●	●	●	●	
Fimbristylis sericea					●	●				
Fimbristylis sieboldii var. *anpinensis*					●		●	●	●	
Fimbristylis subbispicata					●	●	●	●	●	
Fimbristylis umbellaris		EN			●				●	
Fuirena ciliaris	LC				●	●	●		●	
Fuirena umbellata	LC				●	●	●	●	●	
Gahnia tristis					●	●	●		●	
Lepironia articulata					●				●	
Lipocarpha chinensis	LC				●	●	●	●	●	
Machaerina rubiginosa					●	●			●	

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						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Rhynchospora brownii					●	●				
Rhynchospora corymbosa	LC				●			●	●	
Rhynchospora rubra					●	●	●	●	●	
Schoenus apogon					●	●	●			
Schoenus falcatus					●				●	
Scirpus juncoides					●	●		●	●	
Scirpus juncoides var. *hotarui*					●	●	●			
Scirpus maritimus					●				●	
Scirpus mucronatus		VU			●	●				MOEJ-RL: *Schoenoplectus mucronatus* var. *mucronatus*
Scirpus mucronatus var. *robusta*					●	●	●	●	●	
Scirpus planiculmis					●	●				
Scirpus tabernaemontani					●	●				
Scirpus ternatanus					●	●	●	●	●	
Scirpus triqueter	LC				●	●			●	
Scirpus validus				E	●	●			●	
Scirpus × *trapezoides*					●	●				
Scleria biflora	LC	EN			●	●			●	
Scleria levis					●	●	●		●	
Scleria rugosa					●				●	
Scleria terrestris	LC				●	●	●	●	●	
RESTIONALES										
FLAGELLARIACEAE										
Flagellaria indica					●		●	●	●	
GRAMINALES										
GRAMINEAE										
Agropyron ciliare var. *minus*					●	●				
Agropyron ciliare var. *pilosum*					●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Agropyron tsukushiense var. *transiens*					●	●		●		
Agrostis clavata					●	●				
Alopecurus aequalia var. *amurensis*	LC				●	●		●		
Alopecurus japonicus					●	●				
Andropogon brevifolium	LC				●	●	●	●	●	
Apluda mutica					●	●		●	●	
Aristida takeoi		EN		E	●	●	●	●		
Arthraxon hispidus					●	●	●	●	●	
Arundo donax	LC				●	●	●	●	●	
Arundo formosana					●				●	
Bothriochloa glabra					●			●	●	
Bothriochloa intermedia var. *punctata*					●				●	
Bothriochloa parvifolia					●	●	●	●	●	
Bothriochloa parvifolia var. *spicigera*					●			●	●	
Brachiaria distachya					●	●	●	●	●	
Brachiaria paspaloides					●	●		●	●	
Brachiaria villosa		EN			●				●	
Capillipedium kwashotense					●				●	
Chikusichloa brachyanthera		VU		E	●				●	
Chrysopogon aciculatus					●	●		●	●	
Cymbopogon tortilis var. *goeringii*					●	●	●	●	●	
Cynodon dactylon					●	●	●	●	●	
Cyrtococcum accrescens					●			●	●	
Cyrtococcum patens					●			●	●	
Digitaria ciliaris					●	●	●	●	●	
Digitaria henryi					●	●	●	●	●	
Digitaria heterantha					●			●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Digitaria leptalea					●			●	●	
Digitaria leptalea var. *reticulmis*					●				●	
Digitaria radicosa					●	●	●	●	●	
Digitaria violascens					●	●	●	●	●	
Dimeria ornithopoda var. *tenera*	LC				●	●	●	●		
Eccoilopus cotulifer					●	●	●	●	●	
Eccoilopus cotulifer var. *densiflorus*				E	●	●		●	●	
Echinochloa colona	LC				●	●	●	●	●	
Echinochloa crus-galli					●	●	●	●	●	
Echinochloa crus-galli var. *oryzicola*					●	●	●	●		
Echinochloa crus-galli var. *praticola*					●	●			●	
Echinochloa glabrescens					●				●	
Echinochloa oryzoides					●				●	
Echinochloa phyllopogon					●				●	
Eleusine indica	LC				●	●	A	●	●	
Eragrostis bulbillifera					●	●	●	●	●	
Eragrostis ferruginea					●	●			●	
Eragrostis japonica	LC				●	●	●	●		
Eragrostis multicaulis					●	●	●	●	●	
Eriochloa procera	LC				●	●	●	●	●	
Eriochloa villosa					●	●		●	●	
Eulalia quadrinervis		NT			●				●	
Garnotia acutigluma		VU			●				●	
Glyceria acutiflora					●	●				
Hackelochloa granularis					●	●	●		●	
Hemarthria compressa	LC				●				●	
Ichnanthus vicinus					●	●		●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Imperata cylindrica					●	●	●	●	●	
Isachne dispar					●	●	●		●	
Isachne globosa	LC				●	●	●	●	●	
Isachne globosa var. *brevispicula*		DD			●				●	
Isachne lutchuensis		CR		E	●			●	●	
Isachne myosotis		CR			●	●		●		
Isachne repens					●	●		●	●	
Ischaemum aristatum					●	●	●	●	●	
Ischaemum aureum				E	●	●	●	●	●	
Ischaemum muticum	LC				●				●	
Ischaemum rugosum var. *segetum*					●	●			●	
Leersia hexandra		NT			●	●	●	●	●	
Leersia japonica					●	●				
Leptochloa chinensis					●	●	●			
Leptochloa panicea	LC				●	●	●	●	●	
Lepturus repens					●	●	●	●	●	
Lophatherum gracile					●	●	●	●	●	
Microstegium ciliatum					●	●	●	●	●	
Microstegium somai					●	●	●	●		
Microstegium vimineum					●	●		●		
Miscanthus floridulus					●	●	●	●		
Miscanthus sinensis					●	●	●	●	●	
Miscanthus sinensis var. *condensatus*					●	●	●	●	●	
Miscanthus sinensis var. *gracillimus*					●	●	●	●	●	
Oplismenus compositus					●	●	●	●	●	
Oplismenus compositus var. *intermedius*					●	●	●			
Oplismenus compositus var. *owatarii*					●	●	●		●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Oplismenus compositus var. *patens*					●	●	●	●	●	
Oplismenus undulatifolius					●	●		●	●	
Oplismenus undulatifolius var. *imbecillis*					●	●	●	●	●	
Oplismenus undulatifolius var. *japonicus*					●	●	●			
Oplismenus undulatifolius var. *microphyllus*					●			●		
Oryzopsis obtusa		CR			●			●		MOEJ-RL: *Piptatherum kuoi*
Panicum bisulcatum					●	●	●	●		
Panicum repens	LC				●	●	●	●	●	
Paspalum scrobiculatum	LC				●	●	●	●	●	
Paspalum thunbergii					●	●		●		
Paspalum vaginatum	LC				●	●	●	●	●	
Pennisetum alopecuroides					●	●		●		
Pennisetum alopecuroides f. *viridescens*					●	●		●		
Pennisetum sordidum					●	●	●			
Phacelurus latifolius					●	●			●	
Phragmites communis	LC				●	●			●	
Phragmites japonica					●			●	●	
Phragmites karka	LC				●	●	●	●	●	
Pleioblastus linearis					●	●	●	●	●	
Poa acroleuca					●	●				
Poa annua	LC				●	A	A	●	●	
Pogonatherum crinitum					●	●	●	●	●	
Polypogon fugax					●	●	●	●		
Polypogon monspeliensis	LC				●	●	●	●	●	
Saccharum kanashiroi					●	●		●		
Saccharum spontaneum	LC				●	●		●	●	
Sacciolepis indica					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Sacciolepis indica var. *oryzetora*					●	●	●	●	●	
Setaria faberi					●	●				
Setaria glauca					●	●	●	●	●	
Setaria pallide					●	●	●	●	●	
Setaria palmifolia					●	●		●	●	
Setaria viridis					●	●		●	●	
Setaria viridis f. *misera*					●				●	
Setaria viridis var. *pachystachys*					●	●	●	●	●	
Setaria viridis var. *pachystachys* f.					●				●	
Setaria × *pycnocoma*					●	●				
Spinifex littoreus					●	●	●	●	●	
Sporobolus diander					●	●	●	●	●	
Sporobolus fertilis					●	●	●	●	●	
Sporobolus fertilis var. *pallidiorus*				E	●	●	●		●	
Sporobolus hancei		CR			●	●				
Sporobolus virginicus					●	●	●	●	●	
Thaumastochloa cochinchinensis		CR			●				●	
Thuarea involuta					●	●	●	●	●	
Trisetum bifidum	LC				●	●				
Zoysia macrostachya					●	●		●		
Zoysia matrella					●	●	●		●	
Zoysia pacifica					●	●	●	●	●	
Zoysia sinica					●	●	●	●		
Zoysia sinica var. *nipponica*					●	●				

This plant list was created by integrating the vascular plant list of Kagoshima University (March 2012) with that of the Environmental Preservation Division, Okinawa Prefecture Department of Environmental and Community Affairs, Okinawa Environmental Analysis Center Co., Ltd. and PREC Institute (March 2014). However, the following modifications have been made:

Scientific Name	IUCN -RL (2016)*2	MOEJ -RL (2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	

・Those species found to be distributed in the Amami Island Group according to Kagoshima University (March 2012) but for which there is no island-specific distribution data are assumed to be distributed on all islands contained in the Amami Island Group.

・The 27 species mentioned in Nature Protection Department, Kagoshima Prefecture Environment and Forestry Affairs Division (2016), Nature Conservation Division, Okinawa Prefecture Department of Cultural and Environmental Affairs (2006) and Wildlife Division, Ministry of the Environment Nature Conservation Bureau (2015) but which are not in the integrated list have been added after their distribution was confirmed in reference to Ebihara et al. (2012), Hatsushima and Amano (1994), Nature Protection Department, Kagoshima Prefecture Environment and Forestry Affairs Division (2016), Nature Conservation Division, Okinawa Prefecture Department of Cultural and Environmental Affairs (2006) and Environmental Protection Department, Kagoshima Prefecture Environmental and Citizens Affairs Department (2003).

・Species sequences and orders are based on Yamagishi (1997).

・The distinction as the native species is based on Shimabukuro (1997), Hotta (2013), Hatsushima and Amano (1994), Ito et al. (2016), Ebihara et al. (2016), Naturalized Plant Handbook (2007), Yonekura and Kajita (2003-), Environmental Protection Department, Kagoshima Prefecture Environmental and Citizens Affairs Department (2003), Hatsushima (1991), Ohashi et al. (2016) and Uyemura et al. (2010).

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Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RL (2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Nominated Property	Middle Ryukyus			South Ryukyus	Note
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	

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2-2-2. Terrestrial mammals of Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island

*1: As for Red List categories of IUCN, details are given on the last page.

*2: As for Red List categories of Ministry of the Environment Government of Japan, details are given on the last page.

*3: SNM: Special Natural Monument, NM: Natural Monument

*4: E: Endemic species, e: Endemic subspecies

●: shows the distribution of species, ○: shows the distribution of subspecies

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Endemic to Middle and South Ryukyus*4	Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
INSECTIVORA										
SCORICIDAE										
Crocidura watasei	LC	NT		E	●	●	●	●		
Crocidura orii	EN	EN		E	●	●	●			
Suncus murinus	LC				●	●	●	●	●	
CHIROPTERA										
PTEROPODIDAE										
Pteropus dasymallus	NT				●			●	●	
Pteropus dasymallus inopinatus				e	○			○		
Pteropus dasymallus yayeyamae				e	○				○	
RHINOLOPHIDAE										
Rhinolophus cornutus	LC				●	●	●			IUCN-RL: Synonyms of *Rhinolophus pusillus*
Rhinolophus cornutus orii		EN		e	○	○	○			
Rhinolophus pumilus	LC*			E	●			●		IUCN-RL: Synonyms of *Rhinolophus pusillus*
Rhinolophus pumilus pumilus		EN		e	○			○		
Rhinolophus perditus	LC*	VU		E	●				●	IUCN-RL: Synonyms of *Rhinolophus pusillus*
Rhinolophus perditus imaizumii		(VU)*		e	○				○	*Assessed at the species level in the MOEJ-RL
HIPPOSIDERIDAE										
Hipposideros turpis	NT			E	●				●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Endemic to Middle and South Ryukyus*4	Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
VESPERTILIONIDAE										
Pipistrellus abramus	LC				●	●	●	●	●	
Myotis macrodactylus	LC				●	●	●			
Myotis yanbarensis	CR	CR		E	●	●	●	●		
Miniopterus fuscus	EN	EN		E	●	●	●	●	●	
Murina ryukyuana	EN	EN		E	●	●	●	●		
MOLOSSIDAE										
Tadarida latouchei	DD	DD			●	●				
CARNIVORA										
FELIDAE										
Prionailurus bengalensis	LC				●				●	
Prionailurus bengalensis iriomotensis	CR	CR	SNM	e	○				○	
ARTIODACTYLA										
SUIDAE										
Sus scrofa	LC				●	●	●	●	●	
Sus scrofa riukiuanus		LP*		e	○	○	○	○	○	*LP on Tokunoshima Island
RODENTIA										
MURIDAE										
Apodemus agrarius	LC	CR								
Tokudaia osimensis	EN	EN	NM*	E	●	●				*Designated by common name "Spiny rat" which includes three species of genus *Tokudaia* .
Tokudaia tokunoshimensis	EN	EN	NM*	E	●		●			
Tokudaia muenninki	CR	CR	NM*	E	●			●		
Diplothrix legata	EN	EN	NM	E	●	●	●	●		
Mus caroli	LC				●			●		Possibility of introduced is also suggested（Suzuk, 2016）
LAGOMORPHA										
LEPORIDAE										
Pentalagus furnessi	EN	EN	NM	E	●	●	●			

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Endemic to Middle and South Ryukyus*4	Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	

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2-2-3. Birds of Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island

*1: As for Red List categories of IUCN, details are given on the last page.

*2: As for Red List categories of Ministry of the Environment Government of Japan, details are given on the last page.

*3: SNM: Special Natural Monument, NM: Natural Monument

*4: Rb: Resident breeder, Sv: Summer visitor, Wv: Winter visitor, Pm: Passage migrant, Vb: Vagrant bird

*5: E: Endemic species, e: Endemic subspecies

●: shows the distribution of species, ○: shows the distribution of subspecies

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
ANSERIFORMES											
ANATIDAE											
Dendrocygna javanica	LC			Vb		●				●	
Anser cygnoides	VU	DD		Vb		●			●	●	
Anser fabalis	LC			Vb		●	●			●	
Anser fabalis middendorffii		NT	NM*	Vb		○	○			○	*Designated by common name "Bean Goose" which includes subsp. *middendorffii* and *serrirostris*
Anser fabalis serrirostris		VU	NM*	Vb		○	○			○	
Anser anser	LC			Vb		●	●			●	
Anser anser rubrirostris				Vb		○	○			○	
Anser albifrons	LC			Vb		●	●		●	●	
Anser albifrons albifrons		NT	NM*	Vb		○	○		○	○	*Designated by common name "Greater White-fronted Goose" which corresponds to subsp.
Anser erythropus	VU	EN		Vb		●	●			●	
Branta bernicla	LC			Vb		●	●		●		
Branta bernicla orientalis		VU	NM*	Vb		○	○		○		*Designated by common name "Brant Goose" which corresponds to subsp. *orientalis*.
Cygnus columbianus	LC			Vb		●	●		●	●	
Cygnus columbianus jankowskyi				Vb		○	○		○	○	
Cygnus cygnus	LC			Vb		●			●		
Tadorna tadorna	LC	VU		Vb		●	●		●	●	
Tadorna ferruginea	LC	DD		Vb		●	●		●	●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Aix galericulata	LC	DD		Wv		●	●	●	●	●	
Anas strepera	LC			Wv		●	●	●	●	●	IUCN-RL: *Mareca strepera*
Anas strepera strepera				Wv		○	○	○	○	○	
Anas falcata	NT			Vb		●	●	●		●	IUCN-RL: *Mareca falcata*
Anas penelope	LC			Wv		●	●	●	●	●	IUCN-RL: *Mareca penelope*
Anas platyrhynchos	LC			Wv		●	●	●	●	●	
Anas platyrhynchos platyrhynchos				Wv		○	○	○	○	○	
Anas zonorhyncha	LC			Rb		●	●	●	●	●	
Anas clypeata	LC			Wv		●	●	●	●	●	IUCN-RL: *Spatula clypeata*
Anas acuta	LC			Wv		●	●	●	●	●	
Anas querquedula	LC			Pm/Wv		●	●	●	●	●	IUCN-RL: *Spatula querquedula*
Anas formosa	LC	VU		Vb		●	●	●		●	IUCN-RL: *Sibirionetta formosa*
Anas crecca	LC			Wv		●	●	●	●	●	
Anas crecca crecca				Wv		○	○	○	○		
Aythya ferina	VU			Wv		●	●	●		●	
Aythya fuligula	LC			Wv		●	●	●		●	
Aythya marila	LC			Wv		●	●	●	●	●	
Aythya marila marila				Wv		○	○	○	○	○	
Bucephala clangula	LC			Vb		●	●		●		
Bucephala clangula clangula				Vb		○	○		○		
Mergellus albellus	LC			Vb		●	●			●	
Mergus merganser	LC			Vb		●	●			●	
Mergus merganser merganser				Vb		○	○			○	
Mergus serrator	LC			Vb		●	●				
Mergus squamatus	EN			Vb		●				●	
PODICIPEDIFORMES											
PODICIPEDIDAE											

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Tachybaptus ruficollis	LC			Rb		●	●	●	●	●	
Tachybaptus ruficollis poggei				Rb		○	○	○	○	○	
Podiceps cristatus	LC			Vb		●	●	●		●	
Podiceps cristatus cristatus				Vb		○	○	○		○	
Podiceps auritus	VU			Vb		●	●		●		
Podiceps auritus auritus				Vb		○	○		○		
Podiceps nigricollis	LC			Wv		●	●			●	
Podiceps nigricollis nigricollis				Wv		○	○			○	
PHAETHONTIFORMES											
PHAETHONTIDAE											
Phaethon rubricauda	LC			Vb		●	●				
Phaethon rubricauda rothschildi		EN		Vb		○	○				
Phaethon lepturus	LC			Vb		●				●	
Phaethon lepturus dorotheae				Vb		○				○	
COLUMBIFORMES											
COLUMBIDAE											
Columba oenas	LC			Vb		●	●				
Columba oenas ssp.				Vb		○	○				
Columba janthina	NT			Rb		●	●	●	●	●	
Columba janthina janthina		NT	NM*	Rb		○	○	○	○	○	*Designated by common name "Japanese Wood Pigeon" which includes subsp. *janthina* and *stejnegeri*.
Columba janthina stejnegeri		EN	NM*	Rb	e	○				○	
Streptopelia orientalis	LC			Rb		●	●	●	●	●	
Streptopelia orientalis orientalis				Vb		○			○	○	
Streptopelia orientalis stimpsoni				Rb	e	○	○	○	○	○	
Streptopelia tranquebarica	LC			Vb		●	●		●	●	
Streptopelia tranquebarica humilis				Vb		○	○		○	○	
Chalcophaps indica	LC			Rb		●				●	

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							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Chalcophaps indica yamashinai		EN	NM*	Rb	e	○				○	*Designated by common name "Emerald Dove" which corresponds to subsp. *yamashinai*
Treron formosae	LC			Rb		●	●	●	●	●	
Treron formosae permagnus				Rb		○	○	○	○		IUCN-RL: *Treron permagnus*
Treron formosae medioximus				Rb	e	○				○	IUCN-RL: *Treron formosae*
Ptilinopus leclancheri	LC			Vb		●				●	IUCN-RL: *Ramphiculus leclancheri*
Ptilinopus leclancheri taiwanus				Vb		○				○	
GAVIIFORMES											
GAVIIDAE											
Gavia stellata	LC			Vb		●	●	●			
Gavia arctica	LC			Vb		●	●	●			
Gavia arctica viridigularis				Vb		○	○	○			
PROCELLARIIFORMES											
DIOMEDEIDAE											
Phoebastria immutabilis	NT	EN		Vb		●	●				
PROCELLARIIDAE											
Pterodroma hypoleuca	LC	DD		Vb		●	●			●	
Calonectris leucomelas	NT			Sv		●	●			●	
Puffinus griseus	NT			Pm		●	●	●			IUCN-RL: *Ardenna grisea*
Puffinus tenuirostris	LC			Pm		●	●			●	IUCN-RL: *Ardenna tenuirostris*
Puffinus carneipes	LC			Pm/Wv		●	●	●			IUCN-RL: *Ardenna carneipes*
Bulweria bulwerii	LC			Sv		●	●	●		●	
HYDROBATIDAE											
Oceanodroma monorhis	NT	VU		Vb		●				●	IUCN-RL: *Hydrobates monorhis*
Oceanodroma tristrami	NT	NT		Vb		●			●		IUCN-RL: *Hydrobates tristrami*
CICONIIFORMES											
CICONIIDAE											
Ciconia nigra	LC			Vb		●				●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Ciconia boyciana	EN	CR	SNM	Vb		●	●	●	●	●	
SULIFORMES											
FREGATIDAE											
Fregata minor	LC			Vb		●	●		●		
Fregata minor minor				Vb		○	○		○		
Fregata ariel	LC			Vb		●	●			●	
Fregata ariel ariel				Vb		○	○			○	
SULIDAE											
Sula dactylatra	LC			Vb		●	●			●	
Sula dactylatra personata				Vb		○	○			○	
Sula sula	LC			Vb		●	●				
Sula sula rubripes		EN		Vb		○	○				
Sula leucogaster	LC			Sv		●	●	●		●	
Sula leucogaster plotus				Sv		○	○	○		○	
PHALACROCORACIDAE											
Phalacrocorax carbo	LC			Wv		●	●	●	●	●	
Phalacrocorax carbo hanedae				Wv		○	○	○	○	○	
Phalacrocorax capillatus	LC			Wv		●	●	●		●	
PELECANIFORMES											
PELECANIDAE											
Pelecanus onocrotalus	LC			Vb		●	●			●	
Pelecanus philippensis	NT			Vb		●	●				
Pelecanus crispus	VU			Vb		●				●	
ARDEIDAE											
Botaurus stellaris	LC			Wv		●	●		●	●	
Botaurus stellaris stellaris		EN		Wv		○	○		○	○	
Ixobrychus sinensis	LC			Wv		●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Migratory Status[*4]	Endemic to Middle and South Ryukyus[*5]	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Ixobrychus sinensis sinensis		NT		Wv		○	○	○	○	○	
Ixobrychus eurhythmus	LC	CR		Vb		●				●	
Ixobrychus cinnamomeus	LC			Rb		●	●	●	●	●	
Ixobrychus flavicollis	LC			Vb		●			●		
Ixobrychus flavicollis flavicollis				Vb		○			○		
Gorsachius goisagi	EN	VU		Wv/Pm		●	●		●	●	
Gorsachius melanolophus	LC	VU		Rb		●				●	
Nycticorax nycticorax	LC			Rb		●	●	●	●	●	
Nycticorax nycticorax nycticorax				Rb		○	○	○	○	○	
Butorides striata	LC			Wv/Pm		●	●	●	●	●	
Butorides striata amurensis				Wv/Pm		○	○	○	○	○	
Ardeola bacchus	LC			Pm		●	●		●	●	
Bubulcus ibis	LC			Wv/Pm		●	●	●	●	●	
Bubulcus ibis coromandus				Wv/Pm		○	○	○	○	○	
Ardea cinerea	LC			Wv		●	●	●	●	●	
Ardea cinerea jouyi				Wv		○	○	○	○	○	
Ardea purpurea	LC			Wv/Rb		●	●			●	
Ardea purpurea manilensis				Wv/Rb	e	○	○			○	
Ardea alba	LC			Wv		●	●	●	●	●	
Ardea alba alba				Vb		○	○	○	○	○	
Ardea alba modesta				Wv		○	○	○	○	○	
Egretta intermedia	LC			Wv		●	●	●	●	●	IUCN-RL: *Ardea intermedia*
Egretta intermedia intermedia		NT		Wv		○	○	○	○	○	
Egretta garzetta	LC			Wv		●	●	●		●	
Egretta garzetta garzetta				Wv		○	○	○		○	
Egretta sacra	LC			Rb		●	●	●	●	●	
Egretta sacra sacra				Rb		○	○	○	○	○	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Egretta eulophotes	VU	NT		Pm		●	●			●	
THRESKIORNITHIDAE											
Threskiornis melanocephalus	NT	DD		Vb		●				●	
Plegadis falcinellus	LC					●			●		
Platalea leucorodia	LC			Vb		●	●	●	●	●	
Platalea leucorodia leucorodia		DD		Vb		○	○	○	○	○	
Platalea minor	EN	EN		Wv		●	●	●		●	
GRUIFORMES											
GRUIDAE											
Grus leucogeranus	CR			Vb		●				●	IUCN-RL: *Leucogeranus leucogeranus*
Grus vipio	VU	VU		Vb		●	●				IUCN-RL: *Antigone vipio*
Grus grus	LC			Vb		●	●				
Grus grus lilfordi		DD		Vb		○	○				
Grus monacha	VU	VU		Vb		●	●	●		●	
Anthropoides virgo	LC			Vb		●		●			
RALLIDAE											
Coturnicops exquisitus	VU	EN		Vb		●				●	
Rallina eurizonoides	LC			Rb		●				●	
Rallina eurizonoides sepiaria		EN		Rb	e	○				○	
Gallirallus okinawae	EN	CR	NM	Rb	E	●			●		IUCN-RL: *Hypotaenidia okinawae*
Gallirallus striatus	LC			Vb		●	●				IUCN-RL: *Lewinia striata*
Gallirallus striatus ssp.				Vb		○	○				
Rallus aquaticus	LC			Wv		●	●	●			IUCN-RL: *Rallus indicus*
Rallus aquaticus				Wv		○	○	○			
Amaurornis phoenicurus	LC			Rb		●	●	●	●	●	
Amaurornis phoenicurus phoenicurus				Rb		○	○	○	○	○	
Porzana pusilla	LC			Pm/Wv		●	●		●	●	IUCN-RL: *Zapornia pusilla*

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Porzana pusilla pusilla				Pm/Wv		○	○		○	○	
Porzana fusca	LC			Rb		●	●	●	●	●	IUCN-RL: *Zapornia fusca*
Porzana fusca erythrothorax		NT		Vb		○	○	○		○	
Porzana fusca phaeopyga				Rb		○	○	○	○	○	
Gallicrex cinerea	LC			Wv		●	●	●	●	●	
Gallinula chloropus	LC			Rb		●	●	●	●	●	
Gallinula chloropus chloropus				Rb		○	○	○	○	○	
Fulica atra	LC			Wv		●	●	●	●	●	
Fulica atra atra				Wv		○	○	○	○	○	
OTIDIFORMES											
OTIDIDAE											
Otis tarda	VU			Vb		●			●		
Otis tarda dybowskii				Vb		○			○		
CUCULIFORMES											
CUCULIDAE											
Centropus bengalensis	LC			Vb		●				●	
Centropus bengalensis lignator				Vb		○				○	
Clamator coromandus	LC			Vb		●			●	●	
Hierococcyx hyperythrus	LC			Vb		●				●	
Cuculus poliocephalus	LC			Sv		●	●	●	●	●	
Cuculus optatus	LC			Pm		●	●	●	●	●	IUCN-RL: *Cuculus saturatus*
Cuculus canorus	LC			Pm		●	●	●	●		
Cuculus canorus telephonus				Pm		○	○	○	○		
CAPRIMULGIFORMES											
CAPRIMULGIDAE											
Caprimulgus indicus	LC			Vb		●	●	●	●	●	IUCN-RL: *Caprimulgus jotaka*
Caprimulgus indicus jotaka		NT		Vb		○	○	○	○	○	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Migratory Status[*4]	Endemic to Middle and South Ryukyus[*5]	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
APODIFORMES											
APODIDAE											
Hirundapus caudacutus	LC			Pm		●	●	●	●	●	
Hirundapus caudacutus caudacutus				Pm		○	○	○	○	○	
Apus pacificus	LC			Pm		●	●	●	●	●	
Apus pacificus kurodae				Pm		○	○	○	○	○	
Apus nipalensis	LC			Rb		●	●	●	●	●	
Apus nipalensis kuntzi				Rb		○	○	○	○	○	
CHARADRIIFORMES											
CHARADRIIDAE											
Vanellus vanellus	NT			Wv		●	●	●	●	●	
Vanellus cinereus	LC	DD		Wv		●	●	●	●	●	
Pluvialis fulva	LC			Pm/Wv		●	●	●	●	●	
Pluvialis dominica	LC			Vb		●			●		
Pluvialis squatarola	LC			Pm/Wv		●	●	●		●	
Charadrius hiaticula	LC			Wv		●	●	●	●		
Charadrius hiaticula tundrae				Wv		○	○	○	○		
Charadrius placidus	LC			Wv		●	●			●	
Charadrius dubius	LC			Wv		●	●	●	●	●	
Charadrius dubius curonicus				Wv		○	○	○	○	○	
Charadrius alexandrinus	LC	VU		Rb		●	●	●		●	
Charadrius alexandrinus dealbatus				Rb		○	○	○		○	
Charadrius mongolus	LC			Rb		●	●	●		●	
Charadrius mongolus stegmanni				Pm/Wv		○	○	○		○	
Charadrius leschenaultii	LC			Pm/Wv		●	●	●		●	
Charadrius veredus	LC			Pm		●	●	●		●	
Charadrius morinellus	LC			Vb		●	●				

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							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
HAEMATOPODIDAE											
Haematopus ostralegus	NT			Vb		●	●	●		●	
Haematopus ostralegus osculans				Vb		○	○	○		○	
RECURVIROSTRIDAE											
Himantopus himantopus	LC			Wv/Pm		●	●	●	●	●	
Himantopus himantopus himantopus		VU		Wv/Pm		○	○	○	○	○	
Himantopus himantopus leucocephalus				Vb		○	○				
Recurvirostra avosetta	LC			Vb		●	●	●		●	
SCOLOPACIDAE											
Scolopax rusticola	LC			Wv		●	●	●	●	●	
Scolopax mira	VU	VU		Rb	E	●	●	●	●		
Gallinago solitaria	LC			Vb		●	●		●	●	
Gallinago solitaria japonica				Vb		○	○		○	○	
Gallinago hardwickii	LC	NT		Pm/Wv		●	●		●	●	
Gallinago stenura	LC			Pm/Wv		●	●		●	●	
Gallinago megala	LC			Pm		●	●			●	
Gallinago gallinago	LC			Wv		●	●	●	●	●	
Gallinago gallinago gallinago				Wv		○	○	○	○	○	
Limnodromus scolopaceus	LC			Pm/Wv		●	●	●			
Limnodromus semipalmatus	NT	DD		Vb		●	●				
Limosa limosa	NT			Pm		●	●	●		●	
Limosa limosa melanuroides				Pm		○	○	○		○	
Limosa lapponica	NT	VU		Pm/Wv		●	●	●			
Limosa lapponica baueri				Pm/Wv		○	○	○			
Numenius minutus	LC	EN		Pm		●	●			●	
Numenius phaeopus	LC					●	●	●	●	●	
Numenius phaeopus variegatus				Pm/Wv		○	○	○	○	○	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Migratory Status[*4]	Endemic to Middle and South Ryukyus[*5]	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Numenius arquata	NT			Wv		●	●	●		●	
Numenius arquata orientalis				Wv		○	○	○		○	
Numenius madagascariensis	EN	VU		Wv		●	●	●		●	
Tringa erythropus	LC	VU		Pm/Wv		●	●	●		●	
Tringa totanus	LC			Wv/Pm		●	●	●		●	
Tringa totanus ussuriensis		VU		Wv/Pm		○	○	○		○	
Tringa stagnatilis	LC			Wv		●	●	●		●	
Tringa nebularia	LC			Pm/Wv		●	●	●	●	●	
Tringa guttifer	EN	CR		Vb		●				●	
Tringa ochropus	LC			Wv		●	●	●	●	●	
Tringa glareola	LC	VU		Pm/Wv		●	●	●	●	●	
Heteroscelus brevipes	NT			Pm/Wv		●	●	●	●	●	IUCN-RL: *Tringa brevipes*
Xenus cinereus	LC			Pm		●	●	●		●	
Actitis hypoleucos	LC			Rb・Wv		●	●	●	●	●	
Arenaria interpres	LC			Pm/Wv		●	●	●		●	
Arenaria interpres interpres				Pm/Wv		○	○	○		○	
Calidris tenuirostris	EN			Pm		●	●	●		●	
Calidris canutus	NT			Pm		●	●	●			
Calidris canutus rogersi				Pm		○	○	○			
Calidris alba	LC			Wv		●	●	●		●	
Calidris ruficollis	NT			Pm/Wv		●	●	●		●	
Calidris minuta	LC			Vb		●	●		●		
Calidris temminckii	LC			Wv		●	●			●	
Calidris subminuta	LC			Wv		●	●	●		●	
Calidris melanotos	LC			Vb		●	●				
Calidris acuminata	LC			Pm		●	●	●		●	
Calidris ferruginea	NT			Pm		●	●	●		●	

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							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Calidris alpina	LC	NT		Wv		●	●	●	●	●	
Calidris alpina sakhalina				Wv		○	○	○	○	○	
Eurynorhynchus pygmeus	CR	CR		Pm/Wv		●	●			●	IUCN-RL: *Calidris pygmaea*
Limicola falcinellus	LC			Pm		●	●	●		●	IUCN-RL: *Calidris falcinellus*
Limicola falcinellus sibirica				Pm		○	○	○		○	
Tryngites subruficollis	NT			Vb		●	●				IUCN-RL: *Calidris subruficollis*
Philomachus pugnax	LC			Pm/Wv		●	●	●	●	●	IUCN-RL: *Calidris pugnax*
Phalaropus lobatus	LC			Vb		●	●			●	
Phalaropus fulicarius	LC			Vb		●			●		
JACANIDAE											
Hydrophasianus chirurgus	LC			Vb		●	●	●	●	●	
ROSTRATULIDAE											
Rostratula benghalensis	LC			Rb		●	●		●	●	
Rostratula benghalensis benghalensis		VU		Rb		○	○		○	○	
TURNICIDAE											
Turnix suscitator	LC			Rb		●	●	●	●	●	IUCN-RL: *Turnix suscitator*
Turnix suscitator okinavensis				Rb	e	○	○	○	○	○	
GLAREOLIDAE											
Glareola maldivarum	LC	VU		Pm/Sv		●	●		●	●	
LARIDAE											
Anous stolidus	LC			Sv		●	●				
Anous stolidus pileatus				Vb		○	○				
Anous minutus	LC			Vb		●	●				
Anous minutus marcusi				Vb		○	○				
Gygis alba	LC			Vb		●	●				
Gygis alba candida				Vb		○	○				
Rissa tridactyla	LC			Vb		●			●	●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Migratory Status[*4]	Endemic to Middle and South Ryukyus[*5]	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Rissa tridactyla pollicaris				Vb		○			○	○	
Larus ridibundus	LC			Wv		●	●	●		●	
Larus saundersi	VU	VU		Wv		●	●	●		●	IUCN-RL: *Saundersilarus saundersi*
Larus crassirostris	LC			Wv		●	●	●	●	●	
Larus canus	LC			Vb		●	●				
Larus canus kamtschatschensis				Vb		○	○				
Larus glaucescens	LC			Vb		●	●				
Larus hyperboreus	LC			Vb		●				●	
Larus hyperboreus pallidissimus				Vb		○				○	
Larus argentatus	LC			Wv		●	●	●		●	
Larus argentatus vegae				Wv		○	○	○		○	
Larus schistisagus	LC			Vb		●	●				
Gelochelidon nilotica	LC			Pm		●	●	●	●	●	
Gelochelidon nilotica nilotica				Pm		○	○	○	○	○	
Sterna caspia	LC			Vb		●	●				IUCN-RL: *Hydroprogne caspia*
Sterna bergii	LC			Vb		●	●	●		●	IUCN-RL: *Thalasseus bergii*
Sterna bergii cristata		VU		Vb		○	○	○		○	
Sterna albifrons	LC			Sv		●	●	●	●		IUCN-RL: *Sternula albifrons*
Sterna albifrons sinensis		VU		Sv		○	○	○	○		
Sterna anaethetus	LC			Sv		●	●	●		●	
Sterna anaethetus anaethetus				Sv		○	○	○		○	
Sterna fuscata	LC			Pm/Sv		●	●	●		●	
Sterna fuscata nubilosa				Pm/Sv		○	○	○		○	
Sterna dougallii	LC			Sv		●	●	●	●	●	
Sterna dougallii bangsi		VU		Sv		○	○	○	○	○	
Sterna sumatrana	LC	VU		Sv		●	●	●	●	●	
Sterna hirundo	LC			Pm		●	●	●		●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Sterna hirundo longipennis				Pm		○	○	○		○	
Chlidonias hybrida	LC			Pm		●	●	●		●	
Chlidonias hybrida javanicus				Pm		○	○	○		○	
Chlidonias leucopterus	LC			Pm		●	●	●	●	●	
STERCORARIIDAE											
Stercorarius pomarinus	LC			Pm		●			●	●	
ALCIDAE											
Alle alle	LC			Vb		●			●		
Alle alle ssp.				Vb		○			○		
Brachyramphus perdix	NT	DD		Vb		●	●				
Synthliboramphus antiquus	LC	CR		Vb		●	●			●	
Synthliboramphus wumizusume	VU	VU	NM	Vb		●				●	
ACCIPITRIFORMES											
PANDIONIDAE											
Pandion haliaetus	LC			Rb・Wv		●	●	●	●	●	
Pandion haliaetus haliaetus		NT		Rb・Wv		○	○	○	○	○	
ACCIPITRIDAE											
Pernis ptilorhynchus	LC			Pm		●	●	●	●	●	
Pernis ptilorhynchus orientalis		NT		Pm		○	○	○	○	○	
Elanus caeruleus	LC			Vb		●				●	
Elanus caeruleus hypoleucus				Vb		○				○	
Milvus migrans	LC			Wv		●	●			●	
Milvus migrans lineatus				Wv		○	○			○	
Haliaeetus albicilla	LC			Vb		●	●			●	
Haliaeetus albicilla albicilla		VU	NM*	Vb		○	○			○	*Designated by common name "White-tailed Eagle" which corresponds to subsp. *albicilla*
Haliaeetus pelagicus	VU	VU	NM	Vb		●	●	●			
Aegypius monachus	NT			Vb		●				●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Spilornis cheela	LC			Rb		●				●	
Spilornis cheela perplexus		CR	SNM*	Rb	e	○				○	*Designated by common name "Crested Serpent Eagle" which corresponds to subsp.
Circus spilonotus	LC			Wv		●	●			●	
Circus spilonotus spilonotus		EN		Wv		○	○			○	
Circus cyaneus	LC			Wv		●	●			●	
Circus cyaneus cyaneus				Wv		○	○			○	
Circus melanoleucos	LC			Vb		●	●			●	
Accipiter soloensis	LC			Pm		●	●	●	●	●	
Accipiter gularis	LC			Rb		●	●	●	●	●	IUCN-RL: *Accipiter gularis*
Accipiter gularis gularis				Rb		○	○	○	○	○	
Accipiter gularis iwasakii		EN		Rb	e	○			○	○	
Accipiter nisus	LC			Wv		●	●		●	●	
Accipiter nisus nisosimilis		NT		Wv		○	○		○	○	
Accipiter gentilis	LC			Wv		●	●			●	
Accipiter gentilis fujiyamae		NT		Wv		○	○		○	○	
Butastur indicus	LC	VU		Pm/Wv		●	●	●	●	●	
Buteo buteo	LC			Wv		●	●	●	●	●	
Buteo buteo japonicus				Wv		○	○	○	○	○	
Buteo hemilasius	LC			Vb		●	●	●	●		
Buteo lagopus	LC			Vb		●	●				
Buteo lagopus menzbieri				Vb		○	○				
Aquila heliaca	VU			Vb		●				●	
Nisaetus nipalensis	LC			Vb		●				●	
Nisaetus nipalensis orientalis		EN		Vb		○				○	
STRIGIFORMES											
TYTONIDAE											
Tyto longimembris	LC			Vb		●				●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Tyto longimembris ssp.				Vb		○				○	
STRIGIDAE											
Otus lempiji	LC			Vb		●	●			●	IUCN-RL: *Otus semitorques*
Otus lempiji semitorques				Vb		○	○				
Otus lempiji pryeri		VU		Rb	e	○	○			○	
Otus sunia	LC			Pm		●				●	
Otus sunia japonicus				Pm		○				○	
Otus elegans	NT			Rb		●	●	●	●	●	
Otus elegans elegans				Rb		○	○	○	○	○	
Bubo bubo	LC	CR		Vb		●	●				
Bubo bubo kiautschensis				Vb		○	○				
Ninox scutulata	LC			Rb		●	●	●		●	IUCN-RL: *Ninox japonica*
Ninox scutulata japonica				Vb		○	○			○	
Ninox scutulata totogo				Rb		○	○	○	○	○	
Asio otus	LC			Vb		●	●	●	●	●	
Asio otus otus				Vb		○	○	○	○	○	
Asio flammeus	LC			Wv		●	●	●		●	
Asio flammeus flammeus				Wv		○	○	○		○	
BUCEROTIFORMES											
UPUPIDAE											
Upupa epops	LC			Pm		●	●	●	●	●	
Upupa epops saturata				Pm		○	○	○	○	○	
CORACIIFORMES											
ALCEDINIDAE											
Halcyon coromanda	LC			Sv		●	●	●		●	
Halcyon coromanda bangsi				Sv		○	○	○		○	
Halcyon smyrnensis	LC			Vb		●				●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Halcyon smyrnensis ssp.				Vb		○				○	
Halcyon pileata	LC			Vb		●	●		●	●	
Todiramphus chloris	LC			Vb		●				●	
Todiramphus chloris collaris				Vb		○				○	
Alcedo atthis	LC			Rb		●	●	●	●	●	
Alcedo atthis bengalensis				Rb		○	○	○	○	○	
MEROPIDAE											
Merops philippinus											
CORACIIDAE											
Eurystomus orientalis	LC			Pm		●	●	●	●	●	
Eurystomus orientalis calonyx		EN		Pm		○	○	○	○	○	
PICIFORMES											
PICIDAE											
Jynx torquilla	LC			Vb		●	●				
Jynx torquilla japonica				Vb		○	○				
Dendrocopos kizuki	LC			Rb		●	●	●	●	●	IUCN-RL: *Picoides kizuki*
Dendrocopos kizuki amamii				Rb	e	○	○	○			
Dendrocopos kizuki nigrescens				Rb	e	○			○		
Dendrocopos kizuki orii				Rb	e	○				○	
Dendrocopos leucotos	LC			Rb		●	●				
Dendrocopos leucotos owstoni		VU	NM	Rb	e	○	○				IUCN-RL: *Dendrocopos owstoni*
Sapheopipo noguchii	CR	CR	SNM	Rb	E	●			●		IUCN-RL: *Dendrocopos noguchii*
FALCONIFORMES											
FALCONIDAE											
Falco naumanni	LC			Vb		●				●	
Falco tinnunculus	LC			Wv		●	●	●	●	●	
Falco tinnunculus interstinctus				Wv		○	○	○	○	○	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Falco amurensis	LC			Vb		●	●		●	●	
Falco columbarius	LC			Vb		●				●	
Falco columbarius insignis				Vb		○				○	
Falco subbuteo	LC			Pm		●	●		●	●	
Falco subbuteo subbuteo				Pm		○	○		○	○	
Falco peregrinus	LC			Wv		●	●	●	●	●	
Falco peregrinus japonensis		VU		Wv		○	○	○	○	○	
Falco peregrinus pealei				Vb		○				○	
PASSERIFORMES											
PITTIDAE											
Pitta nympha	VU	EN		Vb		●	●				
ARTAMIDAE											
Artamus leucorynchus	LC			Vb		●				●	
Artamus leucorynchus leucorynchus				Vb		○				○	
CAMPEPHAGIDAE											
Coracina melaschistos	LC			Vb		●				●	
Coracina melaschistos intermedia				Vb		○				○	
Pericrocotus divaricatus	LC			Rb		●	●	●	●	●	
Pericrocotus divaricatus divaricatus		VU		Pm		○			○	○	
Pericrocotus divaricatus tegimae				Rb		○	○	○	○	○	IUCN-RL: *Pericrocotus tegimae*
ORIOLIDAE											
Oriolus chinensis	LC			Vb		●				●	
Oriolus chinensis diffusus				Vb		○				○	
DICRURIDAE											
Dicrurus macrocercus	LC			Vb		●	●	●	●	●	
Dicrurus macrocercus ssp.				Vb		○	○	○	○	○	
Dicrurus leucophaeus	LC			Vb		●	●			●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Migratory Status[*4]	Endemic to Middle and South Ryukyus[*5]	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Dicrurus leucophaeus leucogenis				Vb		○	○			○	
MONARCHIDAE											
Terpsiphone atrocaudata	NT			Sv		●	●	●	●	●	
Terpsiphone atrocaudata illex				Sv		○	○	○	○	○	
LANIIDAE											
Lanius tigrinus	LC	CR		Vb		●			●	●	
Lanius bucephalus	LC			Wv		●	●	●		●	
Lanius bucephalus bucephalus				Wv		○	○	○		○	
Lanius cristatus	LC			Wv		●	●	●	●	●	
Lanius cristatus lucionensis				Wv		○	○	○	○	○	
Lanius cristatus superciliosus		EN		Wv		○			○	○	
Lanius isabellinus	LC			Vb		●			●		
Lanius isabellinus ssp.				Vb		○			○		
Lanius schach	LC			Vb		●			●	●	
Lanius schach schach				Vb		○			○	○	
Lanius sphenocercus	LC			Vb		●			●	●	
Lanius sphenocercus sphenocercus				Vb		○			○	○	
CORVIDAE											
Garrulus lidthi	VU		NM	Rb	E	●	●				
Corvus dauuricus	LC			Vb		●	●			●	
Corvus frugilegus	LC			Vb		●	●			●	
Corvus frugilegus pastinator				Vb		○	○			○	
Corvus macrorhynchos	LC			Rb		●	●	●	●	●	
Corvus macrorhynchos connectens				Rb	e	○	○	○	○		
Corvus macrorhynchos osai				Rb	e	○				○	
REGULIDAE											
Regulus regulus	LC			Wv		●	●	●		●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Regulus regulus japonensis				Wv		○	○	○		○	
REMIZIDAE											
Remiz pendulinus	LC			Vb		●	●				IUCN-RL: *Remiz consobrinus*
Remiz pendulinus consobrinus				Vb		○	○				
PARIDAE											
Poecile varius	LC			Rb		●	●	●	●	●	IUCN-RL: *Parus varius*
Poecile varius yakushimensis				Vb		○	○				
Poecile varius amamii				Rb		○	○	○	○		
Poecile varius olivaceus		NT		Rb	e	○				○	
Periparus ater	LC			?							IUCN-RL: *Parus ater*
Parus minor	LC			Rb		●	●	●	●	●	IUCN-RL: *Parus major*
Parus minor amamiensis				Rb	e	○	○	○			
Parus minor okinawae				Rb	e	○			○		
Parus minor nigriloris				Rb	e	○				○	
ALAUDIDAE											
Calandrella brachydactyla	LC			Vb		●	●				
Calandrella brachydactyla longipennis				Vb		○	○				
Calandrella cheleensis	LC			Vb		●	●				
Calandrella cheleensis cheleensis				Vb		○	○				
Alauda arvensis	LC			Vb		●	●	●		●	
Alauda arvensis japonica				Vb		○	○	○		○	
HIRUNDINIDAE											
Riparia riparia	LC			Pm		●	●	●		●	
Riparia riparia ijimae				Pm		○	○	○		○	
Hirundo rustica	LC			Pm		●	●	●	●	●	
Hirundo rustica saturata				Vb		○				○	
Hirundo rustica gutturalis				Pm		○	○	○	○	○	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Hirundo tahitica	LC			Rb		●	●	●	●	●	
Hirundo tahitica namiyei				Rb		○	○	○	○	○	
Hirundo daurica	LC			Pm		●	●	●		●	
Hirundo daurica japonica				Pm		○	○	○		○	
Delichon urbicum	LC			Vb		●	●				
Delichon urbicum lagopodum				Vb		○	○				
Delichon dasypus	LC			Pm		●	●	●		●	
Delichon dasypus				Pm		○	○	○		○	
PYCNONOTIDAE											
Pycnonotus sinensis	LC			Rb		●			●	●	
Pycnonotus sinensis sinensis				Rb		○				○	
Pycnonotus sinensis ssp.				Rb		○			○		
Hypsipetes amaurotis	LC			Rb		●	●	●	●	●	IUCN-RL: *Ixos amaurotis*
Hypsipetes amaurotis amaurotis				Wv		○	○	○	○	○	
Hypsipetes amaurotis ogawae				Rb		○	○	○			
Hypsipetes amaurotis pryeri				Rb	e	○			○		
Hypsipetes amaurotis stejnegeri				Rb	e	○				○	
CETTIIDAE											
Cettia diphone	LC			Rb		●	●	●	●	●	
Cettia diphone borealis				Vb		○	○				
Cettia diphone cantans				Wv		○			○		
Cettia diphone restricta		EX*		Rb*		○	○	○	○	○	*The population which were indistinguishable from this subspecies morphologically were found in Okinawa island (in 2002), and in Amami-Oshima Island (in 2009). Therefore, it is regarded as resitdential breeder in Amami Island Group and Okinawa Island Group in "Check-List of Japanese Birds. 7th rev. ed.".
Cettia diphone riukiuensis				Wv		○	○	○	○	○	
Urosphena squameiceps	LC			Wv		●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Migratory Status[*4]	Endemic to Middle and South Ryukyus[*5]	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
PHYLLOSCOPIDAE											
Phylloscopus trochilus	LC			Vb		●	●				
Phylloscopus trochilus yakutensis				Vb		○	○				
Phylloscopus fuscatus	LC			Vb		●	●		●	●	
Phylloscopus fuscatus fuscatus				Vb		○	○		○	○	
Phylloscopus schwarzi	LC			Vb		●			●	●	
Phylloscopus proregulus	LC			Vb		●				●	
Phylloscopus inornatus	LC			Wv		●	●	●	●	●	
Phylloscopus borealis	LC			Pm/Wv		●				●	
Phylloscopus borealis kennicotti				Pm/Wv		○				○	
Phylloscopus examinandus				Pm		●			●	●	
Phylloscopus xanthodryas	LC			Pm		●	●			●	IUCN-RL: *Phylloscopus borealis*
Phylloscopus borealoides	LC			Vb		●	●				
Phylloscopus coronatus	LC			Vb		●	●	●			
Phylloscopus ijimae	VU	VU	NM	Vb		●	●			●	
SYLVIIDAE											
Sylvia curruca	LC			Vb		●	●				
Sylvia curruca ssp.				Vb		○	○				
ZOSTEROPIDAE											
Zosterops japonicus	LC			Rb		●	●	●	●	●	
Zosterops japonicus japonicus				Wv		○			○		
Zosterops japonicus loochooensis				Rb	e	○	○	○	○	○	
LOCUSTELLIDAE											
Locustella ochotensis	LC			Pm		●				●	
Locustella pleskei	VU	EN		Vb		●	●				
Locustella fasciolata	LC			Vb		●	●	●	●	●	
Locustella fasciolata amnicola				Vb		○	○	○	○	○	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
ACROCEPHALIDAE											
Acrocephalus orientalis	LC			Pm		●	●	●		●	IUCN-RL: *Acrocephalus arundinaceus*
Acrocephalus bistrigiceps	LC			Vb		●	●			●	
Acrocephalus bistrigiceps bistrigiceps				Vb		○	○			○	
CISTICOLIDAE											
Cisticola juncidis	LC			Rb		●	●	●	●	●	
Cisticola juncidis brunniceps				Rb		○	○	○	○	○	
BOMBYCILLIDAE											
Bombycilla garrulus	LC			Wv		●	●	●		●	
Bombycilla garrulus centralasiae				Wv		○	○	○		○	
Bombycilla japonica	NT			Wv		●	●	●		●	
TROGLODYTIDAE											
Troglodytes troglodytes	LC			Wv		●			●		
Troglodytes troglodytes fumigatus				Wv		○			○	○	
STURNIDAE											
Spodiopsar sericeus	LC			Vb		●	●			●	IUCN-RL: *Sturnus sericeus*
Spodiopsar cineraceus	LC			Wv/Rb		●	●	●	●	●	IUCN-RL: *Sturnus cineraceus*
Agropsar sturninus	LC			Vb		●	●			●	IUCN-RL: *Sturnus sturninus*
Agropsar philippensis	LC			Pm/Wv		●	●	●	●	●	IUCN-RL: *Sturnus philippensis*
Sturnia sinensis	LC			Wv		●	●			●	IUCN-RL: *Sturnus sinensis*
Pastor roseus	LC			Vb		●	●				IUCN-RL: *Sturnus roseus*
Sturnus vulgaris	LC			Vb		●	●			●	
Sturnus vulgaris poltaratskyi				Vb		○	○			○	
MUSCICAPIDAE											
Zoothera sibirica	LC			Pm		●			●	●	
Zoothera sibirica davisoni				Pm		○			○	○	
Zoothera dauma	LC			Rb		●	●	●		●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Zoothera dauma aurea				Wv		○	○	○		○	IUCN-RL: *Zoothera aurea*
Zoothera dauma major	NT	VU	NM	Rb	e	○	○				IUCN-RL: *Zoothera major*
Zoothera dauma horsfieldi		DD		Rb	e	○				○	IUCN-RL: *Zoothera dauma*
Turdus hortulorum	LC			Vb		●				●	
Turdus cardis	LC			Vb		●	●	●	●	●	
Turdus merula	LC			Vb		●	●		●	●	
Turdus merula mandarinus				Vb		○	○		○	○	
Turdus obscurus	LC			Wv		●	●	●	●	●	
Turdus pallidus	LC			Wv		●	●	●	●	●	
Turdus chrysolaus	LC			Wv		●	●	●	●	●	
Turdus chrysolaus chrysolaus				Wv		○	○	○	○	○	
Turdus ruficollis	LC			Vb		●	●			●	
Turdus ruficollis ruficollis				Vb		○	○			○	
Turdus naumanni	LC			Wv		●	●	●	●	●	
Turdus naumanni eunomus				Wv		○	○	○	○	○	
Turdus naumanni naumanni				Wv		○	○		○	○	
Luscinia akahige	LC			Vb		●	●	●	●		IUCN-RL: *Larvivora akahige*
Luscinia akahige akahige				Vb		○	○	○	○		
Luscinia komadori	NT		NM*	Rb		●	●	●	●	●	IUCN-RL: *Larvivora komadori* *Designated by common name "Ryukyu-Robin" corresponds to species *Luscinia komadori* which includes three subspecies.
Luscinia komadori komadori		VU	NM*	Rb・Wv		○	○	○		○	
Luscinia komadori namiyei		EN	NM*	Rb	e	○			○		
Luscinia komadori subrufus		DD	NM*	Vb		○				○	
Luscinia svecica	LC			Vb		●	●		●	●	
Luscinia svecica svecica				Vb		○	○		○	○	
Luscinia calliope	LC			Wv		●	●	●	●	●	
Tarsiger cyanurus	LC			Wv		●	●	●	●	●	
Tarsiger cyanurus cyanurus				Wv		○	○	○	○	○	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Phoenicurus ochruros	LC			Vb		●				●	
Phoenicurus ochruros rufiventris				Vb		○				○	
Phoenicurus auroreus	LC			Wv		●	●	●	●	●	
Phoenicurus auroreus auroreus				Wv		○	○	○	○	○	
Saxicola rubetra	LC			Vb		●			●		
Saxicola torquatus	LC			Pm/Wv		●	●	●	●	●	
Saxicola torquatus stejnegeri				Pm/Wv		○	○	○	○	○	
Saxicola caprata	LC			Vb		●				●	
Saxicola ferreus	LC			Vb		●				●	
Oenanthe isabellina	LC			Vb		●			●		
Oenanthe oenanthe	LC			Vb		●				●	
Oenanthe oenanthe oenanthe				Vb		○				○	
Monticola solitarius	LC			Rb		●	●	●	●	●	
Monticola solitarius pandoo				Vb		○	○	○		○	
Monticola solitarius philippensis				Rb		○	○	○	○	○	
Monticola gularis	LC			Vb		●				●	
Muscicapa griseisticta	LC			Pm		●	●	●	●	●	
Muscicapa sibirica	LC			Vb		●	●	●	●	●	
Muscicapa sibirica sibirica				Vb		○	○	○	○	○	
Muscicapa dauurica	LC			Pm		●	●		●	●	
Muscicapa dauurica dauurica				Pm		○	○		○	○	
Ficedula zanthopygia	LC			Vb		●				●	
Ficedula narcissina	LC			Rb		●	●	●	●	●	
Ficedula narcissina narcissina				Wv/Pm		○	○	○		○	
Ficedula narcissina owstoni				Rb		○	○	○	○	○	IUCN-RL: *Ficedula owstoni*
Ficedula mugimaki	LC			Vb		●				●	
Ficedula albicilla	LC			Vb		●	●	●		●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Cyanoptila cyanomelana	LC			Pm		●	●	●	●	●	
Cyanoptila cyanomelana cyanomelana				Pm		○	○	○	○	○	
PASSERIDAE											
Passer rutilans	LC			Vb		●	●		●	●	
Passer rutilans rutilans				Vb		○	○		○	○	
Passer montanus	LC			Rb		●	●	●	●	●	
Passer montanus saturatus				Rb		○	○	○	○	○	
MOTACILLIDAE											
Dendronanthus indicus	LC			Vb		●	●	●	●	●	
Motacilla flava	LC			Pm		●	●	●	●	●	
Motacilla flava macronyx				Vb		○	○			○	
Motacilla flava simillima				Pm		○	○	○		○	
Motacilla flava taivana				Wv/Pm		○	○		○	○	
Motacilla citreola	LC			Vb		●	●		●		
Motacilla citreola citreola				Vb		○	○		○		
Motacilla cinerea	LC			Wv		●	●	●		●	
Motacilla cinerea cinerea				Wv		○	○	○	○	○	
Motacilla alba	LC			Wv		●	●	●	●	●	
Motacilla alba personata				Vb		○	○			○	
Motacilla alba ocularis				Vb		○	○				
Motacilla alba lugens				Wv		○	○	○	○	○	
Motacilla alba leucopsis				Wv		○	○	○		○	
Motacilla grandis	LC			Vb		●	●		●	●	
Anthus richardi	LC			Wv		●	●		●	●	
Anthus richardi richardi				Wv		○	○		○	○	
Anthus godlewskii	LC			Vb		●	●			●	
Anthus pratensis	NT			Vb		●	●				

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Anthus pratensis ssp.				Vb		○	○				
Anthus hodgsoni	LC			Wv		●	●	●	●	●	
Anthus hodgsoni hodgsoni				Wv		○	○	○	○	○	
Anthus gustavi	LC			Vb		●				●	
Anthus gustavi gustavi				Vb		○				○	
Anthus cervinus	LC			Wv		●	●	●	●	●	
Anthus rubescens	LC			Wv		●	●	●	●	●	
Anthus rubescens japonicus				Wv		○	○	○	○	○	
FRINGILLIDAE											
Fringilla montifringilla	LC			Wv		●	●	●		●	
Chloris sinica	LC			Wv		●	●		●	●	
Chloris sinica kawarahiba				Wv		○	○		○	○	
Chloris sinica minor				Vb		○	○				
Carduelis spinus	LC			Wv		●	●		●	●	IUCN-RL: *Spinus spinus*
Carduelis flammea	LC			Vb		●			●	●	IUCN-RL: *Acanthis flammea*
Carduelis flammea flammea				Vb		○			○	○	
Carpodacus erythrinus	LC			Vb		●	●				
Carpodacus erythrinus grebnitskii				Vb		○	○				
Carpodacus roseus	LC			Vb		●			●		
Loxia curvirostra	LC			Vb		●			●		
Loxia curvirostra japonica				Vb		○			○		
Pyrrhula pyrrhula	LC			Vb		●			●		
Pyrrhula pyrrhula griseiventris				Vb		○			○		
Coccothraustes coccothraustes	LC			Wv		●	●		●	●	
Coccothraustes coccothraustes japonicus				Wv		○	○		○	○	
Eophona migratoria	LC			Vb		●	●			●	
Eophona migratoria migratoria				Vb		○	○			○	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Migratory Status[*4]	Endemic to Middle and South Ryukyus[*5]	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Eophona personata	LC			Vb		●	●	●	●	●	
Eophona personata personata				Vb		○	○	○	○	○	
CALCARIIDAE											
Calcarius lapponicus	LC			Vb		●	●		●		
Calcarius lapponicus coloratus				Vb		○	○		○		
Emberiza lathami	LC			Vb		●			●	●	
Emberiza leucocephalos	LC			Vb		●	●				
Emberiza leucocephalos leucocephalos				Vb		○	○				
Emberiza cioides	LC			Vb		●	●	●	●	●	
Emberiza cioides ciopsis				Vb		○	○	○	○	○	
Emberiza hortulana	LC			Vb		●		●			
Emberiza tristrami	LC			Vb		●	●			●	
Emberiza fucata	LC			Wv		●	●		●	●	
Emberiza fucata fucata				Wv		○	○		○	○	
Emberiza pusilla	LC			Wv		●	●	●	●	●	
Emberiza chrysophrys	LC			Vb		●	●			●	
Emberiza rustica	LC			Vb		●	●	●	●	●	
Emberiza rustica latifascia				Wv		○	○	○	○	○	
Emberiza elegans	LC			Wv		●	●	●	●	●	
Emberiza elegans elegans				Wv		○	○	○	○	○	
Emberiza aureola	EN			Vb		●	●	●	●	●	
Emberiza aureola ornata		CR		Vb		○	○	○	○	○	
Emberiza rutila	LC			Vb		●	●			●	
Emberiza melanocephala	LC			Vb		●	●		●		
Emberiza bruniceps	LC			Vb		●			●		
Emberiza sulphurata	VU	NT		Vb		●	●			●	
Emberiza spodocephala	LC			Wv		●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Migratory Status*4	Endemic to Middle and South Ryukyus*5	Four Regions Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Northern Part of Okinawa island	Iriomote Is.	
Emberiza spodocephala spodocephala				Vb		○	○			○	
Emberiza spodocephala personata				Wv		○	○	○	○		IUCN-RL: *Emberiza personata*
Emberiza variabilis	LC			Wv		●	●	●	●	●	
Emberiza schoeniclus	LC			Wv		●				●	
Emberiza schoeniclus pyrrhulina				Wv		○				○	

Bibliography

1. For the classification and distribution data, as well as migratory status, the following literature was basically relied on:

Ornithological Society of Japan, Check-List Editorial Committee(Ed.). (2012). *Check-List of Japanese Birds* . 7th rev. ed. Tokyo, Ornithological Society of Japan. (in Japanese)

2. In addition, the following literature and sources were referred to as needed for island-specific distribution data:

Amami Ornithologists' Club (2009). *Pictorial Guide to Amami Wild Birds* . Tokyo, Bun-Ichi Sogo Shuppan. (in Japanese)

Itaya, H., & Ariyama, T. (2015). Observations of a Willow Warbler (*Phylloscopus trochilus*) on Yonaguni-jima, Okinawa Prefecture, Japan. *Japanese Journal of Ornithology* , *64* (2), 257-260. (in Japanese)

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Ryukyu Shimpo. (2015). *Blue-tailed bee-eater (Merops philippinus) spotted in Naha: first ever in Japan.* Retrieved from http://ryukyushimpo.jp/photo/prentry-242942.html (in Japanese)

Yoshihara, R., Goto, Y., Kitaura, K., & Mizuta, T. (2016). Record of the Fairy Pitta (*Pitta nympha*) on Amami-Oshima Island, Kagoshima Prefecture. *Journal of the Yamashina Institute for Ornithology* , *48* (1), 1

· Those species found to be distributed in the "Amami Island Group", "Ryukyu Island Group", "Miyako Island Group", "Yaeyama Island Goup" according to Check-List of Japanese Birds. 7th rev. ed. (2012) but for which there is no island-specific distribution data are assumed to be distributed on all islands contained in each island groups.

· Information on the distribution of species and subspecies by island is not necessarily consistent because the preciseness of the information varies depending on the literature (e.g., species-level versus subspecies level, inconsistent migratory status between species- and subspecies levels).

3. The following literature and sources were referred to for endemism to the Amami Island Group and the Ryukyu Chain

Takagi, M (2008). Avifauna of the Nansei Shoto (Southwest Islands), Japan, in relation to distances among islands.*Japanese Journal of Ornithology, 58* (1), 1-17. (in Japanese)

2-2-4. Terrestrial reptiles of Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island

*1: As for Red List categories of IUCN, details are given on the last page.

*2: As for Red List categories of Ministry of the Environment Government of Japan, details are given on the last page.

*3: SNM: Special Natural Monument, NM: Natural Monument

*4: E: Endemic species, e: Endemic subspecies

●: shows the distribution of species, ○: shows the distribution of subspecies

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Endemic to Middle and South Ryukyus*4	Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
TESTUDINES										
GEOEMYDIDAE										
Mauremys mutica	EN				●			a	●	a: Domestic alien subspecies
Mauremys mutica kami				e	○			a	○	a: Domestic alien subspecies
Cuora flavomarginata	EN				●			A	●	A: Alien subspecies *C. flavomarginata* spp.
Cuora flavomarginata evelynae		VU	NM*	e	○				○	*Designated by common name "Yellow-margined box turtle" which corresponds to subsp. *evelynae* .
Geoemyda japonica	EN	VU	NM	E	●			●		
SQUAMATA										
LACERTILIA										
EUBLEPHARIDAE										
Goniurosaurus splendens	(EN)*	EN		E	●		●			* Contained in *G. kuroiwae* , as a subsp. *splendens*
Goniurosaurus kuroiwae	EN*			E	●			●		*Contains 5 subspecies.
Goniurosaurus kuroiwae kuroiwae		VU		e	○			○		
GEKKONIDAE										
Gehyra mutilata					●	●	●	●	●	
Gekko vertebralis				E	●	●	●			
Gekko sp.		NT		E	●			●		
Gekko hokouensis	LC				●	●	●	●	●	
AGAMIDAE										
Japalura polygonata					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Endemic to Middle and South Ryukyus[*4]	Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Japalura polygonata polygonata		VU		e	○	○	○	○		
Japalura polygonata ishigakiensis		NT		e	○				○	
SCINCIDAE										
Scincella boettgeri				E	●				●	
Plestiodon stimpsonii		NT		E	●				●	
Plestiodon oshimensis		NT			●	●	●			
Plestiodon marginatus		VU		E	●			●		
Plestiodon kishinouyei	LR/nt	VU	NM	E	●				●	
Plestiodon barbouri		VU		E	●	●	●	●		
Ateuchosaurus pellopleurus					●	●	●	●		
LACERTIDAE										
Takydromus smaragdinus		LP*		E	●	●	●	●		*LP on Tokunoshima Island
Takydromus dorsalis		VU		E	●				●	
SERPENTES										
TYPHLOPIDAE										
Ramphotyphlops braminus					●	●	●	●	●	
PAREATIDAE										
Pareas iwasakii	DD	NT		E	●				●	
XENODERMATIDAE										
Achalinus werneri	VU	NT		E	●	●	●	●		
Achalinus formosanus	LC				●				●	
Achalinus formosanus chigirai		VU		e	○				○	
COLUBRIDAE										
Cyclophiops herminae	NT	NT		E	●				●	
Cyclophiops semicarinatus				E	●	●	●	●		
Lycodon ruhstrati	LC				●				●	
Lycodon ruhstrati multifasciatus		NT		e	○				○	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Endemic to Middle and South Ryukyus[*4]	Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
Elaphe taeniura					●			A	●	A: Alien subspecies, *E. taeniura friesei*
Elaphe taeniura schmackeri		VU		e	○				○	
Hebius pryeri				E	●	●	●	●		
Hebius ishigakiense				E	●				●	
Dinodon semicarinatum				E	●	●	●	●		
Dinodon rufozonatum					●				●	
Dinodon rufozonatum walli				e	○				○	
ELAPIDAE										
ELAPINAE										
Sinomicrurus japonicus	NT			E	●	●	●	●		
Sinomicrurus japonicus boettgeri		NT		e	○		○	○		
Sinomicrurus japonicus japonicus		NT		e	○	○				
Sinomicrurus macclellandi					●				●	
Sinomicrurus macclellandi iwasakii		VU		e	○				○	
VIPERIDAE										
CROTALINAE										
Protobothrops elegans				E	●				●	
Protobothrops flavoviridis				E	●	●	●	●		
Ovophis okinavensis				E	●	●	●	●		

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2-2-5. Amphibians of Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island

*1: As for Red List categories of IUCN, details are given on the last page.

*2: As for Red List categories of Ministry of the Environment Government of Japan, details are given on the last page.

*3: SNM: Special Natural Monument, NM: Natural Monument

*4: E: Endemic species, e: Endemic subspecies

●: shows the distribution of species, ○: shows the distribution of subspecies

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Endemic to Middle and South Ryukyus*4	Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
CAUDATA										
SALAMANDRIDAE										
Echinotriton andersoni	EN	VU		E	●	●	●	●		
Cynops ensicauda	EN	NT		E	●	●		●		
ANURA										
HYLIDAE										
Hyla hallowellii	LC			E	●	●	●	●		
RANIDAE										
Rana kobai		NT		E	●	●	●			
Rana ulma		NT		E	●			●		
Odorrana amamiensis	EN	VU		E	●	●	●			
Odorrana splendida	EN	EN		E	●	●				
Odorrana supranarina	EN	NT		E	●				●	
Odorrana ishikawae	EN	EN		E	●			●		
Odorrana utsunomiyaorum	EN	EN		E	●				●	
Odorrana narina	EN	VU		E	●			●		
Babina subaspera	EN	EN		E	●	●				
Babina holsti	EN	EN		E	●			●		
Nidirana okinavana	EN	VU			●				●	IUCN-RL: *Babina okinavana*
DICROGLOSSIDAE										
Limnonectes namiyei	EN	EN		E	●			●		

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Endemic to Middle and South Ryukyus[*4]	Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Northern part of Okinawa Is.	Iriomote Is.	
CAUDATA										
Fejervarya sakishimensis				E	●				●	
RHACOPHORIDAE										
Kurixalus eiffingeri	LC				●				●	
Rhacophorus viridis	LC			E	●	●	●	●		
Rhacophorus viridis viridis				e	○			○		
Rhacophorus viridis amamieneis				e	○	○	○			
Rhacophorus owstoni	LC			E	●				●	
Buergeria japonica	LC				●	●	●	●	●	
MICROHYLIDAE										
Microhyla okinavensis	LC			E	●	●	●	●	●	

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2-2-6. Inland water fishes of Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island

*1: As for Red List categories of IUCN, details are given on the last page.

*2: As for Red List categories of Ministry of the Environment Government of Japan, details are given on the last page.

*3: SNM: Special Natural Monument, NM: Natural Monument

*4: F: Freshwater fish, which are confined to freshwater throughout their lives.

D: Diadromous fish, which regularly migrate between rivers and the sea during certain periods of their life cycle.

B: Brackish water fish, which spend their lives in and around brackish water bodies except for the planktonic stage.

P: Peripheral freshwater fish, which mainly inhabit the sea but spend part of their lives in inland waters.

M: Marine vagrants, which typically inhabit the sea but accidentally enter freshwater habitats.

*5: E: Endemic species, e: Endemic subspecies

●: shows the distribution of species. ○: shows the distribution of subspecies

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Life Cycle*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
ORECTOLOBIFORMES											
HEMISCYLLIIDAE											
Hemiscylliidae sp.				M		●				●	
CARCHARHINIFORMES											
CARCHARHINIDAE											
Carcharhinus leucas				P		●			●	●	
Negaprion acutidens				M		●				●	
MYLIOBATIFORMES											
DASYATIDAE											
Himantura fai	LC			P		●				●	
Neotrygon kuhlii	DD			M		●				●	
Pastinachus sephen	DD			P		●			●	●	
ELOPIFORMES											
ELOPIDAE											
Elops hawaiensis	DD			P		●	●		●	●	
MEGALOPIDAE											

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Megalops cyprinoides	DD			P		●	●		●	●	
ALUBLIFORMES											
ALUBLIDAE											
Albula sp.				M		●			●		
ANGUILLIFORMES											
ANGUILLIDAE											
Anguilla bicolor	NT			D		●				●	
Anguilla bicolor pacifica	NT	DD		D		○				○	
Anguilla japonica	EN	EN		D		●	●	●	●	●	
Anguilla marmorata	LC			D		●	●	●	●	●	
MURAENIDAE											
Echidna rhodochilus		CR		B		●				●	
Echidna nebulosa				M		●			●	●	
Gymnothorax albimarginatus				M		●				●	
Gymnothorax fimbriatus				M		●				●	
Gymnothorax monochrous				P		●				●	
Gymnothorax pictus				M		●			●		
Gymnothorax pseudothyrsoideus				M		●	●		●		
Gymnothorax richardsonii				M		●				●	
Gymnothorax thyrsoideus				M		●				●	
Strophidon sathete				P		●	●		●	●	
Uropterygius concolor		CR		B		●	●		●	●	
Uropterygius micropterus				M		●			●		
OPHICHTHIDAE											
Lamnostoma polyophthalmum				B		●			●		
Ophichthus altipennis	LC			M		●			●		
Pisodonophis boro				B		●	●		●	●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Pisodonophis cancrivorus				M		●			●	●	
Scolecenchelys macroptera				M		●			●	●	
CONGRIDAE											
Conger cinereus				M		●			●	●	
CLUPEIFORMES											
CLUPEIDAE											
Amblygaster leiogaster				M		●			●	●	
Dussumieria elopsoides				M		●			●		
Herklotsichthys quadrimaculatus				P		●			●	●	
Sardinella melanura				M		●		●	●	●	
Sardinella sp.				M		●			●	●	
Nematalosa come				P		●			●	●	
Nematalosa japonica		EN		M		●	●		●		
Spratelloides atrofasciatus				M		●			●		
Spratelloides delicatulus				M		●			●		
ENGRAULIDAE											
Encrasicholina heteroloba				M		●				●	
Stolephorus indicus				M		●			●	●	
Stolephorus commersonnii				B		●			●	●	
Thryssa baelama				B		●			●	●	
GONORYNCHIFIRMES											
CHANIDAE											
Chanos chanos				P		●			●	●	
CYPRINIFORMES											
CYPRINIDAE											
Carassius burgeri				F		●			●		
Carassius burgeri subsp.1		DD		F		○			○		

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Carassius sp. A				F		●	●		●	●	
Carassius sp. B		CR		F	E	●	●		●	●	
COBITIDAE											
Misgurnus anguillicaudatus	LC	DD		F		●	●	●	●	●	
SILURIFORMES											
PLOTOSIDAE											
Plotosus lineatus				M		●			●	●	
Plotosus japonicus				M		●			●		
SALMONIFORMES											
PLECOGLOSSIDAE											
Plecoglossus altivelis	DD			D		●	●	?	●*		* The distribution on the Okinawa Island is a result of the reintroduction from the Amami-Oshima Island. ?: Unverified information
Plecoglossus altivelis ryukyuensis	EN	CR		D	e	○	○	?	○*		
STOMIIFORMES											
PHOSICHTHYIDAE											
Vinciguerria nimbaria				M		●			●		
AULOPIFORMES											
SYNODONTIDAE											
Saurida gracilis				M		●	●		●		
Saurida nebulosa				B		●			●	●	
Trachinocephalus myops				M		●			●		
OPHIDIIFORMES											
BYTHITIDAE											
Bythitidae sp.				M		●				●	
LOPHIIFORMES											
ANTENNARIIDAE											
Antennarius dorehensis				M		●			●	●	
Antennarius pictus				M		●			●		

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Life Cycle*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Histrio histrio				M		●	●		●	●	
BERYCIFORMES											
HOLOCENTRIDAE											
Neoniphon sammara				M		●			●		
Sargocentron diadema				M		●			●		
Sargocentron ittodai				M		●			●	●	
Sargocentron praslin				M		●			●	●	
Sargocentron rubrum				M		●			●		
SYNBRANCHIFORMES											
SYNBRANCHIDAE											
Monopterus sp.		CR		F	E	●	●		●	●	
GASTEROSTEIFORMES											
PEGASIDAE											
Pegasus volitans	DD			M		●				●	
FISTULARIIDAE											
Fistularia commersonii				M		●	●		●	●	
CENTRISCIDAE											
Aeoliscus strigatus				M		●				●	
SYNGNATIDAE											
Acentronura sp.				M		●			●		
Corythoichthys haematopterus				M		●			●	●	
Doryrhamphus japonicus				M		●				●	
Hippichthys cyanospilus				B		●	●		●	●	
Hippichthys heptagonus	LC	EN		D		●	●		●	●	
Hippichthys spicifer	LC			B		●	●	●	●	●	
Hippocampus kelloggi	VU			M		●			●		
Hippocampus kuda	VU			B		●	●		●	●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Life Cycle*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Micrognathus andersonii				M		●			●	●	
Microphis argulus		CR		D		●				●	
Microphis brachyurus	LC			D		●	●	●	●	●	
Microphis brachyurus brachyurus	LC			D		○	○	○	○	○	
Microphis jagorii		CR		B		●			●	●	
Microphis leiaspis	LC			D		●	●	●	●	●	
Microphis retzii		CR		D		●				●	
Urocampus carinirostris				B		●				●	
Urocampus nanus				M		●			●		
MUGILIFORMES											
MUGILIDAE											
Cestraeus plicatilis		CR		D		●				●	
Chelon affinis				P		●	●		●	●	
Chelon macrolepis	LC			P		●	●		●	●	
Chelon melinopterus	LC			P		●	●			●	
Chelon subviridis		DD		P		●	●		●	●	
Crenimugil crenilabis				M		●	●		●	●	
Crenimugil heterocheilos	LC	EN		D		●				●	
Ellochelon vaigiensis		DD		P		●	●		●	●	
Moolgarda engeli		DD		P		●			●	●	
Moolgarda pedaraki		DD		P		●	●		●	●	
Moolgarda perusii				P		●	●		●	●	
Moolgarda seheli				P		●	●		●	●	
Mugil cephalus	LC			P		●	●		●	●	
Mugil cephalus cephalus	LC			P		○	○		○	○	
Oedalechilus labiosus				M		●	●		●		
ATHERHINIFORMES											

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
ATHERINIDAE											
Atherinomorus duodecimalis		DD		P		●				●	
Atherinomorus lacunosus				M		●			●		
Atherinomorus pinguis				P		●	●		●	●	
Hypoatherina temminckii		DD		M		●				●	
Hypoatherina woodwardi				P		●			●	●	
Stenatherina panatela				M		●			●		
BELOBNIFORMES											
ADRIANICHTHYIDAE											
Oryzias latipes		VU		F		●	●		●		
HEMIRHAMPHIDAE											
Hyporhamphus dussumieri				M		●			●	●	
Hyporhamphus quoyi				M		●			●	●	
Zenarchopterus dunckeri		NT		B		●				●	
EXOCOETIDAE											
Parexocoetus mento				M		●			●		
BELONIDAE											
Strongylura incisa				M		●			●	●	
Tylosurus acus				M		●				●	
Tylosurus acus melanotus				M		○				○	
Tylosurus crocodilus				M		●			●		
Tylosurus crocodilus crocodilus				M		○			○		
PERCIFORMES											
SCORPAENIDAE											
Dendrochirus zebra				M		●				●	
Pterois antennata				M		●				●	
Pterois volitans				M		●			●	●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Scorpaenodes guamensis				M		●			●	●	
Scorpaenopsis neglecta				M		●	●		●		
Scorpaenopsis ramaraoi	LC			M		●			●	●	
TETRAOROGIDAE											
Ablabys taenianotus				M		●			●	●	
Tetraroge barbata		CR		B		●				●	
Tetraroge niger	LC	CR		B		●				●	
SYNANCEIIDAE											
Synanceia verrucosa				M		●			●	●	
PLATYCEPHALIDAE											
Cociella punctata				P		●			●	●	
Platycephalus indicus				P		●	●		●	●	
Thysanophrys celebica				M		●				●	
DACTYLOPTERIDAE											
Dactyloptena orientalis				M		●			●		
LATIDAE											
Lates sp.				P		●				●	
AMBASSIDAE											
Ambassis buruensis				D		●			●	●	
Ambassis interrupta	LC	DD		D		●	●		●	●	
Ambassis macracanthus		DD		D		●			●	●	
Ambassis miops	LC			D		●	●		●	●	
Ambassis urotaenia	LC			D		●			●	●	
SERRANIDAE											
Epinephelus coioides	NT			P		●	●		●	●	
Epinephelus corallicola				P		●				●	
Epinephelus fasciatus	LC			M		●				●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Epinephelus fuscoguttatus	NT			M		●				●	
Epinephelus maculatus	LC			M		●				●	
Epinephelus malabaricus	NT			P		●			●	●	
Epinephelus ongus	LC			M		●				●	
Grammistes sexlineatus				M		●				●	
PSEUDOCHROMIDAE											
Labracinus cyclophthalmus				M		●			●	●	
Pseudochromis tapeinosoma				M		●				●	
PLESIOPIDAE											
Plesiops coeruleolineatus				M		●	●		●	●	
APOGONIDAE											
Apogon amboinensis	DD			B		●	●		●	●	
Apogon aureus				M		●				●	
Apogon compressus	LC			M		●				●	
Apogon cookii				M		●			●	●	
Apogon hyalosoma	LC	CR		B		●				●	
Apogon ishigakiensis				M		●			●	●	
Apogon fraenatus				M		●				●	
Apogon lateralis	LC	DD		B		●			●	●	
Apogon novemfasciatus				M		●				●	
Apogon properuptus				M		●				●	
Apogon trimaculatus				M		●			●		
Cheilodipterus intermedius				M		●				●	
Cheilodipterus quinquelineatus				M		●			●	●	
Foa brachygramma				M		●			●	●	
Fowleria marmorata				M		●			●		
Fowleria variegata				B		●	●		●	●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Life Cycle*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Fowleria sp.				M		●				●	
Nectamia bandanensis				M		●				●	
Nectamia fusca				M		●	●		●	●	
Pseudamia amblyuroptera		DD		B		●				●	
Siphamia tubifer				M		●			●		
Sphaeramia orbicularis				B		●	●			●	
Zoramia viridiventer				M		●				●	
CARANGIDAE											
Caranx ignobilis				P		●	●		●	●	
Caranx melampygus				P		●	●		●	●	
Caranx papuensis				P		●	●		●	●	
Caranx sexfasciatus	LC			P		●	●		●	●	
Scomberoides lysan				P		●			●	●	
Scomberoides tol				M		●	●		●	●	
Selar crumenophthalmus	LC			M		●			●	●	
Trachinotus blochii				M		●			●	●	
LEIOGNATHIDAE											
Equulites leuciscus				M		●			●		
Eubleekeria splendens	LC			P		●			●	●	
Leiognathus equulus	LC			P		●	●		●	●	
Leiognathus fasciatus				P		●			●	●	
Photopectoralis bindus				M		●	●		●		
LUTJANIDAE											
Lutjanus argentimaculatus				P		●	●		●	●	
Lutjanus bohar				M		●				●	
Lutjanus decussatus				M		●				●	
Lutjanus ehrenbergii				P		●				●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Life Cycle*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Lutjanus fulviflamma				P		●	●		●	●	
Lutjanus fulvus				P		●	●		●	●	
Lutjanus gibbus				M		●			●	●	
Lutjanus goldiei		CR		D		●				●	
Lutjanus kasmira				M		●	●			●	
Lutjanus monostigma				P		●			●	●	
Lutjanus quinquelineatus				M		●			●	●	
Lutjanus rivulatus				P		●	●		●	●	
Lutjanus russellii				P		●	●		●	●	
Lutjanus stellatus				M		●			●		
Paracaesio xanthura				M		●				●	
CAESIONIDAE											
Pterocaesio digramma				M		●			●	●	
LOBOTIDAE											
Lobotes surinamensis	LC			M		●			●	●	
GERREIDAE											
Gerres erythrourus				P		●			●	●	
Gerres filamentosus	LC			P		●	●		●	●	
Gerres longirostris				P		●			●	●	
Gerres macracanthus				P		●				●	
Gerres oyena				P		●	●		●	●	
Gerres oblongus				M		●	●			●	
Gerres ryukyuensis				M		●			●		
Gerres shima				P		●	●		●	●	
HAEMULIDAE											
Hapalogenys nigripinnis				M		●	●		●	●	
Plectorhinchus albovittatus		DD		P		●				●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Plectorhinchus gibbosus				P		●	●		●	●	
Plectorhinchus lessonii				M		●				●	
Pomadasys argenteus				P		●	●		●	●	
Pomadasys quadrilineatus				P		●			●		
NEMIPTERIDAE											
Scolopsis bilineata				M		●			●	●	
Scolopsis ciliata				M		●			●	●	
Scolopsis lineata				M		●			●		
Scolopsis monogramma				M		●			●		
SPARIDAE											
Acanthopagrus chinshira	NT			M		●			●		
Acanthopagrus sivicolus	VU			P		●	●		●	●	
Acanthopagrus pacificus	LC	VU		P		●				●	
Rhabdosargus sarba				M		●			●		
LETHRINIDAE											
Gnathodentex aureolineatus				M		●				●	
Lethrinus atkinsoni				M		●				●	
Lethrinus harak				M		●			●	●	
Lethrinus nebulosus				M		●			●		
Lethrinus semicinctus				M		●			●		
SILLAGONIDAE											
Sillaginops macrolepis		EN		P		●				●	
Sillago aeolus				M		●	●		●	●	
Sillago sihama				P		●			●	●	
MULLIDAE											
Mulloidichthys flavolineatus				M		●	●		●	●	
Mulloidichthys vanicolensis				M		●			●		

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Life Cycle*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Parupeneus ciliatus				M		●	●		●	●	
Parupeneus indicus				M		●	●		●	●	
Parupeneus multifasciatus	LC			M		●			●	●	
Parupeneus spilurus				M		●	●				
Upeneus tragula				M		●	●		●		
Upeneus vittatus				M		●			●	●	
PEMPHERIDAE											
Pempheris schwenkii				M		●			●	●	
MONODACTYLIDAE											
Monodactylus argenteus				B		●			●	●	
TOXOTIDAE											
Toxotes jaculatrix		CR		B		●				●	
CHAETODONTIDAE											
Chaetodon auriga	LC			M		●			●	●	
Chaetodon auripes	LC			M		●	●		●	●	
Chaetodon citrinellus	LC			M		●				●	
Chaetodon ephippium	LC			M		●			●		
Chaetodon kleinii	LC			M		●				●	
Chaetodon lineolatus	LC			M		●	●				
Chaetodon lunula	LC			M		●	●		●	●	
Chaetodon octofasciatus	LC			M		●	●				
Chaetodon vagabundus	LC			M		●	●		●	●	
Heniochus acuminatus	LC			M		●	●		●	●	
POMACANTHIDAE											
Pomacanthus semicirculatus	LC			M		●			●	●	
CHEILODACTYLIDAE											
Goniistius zonatus				M		●	●		●		

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
POMACENTRIDAE											
Abudefduf lorenzi				M		●				●	
Abudefduf septemfasciatus				M		●				●	
Abudefduf sexfasciatus				M		●	●		●	●	
Abudefduf sordidus				M		●			●	●	
Abudefduf vaigiensis				M		●	●		●	●	
Amphiprion clarkii				M		●				●	
Chrysiptera biocellata				M		●			●	●	
Chrysiptera cyanea				M		●			●	●	
Chrysiptera glauca				M		●			●	●	
Chrysiptera brownriggi				M		●				●	
Chrysiptera unimaculata				M		●	●				
Dischistodus prosopotaenia				M		●				●	
Neopomacentrus cyanomos				M		●				●	
Neopomacentrus taeniurus				B		●	●		●	●	
Pomacentrus amboinensis				M		●				●	
Pomacentrus bankanensis				M		●	●			●	
Pomacentrus chrysurus				M		●			●	●	
Pomacentrus moluccensis				M		●				●	
Pomacentrus nagasakiensis				M		●	●				
Pomacentrus taeniometopon				B		●	●		●	●	
Pomacentrus sp.				M		●			●	●	
Stegastes altus				M		●	●				
Stegastes nigricans				M		●			●		
TERAPONTIDAE											
Mesopristes argenteus	LC	CR		P		●				●	
Mesopristes cancellatus		CR		D		●			●	●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Mesopristes iravi		CR		D		●				●	
Pelates quadrilineatus				M		●			●		
Rhynchopelates oxyrhynchus				P		●			●		
Terapon jarbua	LC			P		●	●		●	●	
KUHLIDAE											
Kuhlia marginata	LC			D		●	●	●	●	●	
Kuhlia mugil				M		●	●		●		
Kuhlia munda		EN		D		●	●		●	●	
Kuhlia rupestris				D		●	●		●	●	
KYPHOSIDAE											
Kyphosus cinerascens				M		●			●		
Kyphosus pacificus				M		●	●			●	
MICROCANTHIDAE											
Microcanthus strigatus				M		●	●		●	●	
GIRELLIIDAE											
Girella leonina				M		●			●		
Girella mezina				M		●	●		●	●	
POLYNEMIDAE											
Polydactylus plebeius				P		●	●		●	●	
LABRIDAE											
Cheilinus chlorourus	LC			M		●				●	
Cheilinus undulatus	EN			M		●				●	
Halichoeres argus	LC			M		●				●	
Halichoeres marginatus	LC			M		●			●	●	
Halichoeres melanurus	LC			M		●				●	
Halichoeres miniatus	LC			M		●			●	●	
Halichoeres nebulosus	LC			M		●				●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Life Cycle*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Halichoeres scapularis	LC			M		●				●	
Halichoeres trimaculatus	LC			M		●	●		●	●	
Iniistius pavo	LC			M		●				●	
Iniistius pentadactylus	LC			M		●				●	
Labroides dimidiatus	LC			M		●				●	
Stethojulis strigiventer	LC			M		●			●	●	
Thalassoma cupido				M		●	●				
SCARIDAE											
Chlorurus sordidus				M		●				●	
Scarus ghobban				M		●				●	
Scarus ovifrons	DD			M		●				●	
Scarus rivulatus	LC			M		●				●	
PINGUIPEDIDAE											
Parapercis pacifica				M		●				●	
TRICHONOTIDAE											
Trichonotus sp.				M		●				●	
TRYPTERYGIIDAE											
Enneapterygius cheni	LC	CR		B		●				●	
Enneapterygius etheostomus	LC			M		●			●		
Helcogramma nesion	LC			M		●			●		
BLENNIIDAE											
Andamia reyi				M		●				●	
Andamia tetradactyla				M		●			●		
Blenniella bilitonensis				M		●			●		
Blenniella periophthalma				M		●			●		
Entomacrodus striatus	LC			M		●				●	
Glyptoparus delicatulus	LC			M		●				●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Istiblennius dussumieri	LC			M		●			●	●	
Istiblennius edentulus				M		●	●		●	●	
Istiblennius lineatus	LC			M		●			●	●	
Praealticus bilineatus	LC			M		●			●	●	
Praealticus striatus	LC			M		●				●	
Rhabdoblennius nitidus	LC			M		●				●	
Salarias fasciatus	LC			M		●			●	●	
Salarias luctuosus				M		●			●	●	
Omobranchus elongatus		DD		B		●	●			●	
Omobranchus ferox				B		●			●	●	
Omobranchus loxozonus	LC			M		●			●	●	
Omox biporos	DD	CR		B		●				●	
Parablennius thysanius				B		●				●	
Meiacanthus grammistes	LC			M		●				●	
Parenchelyurus hepburni	LC			M		●	●				
Petroscirtes breviceps				M		●	●		●		
Petroscirtes mitratus				M		●			●	●	
Petroscirtes variabilis				M		●	●			●	
CALLIONYMIDAE											
Dactylopus dactylopus				M		●			●		
Eleutherochir opercularis				B		●			●		
Pseudocalliurichthys ikedai		DD		B		●				●	
RHYACHICHTHYIDAE											
Rhyacichthys aspro		CR		D		●	●		●	●	
ELEOTRIDAE											
Belobranchus belobranchus		DD		D		●				●	
Bostrychus sinensis	LC	EN		B		●	●		●	●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Bunaka gyrinoides		NT		D		●	●		●	●	
Butis amboinensis	LC	CR		B		●	●		●	●	
Eleotris acanthopoma	LC			B		●	●	●	●	●	
Eleotris fusca	LC			D		●	●	●	●	●	
Eleotris melanosoma	LC			B		●	●	●	●	●	
Hypseleotris cyprinoides	DD	EN		D		●	●		●	●	
Ophieleotris sp. 1		EN		D		●	●	●	●	●	
Ophieleotris sp. 2		EN		D		●	●		●	●	
Ophiocara porocephala	LC	VU		B		●	●		●	●	
GOBIIDAE											
Caragobius urolepis		VU		B		●	●		●	●	
Taenioides sp.				B		●	●		●		
Trypauchenopsis intermedia				B		●	●	●	●	●	
Trypauchenopsis sp.				B		●			●		
Acentrogobius audax		NT		B		●			●	●	
Acentrogobius caninus		NT		B		●	●		●		
Acentrogobius janthinopterus				B		●			●	●	
Acentrogobius multifasciatus				B		●			●	●	
Acentrogobius suluensis		NT		B		●	●		●	●	
Acentrogobius viganensis				B		●	●			●	
Acentrogobius virgatulus				B		●	●		●	●	
Acentrogobius viridipunctatus		VU		B		●			●	●	
Acentrogobius sp. 2				B		●	●	●	●	●	
Amblygobius esakiae				B		●				●	
Amblygobius hectori				M		●				●	
Amblygobius linki		NT		B		●	●		●	●	
Amblygobius phalaena				M		●	●		●	●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Amblygobius sp. A				B		●	●		●	●	
Amoya moloanus				B		●			●	●	
Asterropteryx semipunctata				M		●	●		●	●	
Asterropteryx ensifera				M		●				●	
Bathygobius cocosensis				M		●	●	●	●	●	
Bathygobius cyclopterus				M		●	●		●	●	
Bathygobius fuscus	LC			M		●	●	●	●	●	
Bathygobius laddi				M		●			●	●	
Bathygobius hongkongensis				M		●			●	●	
Bathygobius coalitus				M		●	●		●	●	
Bathygobius sp. A		CR		B		●			●	●	
Cabillus sp.				M		●			●		
Callogobius hasseltii				M		●	●		●	●	
Callogobius okinawae				M		●	●	●	●	●	
Callogobius tanegasimae				B		●	●	●	●	●	
Callogobius sp. A		CR		B	E	●				●	
Callogobius sp. B				B		●				●	
Cristatogobius aurimaculatus		CR		B		●	●			●	
Cristatogobius lophius		EN		B		●	●		●	●	
Cristatogobius nonatoae		CR		B		●	●			●	
Cryptocentroides insignis				B		●			●	●	
Cryptocentrus albidorsus				M		●			●	●	
Cryptocentrus caeruleomaculatus				B		●			●	●	
Cryptocentrus melanopus				B		●	●		●	●	
Cryptocentrus nigrocellatus				M		●				●	
Cryptocentrus strigilliceps				M		●				●	
Ctenogobiops pomastictus				M		●				●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Dorombus sp.				B		●	●	●	●	●	
Eviota abax				M		●			●		
Eviota japonica				M		●			●	●	
Eviota ocellifer		CR		B	E	●				●	
Eviota prasina				M		●				●	
Exyrias belissimus				M		●			●		
Exyrias puntang				B		●	●		●	●	
Favonigobius gymnauchen				B		●	●	●	●	●	
Favonigobius melanobranchus				B		●	●		●	●	
Favonigobius opalescens				M		●				●	
Favonigobius reichei				B		●	●	●	●	●	
Favonigobius sp. A				B		●				●	
Favonigobius sp. B				B		●			●	●	
Favonigobius sp. C				B		●				●	
Fusigobius duospilus				M		●	●				
Fusigobius humeralis				M		●			●		
Fusigobius neophytus				M		●				●	
Fusigobius signipinnis				M		●				●	
Gladiogobius brevispinis				B		●				●	
Glossogobius aureus	LC	CR		B		●	●		●	●	
Glossogobius bicirrhosus	LC	CR		B		●	●		●	●	
Glossogobius biocellatus	LC			B		●	●	●	●	●	
Glossogobius celebius				D		●	●		●	●	
Glossogobius circumspectus		NT		B		●	●		●	●	
Glossogobius sp.		DD		B		●	●		●	●	
Heteroplopomus sp.				B		●				●	
Istigobius campbelli				M		●	●		●	●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Istigobius decoratus				M		●				●	
Istigobius goldmanni				M		●				●	
Istigobius ornatus				M		●	●		●	●	
Macrodontogobius wilburi				M		●				●	
Mahidoria sp.				M		●	●		●	●	
Mangarinus waterousi				B		●	●		●	●	
Myersina macrostoma				B		●	●		●	●	
Oplopomus oplopomus				M		●				●	
Palutrus meteori				M		●			●	●	
Parkraemeria saltator		VU		B	E	●			●	●	
Pleurosicya bilobata				M		●				●	
Priolepis semidoliata				M		●	●			●	
Psilogobius prolatus				M		●				●	
Silhouettea capitlineata				M		●				●	
Silhouettea sp. A		NT		B	E	●	●		●	●	
Silhouettea sp. B				B		●				●	
Tomiyamichthys lanceolatus				M		●	●		●	●	
Tomiyamichthys russus				M		●				●	
Trimma okinawae				M		●				●	
Valenciennea longipinnis				M		●			●	●	
Valenciennea sexguttata				M		●				●	
Vanderhorstia phaeosticta				M		●				●	
Vanderhorstia sp. 2				M		●				●	
Vanderhorstia sp.				M		●				●	
Yongeichthys nebulosus				B		●	●		●	●	
Gobiidae sp. A				B		●			●	●	
Gobiidae sp. B				B		●			●	●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Gobiidae sp. C				M		●				●	
Acanthogobius insularis		VU		B	E	●	●		●		
Awaous melanocephalus				D		●	●	●	●	●	
Awaous ocellaris				D		●	●		●	●	
Eugnathogobius mindora		NT		B		●			●	●	
Eutaenichthys sp.				B		●	●			●	
Gnatholepis anjerensis				M		●			●	●	
Gnatholepis cauerensis	LC			M		●				●	
Gymnogobius petschiliensis				D		●	●		●		
Luciogobius ryukyuensis		VU		B	E	●	●		●	●	
Luciogobius pallidus	DD	NT		B		●	●				
Mugilogobius cavifrons	LC	EN		B		●			●	●	
Mugilogobius chulae	LC			B		●	●		●	●	
Mugilogobius fuscus		DD		B		●				●	
Mugilogobius sp. 1				B		●	●	●	●	●	
Mugilogobius sp. 2				B		●				●	
Mugilogobius sp. 3		VU		B		●				●	
Oligolepis acutipennis	DD			B		●	●	●	●	●	
Oligolepis stomias	DD			B		●	●	●	●	●	
Oxyurichthys cornutus				B		●	●		●	●	
Oxyurichthys ophthalmonema				B		●	●	●	●	●	
Oxyurichthys papuensis				M		●				●	
Oxyurichthys visayanus				B		●	●	●	●	●	
Oxyurichthys sp. 1				M		●				●	
Oxyurichthys sp. 2		CR		B		●				●	
Pandaka lidwilli		VU		B		●	●	●	●	●	
Pandaka trimaculata				B		●	●		●	●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Pseudogobius javanicus				B		●	●		●	●	
Pseudogobius masago		VU		B		●	●		●		
Pseudogobius sp.		DD		B		●				●	
Redigobius balteatus	LC	DD		B		●				●	
Redigobius bikolanus	LC			B		●	●	●	●	●	
Rhinogobius giurinus	LC			D		●	●	●	●	●	
Rhinogobius brunneus	DD			D		●	●	●	●	●	
Rhinogobius nagoyae	DD			D		●	●	●	●	●	
Rhinogobius sp. BB				F	E	●			●		
Rhinogobius sp. DL				D		●	●		●	●	
Rhinogobius sp. MO				D	E	●	●	●	●		
Rhinogobius sp. YB				F	E	●	●	●	●	●	
Schismatogobius ampluvinculus		EN		D		●			●	●	
Schismatogobius roxasi		EN		D		●	●		●	●	
Stenogobius sp.				D		●	●		●	●	
Stenogobius ophthalmoporus		DD		B		●			●	●	
Tridentiger kuroiwae	LC			D		●	●	●	●	●	
Periophthalmus argentilineatus				B		●	●		●	●	
Periophthalmus modestus		NT		B		●	?		●		
Scartelaos histophorus		CR		M		●			●		
Lentipes armatus		CR		D		●	●		●	●	
Sicyopterus japonicus				D		●	●	●	●	●	
Sicyopterus lagocephalus	LC	VU		D		●	●		●	●	
Sicyopus cebuensis		DD		D		●	●		●		
Sicyopus leprurus		CR		D		●	●		●	●	
Sicyopus zosterophorus	LC	CR		D		●	●		●	●	
Stiphodon alcedo				D		●			●	●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Stiphodon atropurpureus		CR		D		●	●		●	●	
Stiphodon imperiorientis	VU	CR		D	E	●	●		●	●	
Stiphodon multisquamus				D		●			●		
Stiphodon percnopterygionus	DD			D		●	●		●	●	
KRAEMERIIDAE											
Gobitrichinotus radiocularis		NT		B		●				●	
Kraemeria cunicularia				B		●	●	●	●	●	
Kraemeria tongaensis	LC	DD		B		●				●	
Kraemeria sp.				B		●				●	
MICRODESMIDAE											
Gunnellichthys curiosus				M		●				●	
Paragunnelichthys sp.				B		●				●	
PTERELEOTRIDAE											
Parioglossus caeruleolineatus		DD		B	E	●	●				
Parioglossus dotui				B		●	●		●	●	
Parioglossus formosus	LC			M		●			●	●	
Parioglossus interruptus		CR		B		●				●	
Parioglossus lineatus	DD	DD		B		●				●	
Parioglossus palustris	LC	VU		B		●				●	
Parioglossus philippinus				B		●				●	
Parioglossus rainfordi	LC	EN		B		●	●			●	
Parioglossus raoi	LC			B		●	●		●	●	
Parioglossus senoui				M		●				●	
Parioglossus taeniatus	LC	CR		B		●				●	
Ptereleotris microlepis				M		●				●	
Ptereleotridae sp.				B		●	●		●	●	
EPHIPPIDIDAE											

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Platax boersii				M		●				●	
Platax orbicularis				M		●			●	●	
SCATOPHAGIDAE											
Scatophagus argus	LC			P		●	●		●	●	
SIGANIDAE											
Siganus fuscescens				M		●	●		●	●	
Siganus guttatus				P		●	●		●	●	
Siganus spinus				M		●			●	●	
Siganus vermiculatus				P		●			●	●	
Siganus virgatus				M		●			●	●	
ZANCLIDAE											
Zanclus cornatus				M		●	●		●	●	
ACANTHURIDAE											
Acanthurus dussumieri	LC			M		●			●		
Acanthurus triostegus	LC			M		●	●		●	●	
Acanthurus xanthopterus	LC			P		●	●		●	●	
Zebrasoma scopas	LC			M		●				●	
SPHYRAENIDAE											
Sphyraena barracuda	LC			P		●	●		●	●	
TRICHIURIDAE											
Trichiurus sp. 2				M		○	○		○		
OSPHRONEMIDAE											
Macropodus opercularis		CR		F		●	●		●		
PLEURONECTIFORMES											
PARALICHTHYIDAE											
Pseudorhombus arsius				P		●	●		●	●	
BOTHIDAE											

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Life Cycle*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Bothus mancus	LC			M		●			●	●	
Bothus pantherinus				P		●			●	●	
SOLEIDAE											
Aseraggodes xenicus				M		●				●	
Pardachirus pavoninus				M		●			●	●	
Synaptura marginata				P		●			●	●	
TETRAODONTIFORMES											
BALISTIDAE											
Abalistes stellatus				M		●				●	
Balistoides viridescens				M		●	●			●	
Pseudobalistes flavimarginatus				M		●	●				
Rhinecanthus aculeatus				M		●	●			●	
Rhinecanthus rectangulus				M		●				●	
MONACANTHIDAE											
Acreichthys tomentosus				M		●			●	●	
Aluterus scriptus	LC			M		●			●	●	
OSTRACIIDAE											
Ostracion cubicum				M		●			●		
TETRAODONTIDAE											
Arothron hispidus	LC			M		●	●		●	●	
Arothron immaculatus				P		●			●	●	
Arothron manilensis				P		●	●		●	●	
Arothron reticularis				P		●			●	●	
Arothron stellatus				M		●			●	●	
Canthigaster amboinensis	LC			M		●			●	●	
Canthigaster rivulata	LC			M		●	●				
Canthigaster valentini	LC			M		●			●	●	

Scientific Name	IUCN -RL (2016)[*1]	MOEJ -RL (2015)[*2]	National Natural Monuments[*3]	Life Cycle[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
							Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Chelonodon patoca	LC			P		●	●		●	●	
Takifugu niphobles	LC	LP*		P		●	●		●	●	* LP on Okinawa Island
DIODONTIDAE											
Chilomycterus reticulatus	LC			M		●				●	
Diodon holocanthus	LC			M		●	●		●	●	
Diodon hystrix	LC			M		●				●	
Diodon liturosus				M		●			●		

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2-2-7. Insects of Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island[*1]

*1: As for the National Endangered Species, species that require special attention in handling distribution information are excluded from this list.

*2: As for Red List categories of IUCN, details are given on the last page.

*3: As for Red List categories of Ministry of the Environment Government of Japan, details are given on the last page.

*4: SNM: Special Natural Monument, NM: Natural Monument

*5: E: Endemic species, e: Endemic subspecies

●: shows the distribution of species, ○: shows the distribution of subspecies

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
ARCHAEOGNATHA										
MACHILIDAE										
Pedetontus amamiensis				E	●	●				
Pedetontus okajimae					●	●		●	●	
Pedetontus takahashii				E	●	●		●		
Pedetontus unimaculatus					●	●		●		
ZYGENTOMA										
LEPISMATIDAE										
Ctenolepisma longicaudata					●	●		●		
Ctenolepisma villosa					●			●	●	
Heterolepisma dispar					●	●		●		
Isolepisma japonica					●	●		●		
Lepisma albomaculata				E	●			●		
Thermobia domestica					●			●	●	
NICOLETIIDAE										
Nipponatelura shirozui				E	●	●				
EPHEMEROPTERA										
BAETIDAE										
Alainites sacishimensis					●	●				
Baetiella bispinosa					●			●		
Baetis pseudofrequentus					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Baetis thermicus				E	●				●	
Baetis yoshinensis					●	●		●		
Cloeon bimaculatum					●			●	●	
Cloeon marginale					●			●		
EPHEMERIDAE										
Ephemera formosana					●			●	●	
HEPTAGENIIDAE										
Afronurus hyalinus				E	●	●		●	●	
Ecdyonurus yoshidae					●			●		
Rhithrogena parva					●			●	●	
LEPTOPHLEBIIDAE										
Chiusanophlebia asahinai		NT		E	●	●		●	●	
POTAMANTHIDAE										
Potamanthus formosus				E	●	●		●	●	
SIPHLONURIDAE										
Dipteromimus tipuliformis				E	●	●		●	●	
ODONATA										
EUPHAEIDAE										
Bayadera brevicauda					●				●	
Bayadera brevicauda ishigakiana				e	○				○	
Euphaea yayeyamana				E	●				●	
CALOPTERYGIDAE										
Matrona basilaris	LC				●	●	●	●		
Matrona basilaris japonica	EN			e	○	○	○	○		
Psolodesmus mandarinus					●				●	
Psolodesmus mandarinus kuroiwae				e	○				○	
CHLOROCYPHIDAE										
Rhinocypha uenoi	EN			E	●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
MEGAPODAGRIONIDAE										*The distribution is simply defined as "Nansei Shoto" and the assessment was conducted in 1996. It may include the following species and subspecies that were subdivided from *Rhipidolestes okinawanus* in and after 2005: *Rhipidolestes aculeatus*, *R. shozoi*, *R. amamiensis amamiensis*, and *R. amamiensis tokunoshimensis*.
Rhipidolestes aculeatus				E	●				●	
Rhipidolestes okinawanus	EN*			E	●			●		
Rhipidolestes amamiensis				E	●	●	●	●		
Rhipidolestes amamiensis amamiensis				e	○	○				
Rhipidolestes amamiensis tokunoshimensis				e	○		○			
Rhipidolestes shozoi				E	●			●		
LESTIDAE										
Indolestes peregrinus	LC				●	●			●	
PLATYCNEMIDIDAE										
Coeliccia flavicauda	LC				●				●	
Coeliccia flavicauda masakii	EN			e	○				○	
Coeliccia ryukyuensis				E	●	●	●	●		
Coeliccia ryukyuensis amamii	EN			e	○	○	○			
Coeliccia ryukyuensis ryukyuensis	EN			e	○			○		
COENAGRIONIDAE										
Agriocnemis femina	LC				●	●	●	●	●	
Agriocnemis femina oryzae	LC				○	○	○	○	○	
Agriocnemis pygmaea	LC	NT			●		●	●	●	
Cercion sexlineatum					●	●	●	●	●	
Ceriagrion auranticum	LC				●	●	●	●	●	
Ceriagrion auranticum ryukyuanum	LC				○	○	○	○	○	
Ischnura asiatica					●	●	●	●	●	
Ischnura senegalensis	LC				●	●	●	●	●	
Pseudagrion pilidorsum					●			●	●	
Pseudagrion pilidorsum pilidorsum					○			○	○	
GOMPHIDAE										
Asiagomphus amamiensis	NT			E	●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Asiagomphus amamiensis amamiensis	EN	NT		e	○	○				
Asiagomphus amamiensis okinawanus	EN	NT		e	○			○		
Asiagomphus yayeyamensis	EN	NT		E	●				●	
Ictinogomphus pertinax	LC				●	●	●	●	●	
Leptogomphus yayeyamensis	LC			E	●				●	
Stylogomphus ryukyuanus					●	●	●	●		
Stylogomphus ryukyuanus asatoi	EN			e	○			○		
Stylogomphus ryukyuanus ryukyuanus					○	○	○			
Stylogomphus shirozui					●				●	
Stylogomphus shirozui watanabei	EN*			e	○				○	*Listed as *S. ryukyuanus* subsp. *watanabei*
CORDULEGASTRIDAE										
Anotogaster sieboldii					●	●		●		
Anotogaster klossi					●				●	
Chlorogomphus brunneus					●	●	●	●		
Chlorogomphus brunneus brunneus	EN			e	○			○		*Evaluated only subspecies
Chlorogomphus brunneus costalis					○	○	○			
Chlorogomphus iriomotensis	LC	NT		E	●				●	
Chlorogomphus okinawensis	EN	VU		E	●			●		
AESHNIDAE										
Anaciaeschna jaspidea	LC	EN			●	●	●	●	●	
Anax guttatus	LC				●	●	●	●	●	
Anax nigrofasciatus	LC				●	●				
Anax nigrofasciatus nigrofasciatus	LC				○	○				
Anax panybeus	LC				●	●	●	●	●	
Anax parthenope	LC				●	●	●	●	●	
Anax parthenope julius	LC				○	○	○	○	○	
Gynacantha japonica					●	●	●	●	●	
Gynacantha ryukyuensis					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Planaeschna ishigakiana		NT		E	●	●			●	
Planaeschna ishigakiana ishigakiana	EN	NT		e	○				○	*Evaluated only subspecies
Planaeschna ishigakiana nagaminei	EN	NT		e	○	○				*Evaluated only subspecies
Planaeschna milnei	LC				●	●	●			
Planaeschna milnei naica	LC			e	○	○	○			
Planaeschna risi	LC				●				●	
Planaeschna risi sakishimana	EN			e	○				○	
Polycanthagyna melanictera	LC				●	●		●		
Sarasaeschna kunigamiensis		NT		E	●			●		
CORDULIIDAE										
Epophthalmia elegans					●	●	●	●	●	
Epophthalmia elegans elegans					○	○	○	○	○	
Hemicordulia mindana	LC	VU			●				●	
Hemicordulia mindana nipponica	EN	VU			○				○	
Hemicordulia okinawensis	LC			E	●	●		●		
Macromia clio					●				●	
Macromia kubokaiya	EN	NT		E	●			●		
Macromia urania	LC	NT			●				●	
Macromidia ishidai	LC	VU		E	●				●	
LIBELLULIDAE										
Acisoma panorpoides	LC				●	●	●	●	●	
Acisoma panorpoides panorpoides	LC				○	○	○	○	○	
Agrionoptera insignis	LC				●				●	
Agrionoptera insignis insignis	LC				○				○	
Brachydiplax chalybea	LC				●	●	●	●	●	
Brachydiplax chalybea flavovittata	LC				○	○	○	○	○	
Brachythemis contaminata	LC				●				●	
Crocothemis servilia	LC				●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Crocothemis servilia servilia	LC				○	○	○	○	○	
Deielia phaon	LC				●	●		●		
Diplacodes trivialis	LC				●	●	●	●	●	
Hydrobasileus croceus	LC				●	●		●	●	
Lathrecista asiatica					●				●	
Lathrecista asiatica asiatica					○				○	
Lyriothemis elegantissima	LC				●		●	●	●	
Lyriothemis tricolor	LC				●				●	
Macrodiplax cora	LC				●				●	
Neurothemis fluctuans					●				●	
Orthetrum albistylum	LC				●	●	●	●	●	
Orthetrum albistylum speciosum	LC				○	○	○	○	○	
Orthetrum glaucum	LC				●	●			●	
Orthetrum luzonicum	LC				●			●	●	
Orthetrum pruinosum	LC				●				●	
Orthetrum pruinosum neglectum	LC				○				○	
Orthetrum sabina	LC				●	●	●	●	●	
Orthetrum sabina sabina	LC				○	○	○	○	○	
Orthetrum triangulare					●	●	●	●	●	
Orthetrum triangulare melania					○	○	○	○	○	
Pantala flavescens	LC				●	●	●	●	●	
Pseudothemis zonata	LC				●				●	
Rhyothemis phyllis					●				●	
Rhyothemis phyllis phyllis					○				○	
Rhyothemis severini		EN			●	●				
Rhyothemis variegata					●	●	●	●	●	
Rhyothemis variegata imperatrix					○	○	○	○	○	
Sympetrum cordulegaster					●			●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Sympetrum darwinianum					●	●				
Sympetrum depressiusculum					●			●	●	
Sympetrum frequence					●	●				
Tholymis tillarga	LC				●	●	●	●	●	
Tramea basilaris					●				●	
Tramea basilaris burmeisteri					○				○	
Tramea transmarina	LC				●	●	●	●	●	
Tramea transmarina euryale	LC				○	○	○	○	○	
Tramea transmarina propinqua	LC				○	○		○	○	
Tramea transmarina yayeyamana	LC			e	○	○		○	○	
Tramea virginia	LC				●	●	●	●	●	
Trithemis aurora	LC				●	●	●	●	●	
Zyxomma obtusum					●				●	
Zyxomma petiolatum	LC				●	●	●	●	●	
PLECOPTERA										
LEUCTRIDAE										
Rhopalopsole amamiensis				E	●	●		●		
Rhopalopsole subnigra					●			●		
NEMOURIDAE										
Amphinemoura bulla					●	●	●	●		
Amphinemoura flavicollis					●				●	
Amphinemura ryukyuensis				E	●	●		●		
Nemoura chinonis					●		●			
Nemoura dantigera				E	●	●	●			
Nemoura dentata				E	●			●		
Nemoura okinawaensis				E	●			●		
PERLIDAE										
Gibosia linguambita				E	●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Kiotina riukiuensis					●			●		
Neoperla geniculata					●			●	●	
OLIGOTOMIDAE										
Oligotoma humbertiana					●				●	
Oligotoma japonica					●	●	●			
Oligotoma saundersii					●			●	●	
BLATTARIA										
BLATTELLIDAE										
Anaplectella ruficollis					●	●	●	●	●	
Blattella asahinai					●			●		
Blattella biligata					●				●	
Blattella lituricollis					●	●	●	●	●	
Episymploce amamiensis					●	●	●			
Episymploce sundaica					●			●	●	
Lobopterella dimidiatipes					●	●		●	●	
Margattea kumamotonis					●	●		●	●	
Margattea kumamotonis shirakii					○	○		○	○	
Margattea ogatai				E	●				●	
Margattea satsumana					●	●		●		
Onychostylus notulatus					●				●	
Onychostylus pallidiolus					●	●	●	●	●	
Onychostylus pallidiolus pallidiolus					○	○	○	○	○	
Onychostylus vilis					●			●	●	
Symploce furcata					●				●	
Symploce gigas					●	●		●	●	
Symploce gigas gigas					○				○	
Symploce gigas okinawana				e	○	○		○		
Symploce japonica					●	●				

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Symploce yayeyamana				E	●				●	
BLATTIDAE										
Hebardina yayeyamana				E	●				●	
Periplaneta japanna					●	●	●	●	●	
Periplaneta suzukii				E	●	●			●	
EPILAMPRIDAE										
Opisthoplatia orientalis					●	●	●	●	●	
Rhabdoblatta formosana					●				●	
Rhabdoblatta guttigera					●	●	●	●		
Rhabdoblatta yayeyamana				E	●				●	
NOCTICOLIDAE										
Nocticola uenoi				E	●			●		
Nocticola uenoi uenoi				e	○			○		
OXYHALOIDAE										
Nauphoeta cinerea					●	●		●		
PANESTHIIDAE										
Panesthia angustipennis					●				●	
Panesthia angustipennis yayeyamensis					○				○	
Salganea taiwanensis					●	●	●	●	●	
Salganea taiwanensis ryukyuanus				e	○	○	○	○		
Salganea taiwanensis taiwanensis					○				○	
PERISPHAERIDAE										
Trichoblatta nigra					●				●	
Trichoblatta pygmaea					●	●	●	●	●	
POLYPHAGIDAE										
Eucorydia yasumatsui				E	●				●	
Holocompsa nitidula					●	●				
PYCNOSCELIDAE										

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Pycnoscelus niger					●				●	
MANTODEA										
ACROMANTIDAE										
Acromantis japonica					●	●	●	●	●	
MANTIDAE										
Amantis nawai					●	●	●	●	●	
Hierodula patellifera					●	●	●	●	●	
Mantis religiosa		DD			●			●	●	
Statilia sp.1				E	●			●	●	
Tenodera angustipennis					●	●	●	●	●	
Tenodera sp.				E	●		●	●	●	
ISOPTERA										
KALOTERMITIDAE										
Cryptotermes domesticus					●	●		●	●	
Glyptotermes fuscus					●	●		●	●	
Glyptotermes nakajimai					●	●		●		
Neotermes koshunensis					●			●	●	
RHINOTERMITIDAE										
Coptotermes guangzhouensis					●			●	●	
Coptotermes sp.				E	●			●		
Reticulitermes amamianus				E	○	○				
Reticulitermes flaviceps					●				●	
Reticulitermes miyatakei				E	●	●	●	●		
Reticulitermes okinawanus				E	○			○	○	
Reticulitermes yaeyamanus					●			●	●	
TERMITIDAE										
Nasutitermes takasagoensis					●				●	
Odontotermes formosanus					●			●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Odontotermes sp.				E	○				○	
Pericapritermes nitobei					●				●	
Sinocapritermes mushae					●				●	
TERMOPSIDAE										
Hodotermopsis japonica					●	●	●	●		
ORTHOPTERA										
ANOSTOSTOMATIDAE										
Paterdecolyus murayamai				E	●				●	
Paterdecolyus yanbarensis				E	●			●		
STENOPELMATIDAE										
Neanias magnus					●	●	●	●	●	
Nippancistroger testaceus					●	●	●	●	●	
Prosopogryllacris okadai				E	●	●				
Prosopogryllacris rotundimacula				E	●				●	
Prosopogryllacris simulans				E	●			●		
RHAPHIDOPHORIDAE										
RHAPHIDOPHORINAE										
Rhaphidophora taiwana					●			●	●	
Atachycines sp. 1				E	●			●		
Atachycines sp. 2				E	●			●		
Diestrammena ingens				E	●				●	
Diestrammena sp. 1				E	●	●	●			
Diestrammena sp. 2				E	●				●	
TETTIGONIIDAE										
TETTIGONIINAE										
Gampsocleis ryukyuensis		NT		E	●			●		
COPIPHORINAE										
Euconocephalus pallidus					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Euconocephalus varius					●	●	●	●	●	
Palaeoagraecia ascenda					●	●		●		
Pyrgocorypha subulata					●			●		
Xestophrys javanicus					●	●		●	●	
CONOCEPHALINAE										
Conocephalus gladiatus					●	●		●		
Conocephalus japonicus					●	●		●	●	
Conocephalus maculatus					●	●	●	●	●	
Conocephalus melas					●	●	●	●	●	
Conocephalus sp.				E	●	●				
LISTROSCELIDINAE										
Hexacentrus fuscipes					●	●		●		
Hexacentrus unicolor					●	●	●	●	●	
MECONEMATIDAE										
Cosmetura amamiensis				E	●	●		●		
Leptoteratura digitata				E	●			●		
Leptoteratura jona				E	●			●		
Leptoteratura symmetrica				E	●	●	●			
Leptoteratura yaeyamana				E	●				●	
Leptoteratura yaeyamana yaeyamana				e	○				○	
Microconocephalopsis yuwanensis				E	●	●				
Neophisis iriomotensis				E	●				●	
Phlugiolopsis yaeyamensis				E	●				●	
MECOPODIDAE										
Mecopoda elongata					●	●	●	●	●	
PSEUDOPHYLLIDAE										
Togona unicolor					●	●		●	●	
PHANEROPTERIDAE										

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Ducetia japonica					●	●	●	●	●	
Elimaea sp.				E	●				●	
Holochlora japonica					●	●		●		
Isopsera denticulata					●	●		●		
Isopsera sulcata					●	●		●		
Phaneroptera falcata					●	●				
Phaneroptera gracilis					●			●	●	
Phaneroptera okinawensis				E	●			●		
Phaneroptera trigonia					●				●	
Phaulula daitoensis					●	●		●	●	
Phaulula gracilis					●	●		●	●	
Psyrana amamiensis				E	●	●				
Psyrana japonica					●	●				
Psyrana ryukyuensis				E	●			●		
Psyrana yaeyamaensis				E	●				●	
Psyrana yaeyamaensis iriomoteana				e	○				○	
Ruidocollaris truncatolobata					●	●				
GRYLLIDAE										
BRACHYTRUPINAE										
Phonarellus ritsemae					●	●		●	●	
GRYLLINAE										
Gryllus bimaculatus					●				●	
Loxoblemmus equester					●	●	●	●	●	
Melanogryllus bilineatus					●			●	●	
Modicogryllus consobrinus					●	●		●	●	
Modicogryllus siamensis					●	●	●	●	●	
Parasongella japonica		DD		E	●			●		
Teleogryllus occipitalis					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Velarifictorus ornatus					●	●	●	●	●	
SCLEROGRYLLINAE										
Velarifictorus grylloides					●	●	●	●	●	
Sclerogryllus puctatus					●	●		●		
LANDREVINAE										
Duolandrevus guntheri					●				●	
Duolandrevus ivani					●	●	●	●		
ENEOPTERIDAE										
ENEOPTERINAE										
Cardiodactylus guttulus					●	●	●	●	●	
Phaloria ryukyuensis				E	●	●	●	●	●	
Xenogryllus marmoratus					○			○		
Xenogryllus marmoratus unipartitus					○			○		
PODOSCIRTINAE										
Aphonoides rufescens					●	●				
Aphonoides sp. 2				E	●			●		
Mistschenkoana gracilis				E	●				●	
OECANTHINAE										
Oecanthus rufescens					●	●			●	
EUSCYRTINAE										
Patiscus nagatomii				E	●				●	
TRIGONIDIIDAE										
TRIGONIDIINAE										
Anaxipha longealata					●				●	
Homoeoxipha lycoides					●			●		
Homoeoxipha nigripes					●				●	
Homoeoxipha obliterata					●	●		●		
Metiochodes karnyi					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Natula matsuurai					●	●	●	●		
Natula pallidula					●	●	●	●	●	
Natula pravdini					●	●		●	●	
Svistella bifasciata					●	●	●	●		
Svistella henryi					●			●	●	
Trigonidium chamadara					●			●		
Trigonidium cicindeloides					●	●	●	●	●	
Trigonidium pallipes					●	●	●	●	●	
NEMOBIINAE										
Apteronemobius asahinai					●	●		●	●	
Caconemobius sazanami					●	●		●		
Caconemobius takarai					●	●				
Dianemobius csikii					●	●	●			
Dianemobius fascipes					●				●	
Dianemobius nigrofasciatus					●	●	●			
Polionemobius taprobanensis					●	●	●	●	●	
Pteronemobius indicus					●	●	●	●	●	
Pteronemobius nigrescens					●	●		●	●	
Pteronemobius sulfurariae					●	●	●	●		
Taiwanemobius ryukyuensis		DD		E	●	●		●		
Thetella elegans				E	●			●	●	
MOGOPLISTIDAE										
Ectatoderus sp.					●	●	●	●	●	
Ornebius bimaculatus					●	●	●	●	●	
Ornebius fuscicerci					●	●		●	●	
Ornebius kanetataki					●	●	●	●	●	
Ornebius longipennis					○			○	○	
Ornebius longipennis ryukyuensis					○			○	○	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Tubarama iriomotejimana					●			●	●	
MYRMECOPHILIDAE										
Myrmecophilus albicinctus					●				●	
Myrmecophilus formosanus					●				●	
GRYLLOTALPIDAE										
Gryllotalpa orientalis					●	●		●	●	
TRIDACTYLIDAE										
Xya nitobae					●			●	●	
Xya riparia					●	●		●	●	
TETRIGIDAE										
CLADONOTINAE										
Austrohancockia okinawensis				E	●			●	●	
Austrohancockia amamiensis		DD		E	●	●	●			
METRODORINAE										
Amphinotus amamiensis				E	●	●				
Amphinotus okinawaensis				E	●			●		
Salomonotettix hygrophilus				E	●				●	
Systolederus japonicus				E	●	●				
SCELIMENINAE										
Criotettix okinawanus				E	●	●		●		
Criotettix saginatus					●				●	
Eucriotettix oculatus					●				●	
Eucriotettix oculatus transpinosus					○				○	
Platygavialidium formosanum					●				●	
TETRIGINAE										
Ergatettix dorsifer					●	●		●		
Euparatettix histricus					●	●	●	●	●	
Euparatettix tricarinatus					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Hedotettix gracilis					●	●		●	●	
Sciotettix sakishimensis					●				●	
Tetrix minor					●	●		●	●	
PYRGOMORPHIDAE										
Atractomorpha lata					●	●	●	●		
Atractomorpha sinensis					●	●	●	●	●	
Atractomorpha sinensis sinensis					○	○	○	○	○	
CATANTOPIDAE										
CATANTOPINAE										
Stenocatantops mistschenkoi					●	●		●	●	
Traulia ornata					●	●	●	●	●	
Traulia ornata amamiensis				e	○	○	○			
Traulia ornata iriomotensis				e	○				○	
Traulia ornata okinawensis				e	○			○		
PODISMINAE										
Fruhstorferiola okinawaensis				E	●	●	●	●		
Sinopodisma aurata				E	●				●	
Sinopodisma punctata					●	●				
Tonkinacris ruficerus				E	●			●		
Tonkinacris yaeyamensis				E	●				●	
CYRTACANTHACRIDINAE										
Patanga japonica					●	●	●	●	●	
Patanga succincta					●	●	●	●	●	
EYPREPOCNEMIDINAE										
Shirakiacris shirakii					●	●	●			
Shirakiacris sp.					●				●	
HEMIACRIDINAE										
Hieroglyphus annulicornis					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
OXYINAE										
Gesonula punctifrons					●	●	●	●	●	
Oxya chinensis					●	●	●	●	●	
Oxya hyla					●			●	●	
Oxya hyla intricata					○			○	○	
Oxya japonica					●	●	●	●	●	
Oxya podisma					●	●	●			
GELASTORHININAE										
Gonista bicolor					●	●	●	●	●	
ACRIDINAE										
Acrida cinerea					●	●	●	●	●	
OEDIPODINAE										
Aiolopus thalassinus					●	●	●	●	●	
Aiolopus thalassinus tamulus					○	○	○	○	○	
Gastrimargus marmoratus					●	●	●	●	●	
Heteropternis rufipes					●	●		●	●	
Locusta migratoria					●	●	●	●	●	
Locusta migratoria manilensis					○	○	○	○	○	
Trilophidia annulata					●				●	
PHASMATODEA										
BACILLIDAE										
Datames sp.					●	●	●	●	●	
HETERONEMIIDAE										
Micadina phluctaenoides					●	●	●	●		
NeÔhirasea japonica					●	●		●		
Phraortes sp. 1				E	●				●	
Phraortes sp. 4				E	●			●		
Phraortes sp. 5				E	●	●				

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Sipyloidea sipylus					●	●	●	●	●	
PHASMATIDAE										
Entoria ishigakiensis					●				●	
Entoria okinawaensis					●	●	●	●	●	
Megacrania tsudai					●				●	
Megacrania tsudai adan		DD		e	○				○	
DERMAPTERA										
ANISOLABIDIDAE										
Anisolabis maritima					●			●		
Anisolabis ryukyuensis				E	●	●		●	●	
Euborellia annulipes					●			●	●	
Euborellia plebeja					●			●		
Gonolabis distincta					●	●		●		
Gonolabis marginalis					●			●		
CHELISOCHIDAE										
Proreus simulans					●				●	
DIPLATYIDAE										
Diplatys flavicollis					●				●	
FORFICULIDAE										
Forficula hiromasai					●	●		●		
Paratimomenus flavocapitatus					●	●				
LABIDURIDAE										
Labidura riparia					●			●		
Labidura riparia japonica					○			○		
PSOCOPTERA										
CAECILIUSIDAE										
Caecilius oyamai					●	●				
Coryphosmila dolobrata					○				○	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Dypsocus coleoptratus					●	●				
ECTOPSOCIDAE										
Ectopsocopsis cryptomeriae					●	●				
Ectopsocus maindroni					○			○		
HEMIPSOCIDAE										
Hemipsocus chloroticus					●	●				
LACHESILLIDAE										
Lachesilla pedicularia					●			●	●	
MESOPSOCIDAE										
Mesopsocus hongkongensis					●	●		●	●	
PSEUDOCAECILIIDAE										
Allocaecilius sinensis					○	○		○		
Heterocaecilius fuscus					○	○		○		
Phallocaecilius hirsutus					○				○	
Pseudocaecilius citricola					○	○		○		
Pseudocaecilius kagoshimensis					●	●		●	●	
Pseudocaecilius kagoshimensis kagoshimensis					○	○		○		
Pseudocaecilius kagoshimensis yaeyamensis				e	○				○	
Pseudoscottiella sakishimensis				E	○				○	
PSOCIDAE										
Atrichadenotecnum ryukyuense				E	●			●	●	
Psococerastis ryukyuensis				E	●			●	●	
Psococerastis yuwan				E	●	●				
MALLOPHAGA										
MENOPONIDAE										
Colpocephalum gallinulae					●	●				
Myrsidea shirakii					●	●				
PHILOPTERIDAE										

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Philopterus acutifrons				E	●	●				
ANOPLURA										
HOPLOPLEURA										
Hoplopleura oenomydis					●	●		●	●	
Polyplax rectinata					●	●		●	●	
THYSANOPTERA										
PHLAEOTHRIPIDAE										
Acallurothrips casuarinae				E	●			●	●	
Acallurothrips hanatonii					●	●				
Acallurothrips nonakai				E	●			●	●	
Apelaunothrips consimilis					●				●	
Apelaunothrips maculipennis				E	●	●		●		
Apelaunothrips nigripennis					●			●		
Azaleothrips moundi					●	●		●	●	
Bactrothrips brevitubus					●	●		●	●	
Bactrothrips honoris					●			●		
Bactrothrips pictipes					●			●		
Baenothrips ryukyuensis					●			●	●	
Bamboosiella exastis					●	●				
Chiridurothrips hisakoae				E	●				●	
Dichaetothrips secutor					●	●				
Ecacanthothrips leai					●	●				
Ecacanthothrips ryukyuensis				E	●	●		●		
Ecacanthothrips tibialis					●	●		●		
Ethirothrips tibialis				E	●				●	
Eugynothrips intorquens					●			●		
Gastrothrips acutulus					●	●		●	●	
Gynaikothrips ficorum					●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Haplothrips aculeatus					●			●	●	
Haplothrips chinensis					●			●	●	
Helionothrips mube					●			●		
Holothrips hagai					●	●		●	●	
Holothrips okinawanus					●				●	
Holothrips porifer					●	●			●	
Holothrips ryukyuensis				E	●			●	●	
Holurothrips morikawai					●			●		
Hoplothrips dentifer					●	●				
Hyidiothrips bruneus					●	●			●	
Hyidiothrips hiromiae				E	●				●	
Hyidiothrips nirasawae				E	●			●		
Idolothrips yashiroi				E	●			●		
Liothrips piperinus					●			●		
Mecynothrips pugilator					●	●		●		
Mesothrips claripennis					●			●		
Nesothrips brevicollis					●			●		
Phaurothrips solifer					●	●		●		
Phylladothrips pictus					●	●				
Psalidothrips ascitus					●	●		●	●	
Psalidothrips consimilis				E	●				●	
Psalidothrips lewisi					●	●		●	●	
Psalidothrips ochraceus				E	●			●		
Psalidothrips simplus					●	●		●		
Pygothrips breviceps					●				●	
Pygothrips vicinus				E	●			●	●	
Sophiothrips nigrus					●			●	●	
Sophiothrips annulatus					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Stephanothrips occidentalis					●			●		
Stigmothrips infirmus					●	●		●		
Stigmothrips russatus					●			●	●	
THRIPIDAE										
Anaphothrips sudanensis					●			●		
Bolacidothrips evittatus					○			○		
Chaetanaphothrips varius				E	○	○		○		
Frankliniella intonsa					●			●	●	
Fulmekiola serrata					●	●		●	●	
Hydatothrips liquidambara					○				○	
Hydatothrips noro				E	○	○		○	○	
Hydatothrips onari					○				○	
Hydatothrips samayunkur					○			○		
Megaleurothrips diStå /is					●			●		
Megaleurothrips usitatus					○			○		
Serichothrips tabulifer					○				○	
Stenchaetothrips minutus					○			○		
Stenchaetothrips mucunae				E	○			○		
Taeniothrips cognaticeps					○			○		
Thrips addendus					○			○		
Thrips alliorum					●			●		
Thrips flavus					●			●		
HOMOPTERA										
AUCHENORRHYNCHA										
CICADOMOROHA										
CICADIDAE										
CICADINAE										
Cryptotympana facialis					●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Cryptotympana yaeyamana				E	●				●	
Euterpnosia chibensis					●	●	●	●		
Euterpnosia chibensis chibensis					○	○	○			
Euterpnosia chibensis okinawana				e	○			○		
Euterpnosia iwasakii				E	●				●	
Graptopsaltria bimaculata				E	●	●	●	●		
Meimuna iwasakii					●				●	
Meimuna kuroiwae					●	●	●	●		
Meimuna oshimensis				E	●	●	●	●		
Mogannia minuta					●			●	●	
Nipponosemia terminalis		LP			●				●	
Platypleura kaempferi					●	●	●	●		
Platypleura kuroiwae				E	●	●	●	●		
Platypleura yayeyamana				E	●				●	
Pomponia linearis					●				●	
Tanna japonensis					●	●				
Tanna japonensis japonensis					○	○				
Tanna ishigakiana		NT		E	●				●	
TIBICININAE										
Muda kuroiwae		VU		E	●			●		
CERCOPIDAE										
Eoscarta assimilis					●			●		
Eoscarta zonalis					●	●	●		●	
APHROPHORIDAE										
Aphrophora flavipes					●	●	●			
Aphrophora okinawana				E	●	●	●	●	●	
Aphrophora paguma				E	●	●	●			
Clovia bipunctata					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Poophilus coStå /is					●			●	●	
MACHAEROTIDAE										
Hindoloides bipunctatus					●			●	●	
Makiptyelus dimorphus					●			●	●	
MEMBRACIDAE										
Taihorina geisha					●	●		●		
Gargara genistae					●	●	●	●	●	
Gargara minuta					●			●	●	
CICADELLIDAE										
AGALLIINAE										
Austroagallia nitobei					○		○			
MACROPSINAE										
Macropsis irrorata					●	●		●	●	
Macropsis matsumurana					●			●		
Pedionis kagoshimensis					●			●	●	
Pediopsoides satsumensis					●	●		●		
LEDRINAE										
Funkikonia tuberculata					●			●	●	
Ledra auditura					●				●	
Ledropsis wakabae					●	●	●	●	●	
Tituria angulata					●	●	●	●	●	
CICADELLINAE										
Bothrogonia ferruginea					●			●	●	
Cofana spectra					●	●	●	●	●	
Kolla atramentaria					●	●	●	●	●	
IDIOCERINAE										
Idiocerus yanonis					●	●	●	●		
SELENOCEPHALINAE										

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Bhatia satsumensis					●	●		●		
Drabescus formosanus					●	●		●		
Drabescus nitobei					●	●		●	●	
Dryadomorpha pallida					●	●	●	●	●	
Favintiga camphorae					●	●	●	●	●	
Parabolopona guttata					●	●	●	●	●	
Parohinka longiseta					●				●	
Waigara boninensis					●	●	●	●		
TARTESSINAE										
Tartessus ferrugineus					●	●	●	●	●	
PENTHIMIINAE										
Penthimia guttula					●				●	
Penthimia okinawana				E	●	●	●	●		
MUKARIINAE										
Mukaria maculata					●			●	●	
Mukaria zonata				E	●			●		
IASSINAE										
Batracomorphus chlorophana					●	●	●	●		
Batracomorphus curvatus					●			●	●	
Batracomorphus diminutus					●	●	●	●	●	
Batracomorphus mundus					●	●				
Batracomorphus stigmaticus					●	●	●	●	●	
COELIDIINAE										
Calodia yayeyamana					●	●	●	●	●	
Lodiana alata					●				●	
Lodiana uenoi				E	●	●		●	●	
Thagria fuscovenosa					●	●		●	●	
Thagria sola				E	●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
APHRODINAE										
Chiasmus mustelinus					●	●	●		●	
Stroggylocephalus agrestis					●	●	●	●	●	
XESTOCEPHALINAE										
Xestocephalus atratus				E	●	●				
Xestocephalus japonicus					●	●	●	●		
DELTOCEPHALINAE										
Alobaldia tobae					●			●		
Balclutha asymmetrica					○		○	○	○	
Balclutha batuensis					○				○	
Balclutha bifasciata					●	●	●	●	●	
Balclutha incisa					●	●		●	●	
Balclutha kuroiwae					●	●		●	●	
Balclutha lucida					●			●	●	
Balclutha rieki					●				●	
Balclutha rosea					●			●	●	
Balclutha rubrinervis					●	●		●	●	
Balclutha saltuella					●	●		●	●	
Balclutha sternalis					●			●	●	
Balclutha viridinervis					●	●	●	●	●	
Cicadulina bipunctata					●	●		●	●	
Doratulina producta					●	●		●	●	
Exitianus indicus					●	●	●	●	●	
Exitianus nanus					●	●	●	●	●	
Hecalus apicalis					●			●	●	
Hecalus arcuatus					●	●	●	●	●	
Hecalus okinawensis					●			●	●	
Hecalus prasinus					●	●	●			

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Hengchunia koshunensis					●				●	
Hishimonus araii					●	●		●	●	
Hishimonus phycitis					●	●			●	
Hishimonus sellatus					●	●	●	●	●	
Macrosteles sexnotatus					●			●		
Macrosteles striifrons					●	●	●	●		
Nephotettix cincticeps					●	●	●	●	●	
Nephotettix malayanus					●		●	●	●	
Nephotettix nigropictus					●	●		●	●	
Nephotettix virescens					●	●		●	●	
Orientus ishidae					●	●		●	●	
Orosius orientalis					●			●	●	
Orosius ryukyuensis					●			●	●	
Paivanana indra					●	●		●	●	
Paralaevicephalus nigrifemoratus					●	●				
Paramesodes albinervosus					●	●	●	●	●	
Phlogotettix cyclops					●	●		●		
Psammotettix striatus					●	●		●		
Recilia distincta					●	●		●	●	
Recilia dorsalis					●	●		●	●	
Recilia oryzae					●	●	●			
Satsumanus satsumae					●			●	●	
Scaphoideus kumamotonis					●			●		
Scaphoideus festivus					●	●		●	●	
Scaphoideus rubroguttatus					●				●	
Stymphalus rubrolineatus					●				●	
Takagiella tezuyae					●		●		●	
Thamnotettix okinawanus					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Yamatotettix flavovittatus					●	●	●	●	●	
Yamatotettix pacificus					●				●	
NIRVANINAE										
Nirvana pallida					●	●		●	●	
Nirvana suturalis					●		●	●	●	
Sophonia orientalis					●			●	●	
TYPHLOCYBINAE										
Aguriahana quercus					●			●		
Amrasca biguttula					●	●		●		
Anufrievia ciconia					●				●	
Apheliona ferruginea					●			●		
Arboridia apicalis					●			●	●	
Arboridia suzukii					●				●	
Dayus takagii					●	●	●	●	●	
Diomma taiwana					●			●	●	
Empoascanara alami					●			●		
Empoascanara circumscripta					●				●	
Empoascanara limbata					●			●		
Empoascanara maculifrons					●	●				
Empoascanara sonani					●			●		
Helionides singularis					●	●		●		
Hiratettix arisanellus					●			●		
Ishiharella polyphemus					●	●	●			
Jacobiasca boninensis					●	●		●	●	
Karachiota marcowa					●			●	●	
Lectotypella asara					●				●	
Limassolla multipunctata					●			●	●	
Naratettix inornatus					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Platycyba bistriata					●			●	●	
Seriana ochrata					○			○	○	
Singapora nigropunctata					●				●	
Tautoneura japonica					●			●		
Tautoneura mori					●	●	●	●	●	
Thaia subrufa					●				●	
Ziczacella heptapotamica					●	●				
Zyginella citri					●				●	
Fulgoromorpha										
CIXIIDAE										
Andes harimaensis					●	●		●	●	
Betacixius brunneus					●	●	●	●		
Betacixius kumejimae				E	●			●		
Borysthenes maculatus					●	●	●	●		
Kirbyana pagana					●	●	●	●	●	
Oliarus okinawanus				E	●			●	●	
Pentastridius pachyceps					●			●	●	
DELPHACIDAE										
ASIRACINAE										
Ugyops vittatus					●	●	●	●	●	
STENOCRANINAE										
Stenocranus agamopsyche					●			●	●	
Stenocranus takasagonis					●			●		
SACCHAROSYDNINAE										
Saccharosydne procerus					●			●	●	
DELPHACINAE										
Arcofaciella verrucosa					●				●	
Arcofacies fullawayi					●			●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Belocera sinensis					●				●	
Cemus nigromaculosus					●			●	●	
Cemus nigropunctatus					●	●	●	●	●	
Delphacodes nigriella					●			●	●	
Ecdelphax cervina					●			●		
Ecdelphax dentata					●			●	●	
Epeurysa nawaii					●	●	●	●	●	
Garaga orchidensis					●				●	
Harmalia heitensis					●			●	●	
Harmalia sirokata					●	●				
Himeunka tateyamaella					●	●		●	●	
Hirozunka japonica					●				●	
Kakuna kuwayamai					●			●		
Laodelphax striatella					●	●	●	●	●	
Latristria eupompe					●			●	●	
Malaxa aurunca					●				●	
Matutinus yanchinus					●		●	●	●	
Nilaparvata bakeri					●				●	
Nilaparvata lugens					●	●	●	●	●	
Numata corporaali					●				●	
Numata muiri					●	●		●	●	
Nycheuma cognatum					●				●	
Paraconon membranacea					●				●	
Peliades chuhkouensis					●				●	
Peregrinus maidis					●	●		●	●	
Perkinsiella bakeri					●			●	●	
Perkinsiella graminicida				E	●	●	●		●	
Perkinsiella saccharicida					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Perkinsiella sinensis					●			●	●	
Perkinsiella yakushimensis					●	●				
Prodelphax formosana					●			●		
Purohita taiwanensis					●			●	●	
Rhombotoya pseudonigripennis					●			●	●	
Sardia rostrata					●	●		●	●	
Sogata hakonensis					●	●	●	●	●	
Sogata nigrifrons					●			●		
Sogatella furcifera					●	●	●	●	●	
Sogatella kolophon					●	●		●	●	
Sogatella vibix					●				●	
Tarophagus colocasiae					●			●	●	
Terthron albovittatum					●			●	●	
Toya propinqua					●	●	●	●	●	
Toya tuberculosa					●			●	●	
Tropidocephala brunneipennis					●	●		●	●	
Tropidocephala festiva					●	●		●	●	
Tropidocephala nigra					●	●		●	●	
Ulanar centesima					●				●	
MEENOPLIDAE										
Nisia grandiceps					●				●	
Nisia nervosa					●	●	●	●	●	
DERBIDAE										
Diostrombus politus					●			●	●	
Halcita shirakii					●	●		●	●	
Kamendaka saccharivora					●	●	●	●	●	
Losbanosia hibarensis					●	●				
Parapeggia taiwana					○				○	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Rhotana kagoshimana					●	●	●	●	●	
Rhotana maculata					●	●	●	●	●	
Shirakiana infumata					●				●	
Vekunta malloti					●	●	●	●	●	
ACHILIDAE										
Akotropis fumata					●	●		●	●	
Catanidia sobrina					●				●	
Deferunda rubrostigma					●	●	●	●	●	
Kosalya flavostrigata					○				○	
Plectoderoides vittifrons				E	●	●	●	●		
Rhotala nawae					●			●	●	
Tangina bipunctata					●			●	●	
Usana yanonis					●			●		
DICTYOPHARIDAE										
Dictyophara okinawensis					●	●		●	●	
Orthopagus lunulifer					●			●	●	
TROPIDUCHIDAE										
Catullioides albosignatus					●				●	
Kallitaxila sinica					●	●	●	●	●	
Mesepora onukii					●	●	●	●	●	
Neommatissus basifuscus					●	●	●	●	●	
Ossoides lineatus					●	●	●	●	●	
Sogana hopponis					●	●		●	●	
Trypetimorpha biermani					●	●		●	●	
ISSIDAE										
Conocaliscelis hokutonis					○			○		
Gergithoides carinatifrons					●	●	●	●	●	
Gergithus okinawanus					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Gergithus satsumensis					●	●	●			
Gergithus yayeyamensis				E	●				●	
Hemisphaerius takagii				E	●				●	
Okissus kuroiwae				E	●	●		●	●	
Sarima amagisana					●	●	●			
Sarima ryukyuana				E	●	●	●	●		
Sarima satsumana					●	●	●	●	●	
Tonga yayeyamana				E	●			●	●	
NOGODINIDAE										
Mindura subfasciata					●			●	●	
Mindura sundana					●	●		●	●	
Pisacha naga					●	●	●	●	●	
FLATIDAE										
Atracis formosana					●	●	●	●	●	
Geisha distinctissima					●	●	●	●	●	
Mimophantia maritima					●	●		●	●	
RICANIIDAE										
Euricania ocellus					●	●		●		
Orosanga japonicus					●		●	●		
Pochazia albomaculata					●			●		
Ricania bifasciata					●	●		●	●	
Ricania formosana					●				●	
Ricania taeniata					●		●	●	●	
LOPHOPIDAE										
Lophops carinata					●	●	●	●	●	
STERNORRHYNCHA										
ALEYRODOIDEA										
ALEYRODIDAE										

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Acanthobemisia distylii					●	●		●		
Aleurotuberculatus aucubae					●			●	●	
Apobemisia kuwanai					●	●				
Pealius amamianus				E	●	●				
Tuberaleyrodes machili					●	●				
PSYLLOIDEA										
APHALARIDAE										
Aphalara itadori					●	●				
CARSIDARIDAE										
Caenohomotoma radiata					●			●		
Leptynoptera sulfurea					●			●	●	
Mesohomotoma camphorae					●	●		●	●	
Nesiope ornata					●				●	
Paurocephala chonchaiensis					●				●	
Paurocephala psylloptera					●	●		●	●	
Sympauropsylla triozoptera					●			●	●	
PSYLLIDAE										
Calophya nigridorsalis					●	●	●	●	●	
Insnesia drypetes				E	●	●		●	●	
Psylla coccinea					●	●				
Psylla evodiae				E	●				●	
Psylla fulguraris					●	●		●	●	
Psylla tobirae					●	●		●	●	
Psylla vaccinii					●			●		
TRIOZIDAE										
Megatrioza magnicauda					●			●	●	
Megatrioza malloticola					●			●		
Stenopsylla occipitalis					●	●			●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Stenopsylla proboscidaria					●	●			●	
Trioza cinnamomi					●	●		●	●	
Trioza formosana					●				●	
Trioza kuwayamai				E	●	●		●		
Trioza nigra					●	●		●	●	
APHIDOIDEA										
APHIDIDAE										
Aicenoa actinodaphis					●			●		
Aphis clerodendri					●			●		
Aphis gossypii					●			●	●	
Aphis ichigo					●			●		
Aphis spiraecola				E	●			●		
Astegopteryx bambusifoliae					●			●	●	
Astegopteryx styracophila					●	●				
Aulacorthum esakii					●	●			●	
Brachysiphoniella montana				E	●			●		
Capitophorus javanicas				E	●				●	
Cavariella araliae					●	●		●		
Ceratovacuna lanigera					●			●		
Ceratovacuna nekoashi					●			●		
Ceratovacuna uscare				E	●			●		
Cinara piniformosa					●			●		
Cryptomyzus taoi				E	●				●	
Cryptosiphum artemisiae					●			●		
Dinipponaphis autumna					●			●		
Eulachnus thunbergii					●			●		
Eutrichosiphum pasaniae					●	●		●	●	
Greenidea ficicola					●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Greenidea formosana					●			●	●	
Greenidea okajimai					●	●				
Hyalopterus pruni					●			●		
Hyperomyzus cardullinus					●			●		
Hysteroneura setariae					●			●		
Indomegoura indica					●			●		
Macromyzus woodwardiae					●				●	
Macrosiphoniella formosartemisiae					●				●	
Macrosiphoniella grandicauda					●			●		
Macrosiphoniella oblonga					●	●				
Macrosiphoniella pseudoartemisiae					●			●		
Macrosiphoniella sanborni					●	●		●		
Macrosiphoniella yomogifoliae					●	●		●		
Matsumuraja rubifoliae					●	●		●		
Melanaphis bambusae					●			●		
Melanaphis formosana				E	●			●	●	
Melanaphis sacchari					●			●		
Mollitrichosiphum glaucae				E	●				●	
Mollitrichosiphum luchuanum				E	●			●		
Mollitrichosiphum nigrofasciatum					●			●		
Mollitrichosiphum nigrofasciatum nigrofasciatum					○			○		
Mollitrichosiphum yamabiwae					●			●	●	
Myzosiphum ryukyuense				E	●			●		
Myzus boehmeriae					●	●		●		
Myzus lactucicola					●	●				
Myzus siegesbeckicola					●	●				
Myzus varians					●	●		●		
Nipponaphis amamiana				E	●	●				

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Nipponaphis machiliphaga					●				●	
Nipponaphis monzeni					●			●		
Pentalonia nigronervosa					●			●		
Pleotrichophorus chrysanthemi				E	●			●		
Rhopalosiphum maidis					●			●	●	
Rhopalosiphum nymphaeae					●			●		
Rhopalosiphum rufiabdominalis					●			●		
Sappaphis piri					●			●		
Sarucalis kahawaluokalani					●			●		
Schizaphis minuta				E	●			●		
Schizaphis rotundiventris					●			●		
Schizolachnus orientalis					●			●		
Semiaphis heraclei					●			●		
Sinomegoura citricola					●			●		
Sitobion akebiae					●	●		●		
Sitobion ibarae					●	●				
Sitobion smilacifoliae					●			●	●	
Sitobion yasumatsui					●	●				
Toxoptera aurantii					●			●		
Toxoptera odinae					●			●		
Uroleucon amamianum					●	●				
Uroleucon cephalonopli					●				●	
Uroleucon formosanum					●	●		●		
COCCOIDEA										
ACLERDIDAE										
Aclerda takahashii					●			●		
Nipponaclerda biwakoensis					●			●		
ASTEROLECANIIDAE										

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Asterolecanium bambusae					●	●		●	●	
Asterolecanium bambusicola					●	●		●		
Asterolecanium coronatum					●			●		
Asterolecanium minutum					●	●				
Asterolecanium pasaniae					●			●		
COCCIDAE										
Ceroplastes ceriferus					●			●		
Ceroplastes cirripediformis					○	○		○		
Ceroplastes japonicus					●	●				
Coccus acutissimus					●	●		●	●	
Coccus discrepans					●	●		●		
Coccus hesperidum					●	●		●	●	
Paralecanium expansum					●			●	●	
Protopulvinaria ixorae					●			●		
Protopulvinaria pyriformis					●			●		
Pulvinaria polygonata					●			●		
DIASPIDIDAE										
Acanthaspidiotus borchsenii					●	●		●		
Acanthomytilus imperatae					●	●				
Andaspis crawii					●	●		●		
Andaspis kashicola					●			●		
Andaspis naracola					●			●		
Andaspis recurrens					●	●		●		
Aonidiella messengeri					●			●	●	
Aonidiella taxus					●	●			●	
Aspidiella phragmitis					●	●				
Aspidiotus beilschmiediae					●			●		
Aspidiotus destructor					●	●		●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Aspidiotus ophiopogonus					●	●				
Aulacaspis amamiana				E	●	●		●	●	
Aulacaspis distylii					●	●		●		
Aulacaspis isobeae				E	●			●		
Aulacaspis kadsurae					●				●	
Aulacaspis kuzunoi					●	●		●		
Aulacaspis takarai				E	●			●		
Aulacaspis yabunikkei					●	●		●	●	
Chionaspis machili					●			●	●	
Chionaspis sozanica					●			●		
Chrysomphalus bifasciculatus					●			●	●	
Clavaspidiotus tayabanus					●			●		
Comstockaspis paraphyses					●			●		
Cryptoparlatorea leucaspis					●			●		
Diaonidia yabunikkei					●	●		●	●	
Diaspidiotus makii					●	●				
Duplaspidiotus claviger					●			●		
Fiorinia euryae					●	●		●		
Fiorinia proboscidaria					●			●		
Fiorinia separata				E	●	●		●	●	
Fiorinia theae					●			●	●	
Greenaspis elongata					●			●		
Hemiberlesia lataniae					●	●		●	●	
Hemiberlesia pitysophila					●			●		
Hypaspidiotus jordani					●			●		
Hypaspidiotus phaneraspis				E	●	●				
Ichthyaspis ficicola					●			●		
Kuwanaspis pseudoleucaspis					●	●		●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Lepidosaphes abdominalis					●	●		●		
Lepidosaphes buzenensis					●	●		●		
Lepidosaphes celtis					●			●		
Lepidosaphes euryae					●			●		
Lepidosaphes glaucae					●			●		
Lepidosaphes gloverii					●	●		●		
Lepidosaphes laterochitinosa					●			●	●	
Lepidosaphes machili					●	●		●	●	
Lepidosaphes pallida					●			●		
Lepidosaphes pallidula					●			●	●	
Lepidosaphes pini					●	●				
Lepidosaphes piniphila					●			●		
Lepidosaphes pitysophila					●			●		
Lepidosaphes smilacis				E	●	●		●	●	
Lindingaspis setiger					●	●		●		
Lopholeucaspis hydrangeae					●			●	●	
Lopholeucaspis japonica					●	●				
Metaspidiotus stauntoniae					●			●		
Microparlatoria itabicola				E	●	●		●		
Natalaspis formosanus					●			●		
Neopinnaspis harperi					●			●	●	
Odonaspis oshimaensis					●	●		●	●	
Odonaspis penicillata					●	●		●	●	
Odonaspis secreta					●	●		●		
Parlatoreopsis pyri					●			●		
Parlatoria camelliae					●			●		
Parlatoria pergandii					●			●	●	
Pinnaspis aspidistrae					●	●		●	●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Pinnaspis buxi					●			●	●	
Pinnaspis hikosana					●			●	●	
Pinnaspis piperis					●	●		●	●	
Pinnaspis uniloba					●	●		●		
Pseudaonidia duplex					●			●		
Pseudaonidia trilobitiformis					●	●		●		
Pseudaulacaspis celtis					●			●		
Pseudaulacaspis cockerelli					●	●		●	●	
Pseudaulacaspis pentagona					●	●		●	●	
Pseudaulacaspis prunicola					●			●		
Radiaspis indica					●			●		
Thysanaspis litseae					●	●		●		
Ungulaspis ficicola					●				●	
ERIOCOCCIDAE										
Eriococcus henmii					●	●				
MARGARODIDAE										
Kuwania quercus					●			●		
Matsucoccus matsumurae					●			●		
PSEUDOCOCCIDAE										
Allotrionymus sp.				E	●			●		
Antonina crawii					●			●		
Antonina graminis					●			●	●	
Chaetococcus bambusae					●			●	●	
Dysmicoccus boninsis					●	●		●	●	
Eumyrmococcus nipponensis					●		●			
Ferrisia virgata					●			●		
Miscanathicoccus miscanthi					●			●		
Neoripersia japonica					●	●				

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Nipaecoccus viridis					●			●	●	
Planococcus lilacinus					●			●	●	
Saccharicoccus sacchari					●	●		●	●	
HETEROPTERA										
DIPSOCOROMORPHA										
SCHIZOPTERIDAE										
Hypselosoma hirashimai		DD		E	●	●				
Kokeshia esakii					●	●		●		
NEPOMORPHA										
NEPIDAE										
Laccotrephes grossus					●				●	
Laccotrephes japonensis					●	●	●	●		
Ranatra chinensis					●			●		
Ranatra longipes		NT			●				●	
Ranatra unicolor					●		●	●		
BELOSTOMATIDAE										
Diplonychus rusticus		CR			●			●		
Lethocerus deyrolli					●			●	●	
CORIXIDAE										
Agraptocorixa hyalinipennis					●			●	●	
Micronecta grisea					●			●	●	
Micronecta hungerfordi					●				●	
Micronecta japonica				E	●	●	●			
Micronecta lenticularis					●				●	
Micronecta sahlbergii					●	●		●	●	
Sigara distorta					●	●		●	●	
Sigara formosana					●				●	
Sigara nigroventralis					●	●	●			

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Sigara septemlineata					●	●	●	●	●	
OCHTERIDAE										
Ochterus marginatus					●				●	
GELASTOCORIDAE										
Nerthra macrothorax					●	●	●	●	●	
NOTONECTIDAE										
Anisops exiguus					●	●	●	●	●	
Anisops kuroiwae					●	●		●	●	
Anisops nasutus					●	●	●	●	●	
Anisops occipitalis					●	●	●	●	●	
Anisops ogasawarensis					●			●	●	
Anisops sta /i					●			●	●	
Anisops tahitiensis					●	●	●	●	●	
Enithares sinica					●			●	●	
Notonecta montandoni		NT			●			●		
PLEIDAE										
Paraplea japonica					●	●	●	●	●	
HELOTREPHIDAE										
Paraplea liturata					●				●	
Heterotrephes admorsus		VU		E	●	●	●			
GERROMORPHA										
MESOVELIIDAE										
Mesovelia japonica					●	●	●	●	●	
Mesovelia vittigera					●	●	●	●	●	
HYDROMETRIDAE										
Hydrometra albolineata		VU			●	●				
Hydrometra annamana					●	●	●	●	●	
Hydrometra okinawana					●	●	●	●	●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Hydrometra procera					●	●		●		
HEBRIDAE										
Hebrus hasegawai					●				●	
Hebrus nipponicus					●				●	
VELIIDAE										
Halovelia septentrionalis					●	●	●	●	●	
Microvelia diluta					●			●	●	
Microvelia douglasi					●	●	●	●	●	
Microvelia Horváthi					●	●	●	●		
Microvelia iriomotensis				E	●				●	
Microvelia japonica					●	●	●	●		
Microvelia kyushuensis					●				●	
Microvelia morimotoi				E	●				●	
Microvelia uenoi				E	●				●	
Pseudovelia hirashimai				E	●				●	
Pseudovelia takarai				E	●				●	
Pseudovelia tsutsuii				E	●	●	●	●		
Rhagovelia esakii				E	●				●	
Xiphovelia curvifemur				E	●	●	●	●		
GERRIDAE										
GERRINAE										
Aquarius paludum					●	●	●	●	●	
Aquarius paludum amamiensis					○	○	○	○	○	
Gerris gracilicornis					●	●	●	●	●	
Limnogonus fossarum					●	●	●	●	●	
Limnogonus fossarum fossarum					○	○	○	○	○	
Limnogonus hungerfordi					●				●	
Neogerris parvulus					●	●	●	●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
HALOBATINAE										
Halobates japonicus					●	●		●	●	
Metrocoris esakii					●			●	●	
Metrocoris histrio					●	●	●			
HERMATOBATIDAE										
Hermatobates weddi		NT			●	●		●	●	
LEPTOPODOMORPHA										
SALDIDAE										
Micracanthia ornatula					●	●		●	●	
Saldoida armata					●	●	●	●	●	
Saldula recticollis					●	●	●	●	●	
Saldula saltatoria					●			●		
Salduncula decempunctata					●			●	●	
OMANIIDAE										
Corallocoris satoi					●	●	●	●	●	
CIMICOMORPHA										
MIRIDAE										
PSALLOPINAE										
Psallops yaeyamanus				E	●				●	
CYLAPINAE										
Bothriomiris capillosus					●				●	
Bothriomiris gotohi					●			●		
Cylapomorpha michikoae					●			●	●	
Peritropis insularis				E	●	●		●		
Peritropis iriomotensis				E	●				●	
Yamatofulvius laevigatus				E	●			●		
BRYOCORINAE										
Bryocoris gracilis					●	●		●	●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Ernestinus pallidiscutum					●			●	●	
Ernestinus tetrastigma				E	●			●	●	
Felisacus capitatus				E	●			●	●	
Felisacus gressitti				E	●	●		●		
Felisacus insularis				E	●	●		●	●	
Felisacus okinawanus				E	●	●		●		
Michailocoris chinensis					●				●	
Monalocoris amamianus				E	●	●				
Monalocoris filicis					●	●	●	●	●	
DERAEOCORINAE										
Deraeocoris hayashii				E	●				●	
Deraeocoris kimotoi				E	●	●	●	●		
Deraeocoris ryukyuensis					●			●	●	
Dortus chinai					●	●		●	●	
Fingulus collaris					●				●	
Fingulus longicornis					●	●		●		
Fingulus takahashii				E	○			○		
Stethoconus japonicus					●				●	
Stethoconus praefectus					●				●	
Termatophylum aeneum				E	●			●	●	
Termatophylum orientale					●				●	
MIRINAE										
Adelphocorisella insulana				E	●				●	
Apolygus bipunctatellus				E	●	●		●		
Apolygus fuscoruber				E	●			●		
Apolygus insulicola					●	●		●	●	
Apolygus miniaceus				E	●				●	
Apolygus spinolae					●	●				

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Bertsa lankana					●	●		●	●	
Castanopsides hasegawai					●	●		●		
Castanopsides takaii					●				●	
Cheilocapsus miyamotoi					●	●		●	●	
Creontiades bipunctatus					●	●		●	●	
Creontiades coloripes					●	●		●	●	
Creontiades minutus					●			●	●	
Dolichomiris linearis					●	●		●	●	
Eurystylus sauteri					●	●	●	●	●	
Exopantilius pilosus					●				●	
Hyalopeplus lineifer					●				●	
Lygocorides rubricans					●	●		●	●	
Lygocoris kyushuensis					●	●		●		
Lygocoris tokaraensis					●	●			●	
Mecistoscelis scirtetoides					●	●		●	●	
Miyamotoa rubicunda		NT		E	●	●				
Orientomiris erythromelas				E	●	●				
Orientomiris flavicollaris				E	●			●		
Orientomiris nigripennis				E	●	●				
Orientomiris yaeyamanus				E	●				●	
Orientomiris yaeyamanus yaeyamanus				e	○				○	
Prolygus kirkaldyi					●	●		●		
Taylorilygus apicalis					●	●		●	●	
Tinginotum formosanum					●				●	
Tinginotum perlatum					●	●		●	●	
Trigonotylus tenuis					●			●	●	
Yamatolygus insulanus					●	●		●		
Zhengiella scutellata					●			●	●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
ORTHOTYLINAE										
Coridromius bufo					●	●		●		
Coridromius declivipennis				E	●			●	●	
Cyrtorhynus lividipennis					●	●		●	●	
Halticiellus insularis					●				●	
Pseudoloxops takaii					●			●		
Pseudoxopidea pinicola				E	●			●	●	
Pseudoxops imperatorius					●			●		
Zanchius gigantoculus				E	●	●		●	●	
Zanchius nakatanii				E	●	●		●		
Zanchius ryukyuensis				E	●			●	●	
PHYLINAE										
Campylomma livida					●				●	
Decomioides philippinensis					●				●	
Decomioides schneirlai					●	●		●	●	
Moissonia punctata					●			●	●	
Opuna annulata					●			●	●	
Opuna pallidula				E	●			●		
Phoenicocoris ryukyuensis				E	●			●		
Pilophorus typicus					●		●	●	●	
Tyttus chinensis					●			●	●	
ISOMETOPINAE										
Isometopus hasegawai				E	●				●	
Myiomma minutum				E	●				●	
Myiomma samuelsoni				E	●				●	
NABIDAE										
Alloeorhynchus vinulus					●	●			●	
Arbela simplicipes					●				●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Arbela tabida					●	●		●		
Nabis stenoferus					●				●	
Nabis kinbergii					●	●	●	●	●	
Phorticus affinis					●				●	
Prostemma fasciatum					●	●		●	●	
Stenonabis orientalis					●	●		●	●	
Stenonabis uhleri					●	●		●	●	
ANTHOCORIDAE										
Amphiareus constrictus					●			●		
Anthocoris miyamotoi					●	●		●	●	
Bilia japonica					●	●		●	●	
Blaptostethus esakii					●	●	●			
Montandoniola moraguesi					●	●		●	●	
Orius strigicollis					●	●		●	●	
Orius takaii				E	●			●		
Orius tantillus					●	●		●	●	
Orius atratus					●	●		●	●	
TINGIDAE										
Belenus dentatus					●			●	●	
Dictyla evidens					●			●		
Eteoneus yasumatsui				E	●				●	
Perissonemia occasa					●				●	
Phatnoma takasago					●				●	
Physatocheila miyatakei				E	●	●				
Stephanitis aperta					●	●	●	●	●	
Stephanitis exigua					●			●	●	
Stephanitis fasciicarina					●			●		
Stephanitis hiurai					●	●	●	●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Stephanitis hiurai hiurai				e	○	○	○	○		
Stephanitis pyrioides					●	●		●	●	
Stephanitis scotti				E	●	●				
Stephanitis shirakii				E	●	●				
Stephanitis subfasciata					●				●	
Stephanitis takeyai					●	●				
Stephanitis typica					●	●	●	●	●	
REDUVIIDAE										
Canthesancus lurco					●				●	
Ectomocoris biguttulus					●			●	●	
Ectrychotes andreae					●	●		●	●	
Elongicoris takarai		NT		E	●			●		
Emesopsis nubilus					●			●		
Epidaus sexspinus					●				●	
Euagoras plagiatus					●	●	●	●	●	
Gardena melinarthrum		NT			●			●		
Haematoloecha adachii					●				●	
Haematoloecha rubescens					●			●		
Oncocephalus breviscutum					●	●		●		
Oncocephalus philippinus					●	●	●	●	●	
Onychomesa gokani				E	○				○	
Peirates cinctiventris					●			●		
Peirates turpis					●	●	●	●	●	
Polididus armatissimus					●			●	●	
Polytoxus annulipes					○	○		○	○	
Polytoxus ruber				E	○			○	○	
Pygolampis bidentata					●			●	●	
Pygolampis foeda					●	●		●	●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Rhynocoris fuscipes					●				●	
Scadra okinawensis					●	●		●	●	
Sirthenea flavipes					●	●		●	●	
Staccia diluta					●	●	●	●	●	
Stachyotropha miyamotoi				E	●			●	●	
Triatoma rubrofasciata		VU			●			●	●	
PENTATOMOMORPHA										
ARADIDAE										
Aneurus greeni					●				●	
Brachyrhynchus taiwanicus					●	●				
Calisius acutus					●				●	
Glochocoris infantulus		NT			●	●				
Neuroctenus pacificus					●				●	
Neuroctenus palauensis					●				●	
Neuroctenus taiwanicus					●	●		●		
BERYTIDAE										
Capyella horni					●				●	
LYGAEIDAE										
LYGAEINAE										
Aethalotus nigriventris					●				●	
Caenocoris dimidiatus					●			●	●	
Graptostethus servus					●	●		●	●	
Oncopeltus nigriceps					●			●		
Spilostethus hospes					●	●	●	●	●	
Thunbergia marginata					●			●		
Thunbergia sanguinaria					●	●		●	●	
Tropidothorax sinensis					●	●	●	●	●	
ORSILLINAE										

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Nysius plebeius					●	●	●	●	●	
ISCHNORHYNCHINAE										
Pylorgus ishiharai					●	●	●	●	●	
CYMINAE										
Cymoninus turaensis					●			●		
Cymus tabaci					●			●	●	
Ninomimus assamensis					●			●	●	
Ninomimus flavipes					●			●		
Ninus insignis					●			●	●	
BLISSINAE										
Dimorphopterus kyushuensis					●	●		●		
Macropes obnubilus					●	●	●	●	●	
Pirkimerus esakii					●			●		
GEOCORINAE										
Geocoris jucundus					●	●	●	●	●	
PACHYGRONTHINAE										
Pachygrontha austrina					●				●	
Pachygrontha bipunctata					●			●	●	
Pachygrontha nigrovittata					●			●	●	
Pachygrontha similis					●			●		
Pachyphlegyas modigliani					●				●	
HETEROGASTRINAE										
Parahyginus signifer					●				●	
Sadoletus valdezi					●		●	●	●	
RHYPAROCHROMINAE										
Appolonius oblongus					●				●	
Botocudo formosanus					●	●		●	●	
Botocudo yasumatsui					●	●	●	●	●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Bryanellocoris orientalis					●	●	●	●	●	
Caridops albomarginatus					●	●				
Clerada apicicornis		NT			●			●	●	
Dieuches albomarginatus					●	●		●	●	
Dieuches siamicus					●			●		
Dieuches uniformis					●			●		
Diniella intaminata					●	●		●	●	
Diniella pallipes					●	●		●	●	
Elasmolomus lineosus					●				●	
Elasmolomus sordidus					●	●	●	●	●	
Eremocoris hirashimai					●	●			●	
Gastrodes grossipes					●	●		●	●	
Gastrodes grossipes japonicus					○	○		○	○	
Horridipamera inconspicua					●	●	●	●	●	
Horridipamera nietneri					●	●	●	●	●	
Lamproceps antennatus					●	●	●	●		
Metochus abbreviatus					●	●	●	●		
Metochus uniguttatus					●	●		●	●	
Neolethaeus dallasi					●	●	●	●	●	
Neolethaeus lewisi					●	●		●	●	
Neolethaeus esakii					●			●		
Neomizaldus lewisi					●	●	●	●	●	
Pamerana scotti					●	●	●	●	●	
Pamerarma distanti					●	●		●		
Pamerarma ventralis					●	●		●	●	
Paraeucosmetus pallicornis					●	●	●	●	●	
Paraparomius lateralis					●	●				
Paromius exiguus					●	●		●	●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Paromius gracilis					●	●		●	●	
Paromius nigriapicalis				E	●			●	●	
Prosomoeus brunneus					●			●		
Pseudopachybrachius guttus					●	●	●	●	●	
Remaudiereana flavipes					●				●	
Remaudiereana nigriceps					●	●	●		●	
Remaudiereana octonotata					●				●	
Remaudiereana sobrina					●			●	●	
Scolopostethus morimotoi				E	●				●	
Stigmatonotum geniculatum					●	●	●	●	●	
MALCIDAE										
Chauliops fallax					●	●	●	●	●	
PYRRHOCORIDAE										
Dysdercus cingulatus					●			●	●	
Dysdercus decussatus					●			●	●	
Dysdercus philippinus					●	●	●	●	●	
Dysdercus poecilus					●			●	●	
LARGIDAE										
Physopelta cincticollis					●	●	●	●	●	
Physopelta gutta					●	●	●	●	●	
STENOCEPHALIDAE										
Dicranocephalus lateralis					●			●	●	
ALYDIDAE										
Daclera levana					●	●	●	●	●	
Leptocorisa acuta					●	●		●	●	
Leptocorisa chinensis					●	●	●	●	●	
Leptocorisa oratoria					●	●		●	●	
Melanacanthus ferrugineus					●			●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Riptortus clavatus					●	●	●	●	●	
Riptortus fuscus					●			●		
Riptortus linearis					●	●	●	●	●	
Riptortus pedestris					●	●	●	●	●	
COREIDAE										
Acanthocoris sordidus					●	●	●	●	●	
Anoplocnemis phasiana					●			●	●	
Clavigralla spinofemoralis					●	●	●	●		
Cletus bipunctata					●		●	●		
Cletus punctiger					●	●	●	●	●	
Cletus schmidti					●	●	●			
Cletus trigonus					●	●	●	●	●	
Dasynus biguttatus					●			●		
Dasynus coccocinctus					●				●	
Homoeocerus marginiventris					●	●	●	●	●	
Homoeocerus unipunctatus					●	●		●	●	
Hygia lativentris					●	●				
Leptoglossus australis					●	●	●	●	●	
Paradasynus formosanus					●			●	●	
Paradasynus spinosus					●	●		●	●	
Plinachtus basalis					●			●	●	
Plinachtus bicoloripes					●	●		●		
RHOPALIDAE										
Leptocoris augur					●				●	
Leptocoris rufomarginatus					●			●	●	
Liorhyssus hyalinus					●	●	●	●	●	
Rhopalus sapporensis					●	●				
Stictopleurus punctatonervosus					○			○		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Stictopleurus punctatonervosus minutus					○			○		
PLATASPIDAE										
Brachyplatys subaeneus					●			●	●	
Brachyplatys vahlii					●			●	●	
Coptosoma japonicum					●	●		●	●	
Coptosoma siamicum					●			●		
Megacopta cribraria					●			●	●	
CYDNIDAE										
Adomerus rotundus					●			●		
Aethus pseudindicus					●		●	●	●	
Fromundus pygmaeus					●		●	●	●	
Garsauria laosana					●	●				
Lactistes falcolipes					●				●	
Macroscytus japonensis					●	●	●	●	●	
Parachilocoris minutus					●				●	
Parachilocoris minutus japonicus					○				○	
Parastrachia japonensis					●	●	●	●		
SCUTELLERIDAE										
Calliphara exellens					●				●	
Calliphara nobilis					●			●	●	
Cantao ocellatus					●	●	●	●	●	
Eucorysses grandis					●			●	●	
Philia miyakonus				E	●			●	●	
Solenosthedium chinense					●				●	
DINIDORIDAE										
Coridius chinensis					●			●		
Cyclopelta parva					●				●	
Eumenotes obscura					●	●		●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
PENTATOMIDAE										
PODOPINAE										
Graphosoma rubrolineatum					●	●		●	●	
Scotinophara lurida					●	●		●	●	
Scotinophara scotti					●	●		●		
PENTATOMINAE										
Aednus obscurus					●	●		●	●	
Agonoscelis nubila					●			●	●	
Alcimocoris japonensis					●	●		●	●	
Amblycara gladiatoria					●			●	●	
Apines grisea					●			●	●	
Axiagastus rosmarus					●			●	●	
Bathycoelia indica					●				●	
Brachymna tenuis		NT			●				●	
Carbula crassiventris					●	●	●	●		
Carbula obtusangula					●			●		
Catacanthus incarnatus					●			●		
Caystrus depressus					●			●	●	
Eurydema dominulus					●			●	●	
Eysarcoris guttiger					●	●	●	●	●	
Eysarcoris ventralis					●	●	●	●	●	
Glaucias subpunctatus					●	●		●	●	
Halyomorpha halys					●	●		●	●	
Lagynotomus elongatus					●			●	●	
Laprius varicornis					●			●	●	
Massocephalus maculatus					●			●		
Nezara antennata					●			●		
Nezara viridula					●	●	●	●	●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Piezodorus hybneri					●	●	●	●	●	
Plautia splendens					●			●	●	
Plautia sta /i					●	●	●	●	●	
Pygomenida bengalensis					●				●	
Rhynchocoris humeralis		NT			●			●	●	
Starioides degenerus					●				●	
Vitellus orientalis					●		●	●	●	
ASOPINAE										
Andrallus spinidens					●	●	●	●	●	
Eocanthecona furcellata					●	●		●	●	
Eocanthecona kyushuensis					●	●				
Zicrona caerulea					●			●	●	
PHYLLOCEPHALINAE										
Gonopsis affinis					●	●	●	●	●	
ACANTHOSOMATIDAE										
Dichobothrium nubilum					●	●	●	●	●	
Elasmucha nipponica					●			●	●	
Sastragala esakii					●	●				
Sastragala scutellata					●	●				
NEUROPTERA										
ASCALAPHIDAE										
Suphalomitus okinawensis				E	●			●		
CHRYSOPIDAE										
Ankylopteryx delicatula				E	●			●		
Ankylopteryx exquisita					●				●	
Ankylopteryx ferruginea				E	●				●	
Ankylopteryx gracilis					●				●	
Ankylopteryx octopunctata					●			●	●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Brinckochrysa scelestes					●			●		
Chrysopa pallens					●			●	●	
Chrysopa formosa					●	●				
Chrysoperla furcifera					●	●		●	●	
Chrysoperla nipponensis				E	●				●	
Dichochrysa alcestes					●			●	●	
Dichochrysa astur					●			●	●	
Dichochrysa cognatellus					●			●		
Dichochrysa formosanus					●	●		●	●	
Dichochrysa ussuriensis					●	●			●	
Italochrysa japonica					●	●	●	●		
Mallada basalis					●			●		
Mallada boninensis					●	●		●	●	
Nipponochrysa moriutii					●	●				
Plesiochrysa remota					●			●		
Semachrysa decorata					●			●		
Semachrysa matsumurae					●	●		●	●	
Semachrysa pulchella					●				●	
CORYDALIDAE										
Neochauliodes azumai				E	●				●	
Neochauliodes sinensis					●	●			●	
Parachauliodes japonicus					●	●	●	●	●	
Parachauliodes yanbaru				E	●			●		
Protohermes immaculatus					●	●	●			
Protohermes sp.				E	●				●	
HEMEROBIIDAE										
Annandalia iniqua					●				●	
Eumicromus confusus					●	●	●	●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Eumicromus narigatorum					●			●		
Eumicromus sauteri					●			●		
Mesohemerobius subacutus					●				●	
Micromus multipunctatus					●	●				
Micromus timidus					●	●		●		
Notiobiella ochracea				E	●				●	
Notiobiella subolivacea					●				●	
Pseudomicromus igorotus					●			●		
Spilomicromus maculatipes					●				●	
Sympherobius okinawaensis				E	●			●		
Sympherobius tessellatus					●			●		
Zachobiella striata				E	●				●	
MANTISPIDAE										
Climaciella quadrituberculata					●			●		
Euclimacia badia					●				●	
MYRMELEONTIDAE										
Distoleon bistrigatus					●			●		
Distoleon contubernalis					●			●		
Distoleon parvulus					●			●		
Glenuroides okinawensis				E	●			●	●	
Grocus acer					●			●		
Hagenomyia micans					●			●		
OSMYLIDAE										
Spilosmylus kruegeri					●	●			●	
Spilosmylus nipponensis					●			●		
SIALIDAE										
Nipponosialis kumejimae					●	●		●	●	
Sialis sinensis					●	●		●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
COLEOPTERA										
RHYSODIDAE										
Omoglymmius sakuraii				E	●	●				
PAUSSIDAE										
Eustra chinensis					●				●	
Eustra crucifera				E	●	●	●	●		
CICINDELIDAE										
Callytron yuasai		NT			●	●	●	●	●	
Callytron yuasai okinawensis		NT			○	○	○	○	○	
Cicindela chinensis					●			●		
Cicindela chinensis okinawana				e	○			○		
Cicindela elisae					●		●			
Cicindela elisae elisae					○		○			
Cicindela ferriei				E	●	●	●			
Cicindela kaleea					●			●		
Cicindela kaleea humerula				e	○			○		
Cicindela psilica					●				●	
Cicindela psilica luchuensis				e	○				○	
Cicindela specularis					●	●	●			
Cicindela striolata					●			●	●	
Cicindela striolata dorsolineolata					○			○	○	
Collyris loochooensis				E	●				●	
Therates alboobliquatus					●	●	●	●	●	
Therates alboobliquatus iriomotensis				e	○				○	
Therates alboobliquatus yakushimanus					○	○	○	○		
CARABIDAE										
Abacetus leucotelus					●				●	
Abacetus submetallicus					●				●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Acupalpus inornatus					●				●	
Aephnidius adelioides					●				●	
Agonum daimio					●			●		
Agonum hasegawai				E	●				●	
Amblystomus quadriguttatus					●			●		
Amphimenes ryukyuensis				E	●	●	●		●	
Anisodactylus tricuspidatus					●	●				
Anisodactylus tricuspidatus nomurai				e	○	○				
Anoplogenius cyanescens					●	●				
Apristus miyakei					●	●				
Apristus secticollis					●				●	
Armatocillenus kasaharai				E	●				●	
Armatocillenus seticornis				E	●				●	
Armatocillenus tokunoshimanus				E	●				●	
Asaphidion tenryuense					●		●			
Asaphidion tenryuense konoi					○		○			
Badister ishigakiensis					●				●	
Badister vittatus					●			●		
Bembidion niloticum					●	●			●	
Bembidion niloticum batesi					○	○			○	
Bembidion satoi				E	●				●	
Brachichila hypocrita					●				●	
Caelostomus picipes					●	●				
Caelostomus picipes japonicus					○	○				
Calleida splendidula					●			●	●	
Campalita chinense					●	●				
Celaenephes parallelus					●				●	
Chlaeminus annamensis					●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Chlaenius bimaculatus					●				●	
Chlaenius bimaculatus lynx					○				○	
Chlaenius bioculatus					●				●	
Chlaenius circumdatus					●			●	●	
Chlaenius circumductus					●			●		
Chlaenius hamifer					●			●	●	
Chlaenius inops					●			●	●	
Chlaenius micans					●			●	●	
Chlaenius pictus					●				●	
Chlaenius praefectus		CR			●			●		
Chlaenius rufifemoratus					●	●		●	●	
Chlaenius sericimicans					●	●		●	●	
Chlaenius tetragonoderus					●	●			●	
Claenius pictus					●				●	
Clivina lobata					●	●	●		●	
Clivina lobata ryukyuensis				e	○	○	○		○	
Colpodes amamiohshimensis				E	●	●				
Colpodes buchanani					●	●		●		
Colpodes iriomotensis				E	●				●	
Colpodes ishidai					●	●				
Colpodes latius				E	●	●				
Colpodes maruokai				E	●				●	
Colpodes meridies					●	●				
Colpodes obscuritarsis					●			●	●	
Colpodes rubriolus					●	●				
Colpodes shibatai				E	●	●				
Colpodes shibataianus					●	●				
Colpodes sylphides				E	●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Colpodes teruyai				E	●			●		
Colpodes yasuii				E	●				●	
Coptodera esakii					●			●		
Coptodera marginata					●				●	
Coptodera subapicalis					●	●				
Coptodera taiwana					●				●	
Craspedophorus formosanus					●				●	
Craspedophorus mandarinus					●				●	
Dicaelindus ryukyuensis					●			●	●	
Diplocheila zeelandica					●			●	●	
Dischissus tibialis					●				●	
Dolichoctis striatus					●	●			●	
Dolichoctis striatus formosanus					○				○	
Dolichoctis striatus striatus					○	○				
Dolichoctis tetraspilotus					●			●		
Drypta lineola					●	●		●	●	
Drypta lineola virgata					○	○		○	○	
Dyschirius formosanus					●				●	
Elaphropus latissimus					●	●				
Endynomena pradieri					●				●	
Epomis nigricans					●				●	
Eucolliuris fuscipennis					●				●	
Euschizomerus liebkei					●				●	
Galerita orientalis					●				●	
Gnathaphanus chujoi				E	●				●	
Haplochlaenius costiger					●				●	
Haplochlaenius insularis		EN		E	●	●				
Harpalomimetes shibatai				E	●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Harpalus azumai				E	●			●		
Harpalus griseus					●			●		
Harpalus ihai					●	●		●	●	
Harpalus sinicus					●			●	●	
Harpalus tridens					●			●		
Hexagonia sauteri					●				●	
Hololeius ceylanicus					●				●	
Ischnagonum cariniguerum				E	●				●	
Lachnocrepis japonica					●				●	
Lebia purkynei					●	●		●		
Lebidia octoguttata					●	●		●		
Leistus crassus					●	●				
Microcosmodes flavopilosus					●				●	
Mimocolliuris insulana				E	●	●				
Morion japonicum		VU			●			●		
Nipponosynuchus abnormalis				E	●	●				
Ocydromus hiranoi				E	●			●		
Ocydromus kishimotoi				E	●	●				
Odacantha metallica					●	●		●	●	
Oodes peguensis					●				●	
Oodes piceus					●			●	●	
Ophionea indica					●			●	●	
Ophionea ishiii					●			●	●	
Orionella lewisii					●	●				
Oxycentrus changi					●				●	
Paratachys fasciatus					●	●				
Paratachys fasciatus fasciatus					○	○				
Parena amamioshimensis					●	●	●	●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Parena latecincta					●			●		
Parena nigrolineata					●			●		
Pentagonica biangulata					●	●		●		
Pentagonica daimaiella					●	●		●		
Pentagonica kyushuensis					●				●	
Pentagonica nigripennis					●	●				
Pentagonica subcordicollis					●	●				
Perigona nigriceps					●	●				
Perileptus asahinai					●				●	
Perileptus japonicus					●	●	●	●	●	
Perileptus laticeps					●	●		●		
Perileptus laticeps ryukyuensis				e	○	○		○		
Perileptus morimotoi		NT			●	●				
Planetes kasaharai				E	●				●	
Platymetopus flavilabris					●			●	●	
Pseudognathaphanus punctilabris					●			●		
Pseudomenarus flavomaculatus					●			●		
Pterostichus plesiomorphs		EN		E	●	●				
Scarites acutidens					●			●	●	
Somotrichus unifasciatus					●			●		
Stenolophus quinquepustulatus					●	●		●	●	
Stenolophus shirakii				E	●	●		●		
Stenolophus smaragdulus					●			●	●	
Stenolophus yonaguniensis				E	●				●	
Synuchus amamioshimae				E	●	●				
Synuchus shibatai				E	●	●				
Synuchus tokararum					●	●				
Tachylopha ovata					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Tachyta umbrosa					●	●		●	●	
Tachyura exarata					●	●				
Tachyura fumicata					●	●			●	
Tachyura gradata					●			●		
Tachyura klugi					●				●	
Tachyura klugi klugi					○				○	
Tachyura laetifica					●	●				
Tachyura lutea					●	●				
Trichisia insularis					●	●		●		
Trichotichnus kobayashie					●			●		
Trichotichnus sugimotoi					●				●	
Trichotichnus szekessyi					●				●	
BRACHINIDAE										
Pheropsophus javanus					●	●		●	●	
Pheropsophus jessoensis					●	●				
Pheropsophus occipitalis					●				●	
HALIPLIDAE										
Haliplus kotoshonis		NT			●	●		●	●	
Peltodytes sinensis					●	●		●	●	
NOTERIDAE										
Canthydrus nitidulus					●	●	●	●	●	
Neohydrocoptus subvittulus					●	●			●	
Noterus japonicus					●	●	●	●	●	
DYTISCIDAE										
Agabus japonicus					●	●	●		●	
Allopachria bimaculata		NT		E	●	●	●	●		
Copelatus andamanicus					●	●	●	●	●	
Copelatus minutissimus		DD			●				●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Copelatus tenebrosus					●	●	●	●	●	
Cybister sugillatus					●	●	●		●	
Cybister tripunctatus					●	●		●	●	
Cybister tripunctatus orientalis		VU			○	○		○	○	
Cybister rugosus		VU			●	●	●	●	●	
Eretes sticticus					●	●	●	●		
Herophydrus rufus					●	●	●	●	●	
Hydaticus conspersus					●			●	●	
Hydaticus conspersus sakishimanus		NT		e	○			○	○	
Hydaticus rhantoides					●	●	●	●	●	
Prodaticus vittatus		VU			●	●	●		●	
Hydroglyphus kifunei		DD		E	●				●	
Hydroglyphus inconstans					●	●	●	●	●	
Hydroglyphus amamiensis					●	●		●	●	
Hydrovatus acuminatus		NT			●	●	●	●	●	
Hydrovatus bonvouloiri		NT			●			●	●	
Hydrovatus pumilus		NT			●	●			●	
Hydrovatus seminarius		NT		E	●	●				
Hydrovatus subtilis		NT			●	●	●	●	●	
Hydrovatus yagii		NT		E	●	●			●	
Hyphydrus laeviventris					●	●	●			
Hyphydrus laeviventris laeviventris		VU			○	○	○			
Hyphydrus lyratus					●			●	●	
Hyphydrus orientalis		DD			●			●	●	
Hyphydrus pulchellus					●	●	●	●		
Laccophilus chinensis					●				●	
Laccophilus difficilis					●	●	●		●	
Laccophilus flexuosus					●		●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Laccophilus kobensis		NT			●				●	
Laccophilus pulicarius					●			●	●	
Laccophilus sharpi		NT			●	●	●	●	●	
Leiodytes nicobaricus					●	●	●	●	●	
Limbodessus compactus					●	●				
Liodessus megacephalus					●		●	●		
Microdytes uenoi				E	●				●	
Platynectes chujoi				E	●				●	
Rhantus suturalis					●	●	●	●	●	
GYRINIDAE										
Dineutus australis		NT			●	●	●	●	●	
Dineutus mellyi					●		●	●		
Dineutus mellyi insularis				e	○		○	○		
Dineutus orientalis		NT			●	●	●	●	●	
Gyrinus ryukyuensis		CR		E	●	●	●	●	●	
Orectochilus yayeyamensis				E	●				●	
HYDRAENIDAE										
Hydraena miyatakei					●	●		●		
Limnebius nakanei				E	●	●		●		
Limnebius nakanei nakanei				e	○	○				
Limnebius nakanei okinawensis				e	○			○		
Limnebius taiwanensis					●				●	
HYDROCHIDAE										
Hydrochus japonicus		NT			●	●		●	●	
HYDROPHILIDAE										
Amphiops mater					●			●	●	
Berosus elongatulus					●	●			●	
Berosus fairmairei					●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Berosus japonicus					●	●				
Berosus pulchellus					●	●		●	●	
Berosus signaticollis					●	●				
Berosus signaticollis punctipennis					○	○				
Cercyon laminatus					●	●				
Cercyon yayeyama				E	●				●	
Chasmogenus abnormalis					●	●	●	●	●	
Coelostoma fallaciosum					●				●	
Coelostoma stultum					●	●	●	●	●	
Dactylosternum abdominale					●		●	●	●	
Enochrus esuriens					●	●	●	●	●	
Enochrus japonicus					●			●		
Enochrus ryukyuensis					●	●	●	●	●	
Enochrus satomii				E	●			●	●	
Enochrus simulans					●	●	●	●		
Enochrus subsignatus		NT			●			●	●	
Enochrus uniformis					●	●	●	●	●	
Helochares anchoralis					●	●	●	●	●	
Helochares ohkurai				E	●	●	●	●	●	
Helochares pallens					●	●	●	●	●	
Hydrocassis jengi				E	●	●				
Hydrochara affinis		DD			●		●		●	
Hydrophilus acuminatus		NT			●	●	●	●	●	
Hydrophilus bilineatus					●	●	●	●	●	
Hydrophilus bilineatus cashimirensis		VU			○	○	○	○	○	
Laccobius nakanei				E	●			●		
Laccobius satoi				E	●	●	●			
Paracymus evanescens					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Pelthydrus okinawanus		DD		E	●			●		
Regimbartia attenuata					●	●		●	●	
Sphaeridium quinquemaculatum					●				●	
Sternolophus inconspicuus					●			●	●	
Sternolophus rufipes					●	●	●	●	●	
HISTERIDAE										
Atholus coelestis					●				●	
Atholus depister					●			●	●	
Chaetabraeus cohaeres					●				●	
Eblisia satzumae					●	●	●	●		
Epierus uenoi				E	●	●				
Eucurtiopsis hiranoi				E	●			●		
Hypocaccus varians					●	●	●			
Hypocaccus varians varians					○	○	○			
Merohister jekeli					●	●		●	●	
Merohister uenoi				E	●	●				
Niponius furcatus					●	●	●			
Paromalus vernalis					●	●			●	
Platylomalus mendicus					●			●		
Platylomalus persimilis					●			●		
Platysoma cambodjense					●	●		●		
Platysoma oberthuri				E	●	●				
Platysoma rasile					●	●				
Platysoma schaumei					●			●		
Platysoma takehikoi					●				●	
Platysoma unicum					●				●	
Saprinus splendens					●	●			●	
LEIODIDAE										

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Agathidium aikanae				E	●	●	●			
Agathidium amamiense				E	●	●				
Agathidium cribratum					●	●				
Agathidium fujisakiae				E	●			●		
Agathidium longicorne					●		●			
Agathidium narusawae				E	●	●	●	●		
Agathidium okinawaense				E	●			●		
Agathidium saigoi				E	●	●	●	●		
Cyrtoplastus laevis				E	●	●	●	●		
Pseudoliodes piceus				E	●	●				
Zeadolopus sinensis					●				●	
CATOPIDAE										
Catopodes fuscifrons					●	●				
Catops amamiensis				E	●	●				
Catops nomurai				E	●	●				
Micronemadus pusillimus					●	●				
Prionochaeta harmandi					●	●				
Prionochaeta harmandi insulana					○	○				
Ptomaphaginus shibatai				E	●	●				
Ptomaphagus amamianus				E	●	●				
Sciodrepoides dubius					●	●				
SILPHIDAE										
Eusilpha kurosawai				E	●	●		●		
Necrodes asiaticus					●	●		●		
Necrophilus nomurai				E	●	●				
Nicrophorus nepalensis					●	●		●		
STAPHYLINIDAE										
Acylophorus ruficollis					●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Aleochara puberula					●			●		
Anotylus lewisius					●			●		
Astenus angulatus					●	●	●			
Astenus brevipes					●			●		
Astenus latifrons					●	●		●		
Astenus naomii				E	●				●	
Astenus ohbayashii				E	●	●				
Astenus shibatai				E	●		●		●	
Astenus yonezoi				E	●	●	●	●		
Atanygnathus terminalis					●	●				
Atopocnemius nomurai				E	●	●				
Cafius corallicola				E	●				●	
Cafius rufescens					●	●			●	
Carpelimus siamensis					●			●		
Carpelimus vagus					●			●		
Charichirus chinensis					●			●		
Cilea silphoides					●			●	●	
Creochara brevipennis					●	●				
Creophilus maxillosus					●			●		
Derispia miyatakei				E	●			●		
Derops okinawanus				E	●			●		
Dianous amamiensis				E	●	●	●			
Dianous yoshidai				E	●				●	
Edaphus okinawaensis				E	●			●		
Edaphus riukiuensis				E	●			●		
Euphalerum amamiense				E	●	●				
Euphalerum kana				E	●	●				
Gabronthus sulcifrons					●	●			●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Gabronthus thermarum					●			●		
Hypocyptus nomurai				E	●			●		
Lathrobium unicolor					●			●		
Lathrobium pallipes					●			●		
Leucocraspedum parvum				E	●	●				
Lispinus jambar					●	●		●	●	
Lispinus strigiventris					●			●		
Lithocharis nigriceps					●			●	●	
Lobrathium amamiense				E	●	●				
Lobrathium cribricolle					●			●		
Lobrathium ryukyuense				E	●	●	●	●		
Megalopinus hirashimai				E	●	●	●	●		
Nacaeus iriomotensts				E	●			●	●	
Nacaeus japonicus					●	●			●	
Nacaeus newtoniellus				E	●			●		
Nazeris gotoi				E	●	●				
Nazeris okinawanus				E	●		●	●		
Nazeris okinawanus amamianus				e	○		○			
Nazeris okinawanus okinawanus				e	○			○		
Neobisnius praelongus					●				●	
Neobisnius inornatus					●			●		
Nipponophloeostiba verrucifera					●				●	
Ochthephilum harusawai				E	●	●				
Ochthephilum japonicum					●			●		
Oedechirus idae					●		●			
Oedechirus lewisius					●			●		
Oxytelus bengalensis					●			●		
Oxytelus incisus					●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Oxytelus migrator					●			●		
Oxytelus nigriceps					●	●		●		
Oxytelus puncticeps				E	●			●	●	
Pachycorynus dimideatus				E	●				●	
Paederus fuscipes					●	●		●		
Palaminus formosae					●	●		●		
Palaminus japonicus					●			●		
Paracilea insulicola					●	●		●	●	
Phacophsallus flavipennis					●			●		
Philonthus aeneipennis					●			●		
Philonthus amamiensis				E	●	●				
Philonthus discoideus					●			●		
Philonthus flavipes					●	●				
Philonthus geminus					●	●				
Philonthus lewisius					●			●		
Philonthus notabilis					●			●		
Philonthus quisquiliarius					●			●		
Philonthus solidus					●			●		
Philonthus variipennis					●	●				
Phucobius densipennis				E	●	●		●	●	
Pinophilus rufipennis					●	●	●	●		
Pinophilus sautteri					●			●		
Platydracus amamiensis				E	●	●				
Priochirus kimurai				E	●			●		
Priochirus yasutoshii				E	●	●				
Procirrus lewisii					●		●			
Rugilus ceylanensis					●	●		●		
Rugilus japonicus				E	●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Saegerius japonicus					●	●				
Scopaeus virilis					●			●		
Sepedophilus apicalis				E	●			●		
Sepedophilus armatus					●			●		
Sepedophilus elegantissimus				E	●			●		
Sepedophilus glabratus					●	●		●		
Sepedophilus glabratus okinawanis				e	○	○		○		
Sepedophilus iriomotensis				E	●				●	
Sepedophilus lewisius					●	●				
Sepedophilus quadrifurcatus				E	●	●		●		
Siagonium densepunctatum				E	●			●		
Stenaesthetus okinawaensis				E	●			●		
Stenus amamiensis				E	●	●				
Stenus flavidulus					●	●	●	●		
Stenus flavidulus paederinus					○	○	○	○		
Stenus gestroi					●	●		●		
Stenus gestroi stigmatipennis					○			○		
Stenus gestroi takara					○	○				
Stenus hagoromo				E	●				●	
Stenus lentus					●				●	
Stenus oshimaensis				E	●	●				
Stenus punctifer				E	●			●		
Stenus riukiuensis				E	●	●		●		
Stenus rugipennis					●	●		●		
Stilicoderus duplicatus				E	●	●				
Stilicopsis insulicola					●		●			
Tachinus iriomotensis				E	●				●	
Tetrabothrus japonicus					●	●		●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Trichopsenius brunneus				E	●		●			
Trichopsenius serratus				E	●	●				
Velleius amamiensis				E	●	●				
PSELAPHIDAE										
Apharinodes papageno		DD		E	●			●		
Arthromelodes giganteus				E	●	●	●			
Arthromelodes punctifrons				E	●	●				
Babascenellus macroscapus					●				●	
Batraxis splendida					●		●	●	●	
Batriscenaulax kleinzach				E	●				●	
Batriscenaulax kunigamensis				E	●			●		
Batriscenaulax nagensis				E	●			●		
Batriscenellus sakaii				E	●			●		
Batrisoplisus amamianus				E	●	●				
Batrisoplisus constrictus				E	●	●				
Batrisoplisus monostatos				E	●			●		
Batrisoplisus tamino				E	●			●		
Batrisoplisus torticornis				E	●				●	
Bryaxis iriomotensis				E	●				●	
Halohermatus regulus				E	●				●	
Hyugatychus tokunoshimensis				E	●		●			
Micrelytriger mirabilis					●	●				
Micrelytriger nakatai				E	●			●		
Physomerinus schenklingi					●				●	
Pselaphogenius lanceolatus				E	●	●				
Thalassomerus miyakei				E	●	●				
Tribasodites picticornis				E	●			●	●	
Triomicrus hamifer				E	●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Triomicrus melini				E	●			●		
SCAPHIDIIDAE										
Eubaeocera caliginosa				E	○			○		
Scaphidium reitteri					●	●				
Scaphisoma brunneonotatum					●			●	●	
Scaphisoma conforme					○			○		
Scaphisoma conforme okinawense				e	○			○		
Scaphisoma insulanum				E	●	●				
Scaphisoma iriomotense				E	●				●	
Scaphisoma rubrum					●			●	●	
Scaphisoma rufum					●	●		●	●	
Scaphisoma sakaii				E	○			○		
HELODIDAE										
Cyphon formosanus					●			●		
Cyphon hashimotorum				E	●				●	
Cyphon intermedius					●	●				
Cyphon puncticeps					○	○	○			
Cyphon puncticeps hisamatsui				e	○	○	○			
Cyphon sinuosus				E	●	●	●			
Sacodes amamiensis				E	●	●	●	●		
Scirtes japonicus					●			●	●	
Scirtes okinawanus				E	●	●	●	●	●	
Scirtes okinawanus okinawanus				e	○	○	○	○		
Scirtes okinawanus yayeyamanus				e	○				○	
Scirtes sakishimanus				E	●				●	
Scirtes tsumaguro				E	●				●	
RHIPICERIDAE										
Sandalus kani				E	●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
LUCANIDAE										
Aegus laevicollis					●	●	●	●	●	
Aegus laevicollis ishigakiensis				e	○				○	
Aegus laevicollis nakanei				e	○			○		
Aegus laevicollis taurulus				e	○	○	○			
Dorcus amamianus				E	●	●	●	●	●	
Dorcus amamianus amamianus				e	○	○				
Dorcus amamianus kubotai				e	○		○			
Dorcus amamianus nomurai				e	○			○		
Dorcus amamianus yaeyamaensis				e	○				○	
Dorcus japonicus					●		●			
Dorcus metacostatus				E	●	●	●			
Dorcus titanus					●	●	●	●	●	
Dorcus titanus elegans				e	○	○				
Dorcus titanus okinawanus				e	○			○		
Dorcus titanus sakishimanus				e	○				○	
Dorcus titanus tokunoshimaensis				e	○		○			
Figulus punctatus					●	●	●	●		
Lucanus ferriei				E	●	●				
Neolucanus insularis				E	●				●	
Neolucanus insulicola				E	●				●	
Neolucanus insulicola insulicola		NT		e	○				○	
Neolucanus okinawanus		VU		E	●			●		
Neolucanus protogenetivus				E	●	●	●			
Neolucanus protogenetivus protogenetivus		VU		e	○	○	○			
Nigidius lewisi					●	●	●	●		
Prosopocoilus dissimilis					●	●		●		
Prosopocoilus dissimilis dissimilis				e	○	○				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Prosopocoilus dissimilis makinoi				e	○		○			
Prosopocoilus dissimilis okinawanus				e	○			○		
Prosopocoilus pseudodissimilis				E	●				●	
Rhaetulus recticornis				E	●	●	●	●		
CERATOBANTHIDAE										
Madrasostes hisamatsui				E	●				●	
TROGIDAE										
Trox sugayai				E	●	●				
Trox uenoi				E	●	●	●			
Trox yamayai				E	●				●	
GEOTRUPIDAE										
Bolbelasmus ishigakiensis				E	●				●	
Bolbelasmus shibatai				E	●	●				
Bolbochromus ryukyuensis					●				●	
Geotrupes oshimanus				E	●	●	●			
HYBOSORIDAE										
Phaeochrous emarginatus					●	●		●	●	
Phaeochrous emarginatus emarginatus					○	○		○	○	
SCARABAEIDAE										
Adoretus falciungulatus				E	●				●	
Adoretus formosanus					○				○	
Adoretus formosanus sakishimanus				e	○				○	
Adoretus sinicus					●				●	
Adoretus tenuimaculatus					●			●		
Trypoxyius dichotomus takarai		DD		e	○			○		
Amphicoma splendens				E	●				●	
Anomala albopilosa					●	●	●	●	●	
Anomala albopilosa gracilis					○	○	○			

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Anomala albopilosa sakishimana				e	○				○	
Anomala albopilosa yashiroi				e	○			○		
Anomala chloroderma				E	●	●	●	●		
Anomala cpustulatus					●				●	
Anomala cpustulatus cpustulatus				e	○				○	
Anomala cuprea					●			●		
Anomala edentula				E	●	●	●	●	●	
Anomala edentula amamiana				e	○	○	○			
Anomala edentula okinawana				e	○			○		
Anomala edentula yaeyamana				e	○				○	
Anomala esakii				E	●				●	
Anomala geniculata					●	●				
Anomala limbfuera					○				○	
Anomala limbfuera yanoi				e	○				○	
Anomala niijimae				E	●				●	
Anomala octiescostata					●			●		
Anomala shirakii				E	●				●	
Anomala triangularis					●	●	●	●		
Anomala triangularis triangularis					○	○	○	○		
Anomala xanthopleura				E	●	●		●	●	
Aphodius atsushii				E	●	●				
Aphodius brachysomus		DD			●	●				
Aphodius elegans					●	●		●		
Aphodius marginellus					●	●		●	●	
Aphodius ohishii				E	●	●				
Aphodius inouei		NT			●	●	●	●		
Aphodius sublimbatus					●	●		●		
Aphodius uniformis					●	●			●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Aphodius uniplagiatus					●				●	
Aphodius urostigma					●	●			●	
Apogonia bicarinata					●	●	●	●	●	
Apogonia bicarinata bicarinata					○	○	○			
Apogonia bicarinata okinawana				e	○			○		
Apogonia bicarinata yaeyamana				e	○				○	
Apogonia bicavata					●			●		
Apogonia shibuyai					●	●	●			
Ataenius okinawensis				E	●			●	●	
Blitopertha okinawaensis				E	●			●		
Brahmina sakishimana				E	●				●	
Brahmina yasuii				E	●				●	
Callinomes ishikawai				E	●				●	
Charitovalgus laetus				E	●	●	●			
Cheirotonus jambar	EN	EN	NM	E	●			●		
Coenochilus striatus					●				●	
Copris brachypterus		VU		E	●	●	●			
Copris ochus		VU			●	●				
Cosmiomorpha similis				E	●				●	
Cosmiomorpha similis nigra				e	○				○	
Dasylepida ishigakiensis				E	●				●	
Dialytes foveatus					●	●	●	●	●	
Ectinohoplia gracilipes					●	●	●			
Eophileurus chinesis					●	●	●	●	●	
Eophileurus chinensis irregularis				e	○	○	○			
Eophileurus chinensis okinawanus				e	○			○	○	
Epitrichius lagopus				E	●	●				
Gametis forticula					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Gametis forticula forticula					○	○	○	○		
Gametis forticula ishigakiana				e	○				○	
Gastromaladera major				E	●	●	●	●	●	
Holotrichia amamiana				E	●	●	●			
Holotrichia aritai				E	●				●	
Holotrichia loochooana				E	●			●	●	
Holotrichia loochooana loochooana				e	○				○	
Holotrichia loochooana okinawana				e	○			○		
Hoplia shirakii				E	●			●		
Hoplomaladera saitoi				E	●				●	
Maladera amamiana					●	●				
Maladera hiranoi				E	●		●			
Maladera impressithorax				E	●	●		●		
Maladera impressithorax impressithorax				e	○	○				
Maladera impressithorax okinoerabuana				e	○			○		
Maladera japonica					○				○	
Maladera japonica yaeyamana				e	○				○	
Maladera nitidiceps				E	●				●	
Maladera nitididorsis				E	●	●				
Maladera okinawaensis				E	●			●		
Maladera opima				E	●				●	
Maladera oshimana					●	●	●	●	●	
Maladera oshimana okinawana				e	○			○		
Maladera oshimana oshimana					○	○	○			
Maladera oshimana sakishimana				e	○				○	
Melolontha masafumii				E	●				●	
Melolontha tamina				E	●	●	●			
Mimela ignicauda					○				○	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Mimela ignicauda sakishimana		DD		e	○				○	
Mimela testaceoviridis					●			●		
Miridiba trichophora					○				○	
Nipponovalgus yonakuniensis				E	●			●	●	
Ochodaeus asahinai					●				●	
Ochodaeus maculatus				E	○	○		○		
Ochodaeus maculatus carinatus				e	○	○		○		
Ochodaeus maculatus					○				○	
Ochodaeus maculatus interruptus					○				○	
Odochilus convexus				E	●				●	
Ohkubous ferrieri					○	○	○			
Ohkubous ferrieri ferrieri				e	○	○	○			
Onthophagus acuticollis					○				○	
Onthophagus acuticollis sakishimanus				e	○				○	
Onthophagus amamiensis				E	●	●		●		
Onthophagus atripennis					●				●	
Onthophagus atripennis apicetinctus				e	○				○	
Onthophagus carnarius					●	●		●		
Onthophagus discedens					●				●	
Onthophagus lutosopictus					●				●	
Onthophagus murasakianus				E	●				●	
Onthophagus oshimanus				E	●	●	●			
Onthophagus shibatai				E	●	●		●		
Onthophagus shirakii				E	●	●	●			
Onthophagus suginoi				E	●			●		
Onthophagus viduus					●	●	●	●	●	
Pachyserica yanoi				E	●				●	
Panelus rufulus				E	●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Paraphytus dentifrons					●	●	●	●		
Paraserica gricea					●			●		
Parastasia oberthuri					○				○	
Parastasia oberthuri ishigakiana				e	○				○	
Paratrichius duplicatus				E	●	●		●		
Paratrichius duplicatus duplicatus				e	○	○				
Paratrichius duplicatus okinawanus				e	○			○		
Polyphylla schoenfeldti				E	●	●	●	●		
Popillia insularis				E	●	●	●	●	●	
Popillia lewisi				E	●	●		●		
Proagopertha ohbayashii				E	●			●		
Protaetia culta					●				●	
Protaetia exasperata					●	●	●	●	●	
Protaetia exasperata akitai				e	○			○		
Protaetia exasperata exasperata				e	○	○				
Protaetia exasperata nomurai				e	○		○			
Protaetia exasperata satoi				e	○			○	○	
Protaetia ishigakia					●	●	●	●	●	
Protaetia ishigakia ishigakia				e	○				○	
Protaetia ishigakia okinawana				e	○			○		
Protaetia lewisi leachi				e	○	○	○			
Protaetia lewisi lewisi					○			○	○	
Protaetia miyakoensis				E	●			●		
Protaetia orientalis					○	○		○		
Protaetia orientalis submarmorea					○	○		○		
Protaetia pryeri					●	●	●	●		
Protaetia pryeri oschimana					○	○	○			
Protaetia pryeri pryeri					○			○		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Psammodius kondoi				E	●				●	
Psammodius thailandicus					●			●		
Rhomborrhina hamai				E	●				●	
Rhomborrhina unicolor					●		●			
Rhyparus amamianus					●	●				
Rhyparus helopholoides					●	●		●	●	
Rhyparus peninsularis					●			●		
Saprosites japonicus					●	●				
Saprosites narae					●	●		●		
Sophrops kawadai				E	●	●		●	●	
Sophrops kawadai kawadai				e	○	○				
Sophrops kawadai okinawaensis				e	○			○		
Sophrops konishii konishii				e	○				○	
Trichiorhyssemus asperulus					●	●			●	
Tricholontha papagena				E	●	●	●	●		
PTILODACTYLIDAE										
Epilichas flabellatus					○	○		○	○	
Epilichas flabellatus amamianus				e	○	○				
Epilichas flabellatus okinawanus				e	○			○		
Epilichas flabellatus tamaii				e	○				○	
Epilichas yakushimensis					●	●			●	
Epilichas yakushimensis iriomotensis				e	○				○	
Epilichas yakushimensis oshimanus				e	○	○				
Ptilodactyla amamioshimana					●	●		●	●	
Ptilodactyla ishigakiana				E	●				●	
Ptilodactyla takahashii				E	●	●		●		
CHELONARIIDAE										
Chelonarium ohbayashii				E	●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Pseudochelonarium yakushimanum					●	●		●		
PSEPHENIDAE										
Eubrianax loochooensis				E	●			●		
Eubrianax manakikikuse				E	●	●			●	
Eubrianax manakikikuse amamiensis				e	○	○				
Eubrianax manakikikuse manakikikuse				e	○				○	
Eubrianax nobuoi				E	●	●				
Macroeubria lewisi					●	●				
Macroeubria okinawana				E	●			●		
Spineubria reticulata				E	●	●				
ELMIDAE										
Grouvellinus subopacus				E	●	●	●	●		
Nomuraelmis amamiensis				E	●	●				
Ordobrevia amamiensis					●	●		●		
Ordobrevia amamiensis amamiensis				e	○	○				
Ordobrevia amamiensis okinawana					○			○		
Stenelmis hisamatsui					●	●	●	●		
Stenelmis ishiharai				E	●				●	
Urumaelmis uenoi				E	●	●				
Urumaelmis uenoi uenoi				e	○	○				
Zaitzevia aritai				E	●				●	
Zaitzevia elongata				E	●	●	●	●		
Zaitzevia yaeyamana				E	●				●	
DRYOPIDAE										
Elmomorphus brevicornis					●	●	●	●		
Elmomorphus brevicornis amamiensis				e	○	○	○	○		
LIMNICHIDAE										
Acontosceles yorioi				E	●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Babalimnichus masamii					●	●	●	●		
Chibidoronus aureus				E	●				●	
Hyphalus taekoae				E	●	●		●	●	
Limnichomorphus ohbayashii				E	●				●	
Pelochares ryukyuensis					●	●		●	●	
HETEROCERIDAE										
Heterocerus fenestratus					●	●		●		
BUPRESTIDAE										
Acmaeodera luzonica					●	●			●	
Agrilus alesi					●	●		●		
Agrilus alesi alesi					○			○		
Agrilus alesi sacchari					○	○				
Agrilus amamioshimanus				E	●	●				
Agrilus auroapicalis					●				●	
Agrilus auroapicalis ishigakianus				e	○				○	
Agrilus auropictus					●	●		●	●	
Agrilus auropictus kanohi					○	○		○		
Agrilus auropictus ryukyuensis				e	○				○	
Agrilus carinihumeralis				E	●	●		●		
Agrilus deguchii				E	●	●		●		
Agrilus esakii				E	●	●	●	●		
Agrilus hirashimai				E	●	●		●		
Agrilus hirashimai hirashimai				e	○	○		○		
Agrilus hornianus					●			●	●	
Agrilus hornianus hornianus					○			○	○	
Agrilus mallotiellus					●	●	●			
Agrilus nagaoi				E	●	●				
Agrilus okinawensis					●			●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Agrilus okinawensis okinawensis					○				○	
Agrilus okinawensis shiozakii				e	○			○		
Agrilus samuelsoni				E	●				●	
Agrilus shibatai				E	●	●		●	●	
Agrilus suginoi				E	●				●	
Agrilus takaii				E	●			●		
Agrilus uenoi					●	●	●	●	●	
Agrilus yamawakii					●	●				
Agrilus yasumatsui				E	●	●		●		
Agrilus yonahaensis				E	●			●		
Anthaxia arakii					●	●				
Anthaxia ihanatsumi					●			●		
Anthaxia moya				E	●				●	
Buprestis esakii					●			●		
Buprestis haemorrhoidalis				E	●	●		●	●	
Buprestis haemorrhoidalis arakii				e	○	○		○		
Buprestis haemorrhoidalis japanensis					○				○	
Chalcophora japonica					●	●	●	●	●	
Chalcophora japonica miwai					○				○	
Chalcophora japonica oshimana				e	○	○	○	○		
Chalcophora yunnana					●	●	●	●	●	
Chalcophora yunnana abnormalis					○			○	○	
Chalcophora yunnana insularis				e	○	○	○			
Chrysobothris ohnoi					●	●	●			
Chrysobothris saliaris				E	●			●	●	
Chrysobothris saliaris saliaris				e	○			○		
Chrysobothris saliaris yaeyamana				e	○				○	
Chrysochroa fulgidissima					○	○	○	○		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Chrysochroa fulgidissima alternans				e	○	○	○	○		
Chrysodema lewisii					●			●	●	
Chrysodema manillarum					●	●		●	●	
Coraebus amamianus				E	●	●				
Coraebus formosanus					●	●		●	●	
Coraebus formosanus heikichii				e	○			○		
Coraebus formosanus nishiyamai				e	○				○	
Coraebus formosanus oshimensis				e	○	○				
Coraebus fukamachii				E	●				●	
Coraebus hastanus					○	○		○	○	
Coraebus hastanus oberthueri				e	○	○		○	○	
Coraebus ignotus					●	●		●		
Coraebus ignotus okinawanus				e	○			○		
Coraebus ignotus shibatai				e	○	○				
Coraebus iriei					●	●		●	●	
Coraebus iriei iriei				e	○			○	○	
Coraebus iriei yoshimotoi					○	○				
Coraebus loochooensis				E	●			●		
Coraebus niponicus					●	●				
Endelus collaris					●	●		●		
Endelus collaris kerremansi					○	○		○		
Endelus pyrrosiae					●	●				
Endelus pyrrosiae aokii				e	○	○				
Habroloma asahinai				E	●			●		
Habroloma eximium					●				●	
Habroloma eximium eupoetum					○				○	
Habroloma liukiuense				E	●	●	●	●		
Habroloma nixillum					●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Habroloma nixillum insulicola				e	○	○				
Mastogenius insperatus					●			●	●	
Nalanda rutilicollis					●	●		●	●	
Nalanda rutilicollis rutilicollis					○	○				
Nalanda rutilicollis ryukyuensis				e	○			○	○	
Ovalisia tonkinea					○	○		○		
Ovalisia tonkinea intermedia					○	○		○		
Paratrachys hederae					●	●	●	●		
Paratrachys hederae chujoi				e	○			○		
Paratrachys hederae princeps				e	○	○	○			
Sambus quadricolor					●	●		●		
Sambus quadricolor quadricolor					○	○		○		
Sambus yaeyamanus				E	●				●	
Toxoscelus amamiensis				E	●	●		●		
Toxoscelus miwai				E	●				●	
Toxoscelus miwai miwai				e	○				○	
Toxoscelus yakushimensis					●	●		●		
Toxoscelus yakushimensis akiyamai				e	○			○		
Toxoscelus yakushimensis gressitti				e	○	○				
Trachys dilaticeps					●	●		●	●	
CALLIRHIPIDAE										
Callirhipis kurosawai				E	●			●		
Horatocera oshimana				E	●	●				
ELATERIDAE										
Abelater pulcherus				E	●				●	
Abelater satoi				E	●				●	
Abelater shirozui					●	●				
Actenicerus nagaoi				E	●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Adelocera brunneus					●	●				
Adelocera difficilis					●	●	●			
Aeoloderma agnatum					●	●				
Aeoloderma brachmana					●	●	●	●	●	
Agriotes asaokai				E	●	●				
Agriotes hirayamai				E	●				●	
Agrypnus amamiensis				E	●	●		●		
Agrypnus amamiensis amamiensis				e	○	○				
Agrypnus amamiensis okinawanus				e	○			○		
Agrypnus arenicola				E	●	●				
Agrypnus binodulus					●		●	●	●	
Agrypnus binodulus sakishimanus				e	○				○	
Agrypnus binodulus tamurai				e	○		○	○		
Agrypnus formosanus					●				●	
Agrypnus miyakei				E	●	●	●	●		
Agrypnus miyakei miyakei				e	○	○	○	○		
Agrypnus miyakei seinoi				e	○			○		
Agrypnus miyamotoi					●		●	●		
Agrypnus miyamotoi heianus				e	○		○			
Agrypnus miyamotoi ihai				e	○			○		
Agrypnus miyamotoi tsushimensis					○			○		
Agrypnus nagaoi					●	●		●	●	
Agrypnus oshimanus				E	●	●				
Agrypnus sakaguchii					●			●	●	
Agrypnus scutellaris					●	●	●	●	●	
Agrypnus scutellaris amamianus					○	○	○			
Agrypnus scutellaris hamai					○	○		○	○	
Agrypnus scutellaris scutellaris					○	○	○	○	○	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Agrypnus setiger					●				●	
Agrypnus taciturnus					○			○	○	
Agrypnus taciturnus ryukyuensis				e	○			○	○	
Agrypnus yuppe					●	●	●	●	●	
Allocardiophorus nigroapicalis				E	●				●	
Ampedus amamiensis				E	●	●	●	●		
Ampedus aritai				E	●	●	●	●		
Ampedus aritai aritai				e	○	○				
Ampedus aritai kuniyoshii				e	○			○		
Ampedus aritai mikyoensis				e	○		○			
Ampedus nomurai				E	●	●				
Anchastus aquilis					○	○	○	○	○	
Anchastus aquilis ryukyuensis					○	○	○	○	○	
Anchastus castaneus				E	●	●	●	●	●	
Anchastus nagaoi				E	●	●				
Anthracalaus sakaguchii					●			●	●	
Campsosternus auratus					●			●		
Campsosternus matsumurae				E	●				●	
Cardiotarsus pallidipes					○	○	○	○		
Cardiotarsus pallidipes yamazakii				e	○	○	○	○		
Chatanayus insularis					●	●		●	●	
Chatanayus insularis insularis					○			○	○	
Chatanayus insularis isaoi				e	○	○		○		
Chatanayus ishiharai seinoi				e	○	○				
Chiagosnius akashii				E	●			●	●	
Chiagosnius okinawensis				E	●			●	●	
Chiagosnius vittiger					○	○		○	○	
Chiagosnius vittiger fuscomarginatus					○	○		○	○	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Ectamenogonus amamiensis				E	●	●	●			
Elater babai				E	●	●	●			
Elater babai babai				e	○	○				
Elater babai seinoi				e	○	○	○			
Elater sakishimensis				E	●				●	
Elater sieboldi					●	●		●	●	
Elater sieboldi amami				e	○	○				
Elater sieboldi sieboldi					○	○		○	○	
Fleutiauxellus curatus					○	○	○			
Fleutiauxellus curatus kishiii				e	○	○	○			
Fleutiauxellus curatus okinawanus				e	○			○		
Gambrinus amamiensis				E	●	●				
Glyphonyx esakii				E	●	●				
Glyphonyx haterumarum				E	●				●	
Glyphonyx haterumarum haterumarum				e	○				○	
Glyphonyx ihai				E	●			●		
Glyphonyx iriomotensis				E	●				●	
Glyphonyx kishiii				E	●	●		●		
Glyphonyx makiharai				E	●			●		
Glyphonyx matobai				E	●	●				
Glyphonyx nomurai				E	●			●		
Glyphonyx okinawanus				E	●	●		●		
Glyphonyx pallidipes				E	●				●	
Glyphonyx shibatai				E	●	●				
Glyphonyx tamurai				E	●			●	●	
Glyphonyx tamurai tamurai				e	○				○	
Glyphonyx tamurai yamayai				e	○			○		
Glyphonyx yoshimotoi				E	●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Glyphonyx yuwancola				E	●	●		●		
Glyphonyx yuwancola yambarus				e	○			○		
Glyphonyx yuwancola yuwancola				e	○	○				
Haterumelater bicarinatus					○	○	○	○	○	
Haterumelater bicarinatus shibatai					○	○	○	○	○	
Hayekpenthes pallidus					○		○		○	
Hayekpenthes pallidus masakii				e	○				○	
Hayekpenthes pallidus tokunoshimensis				e	○		○			
Hemicrepidius amami				E	●	●				
Hemicrepidius desertor					○	○				
Hemicrepidius desertor amamicola				e	○	○				
Hemicrepidius secessus					●			●		
Hemicrepidius secessus kuniyoshii				e	○			○		
Hemicrepidius secessus secessus					○			○		
Heteroderes prosternalis					●			●		
Insuliectinus amami				E	●	●				
Ischiodontus kawaii					●	●				
Lacon churakagi				E	●				●	
Lacon parallelus					●	●				
Lacon parallelus amamiensis				e	○	○				
Lacon parallelus parallelus					○	○				
Lacon yayeyamanus					●	●	●	●	●	
Lanecarus ihai				E	●	●	●	●		
Malaxia elongata				E	○	○				
Megapenthes azumai				E	○				○	
Megapenthes shirozui					○	○				
Megapenthes shirozui taichii				e	○	○				
Melanotus amamiensis				E	●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Melanotus amamiensis amamiensis				e	○	○				
Melanotus amamiensis yambarus				e	○			○		
Melanotus bannaensis				E	●				●	
Melanotus cete					●	●				
Melanotus cete cete					○	○				
Melanotus ishigakianus				E	●				●	
Melanotus loochooensis				E	●	●	●	●	●	
Melanotus loochooensis loochooensis				e	○		○	○	○	
Melanotus loochooensis tanchamelis					○	○				
Melanotus masakii				E	●			●		
Melanotus okinawensis					●	●	●	●		
Melanotus omotoensis				E	●				●	
Melanotus oshimanus				E	●	●				
Melanotus restrictus					●			●		
Melanotus sakishimensis				E	●			●	●	
Melanotus senilis					●	●				
Melanotus senilis senilis					○	○				
Melanotus takahashii					●	●		●		
Melanotus yayeyamacola				E	●				●	
Meristhus scobinula					●	●	●		●	
Migiwa amamiensis				E	●	●				
Nanseia erabuensis					●				●	
Neodiploconus ferrugineipennis				E	●			●	●	
Neodiploconus ferrugineipennis ferrugineipennis				e	○				○	
Neodiploconus ferrugineipennis kuniyoshii				e	○			○		
Neodiploconus satoi				E	●				●	
Neodiploconus satoi matobai				e	○				○	
Neopenthes pallidihumeralis				E	●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Neotrichophorus aureoilosus				E	●	●		●	●	
Neotrichophorus linteatus					●	●				
Neotrichophorus rubuginosus					●				●	
Okinawana hatayamai				E	●	●	●	●		
Okinawana hatayamai amami				e	○	○	○			
Okinawana hatayamai hatayamai				e	○			○		
Parabetarmon carinicephalus					●				●	
Paracalais berus					●	●	●	●		
Paracalais larvatus					●	●	●	●	●	
Paracalais larvatus larvatus					○	○	○	○	○	
Paracardiophorus amami				E	●	●				
Paracardiophorus tokara					●	●	●	●		
Paracardiophorus tokara heianus				e	○		○			
Paracardiophorus tokara tokara					○	○		○		
Pectocera amamiinsulana				E	●	●	●	●		
Pectocera yaeyamana					●				●	
Penthelater plebejus					●			●		
Platynychus adjutor					●			●		
Platynychus adjutor adjutor					○			○		
Platynychus formosanus					●	●		●	●	
Platynychus nothus					○	○	○	○	○	
Platynychus nothus amamianus				e	○	○	○			
Platynychus nothus loochooensis				e	○			○	○	
Pleonomus makiharai				E	●			●	●	
Procraerus variegatus					●				●	
Prodrasterius hisamatsui					●	●	●	●	●	
Prodrasterius hisamatsui hisamatsui					○	○	○	○		
Prodrasterius hisamatsui yaeyamensis				e	○				○	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Pronegastrius amamiensis				E	●	●	●			
Quasimus cordatus				E	●			●	●	
Quasimus formosanus					●	●			●	
Quasimus imasakai				E	●			●		
Quasimus saitoi					●	●	●			
Quasimus saitoi ogatai				e	○	○				
Quasimus shibatai matobai				e	○	○	○			
Quasimus takahashii				E	●	●	●	●	●	
Quasimus yamayai				E	●				●	
Ryukyucardiophorus loochooensis					●			●	●	
Sephilus formosanus					●				●	
Silesis okinawensis					●	●		●	●	
Silesis okinawensis okinawensis				e	○			○	○	
Silesis okinawensis shirouzui				e	○	○				
Silesis sauteri					○				○	
Silesis sauteri babai				e	○				○	
Tetrigus lewisi					●	●	●	●		
Tetrigus okinawensis				E	●	●	●	●	●	
Vuilletus amamiensis				E	●	●		●		
Vuilletus amamiensis amamiensis				e	○	○				
Vuilletus amamiensis okinawanus				e	○			○		
Xanthopenthes granulipennis					●	●	●	●	●	
Xanthopenthes hiramatsui				E	●			●		
Xanthopenthes konoi					●	●	●	●	●	
Yukoana amamiensis				E	●	●				
Yukoana elongata					●	●		●		
Yukoana elongata amamicola				e	○	○				
Yukoana elongata elongata					○	○		○		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Yukoana elongata okinawana				e	○			○		
TROSCIDAE										
Aulonothroscus longulus					●	●				
EUCNEMIDAE										
Bioxylus laticollis					●	●				
Dromaeolus cariniceps					●			●		
Euryptychus isiharai					●	●				
Nematodes confusus					●				●	
Otho amamiensis				E	●	●				
Pterotarsus mouhoti					●				●	
Spinifornax oshimanus				E	●	●				
LYCIDAE										
Cautires amamiensis				E	●	●	●			
Cautires kazuoi				E	●				●	
Eropterus nothus					●	●				
Libnetis kazuoi				E	●				●	
Lyponia ishigakiana				E	●				●	
Lyponia oshimana				E	●	●		●		
Macrolycus dominator					○				○	
Macrolycus dominator ishigakianus				e	○				○	
Macrolycus okinawanus				E	●			●		
Macrolycus shirakii				E	●	●	●			
Plateros ignius				E	●				●	
Plateros ikarianus				E	●	●				
Plateros imasakai				E	●				●	
Plateros koreanus					●			●		
Plateros miwai				E	●	●				
Plateros nakachii				E	●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Plateros rufomarginatus				E	●				●	
Plateros sakishimana				E	●				●	
Plateros shibatai					●	●				
Plateros shirakii				E	●	●		●		
Plateros yayeyamanus				E	●				●	
LAMPYRIDAE										
Curtos costipennis					●	●			●	
Curtos okinawanus				E	●			●		
Cyphonocerus okinawanus				E	●	●		●		
Cyphonocerus okinawanus amamianus				e	○	○				
Cyphonocerus okinawanus okinawanus				e	○			○		
Drilaster anomalus				E	●	●				
Drilaster bicolor				E	●	●				
Drilaster fuscicollis				E	●			●		
Drilaster iokii				E	●		●			
Drilaster okinawensis				E	●			●		
Drilaster shibatai				E	●	●				
Lucidina natsumiae				E	●				●	
Luciola filiformis					○				○	
Luciola filiformis yayeyamana				e	○				○	
Luciola kuroiwae				E	●	●		●		
Pristolycus sagulatus					○	○				
Pristolycus sagulatus amami				e	○	○				
Pyrocoelia abdominalis				E	●				●	
Pyrocoelia atripennis				E	●				●	
Pyrocoelia iriomotensis				E	●				●	
Pyrocoelia matsumurai				E	●			●		
Pyrocoelia matsumurai matsumurai				e	○			○		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Pyrocoelia oshimana				E	●	●				
Stenocladius azumai				E	●			●		
Stenocladius bicoloripes					●			●	●	
Stenocladius shirakii				E	●				●	
RHAGOPHTHALMIDAE										
Rhagophthalmus ohbai		EN		E	●				●	
CANTHARIDAE										
Athemus akemiae				E	●	●	●			
Athemus hanatanii				E	●				●	
Athemus kunigamiensis				E	●			●		
Athemus okinawanus				E	●			●		
Athemus ryukyuanus				E	●				●	
Athemus teruhisai				E	●			●		
Athemus ueharaensis				E	●				●	
Athemus yaeyamanus				E	●				●	
Athemus yonaensis				E	●			●		
Habronychus aritai				E	●				●	
Kandyosilis mucronata					●				●	
Laemoglyptus iriomotoensis				E	●				●	
Malthinellus chujoi				E	●	●	●			
Malthinus okinawanus				E	●			●		
Maltypus ryukyuanus					●				●	
Microichthyurus minutulus				E	●	●				
Micropodabrus maculivertex				E	●			●		
Micropodabrus yayeyamanus				E	●				●	
Podabrus curvatipes					●				●	
Podabrus ihai				E	●			●		
Prothemus kanoi				E	●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Prothemus nigrihumeralis				E	●				●	
Prothemus ryukyuanus				E	●	●	●	●		
Themus ishigakiensis				E	●				●	
Themus kazuoi				E	●	●	●	●		
Themus kurosawai				E	●			●		
DERMESTIDAE										
Anthrenus maculifer					●	●		●		
Dermestes freudi					●			●	●	
Evorinea hisamatsui					●	●				
Orphinus fasciatus					●				●	
Orphinus formosanus					●			●		
Orphinus quadrimaculatus					●	●		●		
Thaumaglossa laeta					●			●	●	
Trinodes amamiensis				E	●	●				
Trogoderma ornatum					●	●		●		
THORICTIDAE										
Thorictodes heydeni					●			●		
BOSTRYCHIDAE										
Xylopsocus bicuspis					●	●		●		
Xylothrips flavipes					●				●	
ANOBIIDAE										
Clada okinawana				E	○			○		
Cryptoramorphus longiusculus					●	●				
Dimorphotheca albomarginata				E	●				●	
Megorama japonicola				E	●	●		●	●	
Oligomerus chujoi				E	●	●		●		
Rhamna yaeyamana				E	○				○	
Stagetomorphus amamiensis				E	●	●				

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Trichodesma kirishimanum					●			●		
Xyletinus tomentosus					●			●		
PTINIDAE										
Gibbium psylloides					●			●		
Ptinus sauteri					●	●		●		
Ptinus senilis					●			●	●	
Ptinus senilis senilis					○			○		
Ptinus senilis yamayai				e	○				○	
TROGOSSITIDAE										
Ancyrona shibatai				E	●	●				
Thymalus amamensis				E	●	●				
CLERIDAE										
Allochotes amamioshimanus				E	●	●				
Allochotes yuwanensis					●	●				
Callimerus ryukyuensis				E	●	●		●		
Cladiscus obeliscus					●	●				
Clerus postmaculatus					●	●				
Cylidrus cyaneus					●	●			●	
Diplopherusa shibatai				E	●	●		●	●	
Omadius nigromaculatus					●	●		●		
Omadius pectoralis					●	●				
Opilo difficilus					●				●	
Opilo formosanus					●				●	
Orthrius binotatus					●				●	
Paracladiscus atricolor				E	●	●		●		
Stenocallimerus okinawanus					●			●		
Stenocallimerus prasinatus				E	●	●				
Stigmatium igai					●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Stigmatium ryukyuense				E	●			●		
Xenorthrius elongatus					●	●				
Xenorthrius umbratus					●				●	
MELYRIDAE										
Attalus amami				E	●	●	●			
Attalus Chüjöanus				E	●	●	●			
Attalus okinawanus				E	●			●		
Attalus trochantinus				E	●	●	●			
Dasytes taguchii				E	●	●				
Hypebaeus okinawensis					●			●		
Hypebaeus tokunoshimanus				E	●		●			
Idgia flavicollis					●			●	●	
Intibia kawasakii					●			●		
Laius miyamotoi					●			●	●	
Malachius okinawaensis				E	●			●		
Nepachys ryukyuanus				E	●	●				
LYMEXYLIDAE										
Atractocerus nipponicus					●	●				
Lymexylon amamianum					●	●				
Lymexylon miyakei					●	●				
NITIDULIDAE										
Aethina aeneipennis					●	●		●		
Aethina maculicollis					●	●				
Amystrops formosiana					●			●		
Brachypeplus dorsalis					●			●	●	
Carpophilus chalybeus					●			●		
Carpophilus mutilatus					●				●	
Cryptarcha okinawensis				E	●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Epuraea foveicollis					●	●				
Haptoncurina paulula					●			●		
Haptoncus luteolus					●	●		●	●	
Haptoncus ocularis					●			●	●	
Lasiodactylus pictus					●	●		●		
Parametopia xrubrum					●			●	●	
Pocadites chujoi					●	●		●		
Pria tokarensis					●			●		
Prometopia quadrimaculata					●			●		
Urophorus humeralis					●			●	●	
MONOTOMIDAE										
Mimemodes carenifrons					●			●		
Mimemodes japonus					●			●		
PHALACRIDAE										
Heterolitus nigromaculatus					●	●				
Heterolitus nipponicus					●			●		
Heterolitus thoracicus					●		●	●		
Litochrus ryukyuensis				E	●	●		●		
Phalacrus tenuicornis					●	●				
SPHINDIDAE										
CUCUJIDAE										
Placonotus testaceus					●		●			
PASSANDRIDAE										
Passandra tenuicornis					●	●		●		
Passandra trigemina					●	●				
SILVANIDAE										
Protosilvanus lateritius					●	●				
Silvanoprus scuticollis					●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Silvanopsis simoni					●			●	●	
CRYPTOPHAGIDAE										
Atomaria lewisi					●			●		
Cryptophagus micramboides					●			●		
Curelius japonicus					●	●		●		
BYTURIDAE										
Byturus atricollis					●	●				
BIPHYLLIDAE										
Biphyllus oshimanus					●	●			●	
LANGURIIDAE										
Anadastus convexus				E	●				●	
Anadastus melanosternus					●	●			●	
Anadastus rufobrunneus				E	●				●	
Atomarops dharma					●	●		●		
Caenolanguria insularis					●				●	
Cathartocrypyus hiranoi					●	●			●	
Microlanguria jansoni					●	●				
Paederolanguria cyanea				E	●			●		
Tetralanguria oshimana				E	●	●				
Toramus quadriguttatus				E	●			●		
Toramus uenoi				E	●			●	●	
EROTYLIDAE										
Aporotritoma amamiensis				E	●	●		●		
Aulacochilus episcaphoides				E	●	●				
Aulacochilus sibiricus					●			●		
Episcapha fortunei					●	●				
Megalodacne asahinai					○	○				
Megalodacne asahinai amamiana				e	○	○				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Megalodacne lewisi					●	●				
Microsternus higonius					●			●		
Microsternus yamadai				E	●	●				
Spondotriplax flavofasciata					●			●		
Triplax horni					●	●				
Triplax taiwana					●	●		●		
Tritoma loochooana				E	●	●				
Tritoma shibatai				E	●	●				
PROPALTICIDAE										
Propalticus morimotoi				E	●				●	
Propalticus ryukyuensis				E	●				●	
CORYLOPHIDAE										
Lewisium magnum					●		●			
ENDOMYCHIDAE										
Ectomychus nigrofasciatus				E	●			●		
Ectomychus sakaii					●	●	●	●		
Ectomychus yukihikoi				E	●	●				
Mycetina karin				E	●	●				
Stenotarsus oshimanus				E	●	●				
Stenotarsus ryukyuensis					●	●		●		
Trochoideus desjardinsi					●			●	●	
ANAMORPHIDAE										
Bystodes flavoaptcalis				E	●			●		
Idiophyes uenoi				E	●			●		
Mychothenus hirashimai				E	●			●		
COCCINELLIDAE										
Axinoscymnus beneficus					●	●		●		
Axinoscymnus nigripennis					●			●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Axinoscymnus rai				E	●			●		
Bothrocalvia albolineata					●				●	
Calvia muiri					●	●				
Calvia parvinotata				E	●	●				
Chilocorus amamensis				E	●	●	●	●		
Chilocorus ishigakensis				E	●				●	
Coccinella septempunctata					●	●		●	●	
Cryptogonus horishanus					●	●		●	●	
Cryptogonus orbiculus					●	●	●	●	●	
Epilachna boisduvali					●	●	●	●	●	
Epilachna vigintioctopunctata					●	●	●		●	
Harmonia octomaculata					●	●		●		
Harmonia yedoensis					●	●	●	●	●	
Horniolus amamensis				E	●	●				
Horniolus okinawensis				E	●			●		
Illeis koebelei					●	●		●	●	
Illeis koebelei amamiana				e	○	○		○		
Illeis koebelei koebelei					○				○	
Lemnia biplagiata					●	●	●	●	●	
Medamatento ocularis				E	●	●		●		
Medamatento secunda				E	●			●	●	
Menochilus sexmaculatus					●	●	●	●	●	
Micraspis discolor					●	●	●	●	●	
Microserangium okinawense					●			●	●	
Nephus ryuguus					●	●	●	●		
Nephus ryukyuensis					●	●	●	●	●	
Nephus tagiapatus					●				●	
Nesolotis amabilis				E	●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Nesolotis azumai				E	●			●		
Nesolotis impunctata				E	●	●				
Phrynocaria congener					●			●	●	
Platynaspidius maculosus				E	●			●		
Propylea japonica					●	●	●	●	●	
Pseudoscymnus kurohime					●	●		●	●	
Pseudoscymnus nagasakiensis					●	●	●	●	●	
Pseudoscymnus quinquepunctatus					●	●	●	●	●	
Pseudoscymnus quinquepunctatus okinawanus				e	○	○	○	○		
Pseudoscymnus quinquepunctatus quinquepunctatus					○				○	
Rodolia pumila					●	●		●		
Rodolia quadrimaculata					●	●		●		
Sasajiella amamiana				E	○	○				
Scotoscymnus bicolor					●	●	●	●	●	
Scymnus contemtus					●	●		●	●	
Scymnus fuscatus					●	●	●	●	●	
Scymnus hatomensis				E	●				●	
Scymnus kimotoi				E	●				●	
Scymnus miyatakei					●	●		●	●	
Scymnus nigrosuturalis					●	●		●		
Scymnus quadrillum					●			●		
Scymnus sodalis					●	●	●	●	●	
Serangium ryukyuense				E	●			●	●	
Stethorus aptus					○	○		○	○	
Stethorus aptus tsutsuii					○	○		○	○	
Synonycha grandis					●	●		●	●	
Telsimia chujoi					●	●		●	●	
DISCOLOMIDAE										

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Aphanocephalus nigriventris					●	●				
Aphanocephalus shibatai				E	●	●		●		
Aphanocephalus shirozui				E	●	●				
Aphanocephalus wollastoni					●				●	
COLYDIIDAE										
Bitoma siccana					●	●	●	●	●	
Bolcocius shibatai					●	●				
Bolcocius yaeyamensis				E	●				●	
Pseudotarphius lewisii					●	●				
Pycnomerus sculpturatus					●	●				
Trachypholis okinawensis					●			●		
BOTHRIDERIDAE										
Cylindromicrus gracilis					●	●				
Dastarcus kurosawai					●			●	●	
MYCETOPHAGIDAE										
Litargus lewisi					●			●		
Mycetophagus amamianus				E	●	●				
Pseudotriphyllus ohbayashii				E	●	●				
CIIDAE										
Acanthocis quadridentatus					●			●	●	
Anoplocis ryukyuensis				E	●			●		
Ceracis laminicollis					●			●		
Cis caoricornis					●				●	
Cis taiwanus					●	●				
Ennearthron amamense				E	●	●				
Neoennearthron amamense				E	●	●		●		
Neoennearthron hisamatsui				E	●	●				
MELANDRYIDAE										

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Anisoxya laticollis					●	●				
Dircaea erotyloides					●	●	●	●		
Holostrophus orientalis					●	●			●	
Orchesia imitans					●	●	●	●	●	
Phloeotrinus minusculus					●	●		●	●	
Phloeotrya obscura					●	●	●			
Symphora miyakei					●	●		●		
Symphora miyakei amamiana				e	○	○		○		
MORDELLIDAE										
Ermischiella hasegawai					●			●		
Falsomordellina amamiana				E	●	●			●	
Falsomordellina luteoloides					●	●	●	●	●	
Falsomordellistena altestrigata					●	●		●	●	
Falsomordellistena katoi					●	●				
Falsomordellistena konoi					●	●				
Falsomordellistena konoi yakushimaensis					○	○				
Falsomordellistena loochooana				E	●	●		●		
Falsomordellistena okamotoi					●			●		
Falsomordellistena tokarana					●	●				
Glipa apicalis					●	●			●	
Glipa azumai					●				●	
Glipa fasciata					●	●		●		
Glipa formosana					●	●				
Glipa iriei					●			●	●	
Glipa ishigakiana					●				●	
Glipa malaccana					●	●		●		
Glipa nipponica					●	●		●		
Glipa oshimana					●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Glipa satoi					●	●				
Glipa satoi yanma				e	○	○				
Glipa sauteri					●	●				
Glipa uenoi					●	●		●		
Glipostena pelecotomoidea					●	●		●		
Glipostenoda excisa					●	●	●	●		
Glipostenoda fusciceps				E	●	●			●	
Glipostenoda lineatisuturalis					●				●	
Glipostenoda matsumurai					●		●		●	
Glipostenoda rarasana					●	●				
Glipostenoda rosseola					●	●		●		
Glipostenoda shizuokana					●		●			
Higehananomia palpalis					●	●	●	●	●	
Hoshihananomia auromaculata					●	●		●		
Hoshihananomia auromaculata nipponica					○	○		○		
Hoshihananomia borealis					●	●		●	●	
Hoshihananomia composita					●				●	
Hoshihananomia composita composita					○				○	
Hoshihananomia katoi					●	●			●	
Hoshihananomia katoi katoi					○	○			○	
Hoshihananomia kirai					●				●	
Hoshihananomia nakanei					●	●				
Hoshihananomia nakanei nakanei				e	○	○				
Hoshihananomia ohshimae				E	●	●				
Hoshihananomia splendens				E	●				●	
Mordella kanpira				E	●			●	●	
Mordella niveoscutellata					●	●		●		
Mordellaria humeralis				E	●	●	●			

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Mordellaria triguttata					●	●				
Mordellina amamiensis					●	●		●		
Mordellina atrofusca					●	●	●	●		
Mordellina brunneotincta					●	●		●		
Mordellina hidakai					●	●		●		
Mordellina hirayamai					●	●	●	●	●	
Mordellina palleola					●	●				
Mordellina pilosovittata					●	●		●		
Mordellina pseudohumeralis					●	●		●		
Mordellina signatella					●	●		●	●	
Mordellina tsutsuii					●	●			●	
Mordellistena edashigei					●	●		●		
Mordellistena maedai					●	●		●		
Mordellistena miyamotoi					●				●	
Mordellistena okinawana				E	●			●		
Mordellistenoda aka					●			●	●	
Mordellistenoda ohsumiana					●	●		●		
Pseudotolida multisulcata				E	●				●	
Stenomordella ochii				E	●	●				
Tolidopalpus galloisi					●	●		●		
Tolidostena atripennis					●			●		
Tomoxia ryukyuana				E	●	●		●	●	
Variimorda ihai				E	●	●	●	●	●	
Variimorda ihai ihai				e	○	○	○	○	○	
Variimorda miyarabi				E	●	●			●	
SYNCHROIDAE										
Synchroa melanotoides					●	●				
OEDEMERIDAE										

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Anoxacis flavomarginata					●	●				
Anoxacis iriomotensis				E	●				●	
Anoxacis vittata					●	●				
Chrysanthia integricollis					●	●				
Dryopomera kurosai				E	●				●	
Dryopomera yatoi					●				●	
Dryopomera yatoi yatoi					○				○	
Eobia chinensis					●	●		●		
Eobia cinereipennis					●				●	
Eobia cinereipennis ishigakiana				e	○				○	
Eobia florilega					●			●	●	
Eobia fuscipennis					●	●				
Eobia magna				E	●				●	
Hypasclera geniculata				E	●			●	●	
Indasclera japonica					●	●				
Indasclera japonica amamiana				e	○	○				
Indasclera subrugosa					●	●	●	●		
Indasclera subrugosa subrugosa					○	○	○	○		
Ischnomera nigrocyanea					●	●				
Ischnomera okushimai				E	●			●		
Nacerdes umenoi				E	●	●		●		
Nacerdes umenoi okinawensis				e	○			○		
Nacerdes umenoi umenoi				e	○	○				
Nacerdes waterhousei					●			●		
Oedemera sexualis					●			●		
Oedemera sexualis ryukyuana					○			○		
Oedemera testaceithorax					●	●	●	●	●	
Oedemera testaceithorax okinawana				e	○	○	○	○		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Oedemera testaceithorax testaceithorax					○				○	
PYROCHROIDAE										
Pseudodendroides amamiana				E	●	●				
Pseudopyrochroa kazuoi				E	●	●		●		
Pseudopyrochroa kazuoi teruhisai				e	○			○		
Pseudopyrochroa kazuoi kazuoi				e	○	○				
Pseudopyrochroa vestiflua					●	●				
ANTHICIDAE										
Anthelephila cribriceps					●	●		●		
Anthelephila ruficollis					●	●	●	●		
Anthicomorphus cruralis					●	●	●	●		
Anthicomorphus niponicus					●	●				
Anthicomorphus niponicus amamiensis				e	○	○				
Anthicus confucii					●	●			●	
Anthicus confucii confucii					○	○			○	
Anthicus formicarius					●	●				
Anthicus formicarius atropterus					○	○				
Anthicus hamai				E	●		●		●	
Anthicus luteonotatus					●		●	●	●	
Anthicus shibatai					●	●	●		●	
Formicomus braminus					●		●			
Formicomus braminus tokarensis				e	○		○			
Formicomus okinawanus				E	●			●	●	
Macratria atrata					●	●			●	
Macratria griseosellata					●	●	●		●	
Macratria serialis					●				●	
Mecynotarsus minimus					●	●	●			
Mecynotarsus minimus laticornis				e	○	○	○			

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Sapintus irregularis					●	●	●	●		
Sapintus sakishimanus				E	●			●	●	
ADERIDAE										
Aderus laticeps					●			●		
Aderus yaeyamanus				E	●				●	
Phytobaenus amabilis					●	●				
Phytobaenus amabilis amamiensis				e	○	○				
Pseudoloterus humeralis					●	●	●	●		
Pseudoloterus japonicus					●	●				
Syzeton shibatai				E	●	●				
MELOIDAE										
Cissites cephalotes					●		●	●		
Zonitis cothurnata					●	●				
Zonitis okinawensis					●			●	●	
SCRAPTIIDAE										
Anaspis oshimana				E	●	●				
Anaspis shibatai					●	●		●		
Canifa cribriceps					●	●		●		
Scraptia livens					●			●		
SALPINGIDAE										
Elacatis atrithorax					●	●				
Elacatis ocularis					●			●		
Inopeplus uenoi					●	●		●	●	
Inopeplus uenoi ohbayasii					○	○		○		
Inopeplus uenoi uenoi				e	○				○	
Lissodema laevipenne					●	●		●		
Lissodema munaguro				E	●			●		
Lissodema teruhisai				E	●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Lissodema uenoi					●			●		
Uruminopeplus sakaii				E	●	●		●		
MYCTERIDAE										
Hemipeplus miyamotoi					●	●		●		
LAGRIIDAE										
Anisostira abnormipes				E	●				●	
Anisostira elegans				E	●			●	●	
Anisostira rugipennis				E	●	●	●	●		
Arthromacra amamiana				E	●	●		●		
Casnonidea occipitalis					●				●	
Laena rotundicollis					●	●		●	●	
Laena rotundicollis insularis				e	○	○				
Laena rotundicollis rotundicollis					○			○	○	
Lagria notabilis				E	●	●				
Lagria okinawana				E	●			●		
Luprops orientalis					●	●		●		
ALLECULIDAE										
Allecula amamiensis				E	●	●		●		
Allecula amamiensis amamiensis				e	○	○				
Allecula amamiensis okinawaensis				e	○			○		
Allecula ohshimana				E	●	●		●		
Allecula satsumae					●	●		●	●	
Allecula shibatai				E	●	●				
Allecula simiola					●	●		●		
Allecula tenuis					●	●				
Bolbostetha sauteri					●	●	●	●		
Bolbostetha sauteri oshimana				e	○	○	○	○		
Borboresthes amamianus				E	●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Cteniopinus iriomotensis				E	●				●	
TENEBRIONIDAE										
Ainu masumotoi				E	●	●			●	
Amarygmus callichromus					●				●	
Androcamaria ryukyuensis				E	●				●	
Basanus amamianus					●	●	●	●		
Basanus fukudai				E	●				●	
Boletoxenus bellicosus					●				●	
Bradymerus clathratus					●				●	
Byrsax kaszabi					●	●		●		
Caedius maderi					●	●		●		
Caedius maderi minor					○	○		○		
Catapiestus rugipennis				E	●	●	●	●		
Ceropria induta					●	●		●	●	
Cneocnemis laminipes					●				●	
Corticeus amamiensis				E	●	●		●	●	
Corticeus gentilis					●	●			●	
Corticeus maehleri					●				●	
Corticeus maehleri mayumiae				e	○				○	
Cryphaeus satoi					●	●	●	●	●	
Cryphaeus satoi iriomotensis				e	○				○	
Cryphaeus satoi satoi					○	○	○	○		
Derispia amamiana				E	●	●				
Derispia japonica				E	●	●		●	●	
Derispia japonica japonica				e	○	○		○	○	
Derispia japonica yaeyamana				e	○				○	
Derispia shibatai				E	●	●				
Diaclina quadrimaculata					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Diaperis lewisi					●	●				
Diaperis lewisi intersecta					○	○				
Diaperis sanguineipennis					●			●		
Diaperis sanguineipennis sinensis					○			○		
Dioedus tokaranus					●				●	
Diphyrrhynchas iriomotensis					●				●	
Diphyrrhynchus oharensis					●				●	
Diphyrrhynchus shibatai					●	●			●	
Elixota iridicollis					●	●		●	●	
Elixota izumii				E	●				●	
Encyalesthus exularis					●				●	
Eucrossoscelis broscosomoides				E	●	●				
Eucrossoscelis michioi				E	●			●		
Euhemicera hajimei				E	●	●			●	
Euhemicera japonica				E	●	●	●	●		
Euhemicera nodokai					●	●	●	●		
Euhemicera sakishimensis					●				●	
Eutochia lateralis					●				●	
Gnesis helopioides					●	●	●	●		
Gnesis helopioides amamianus				e	○	○				
Gnesis helopioides okinawanus				e	○			○		
Gnesis helopioides purpurascens					○	○	○			
Gnesis magnipunctatus				E	●				●	
Gonocephalum coenosum					●				●	
Gonocephalum coriaceum					●	●				
Gonocephalum kondoi				E	●				●	
Gonocephalum okinawanum					●	●		●	●	
Gonocephalum pubens					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Gonocephalum takara					●				●	
Ischnodactylus iriomotensis				E	●				●	
Leptoscapha unifasciata					●	●			●	
Menephilus arciscelis					●	●	●	●	●	
Mesomorphus villiger					●	●		●		
Metaclisa nagaii				E	●	●	●	●		
Micropedinus pallidipennis					●	●	●		●	
Micropedinus rotundicollis				E	●				●	
Myostdes amamianus				E	●	●	●			
Myostdes ishigakianus				E	●				●	
Myostdes okinawanus				E	●			●		
Nesocaedius minimus					●	●		●	●	
Pentaphyllus dilatipes					●	●	●		●	
Pentaphyllus quadricornis					●				●	
Phaedis iriei				E	●			●		
Phaedis marmoratus				E	●				●	
Phaedis oshimensis				E	●	●	●			
Plamius yaeyamensis				E	●				●	
Platydema celatum				E	●				●	
Platydema fumosum					●	●		●	●	
Platydema fumosum fumosum					○	○		○	○	
Platydema fumosum kawaii				e	○	○		○	○	
Platydema maruseuli					●	●		●	●	
Platydema pallidicolle					●	●		●	●	
Platydema recticorne					●				●	
Platydema sakishimense					●				●	
Platydema sauteri					●			●	●	
Platydema sauteri omoto				e	○			○	○	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Platydema sawadai				E	●				●	
Platydema subfascia					●	●		●	●	
Platydema subfascia subfascia					○	○		○		
Platydema subfascia yaeyama				e	○				○	
Plesiophthalmus aurichalceus				E	●			●		
Plesiophthalmus brevipennis				E	●	●	●	●		
Plesiophthalmus brevipennis aurichalceus				e	○			○		
Plesiophthalmus brevipennis brevipennis				e	○	○	○			
Plesiophthalmus fuscoaenescens				E	●				●	
Plesiophthalmus gracilis				E	●				●	
Plesiophthalmus makiharai				E	●		●			
Plesiophthalmus mizusawai				E	●	●				
Plesiophthalmus nakamurai				E	●	●				
Plesiophthalmus piceus				E	●			●		
Plesiophthalmus spectabilis					●			●		
Plesiophthalmus spectabilis okinawanus				e	○			○		
Promethis iriomotensis				E	●				●	
Promethis okinawana				E	●			●		
Promethis oshimana				E	●	●	●			
Promethis subbiangulata					●			●		
Promethis tokunoshimana				E	●		●			
Pseudonautes purpurivittatus					●	●	●	●	●	
Rhipidandrus speculifrons					●				●	
Scaphidema kondoi				E	●	●				
Stenochinus carinatus					●	●		●	●	
Stenochinus carinatus carinatus					○	○		○	○	
Stenochinus oshimanus				E	●	●				
Strongylium akitai				E	●	●				

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Strongylium cultellatum					●	●		●	●	
Strongylium kawadai				E	●				●	
Strongylium marseuli					●		●	●		
Strongylium oshimanum				E	●	●				
Strongylium shibatai				E	●	●			●	
Tarpela amamiensis				E	●	●		●		
Tarpela brunnea					●			●	●	
Tarpela brunnea konoi					○			○	○	
Tetragonomenes palpaloides					●	●		●	●	
Tetragonomenes rufiventris				E	●	●		●		
Tetragonomenes semiviolaceus					●	●				
Tetraphyllus latior				E	●	●	●	●		
Tetraphyllus lunuliger					●	●	●	●		
Tetraphyllus lunuliger laevis				e	○	○	○	○		
Toxicum funginum					●				●	
Toxicum subtricornutum				E	●			●		
Trachyscelis chinensis					●			●	●	
Uloma bonzica					●	●				
Uloma excisa					●	●	●	●	●	
Uloma excisa nanseiensis					○	○	○	○	○	
Uloma ichoi				E	●	●		●		
Uloma marseuli					●	●		●		
Uloma marseuli marseuli					○	○		○		
Uloma polita					●				●	
Uloma sakuraii				E	●	●				
Uloma takarai				E	●				●	
CERAMBYCIDAE										
Abryna obscura					●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Acalolepta amaiana				E	●	●	●	●		
Acalolepta amaiana amaiana				e	○	○	○			
Acalolepta amaiana simillima				e	○			○		
Acalolepta ferriei				E	●	●		●		
Acalolepta iwahashii				E	●				●	
Acalolepta kuniyoshii				E	●			●		
Acalolepta luxuriosa					●	●				
Acalolepta luxuriosa kawadai				e	○	○				
Acalolepta oshimana					●	●	●	●		
Acalolepta oshimana omoro				e	○			○		
Acalolepta oshimana oshimana					○	○	○			
Acalolepta permutans				E	●			●		
Acalolepta permutans okinawana				e	○			○		
Acalolepta permutans paucipunctata					○				○	
Acrocyrtidus elegantulus				E	●	●				
Acrocyrtidus elegantulus longicornis				e	○	○				
Aeolesthes chrysothrix					●	●	●	●	●	
Aeolesthes chrysothrix kurosawai				e	○	○	○	○		
Aeolesthes chrysothrix nakamurai				e	○				○	
Allotraeus insularis					●	●	●	●	●	
Allotraeus insularis amamiensis				e	○	○	○	○		
Allotraeus insularis insularis				e	○				○	
Amamiclytus nobuoi		DD			●	●				
Anaespogonius piceonigris				E	●	●				
Anaglyptus arakawae					●	●	●			
Anaglyptus arakawae amamiensis				e	○	○	○			
Anastrangalia kasaharai				E	●	●				
Anoplophora malasiaca					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Anoplophora oshimana				E	●	●	●	●		
Apomecyna histrio					●	●	●	●	●	
Apomecyna histrio histrio					○	○	○		○	
Apomecyna histrio okinawana					○	○	○	○		
Apomecyna naevia					●	●		●		
Apomecyna naevia deguchii				e	○	○		○		
Apomecyna semihistrio				E	●				●	
Apriona nobuoi				E	●	●		●		
Apriona yayeyamai				E	●				●	
Artimpaza setigera					●	●	●	●		
Artimpaza setigera japonica					○	○	○	○		
Asaperda bicostata					●	●	●	●		
Asaperda bicostata bicostata					○	○	○			
Asaperda bicostata okinawana				e	○			○		
Batocera lineolata					●	●	●			
Bumetopia japonica					●			●		
Bumetopia japonica okinawana				e	○			○		
Bumetopia ohshimana					●	●	●			
Bumetopia ohshimana ohshimana					○	○	○			
Bumetopia sakishimana				E	●				●	
Bumetopia sakishimana ishigaki				e	○				○	
Callidiellum rufipenne					●	●		●		
Caraphia lepturoides					●	●	●	●		
Caraphia lepturoides lepturoides					○	○	○	○		
Cephalallus unicolor					●	●	●	●		
Ceresium elongatum					●	●	●	●	●	
Ceresium fuscum					●	●	●	●	●	
Ceresium fuscum fuscum					○	○	○	○		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Ceresium fuscum shirakii				e	○				○	
Ceresium holophaeum					●	●	●	●	●	
Ceresium longicorne					●	●	●	●	●	
Ceresium simile					●	●	●	●	●	
Ceresium simile flavopubescens					○	○	○	○	○	
Ceresium unicolor					●			●	●	
Ceresium unicolor pseudounicolor				e	○			○	○	
Chloridolum loochooanum				E	●	●		●		
Chlorophorus amami				E	●	●				
Chlorophorus annularis					●	●	●	●	●	
Chlorophorus aritai				E	●			●	●	
Chlorophorus flavopubescens				E	●	●				
Chlorophorus muscosus					●	●	●	●		
Chlorophorus quinquefasciatus					●	●		●	●	
Chlorophorus signaticollis					●			●	●	
Chlorophorus yayeyamensis					●	●	●	●	●	
Comusia testacea					●	●	●	●		
Corymbia succedanea					●			●		
Cylindilla makiharai				E	●				●	
Demonax masatakai				E	●				●	
Demonax ohbayashii				E	●				●	
Demonax sawaii				E	●			●		
Demonax semixeniscus				E	●	●				
Diboma costata		VU			●	●	●	●	●	
Egesina flavoapicalis				E	●			●		
Egesina picea					●	●	●			
Egesina shibatai					●	●	●			
Epania dilaticornis					●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Epania dilaticornis kumatai					○	○		○		
Epania iriei				E	●				●	
Epania shikokensis					●	●		●	●	
Epania shikokensis maruokai				e	○				○	
Epania shikokensis shikokensis					○	○		○		
Ephies japonicus					●	●		●		
Ephies japonicus okinawanus				e	○	○		○		
Eupromus ruber					●	●				
Eurypoda batesi					●	●	●	●		
Eurypoda unicolor					●	●	●	●		
Euseboides matsudai					●	●	●	●	●	
Euseboides matsudai matsudai					○	○	○	○	○	
Exocentrus hayashii				E	●				●	
Exocentrus marui				E	●	●	●			
Exocentrus nobuoi					●	●		●		
Exocentrus nobuoi nobuoi				e	○	○				
Exocentrus nobuoi okinawaensis					○			○		
Exocentrus takakuwai					●		●			
Formosopyrrhona satoi				E	●	●	●	●		
Glaphyra cobaltina				E	●	●				
Glaphyra shibatai					●	●	●	●		
Glaphyra shibatai okinawana				e	○			○		
Glaphyra shibatai shibatai					○	○	○			
Glaphyra takeuchii					●	●	●	●		
Glaphyra takeuchii ebeninus				e	○	○	○	○		
Glenea chlorospila					●	●	●	●		
Glenea chlorospila chlorospila					○	○	○			
Glenea chlorospila okinawensis				e	○			○		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Glenea hamabovola				E	●				●	
Glenea iriei				E	●	●	●			
Glenea iriei heikichii				e	○			○		
Glenea iriei iriei				e	○	○	○			
Glenea iwasakii					●				●	
Glenea lineata					●	●	●	●	●	
Glenea lineata ihai				e	○			○		
Glenea lineata lineata					○	○	○			
Glenea lineata ryukyuensis				e	○				○	
Gnatholea biseburata					●	●				
Hyllisia taihokensis					●	●	●	●	●	
Idiostrangalia maruokai				E	●	●				
Iproca ishigakiana				E	●			●	●	
Kazuoclytus fukiensis					●	●		●		
Kurarua chujoi					●				●	
Leptepania ryukyuana					●	●	●	●		
Leptura ochraceofasciata					●	●	●	●		
Leptura ochraceofasciata amamiana				e	○	○	○			
Leptura ochraceofasciata watanabei				e	○			○		
Longipalpus dilatipennis				E	●	●	●	●	●	
Macrotoma fisheri					●				●	
Macrotoma fisheri obuscuribrunnea				e	○				○	
Margites formosana					●	●		●	●	
Margites formosana ishigakiana				e	○				○	
Margites formosana kawazoei				e	○	○				
Margites formosana okinawana				e	○			○		
Margites fulvidus					●	●	●	●		
Megopis sinica					●	●	●	●		

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Megopis sinica sinica					○	○	○	○		
Megopis sinica validicornis				e	○				○	
Merionoeda formosana					●				●	
Merionoeda formosana iriomotensis				e	○				○	
Merionoeda formosana okinawana				e	○			○		
Merionoeda formosana rubriventris				e	○	○	○			
Mesoereis horiana				E	●				●	
Mesosa cervinopicta				E	●				●	
Mesosa itoi				E	●			●		
Mesosa konoi					●	●		●		
Mesosa konoi amamiana				e	○	○				
Mesosa konoi okinawana				e	○			○		
Mesosa longipennis					●	●				
Mesosa nomurai					●	●				
Mesosa pictipes				E	●	●	●	●		
Mesosa pictipes miyamotoi					○	○	○			
Mesosa pictipes pictipes				e	○			○		
Mesosa yonaguni				E	●			●	●	
Mesosa yonaguni subkonoi				e	○			○	○	
Microlenecamptus nakabayashii				E	●			●		
Mimectatina divaricata					●	●			●	
Mimectatina divaricata fulvovariegata					○	○				
Mimectatina divaricata yayeyamana				e	○				○	
Mimectatina iriei				E	●	●		●		
Mimectatina meridiana					●	●	●	●	●	
Mimectatina meridiana ?hirai					○	○	○	○	○	
Mimorsidis yayeyamensis				E	●				●	
Mimostrangalia longicornis				E	●	●	●	●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Molorchoepania mizoguchii					●	●	●	●	●	
Monochamus alternatus					●	●		●		
Monochamus asiaticus				E	●				●	
Monochamus maruokai				E	●				●	
Monochamus masaoi				E	●	●		●		
Mycerinopsis apomecynoides				E	●	●		●		
Nadezhdiella japonica				E	●				●	
Nanohammus subfasciatus					●	●	●	●		
Necydalis moriyai				E	●	●				
Neosybra ryukyuensis				E	●				●	
Niphona furcata					●	●	●	●		
Niphona yanoi					●			●	●	
Niphona yanoi yanoi					○			○	○	
Nortia carinicollis					●	●	●	●	●	
Notomulciber quadrisignatus					●				●	
Oberea ishigakiana				E	●				●	
Oberea okinawana				E	●			●		
Oberea shibatai				E	●	●	●	●		
Obrium hattai				E	●				●	
Obrium takahashii				E	●	●		●		
Obrium takeshitai				E	●				●	
Olenecamptus bilobus					●			●	●	
Olenecamptus bilobus nipponensis				e	○			○	○	
Olenecamptus formosanus					●	●	●			
Olenecamptus taiwanus					●	●		●		
Ostedes inermis					●	●	●			
Ostedes inermis densepunctata		DD		e	○	○	○			
Paranaspia yaeyamensis				E	●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Parandra formosana					●				●	
Parandra shibatai				E	●	●		●		
Parasalpinia kojimai					●			●	●	
Pareutetrapha magnifica					●				●	
Pareutetrapha magnifica caeruleithoracica				e	○				○	
Peblephaeus ishigakianus				E	●				●	
Peblephaeus okinawanus				E	●			●		
Peblephaeus yayeyamai				E	●				●	
Penthides flavus					●				●	
Penthides flavus multipubens				e	○				○	
Penthides rufoflavus					●	●				
Perissus kiusiuensis					●	●	●			
Perissus kiusiuensis yamadai				e	○	○	○			
Perissus tsutsumii				E	●			●		
Pothyne annulata					●	●	●	●	●	
Pothyne annulata annulata					○	○	○	○		
Pothyne annulata ishigakiana				e	○				○	
Pothyne annulata yonaguniensis				e	○			○		
Pothyne formosana chocolatoides				e	○				○	
Pothyne formosana liturata				e	○			○		
Pothyne variegata					●	●	●	●	●	
Pothyne variegata hayashii				e	○	○	○			
Pothyne variegata ryukyuana				e	○			○		
Pothyne variegata yayeyamana				e	○				○	
Praolia citrinipes					●	●		●	●	
Praolia citrinipes ishigakiana				e	○				○	
Praolia citrinipes takeuchii				e	○	○				
Praolia citrinipes umui				e	○			○		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Praolia mizutanii				E	●	●				
Psacothea hilaris					●	●	●	●	●	
Psacothea hilaris ishigakiana				e	○				○	
Psacothea hilaris maculata				e	○	○	○			
Psacothea hilaris teneburosa					○			○		
Psephactus remiger					●	●	●	●		
Psephactus remiger insularis					○	○	○	○		
Pseudalosterna aritai				E	●			●		
Pseudalosterna takagii				E	●	●	●			
Pseudiphra apicale					●			●		
Pseudiphra elegans				E	●				●	
Pseudiphra obscura					●	●	●			
Pseudocalamobius leptissimus					●	●	●	●		
Pseudocalamobius leptissimus okinawanus				e	○	○	○	○		
Pterolophia annulata					●	●		●	●	
Pterolophia formosana					●			●		
Pterolophia gibbosipennis					●	●	●	●	●	
Pterolophia gibbosipennis iriomotei				e	○				○	
Pterolophia gibbosipennis kuniyoshii				e	○			○		
Pterolophia gibbosipennis subcristipennis					○	○	○			
Pterolophia kaleea					●				●	
Pterolophia kaleea kaleea					○				○	
Pterolophia kubokii		NT			●				●	
Pterolophia latefascia					●				●	
Pterolophia obovata				E	●		●	●		
Pterolophia oshimana				E	●	●				
Pyrestes inaequalicollis				E	●	●		●		
Pyrestes yayeyamensis				E	●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Rhaphuma amamiensis				E	●	●				
Rhaphuma diminuta					●	●		●		
Rhaphuma diminuta nitens				e	○	○		○		
Rhodopina modica				E	●	●	●			
Rhodopina okinawensis				E	●			●		
Rhodopina sakishimana				E	●				●	
Rondibilis amanoi					●	●		●		
Rondibilis elongata				E	●			●	●	
Rondibilis elongata elongata				e	○				○	
Rondibilis elongata minor				e	○			○		
Rondibilis femorata		DD			●				●	
Rondibilis insularis					●	●	●	●		
Ropica caenosa					●			●		
Ropica honesta					●	●	●	●	●	
Ropica loochooana				E	●			●	●	
Ropica loochooana hayashii				e	○				○	
Ropica loochooana loochooana				e	○			○	○	
Ropica nobuoi					●	●	●			
Ropica nobuoi nobuoi				e	○	○	○			
Rosalia feriei				E	●	●				
Rosalia lesnei					●				●	
Sciades brevicollis				E	●				●	
Sciades fasciatus					●	●	●	●	●	
Sciades fasciatus nobuoi				e	○	○	○			
Sciades fasciatus okinawanus				e	○			○		
Sciades fasciatus yaeyamanus				e	○				○	
Sciades longicollis				E	●	●	●	●		
Sciades sakishimanus				E	●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Sciades sakishimanus deguchii				e	○	○		○		
Sciades sakishimanus sakishimanus				e	○				○	
Sciades tonsus					●			●		
Sophronica obrioides					●	●	●			
Stenhomalus taiwanus					●			●	●	
Stenodryas clavigera					●	●	●	●	●	
Stenodryas clavigera iusularis					○	○	○	○	○	
Stenygrinum quadrinotatum		EN			●	●	●			
Strangalia gracilis				E	●	●		●		
Stromatium longicorne					●	●	●	●	●	
Sybra basialbofasciata				E	●	●		●		
Sybra distincta				E	●	●	●	●		
Sybra flavostriata				E	●				●	
Sybra flavostriata flavostriata				e	○				○	
Sybra mimogeminata				E	●				●	
Sybra ordinata					●	●	●	●		
Sybra ordinata loochooana				e	○			○		
Sybra ordinata subtesselata				e	○	○	○			
Sybra oshimana					●	●	●	●		
Sybra pascoei					●	●		●	●	
Sybra pascoei ishigakii				e	○				○	
Sybra pascoei okinawana				e	○	○		○		
Sybra trimeresura				E	●	●	●	●		
Thranius multinotatus					●			●	●	
Thranius multinotatus latipennis				e	○				○	
Thranius multinotatus okinawensis				e	○			○		
Thranius rufescens					●	●	●	●	●	
Thranius variegatus					●	●	●			

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Thranius variegatus obscura				e	○	○	○			
Uraecha oshimana				E	●	●	●	●		
Xenolea asiatica					●	●	●	●	●	
Xylariopsis iriei					●	●		●		
Xylotrechus albolatifasciatus				E	●			●		
Xylotrechus atronotatus					●	●	●	●	●	
Xylotrechus atronotatus angulithorax					○	○	○	○		
Xylotrechus atronotatus generosus				e	○				○	
Xylotrechus chinensis					●	●	●	●		
Xylotrechus chujoi				E	●			●	●	
Xylotrechus chujoi chujoi				e	○			○		
Xylotrechus chujoi ishigakianus				e	○				○	
Xylotrechus grayii					●	●		●	●	
Xylotrechus grayii grayii					○	○		○		
Xylotrechus grayii yaeyamanus					○				○	
Xylotrechus reductemaculatus				E	●	●	●			
CHRYSOMELIDAE										
Abirus fortunei					●			●	●	
Acrothinium gaschkevitchii					●	●		●		
Acrothinium gaschkevitchii okinawense				e	○			○		
Acrothinium gaschkevitchii shirakii				e	○	○				
Adiscus nigripennis					●				●	
Altica caerulescens					●	●		●		
Altica cirsicola					●			●		
Altica cyanea					●	●	●	●	●	
Altica viridicyanea					●			●		
Aphthona amamiana				E	●	●	●			
Aphthona formosana					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Aphthona nigrita					●	●		●		
Apophylia elongata				E	●	●		●		
Argopistes coccinelliformis					●	●		●		
Atrachya flavomaculata				E	●				●	
Aulacophora bicolor					●	●		●	●	
Aulacophora indica					●	●	●	●	●	
Aulacophora lewisii					●	●		●	●	
Aulacophora loochooensis				E	●	●				
Aulacophora nigripennis					●	●	●	●	●	
Aulacophora nigripennis nigripennis					○	○				
Aulacophora nigripennis nitidipennis					○	○	○	○	○	
Basilepta amamiensis				E	●	●				
Basilepta davidi					●	●		●	●	
Basilepta hirayamai					●	●	●	●	●	
Basilepta uenoi					●	●		●		
Batophila latissima					●	●				
Brontispa longissima					●			●		
Cassida circumdata					●	●		●	●	
Cassida piperata					●	●		●	●	
Cassida versicolor					●			●	●	
Cassida vespertina					●			●	●	
Chaetocnema basalis					●	●	●	●	●	
Chaetocnema concinna					●	●				
Chaetocnema concinnicollis					●			●		
Chaetocnema discreta					●	●	●	●		
Chaetocnema formosensis					●				●	
Chlamisus geniculatus					●	●	●	●		
Chlamisus japonicus					●	●			●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Chlamisus yakushimanus					●			●		
Chrysolina aurichalcea					●	●	●	●		
Clitea metallica					●			●	●	
Coenobius nigrocastaneus					●				●	
Coenobius obscuripennis					●	●	●	●	●	
Colaspoides amamiana				E	●	●				
Colaspoides fulvus					●	●	●	●	●	
Colaspoides imasakai					●	●	●			
Colaspoides okinawanus				E	●			●		
Colaspoides suginoi				E	●		●			
Colasposoma auripenne					●	●		●	●	
Cryptocephalus loochooensis					●	●		●	●	
Cryptocephalus loochooensis loochooensis					○	○		○	○	
Cryptocephalus perelegans					●	●		●	●	
Cryptocephalus perelegans perelegans					○	○		○	○	
Cryptocephalus perelegans takahasii				e	●			●		
Demotina aurosquama					●	●				
Demotina decorata					●	●				
Demotina elegans					●	●		●	●	
Demotina major					●	●		●		
Demotina modesta					●	●	●	●	●	
Demotina sasakawai					●	●		●		
Demotina serhiventris					●	●		●	●	
Dercetina azumai					●				●	
Dicladispa armigera				E	●				●	
Epaenidea elegans					●	●				
Epiluperodes ryukyuanus				E	●				●	
Exosoma amamiense				E	●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Galerucella grisescens					●			●	●	
Gallerucida oshimana					●	●				
Haplosomoides costatus					●	●		●	●	
Haplosomoides miyamotoi				E	●	●				
Hemipyxis balyi					●				●	
Hemipyxis balyi yaeyamana				e	○				○	
Hemipyxis cinctipennis					●	●	●	●		
Hemipyxis cinctipennis cinctipennis					○	○	○			
Hemipyxis cinctipennis okinawana				e	○			○		
Hemipyxis flaviabdominalis					●				●	
Hemipyxis foveolata					●	●		●		
Hemipyxis foveolata foveolata					○	○		○		
Hemipyxis shirakii				E	●			●	●	
Hemipyxis takarai				E	●				●	
Hespera lomasa					●	●		●		
Hoplosaenidea miyatakei				E	●	●			●	
Issikia issikii				E	●	●		●		
Laccoptera quadrimaculata					●	●		●	●	
Lanka fulva					●	●		●	●	
Lema coronata					●				●	
Lema honorata					●				●	
Lema rugifrons					●	●		●	●	
Leptispa miyamotoi				E	●	●	●			
Lilioceris formosana					●	●		●		
Lipromela okinawana				E	●			●		
Lipromorpha difficilis					●	●	●	●		
Longitarsus bimaculatus					●	●		●	●	
Longitarsus boharti				E	●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Longitarsus formosanus					●				●	
Longitarsus ihai				E	●			●	●	
Longitarsus ishigakiensis				E	●				●	
Longitarsus scutellaris					●	●	●	●		
Luperomorpha amamiana				E	●	●	●			
Luperomorpha birmanica					●				●	
Luperomorpha hidakai				E	●			●		
Luperomorpha sakishimana				E	●				●	
Lypesthes fulvus					●	●		●		
Manobia gressitti				E	●				●	
Manobia lewisi					●	●	●	●		
Manobia parvula					●	●		●	●	
Manobidia simplicithorax					●	●				
Medythia suturalis					●			●	●	
Monolepta chujoi				E	●	●			●	
Monolepta minor					●	●		●		
Monolepta miyamotoi				E	●	●		●		
Monolepta pallidula					●			●		
Monolepta sakishimana				E	●				●	
Morphosphaera coerulea					●	●		●	●	
Nodina chalcosoma					●	●			●	
Nodina kraussi				E	●			●		
Nodina morimotoi				E	●			●		
Nonarthra variabilis					●	●		●		
Notosacantha ihai					●	●		●		
Notosacantha loochooana				E	●	●				
OgLöblinia flavicornis					●	●	●	●	●	
Oomorphoides loochooensis					●	●	●	●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Oomorphoides okinawensis					●	●	●	●		
Oomorphoides sakishimanus				E	●				●	
Orthaltica shirozui				E	●	●		●	●	
Orthaltica okinawana				E	●	●		●	●	
Oulema atrosuturalis					●			●	●	
Pagria signata					●	●	●	●	●	
Parascela cribrata					●				●	
Parategyrius unicolor				E	●				●	
Phaedon brassicae					●	●		●		
Phola octodecimguttata					●	●		●	●	
Phyllotreta striolata					●	●		●	●	
Plagiodera versicolora					●	●				
Platycorynus japonicus				E	●	●		●	●	
Platycorynus japonicus japonicus				e	○	○		○	○	
Psylliodes angusticollis					●	●		●	●	
Psylliodes balyi					●	●		●	●	
Psylliodes brettinghami					●	●				
Psylliodes sribrugosa					●	●				
Pyrrhalta humeralis					●			●		
Pyrrhalta nigricornis				E	●	●				
Pyrrhalta yasumatsui				E	●	●		●		
Pyrrhalta yoshimotoi				E	●			●		
Rhyparida sakisimensis					●			●	●	
Schenklingia hiranoi					●	●				
Schenklingia sauteri					●	●		●		
Smaragdina ihai				E	●			●		
Smaragdina nipponensis					●	●		●	●	
Smaragdina quadrimaculata				E	●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Spermophagus rufiventris					●	●				
Sphaeroderma flavonotatum					●				●	
Sphaeroderma fulvoapicale				E	●	●		●		
Sphaeroderma quadrimaculatum					●	●		●	●	
Theopea aureoviridis				E	●			●	●	
Thlaspida cribrosa					●			●		
Trichochrysea okinawana					●	●		●	●	
Trichochrysea okinawana okinawana					○	○		○	○	
Trichochrysea sakisihimana				E	●				●	
Zeugophora flavonotata				E	●				●	
Zeugophora gracilis					●			●		
Zeugophora gracilis unicolor				e	○			○		
Zipangia amamiana				E	●	●				
Zipangia nigricornis				E	●				●	
Zipangia okinawana				E	●			●		
Zipanginia loochooana				E	●	●		●		
ANTHRIBIDAE										
Acorynus asanoi					●	●				
Acorynus okinawanus				E	●			●		
Acorynus poecilus				E	●				●	
Acorynus singularis				E	●	●				
Anthribus niveovariegatus					●	●				
Aphaulimia grammica					●	●		●	●	
Araecerus ishigakiensis				E	●			●		
Asemorhinus nebulosus					●				●	
Autotropis okinawana				E	●	●		●		
Caenophloeobius inconspicuus					●	●				
Cedus japonicus				E	●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Cisanthribus nakanei				E	●			●		
Deropygus cavus				E	●	●				
Deropygus morimotoi				E	●	●				
Deropygus uedai					●	●				
Eucorynus crassicornis					●				●	
Euparius concolor				E	●	●		●		
Euparius modicus					●				●	
Euparius modicus yaeyamanus					○				○	
Exillis japonicola					●	●		●	●	
Habrissus formosanus					●			●	●	
Habrissus nigronotatus					●	●		●		
Illis anna					●	●		●	●	
Litocerus communis					●	●		●	●	
Litocerus communis amamianus				e	○	○		○		
Litocerus communis communis					○				○	
Litocerus securus					●	●				
Litocerus tokarensis					●	●				
Litocerus tokarensis tokarensis					○	○				
Mecotropis kyushuensis					●	●		●		
Mecotropis ogasawarai				E	●			●		
Melanopsacus inaequalis				E	●	●				
Melanopsacus kinke					●				●	
Melanopsacus makiharai				E	●	●				
Misthoshima brevitarsis				E	●	●		●		
Nerthomma aplota					●	●				
Nessiodocus propinquus					●			●		
Nessiodocus triodes					●	●		●	●	
Notioxenus nitidus					●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Ozotomerus amamianus					●	●			●	
Ozotomerus nigromaculatus					●			●		
Peribathys okinawanus				E	●			●		
Peribathys shinonagai				E	●	●	●			
Phaulimia angusta				E	●			●	●	
Phaulimia decorata					●	●		●		
Phaulimia incerta					●	●		●		
Phaulimia kurosawai				E	●				●	
Phaulimia tuberosa				E	●				●	
Platystomos asteromaculatus				E	●	●		●		
Plintheria variolosa					●	●				
Rawasia ritsemae					●			●		
Rhaphitropis flavipes				E	●				●	
Rhaphitropis nigromaculata				E	●	●			●	
Sintor bipunctatus					●	●				
Sintor yamawakii				E	●			●		
Stenorhis hirashimai				E	●	●		●		
Tropideres insularis				E	●	●	●			
Tropideres japonicus					●	●	●	●		
Uncifer discrepans				E	●	●		●		
Uncifer hispidus					●	●		●		
Unciferina persimilis				E	●	●		●		
Xanthoderopygus didymus					●				●	
Xanthoderopygus flavicollis				E	●	●			●	
Xanthoderopygus jocosus					●	●				
Xylinada annulipes					●	●				
Xylinada japonica					●	●		●		
Xylinada oshimai				E	●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
ATTELABIDAE										
Auletobius fumigatus					●				●	
Auletobius planifrons					●	●		●	●	
Auletobius uniformis					●	●	●	●		
Deporaus insularis					●	●		●		
Eugnamptus aurifrons					●			●		
Eugnamptus sauteri					●	●				
Involvulus aes				E	●			●		
Involvulus amamiensis				E	●	●				
Involvulus cornix					●	●		●		
Involvulus flavus				E	●				●	
Involvulus subtilis				E	●	●	●	●		
BRENTIDAE										
Baryrhynchus poweri					●	●	●	●		
Baryrhynchus yaeyamensis		DD		E	●				●	
Callipareius japonicus					●		●			
Cerobates canaliculatus					●			●		
Cerobates formosanus					●				●	
Cerobates laticostatis					●			●		
Cerobates planicollis				E	●			●		
Cyphagogus signipes					●	●				
Desmidophorus crassus					●			●	●	
Higonius cilo					●				●	
Paramorphocephalus fumosus					●	●				
Trachelizus japonicus					●	●		●	●	
Trachelizus makiharai				E	●				●	
APIONIDAE										
Nanophyes dimorphus					●			●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Nanophyes formosensis					●			●		
Nanophyes pallipes					●			●		
Nanophyes plumbeus					●	●				
Nanophyes proles					●			●	●	
CURCULIONIDAE										
Acicnemis azumai					●	●		●	●	
Acicnemis dividicincta					●	●		●		
Acicnemis dividicincta okinawana				e	○	○		○		
Acicnemis dorsonigrita					●			●		
Acicnemis exilis					●	●			●	
Acicnemis kiotoensis					●	●		●	●	
Acicnemis maculaalba					●	●		●	●	
Acicnemis postica					●	●		●	●	
Acicnemis shibatai					●	●	●		●	
Acicnemis shigematsui				E	●				●	
Aclees hirayamai					●	●		●	●	
Acythopeus insularis					●	●		●		
Adorytomus anoploides					●	●				
Anthonomus minor					●	●			●	
Anthonomus okinawanus					●	●		●	●	
Anthonomus ryukyuensis					●	●		●	●	
Anthonomus uenoi					●			●		
Anthinobaris shirozui					●			●	●	
Bagous kagiashi					●	●		●	●	
Bagous ryukyuensis				E	●				●	
Bagous subvittatus				E	●			●		
Bagous youngi					●	●		●		
Baris armipes					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Baris kiboshi					●	●		●		
Baris kiboshi ihai				e	○			○		
Baris kiboshi kiboshi					○	○				
Batobaris rubi					●	●		●		
Blosyrus asellus					●			●	●	
Calyptopygus kumei				E	●			●		
Camptorhinus dorsalis					●			●	●	
Catabonops monachus					●	●				
Catarrhinus umbrosus					●	●		●	●	
Colobodellus postfasciatus					●	●		●	●	
Colobodes alboguttatus				E	●				●	
Colobodes formosanus				E	●				●	
Colobodes kuniyoshii				E	●				●	
Colobodes ornatoideus					●	●	●	●		
Colobodes rotundicollis					●				●	
Conisius yaeyamanus				E	●				●	
Cotasteromimus squamiger					●	●		●	●	
Cryptorhynchus fasciculatus					●			●	●	
Curculio atridorsum				E	●	●				
Curculio clarus					●	●		●		
Curculio funebris					●	●		●		
Curculio hilgendorfi					●	●		●		
Curculio hirashimai					●			●	●	
Curculio maculanigra					●			●		
Curculio nagaoi					●	●				
Cyphicerus kuchibutonus				E	●	●		●	●	
Darumazo distinctus					●				●	
Demimaea minuta					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Derelomus bicarinatus					●			●	●	
Deretiosopsis nigrisetis					●	●		●		
Deretiosus albicaudatus					●			●	●	
Deretiosus angulicollis					●				●	
Deretiosus ishigakianus				E	●				●	
Dermatoxenus caesicollis					●				●	
Dryotribus mimeticus					●	●				
Dyscerus orientalis					●	●		●	●	
Dyscerus perforatus					●				●	
Echinocnemus phytonomoides					●				●	
Echinocnemus squameus					●			●	●	
Edaphotrypetes ovipennis					●	●	●	●	●	
Edaphotrypetes parallelipennis					●		●			
Endaeus nipponicus					●			●	●	
Endaeus nychiommatoides					●				●	
Episomus mori					●	●	●	●	●	
Eugnathus distinctus					●			●	●	
Euryommatus ellipticus					●	●		●		
Euthycus inaequalicollis					●			●		
Euthycus japonicus				E	●	●				
Euthyrhinus yaeyamanus					●				●	
Gasteroclisus auriculatus					●			●	●	
Gasteroclisus binodulus					●				●	
Gryporrhynchus obscurus					●			●		
Gryporrhynchus ryukyuensis				E	●				●	
Gymnaetron miyoshii					●			●		
Hesychobius vossi					●	●		●	●	
Heterendaeus miyamotoi				E	●	●		●		

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Heterochyromera imerodeus					●		●			
Imachra oculatus				E	●				●	
Imachra decipiens					●			●		
Imachra maetai					●			●		
Imachra shirozui				E	●	●	●	●	●	
Ixalma hilleri					●	●				
Labaninus kimotoi					●	●				
Larinus latissimus					●			●		
Larinus latissimus kuroiwai				e	○			○		
Lixus akonis					●				●	
Lixus impressiventris					●			●		
Macrocorynus psittacinus					●				●	
Macrorhyncolus crassiusculus					●	●		●		
Mechistocerus japonicus					●	●				
Mechistocerus ochraceus					●			●	●	
Mechistocerus okumai				E	●	●		●		
Mechistocerus simillis				E	●	●		●	●	
Mechistocerus yaeyamensis				E	●				●	
Mecysolobus takahashii					●	●				
Metetra esakii					●	●		●		
Microcryptorhynchus nipponicus					●	●		●	●	
Microtribus splendidus					●	●		●		
Myllocerus neglectus					●	●	●	●		
Neasphalmus okinawanus					●			●		
Ochronanus pallidus					●			●		
Ochyromera miwai					●	●		●		
Ochyromera ryukyuensis				E	●	●	●	●	●	
Odosyllis subcostatus					●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Oedophrys sakaguchii					●	●	●	●		
Orchestes heritierae				E	●				●	
Orchestes truncatipennis					●	●		●		
Orchestes yokoae				E	●	●				
Pachyrhynchus infernalis				E	●				●	
Parempleurus dentirostris					●			●		
Parempleurus femoratus					●	●		●		
Parendymia pilipes					●				●	
Pentarthrum angustissimum					●			●	●	
Phaenomerus foveipennis					●	●		●	●	
Phloeophagosoma curvirostre					●				●	
Pholidoforus squamosus					●	●		●	●	
Rhadinomerus annulipes					●	●		●		
Rhadinomerus ishigakianus				E	●				●	
Rhadinomerus unmon					●	●	●	●	●	
Rhadinomerus unmon ryukyuensis					○	○	○	○	○	
Rhinoncus sibiricus					●	●		●		
Scepticus uniformis					●	●	●	●	●	
Sclerolips horridus					●			●		
Scleropteroides insulare				E	●	●		●		
Seleuca impressicollis				E	●	●		●	●	
Shigizo rhombiformis				E	●	●		●	●	
Shirahoshizo rufescens					●	●		●		
Simulatacalles simulator					●	●		●	●	
Sphinxis ihai					●	●		●	●	
Stenoscelis gracilitarsis					●	●		●		
Sybulus nigricollis					●				●	
Sympiezomias cribricollis					●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Telephae matsudai				E	●	●				
Tivicis aeratus				E	●				●	
Tivicis maculatus				E	●			●	●	
Xenomimetes tenuis					●				●	
RHYNCHOPHORIDAE										
Cryptoderma kuniyoshii				E	●			●	●	
Dexipeus uenoi				E	●			●		
Dryophthorus japonicus					●	●				
Laogenia formosana					●	●		●		
Sipalinus gigas					●			●		
Sitophilus granarius					●			●		
Sphenocorynes ocellatus					●	●		●	●	
Stenommatus ocularis					●	●		●		
PLATYPODIDAE										
Crossotarsus emancipatus					●	●				
Crossotarsus externedentatus					●	●		●	●	
Crossotarsus niponicus					●	●				
Crossotarsus simplex					●			●	●	
Cryphalus abbreviatus					●			●		
Platypus calamus					●	●		●	●	
Platypus quercivorus					●	●		●		
Platypus solidus					●			●		
Platypus taiwansis					●	●		●		
SCOLYTIDAE										
Cyrtogenius brevior					●			●		
Margadillius corpulentus					●			●	●	
Orthotomicus kuniyoshii				E	●			●		
Poecilips advena					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Scolytogenes birosimensis					●			●	●	
Scolytogenes fulvipennis					●			●		
Sueus niisimai					●				●	
Xyleborus andrewesi					●			●		
Xyleborus permarginatus					●	●				
HALICTOPHAGIDAE										
Blattodeaphagus iriomotensis				E	●				●	
Halictophagus iriomotensis				E	●				●	
Halictophagus yaeyamanus				E	●				●	
MYRMECOLACIDAE										
Stichotrema asahinai				E	●	●		●		
STYLOPIDAE										
Paraxenos esakii					●	●			●	
Paraxenos nagatomii				E	●				●	
Paraxenos orientalis					●				●	
Pseudoxenos iwatai					●	●	●	●	●	
HYMENOPTER										
AGAONIDAE										
Acophila mikii					●	●		●		
Blastophaga nipponica					●	●		●		
Blastophaga pumilae					●	●		●		
Blastophaga sumatrana					●			●	●	
Ceratosolen appendiculatus					●				●	
Ceratosolen jucundus					●				●	
Cetrasolen cornutus					●	●		●	●	
Eufroggatisca okinavensis				E	●			●		
Eupristina verticillata					●			●	●	
Kradibia sumatrana					●			●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Liporrhopalum philippinensis					●			●		
Odontofroggatia gajimaru					●	●		●		
Odontofroggatia galili					●			●	●	
Otitesella ako					●	●				
Philotrypesis jacobsoni					●			●		
Philotrypesis okinavensis				E	●			●	●	
Platyscapa ishiiana					●	●		●		
Sycoscapter gajimaru				E	●			●		
Sycoscapter inubiae					●	●		●		
Walkerella yashiroi				E	●			●		
Wiebesia pumilae					●	●		●		
AMPULICIDAE										
Ampulex dentata				E	●			●		
Ampulex tridentata				E	●	●			●	
ANDRENIDAE										
Andrena amamiensis				E	●	●				
Andrena austoinsularis				E	●	●		●		
Andrena edashigei				E	●	●		●		
Andrena hirashimai				E	●	●		●		
Andrena ishikawai				E	●	●	●	●		
Andrena okinawana					●	●	●	●	●	
Andrena taniguchiae				E	●	●				
ANTHOPHORIDAE										
Amegilla florea					●			●	●	
Amegilla florea urens					○			○	○	
Amegilla senahai					●	●	●	●	●	
Amegilla senahai senahai					○				○	
Amegilla senahai subflavescens				e	○	○	○	○		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Ceratina iwatai					●			●		
Ceratina okinawana					●	●	●	●	●	
Ceratina dentipes					●			●		
Ceratina satoi					●	●		●		
Eucera spurcatipes					●			●		
Nomada amamiensis				E	●	●				
Nomada japonica					●			●		
Tetralonia chinensis					●				●	
Tetralonia chinensis nigricaudata				e	○				○	
Tetralonia okinawae					●	●		●	●	
Tetralonia okinawae okinawae					○	○		○		
Tetralonia okinawae sakishimana				e	○				○	
Thyreus takaonis					●	●		●	●	
Xylocopa albinotum				E	●				●	
Xylocopa amamensis					●	●	●			
Xylocopa flavifrons				E	●			●		
APHELINIDAE										
Aspidiotiphagus pseudoaonidiae					●			●		
Coccobius azumai				E	●			●		
AULACIDAE										
Pristaulacus comptipennis					●			●	●	
Pristaulacus insularis					●	●				
Pristaulacus ryukyuensis				E	●	●		●		
BETHYLIDAE										
Acrepyris ishigakiensis				E	●				●	
Acrepyris minutus					●	●			●	
Acrepyris orihime				E	●			●		
Allobethylus tomoae					●			●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Apensia bishamon				E	●	●		●		
Apensia daikoku				E	●				●	
Apensia elegans					●	●		●		
Apensia kusigematii				E	●	●		●	●	
Apensia okinawensis				E	●			●	●	
Apensia otohime				E	●	●				
Cephalonomia shirahamana				E	●				●	
Dissomphlus minutulus				E	●				●	
Epyris yamatonis					●				●	
Goniozus hoorai					●	●		●		
Goniozus japonicus					●	●		●	●	
Goniozus kusigematii					●			●		
Holepyris amamiinselanus				E	●	●				
Holepyris atamensis					●	●			●	
Holepyris matsumurai				E	●				●	
Holepyris yambaru				E	●	●		●		
Odontepyris marishi				E	●				●	
Plastanoxus amamiensis					●	●				
Pseudisobrachium onoyamai				E	●				●	
Pseudisobrachium ryukyuaum				E	●	●		●		
Sclerodermus harmandi					●	●		●		
BRACONIDAE										
Acanthormius iriomotensis				E	●				●	
Acanthormius rugosus				E	●				●	
Acanthormius takadai					●	●				
Aleiodes tenuis				E	●	●		●	●	
Apanteles baoris					●	●				
Apanteles cypris					●	●		●	●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Aphidius amamioshimensis				E	●	●				
Aphidius gifuensis					●	●		●		
Aphidius longipetiolus					●	●		●		
Aphidius picipes					●			●		
Aphidius salicis					●	●				
Bassus albifasciatus					●	●		●		
Bassus ebulus					●	●				
Bassus festivus					●	●		●		
Binodoxys confucius					●	●				
Binodoxys toxopterae				E	●	●				
Blacus melliceps				E	●			●		
Bracon onukii					●	●			●	
Braunsia antefurcalis					●	●				
Braunsia matsumurai					●	●				
Cotesia flavipes					●	●				
Cotesia plutellae					●			●		
Cotesia ruficrus					●	●		●		
Cremnops desertor					●			●	●	
Diaeretiella rapae					●			●		
Ephedrus persicae					●	●				
Lipolexis gracilis					●	●		●		
Lysiphlebus japonicus					●	●	●	●		
Macrocentrus thoracicus					●			●		
Meteorus graviliventris					●			●		
Meteorus ictericus					●			●		
Meteorus narangae					●	●			●	
Meteorus pulchricornis					●	●	●	●	●	
Meteorus versicolor					●				●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Myosoma chinensis					●			●		
Phanerotoma flava					●			●		
Phanerotoma grapholithae					●			●		
Praon orientale					●			●		
Praon yomenae					●	●		●		
Pseudoshirakia yokohamensis					●			●		
Rogas narangae					●				●	
CHALCIDIDAE										
Antrocephalus apicalis					●	●		●	●	
Antrocephalus apicalis apicalis					○	○		○		
Antrocephalus apicalis yaeyamanus				e	○				○	
Brachymeria fonscolombei					●			●		
Brachymeria hime					●			●		
Epitranus albipennis					●	●				
Epitranus shirakii				E	●			●		
Euchalcidia yamamotoi					●				●	
Hockeria amamioshimensis				E	●	●				
CHRYSIDIDAE										
Calosega kamiteta				E	●				●	
Chrysis angolensis					●	●		●	●	
Chrysis angolensis fuscipennis					○	○		○	○	
Chrysis principalis					●	●		●		
Chrysis splendidula					●			●		
Chrysis vicaria					●	●		●	●	
Chrysis formosana					○	○		○		
Chrysis formosana amamiensis				e	○	○		○		
Loboscelidia maai					●				●	
Okinawasega eguchii				E	●				●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Praestochysis lusca					●	●		●	●	
Stilbum cyanurum					●			●		
Stilbum cyanurum splendidum					○			○		
Trichrysis triacantha					●	●		●	●	
CIMBICIDAE										
Abia imperialis					●	●				
COLLETIDAE										
Colletes esakii					●	●				
Colletes perforator					●	●	●	●		
Hylaeus nanseiensis				E	●	●	●	●		
Hylaeus insularum					●	●	●	●	●	
Hylaeus insularum iriomotensis				e	○			○	○	
Hylaeus insularum insularum					○	○	○	○		
Hylaeus maetai				E	●				●	
Hylaeus meridianus				E	●	●		●		
CRABRONIDAE										
Crossocerus hakusanus					●	●				
Crossocerus hirashimai				E	●	●		●	●	
Dolichurus amamiensis					●	●	●		●	
Dolichurus minor				E	●			●		
Ectemnius albomaculatus				E	●	●			●	
Ectemnius chrysites					●	●		●		
Ectemnius confinis					●	●		●		
Ectemnius flavohirtus					●			●	●	
Ectemnius schletteri					●	●	●	●	●	
Ectemnius schletteri ishigakiensis				e	○				○	
Ectemnius schletteri japonicus					○	○	○			
Ectemnius schletteri sakaguchii				e	○			○		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Larra amplipennis		NT			●	●		●	●	
Larra carbonaria					●	●	●	●		
Larra luzonensis					●				●	
Lestica hentona				E	●			●		
Lestica okinawana				E	●			●		
Liris albopilosus					●				●	
Liris aurulentus					●	●		●	●	
Liris binghami					●	●		●	●	
Liris binghami deplanatus					○	○		○	○	
Liris difficilis					●				●	
Liris festinans					●	●	●	●	●	
Liris festinans festinans					○	○				
Liris festinans japonicus				e	○	○	○	○	○	
Liris iriomotensis				E	●				●	
Liris rohweri					●		●	●	●	
Liris rohweri formosanus					○		○	○	○	
Liris subtessellatus					●	●	●	●	●	
Lyroda venusta					●				●	
Lyroda venusta taiwana					○				○	
Pison punctifrons					●	●	●	●	●	
Rhopalum okinawanum				E	●			●		
Tachysphex changi					●			●	●	
Tachysphex formosanus					●				●	
Tachysphex nambui				E	●				●	
Tachysphex nigricolor					●	●	●	●	●	
Tachysphex nigricolor nigricolor					○	○	○	○	○	
Tachysphex nigricolor yaeyamanus				e	○				○	
Tachytes sinensis					●				●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Tachytes sinensis yaeyamanus				e	○				○	
Trypoxlon thaianum					●	●	●	●	●	
Trypoxlon thaianum dubiosum				e	○	○	○	○	○	
Trypoxylim errans					●			●		
Trypoxylon formosicola					●	●	●	●	●	
Trypoxylon formosicola amamiense				e	○	○	○	○		
Trypoxylon formosicola inornatum				e	○			○	○	
Trypoxylon iriomotense				E	●				●	
Trypoxylon okinawanum				E	●	●		●	●	
Trypoxylon petiolatum					●	●	●	●	●	
Trypoxylon petioloides					●				●	
Trypoxylon petioloides ishigakiense					○				○	
Trypoxylon rufiventre				E	●			●		
Trypoxylon ryukyuense				E	●	●	●	●	●	
Trypoxylon schmiedeknechti					●				●	
Trypoxylon varipes					●	●				
Trypoylon takasago					●			●	●	
Trypoylon takasago kumaso				e	○			○	○	
DIPRIONIDAE										
Gilpinia amamiana				E	●	●				
Nesodiprion japonicus					●			●	●	
DRYINIDAE										
Apterodryinus tambiniae				E	●	●				
EMBOLEMIDAE										
Embolemus pecki					●				●	
EUCOILIDAE										
Endecameris erugatus				E	●				●	
Endecameris striatus					●	●	●			

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Eucoilidea guamensis					●			●		
Gronotoma micromorpha				E	●			●		
Hexacola antennata				E	●			●	●	
Hexacola cognata				E	●	●	●	●	●	
Hexacola octosegmenta				E	●		●			
Hexacola quinaria				E	●		●		●	
Hexacola samuelsoni				E	●	●	●		●	
Leptolamina gressitti					●				●	
Odonteucoila amamiensis				E	●		●			
Odonteucoila floccosa					●	●				
Rhoptromeris ryukyuensis				E	●				●	
Trybliographa elliptica					●	●			●	
Trybliographa laticauca					●				●	
Trybliographa okinawaensis				E	●			●	●	
Trybliographa parallela				E	●		●	●	●	
Trybliographa rugipunctata					●	●		●	●	
Trybliographa shirozui				E	●	●		●		
Trybliographa vulgaris					●	●	●	●	●	
EULOPHIDAE										
Apleurotropis kumatai					●			●		
Asecodes delucchii					●	●		●		
Chrysocharis chilo					●	●	●			
Chrysocharis pentheus					●			●		
Cirrospilus phyllocnistis					●	●				
Cirrospilus quadristriatus					●	●				
Citrostichus phyllocnistoides					●	●		●		
Closterocerus trifasciatus					●	●				
Desmatocharis turcica					●	●	●			

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Diglyphus albiscapus					●		●	●		
Hemiptarsenus varicornis					●			●		
Iniostichus kumatai					●			●		
Melittobia sosui				E	●			●		
Mestocharella kumatai				E	●	●		●		
Mestocharella rhois				E	●				●	
Neochrysocharis formosa					●			●		
Neochrysocharis okazakii					●			●		
Parachrysocharis javensis					●			●		
Pediobius acantha					●	●	●			
Pediobius flaviscapus					●	●		●	●	
Pediobius italicus					●		●			
Pediobius longicornis					●	●		●		
Pleurotroppopsis japonica					●	●				
Pleurotroppopsis lunata				E	●				●	
Quadrastichus liriomyzae					●			●		
Stenomesius japonicus					●	●				
Sympiesis dolichogaster					●	●				
Zaommomenten brevipetiolatus					●				●	
EUMENIDAE										
Anterhynchium flavomarginatum					●	●	●	●	●	
Anterhynchium flavomarginatum hanedai				e	○			○		
Anterhynchium flavomarginatum umenoi				e	○				○	
Anterhynchium flavomarginatum amamiense				e	○	○	○			
Delta esuriensa					●	●		●	●	
Delta esuriensa okinawae					○	○		○	○	
Delta flavopictum					●			●	●	
Delta flavopictum formosanum					○			○	○	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Discoelius japonicus					●	●				
Euodynerus dantici					●		●	●		
Euodynerus dantici nigrescens				e	○		○	○		
Euodynerus nipanicus					●	●	●	●	●	
Euodynerus nipanicus flavicornis				e	○	○	○	○		
Euodynerus nipanicus ryukyuensis				e	○				○	
Euodynerus trilobus					●			●	●	
Okinawepipona kogimai					●	●		●		
Okinawepipona kogimai kogimai				e	○			○		
Okinawepipona kogimai nagasei				e	○	○				
Pachymenes yayeyamensis					●	●		●	●	
Pararrhynchium ishigakiense				E	●				●	
Pararrhynchium tsunekii		NT		E	●	●				
Pseudozumia indosinensis					●			●	●	
Pseumenes depressus					●				●	
Rhynchium quinquecinctum					●	●	●	●	●	
Rhynchium quinquecinctum murotai					○	○	○	○		
Rhynchium quinquecinctum nambui				e	○				○	
Stenodynerus clypeopictus					●			●		
Stenodynerus frauenfeldi					●	●				
Stenodynerus kusigematii				E	●	●	●	●		
Stenodynerus kusigematii kusigematii				e	○			○		
Stenodynerus kusigematii tsunekii				e	○	○				
Stenodynerus kusigematii rufiventris				e	○		○			
Stenodynerus rufomaculatus				E	●			●		
EURYTOMIDAE										
Eurytoma schaeferi					●		●			
Sycophila variegata					●	●				

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
EVANIIDAE										
Evania appendigaster					●			●		
FORMICIDAE										
Acropyga nipponensis					●	●	●	●		
Acropyga sauteri					●	●	●	●	●	
Acropyga yaeyamensis				E	●				●	
Aenictus ceylonicus					●			●		
Aenictus lifuiae					●				●	
Amblyopone fulvida		NT		E	●			●		
Amblyopone sakail					●			●		
Amblyopone silvestrii					●			●	●	
Anoplolepis gracilipes					●	●	●	●	●	
Aphaenogaster concolor				E	●	●		●		
Aphaenogaster gracillima				E	●				●	
Aphaenogaster irrigua					●	●	●	●		
Aphaenogaster luteipes				E	●	●	●			
Aphaenogaster minutula				E	●	●	●			
Aphaenogaster osimensis					●	●				
Aphaenogaster tipuna					●				●	
Camponotus albosparsus					●				●	
Camponotus amamianus		DD		E	●	●				
Camponotus bishamon					●	●	●	●	●	
Camponotus devestivus					●	●	●			
Camponotus friedae					●	●				
Camponotus kaguya					●	●	●	●		
Camponotus monju					●	●		●	●	
Camponotus nawai					●	●				
Camponotus nipponicus					●	●	●			

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Camponotus shonki					●		●	●	●	
Camponotus yambaru				E	●			●		
Cardiocondyla nuda					●	●	●	●	●	
Cardiocondyla tsukuyomi					●			●	●	
Cardiocondyla wroughtonii					●			●	●	
Cardiocondyla yamauchii				E	●			●		
Cerapachys biroi					●	●		●	●	
Cerapachys hashimotoi				E	●				●	
Cerapachys nubatama					●	●				
Crematogaster nawai					●	●		●		
Crematogaster osakensis					●	●				
Crematogaster sp.					●	●				
Crematogaster teranishii					●			●		
Crematogaster vagula					●	●	●	●	●	
Cryptopone sauteri					●	●				
Cryptopone tengu					●	●	●	●	●	
Diacamma sp.					●	●	●	●		
Discothyrea kamiteta				E	●			●		
Discothyrea sauteri					●				●	
Epitritus hexamerus					●			●		
Epitritus hirashimai					●	●	●	●		
Hypoponera beppin					●	●		●		
Hypoponera bondroiti					●			●		
Hypoponera gleadowi					●				●	
Hypoponera nippona					●	●	●	●	●	
Hypoponera opaciceps					●	●		●		
Hypoponera zwaluwenburgi					●			●		
Kiydris mutica					●	●		●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Lasius sakagamii					●			●		
Leptanilla sp.				E	●			●		
Leptogenys confucii					●	●	●	●		
Leptothrax anira					●	●				
Leptothrax antera					●	●	●			
Leptothrax basana				E	●				●	
Leptothrax indra				E	●			●		
Monomorium chinense					●	●	●	●	●	
Monomorium destructor					●			●		
Monomorium floricola					●	●		●	●	
Monomorium hiten					●			●	●	
Monomorium intrudens					●	●	●	●		
Monomorium latinode					●			●	●	
Monomorium sechellense					●	●		●	●	
Mymica kotokui					●			●		
Myrmecina amamiana				E	●	●	●			
Myrmecina ryukyuensis				E	●	●	●	●	●	
Ochetellus glaber					●	●	●	●	●	
Odontomachus sp.				E	●			●		
Oligomyrmex hannya				E	●			●		
Oligomyrmex oni				E	●			●		
Oligomyrmex yamatonis					●	●	●	●	●	
Pachycondyla chinensis					●	●	●	●	●	
Pachycondyla darwini					●			●	●	
Pachycondyla luleipes					●				●	
Pachycondyla pilosior					●		●	●		
Pachycondyla sakishimensis				E	●				●	
Pachycondyla sp.					●			●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Paratrechina amia					●	●	●	●	●	
Paratrechina longicornis					●	●	●	●	●	
Paratrechina nubatama					●	●				
Paratrechina otome				E	●				●	
Paratrechina ryukyuensis					●	●		●	●	
Paratrechina sakurae					●	●	●			
Paratrechina yaeyamensis				E	●				●	
Paratrechina yambaru				E	●			●		
Pentastruma sauteri					●			●	●	
Pheidole fervens					●	●		●	●	
Pheidole megacephala					●	●		●	●	
Pheidole node					●	●	●	●		
Pheidole pieli					●	●	●	●	●	
Pheidole ryukyuensis					●			●	●	
Pheidole susanowe					●			●	●	
Pheidologeten diversus					●			●		
Polyrhachis dives					●			●	●	
Polyrhachis latona					●				●	
Polyrhachis moesta					●	●		●	●	
Ponera bishamon				E	●			●	●	
Ponera takaminei					●			●		
Ponera tamon					●	●		●	●	
Pristomyrmex pungens					●	●	●	●	●	
Pristomyrmex yaeyamensis					●				●	
Probolomyrmex okinawensis		DD		E	●			●		
Proceratium itoi					●	●		●	●	
Proceratium japonicum					●	●	●	●	●	
Protanilla sp.					●	●	●	●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Recurvidris recurvispinosa					●				●	
Smithistruma benten					●	●		●	●	
Smithistruma circothrix				E	●			●		
Smithistruma japonica					●	●		●	●	
Smithistruma kichijo					●			●		
Smithistruma leptothrix					●			●	●	
Smithistruma mazu					●			●		
Smithistruma morisitai					●			●		
Solenopsis tipuna					●	●	●	●	●	
Strumigenys lacunosus					●			●		
Strumigenys minutula					●		●	●	●	
Strumigenys solifontis					●			●		
Strumigenys sp. 1				E	●			●		
Strumigenys sp. 2				E	●				●	
Strumigenys sp. 3					●			●		
Strumigenys sp. 4					●	●	●	●	●	
Tapinoma melanocephalum					●	●	●	●	●	
Tapinoma sp.					●	●		●	●	
Technomyrmex albipes					●	●	●	●	●	
Tetramorium bicarinatum					●	●		●	●	
Tetramorium kraepelini					●			●		
Tetramorium lanuginosum					●	●	●	●	●	
Tetramorium nipponense					●	●	●	●	●	
Tetramorium simillimum					●	●		●	●	
Tetramorium smithi					●			●		
Tetraponera sp.				E	●			●		
Trichoscapa membranifera					●	●		●	●	
Vollenhovia amamiana				E	●	●	●			

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Vollenhovia benzai					●	●	●			
Vollenhovia okinawana				E	●			●		
Vollenhovia sakishimana					●				●	
Vollenhovia yambaru				E	●			●		
HALICTIDAE										
Halictus aerarius					●		●	●		
Lasioglossum vagans					●			●		
Lasioglossum amamiensis				E	●	●	●			
Lasioglossum formosae					●				●	
Lasioglossum kumejimense					●	●	●	●	●	
Lasioglossum naitoi				E	●			●	●	
Lasioglossum okinawa				E	●			●		
Lasioglossum sakishima				E	●				●	
Lasioglossum solisortus				E	●				●	
Lasioglossum subopaeum					●	●	●	●	●	
Lasioglossum subtropicum				E	●				●	
Lasioglossum villosulum					●			●		
Lasioglossum villosulum trichopse					○			○		
Lasioglossum zipangu				E	●			●	●	
Nomia pavonula					●	●	●	●	●	
ICHNEUMONIDAE										
Acrolyta discrepa				E	●	●				
Acrolyta excisa				E	●	●		●	●	
Acrolyta spola				E	●	●		●		
Aphanistes wadai					●	●				
Aritranis sumiyonus				E	●	●				
Ateleute densistriata				E	●	●	●	●	●	
Ateleute mesorufa				E	●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Atractodes paucus				E	●	●				
Baltazaria nigrescens				E	●	●				
Bathythrix prothorax				E	●				●	
Callajoppa formosana					●			●		
Calosphyrum alboorbitalis				E	●				●	
Campoplex notabilis				E	●	●				
Campoplex sugiharai					●	●	●	●		
Campoplex sugiharai okinawensis				e	○	○	○	○		
Casinaria cylindrator				E	●	●			●	
Casinaria daitojimensis					●	●	●	●		
Charops daitojimensis					●	●	●	●		
Chorinaeus ryukyuensis				E	●	●				
Chriodes pentagonus					●	●		●	●	
Coccygomimus amamiensis				E	●	●				
Coccygomimus nipponicus					●	●	●			
Colpotrochia pilosa					●			●		
Cratichneumon amamioshimensis				E	●	●				
Cryptopimpla procul					●	●				
Cryptopimpla tertia				E	●	●				
Cymodusa orientalis					●	●		●		
Diatora lissonota					●			●		
Dicamptus nigropictus					●	●		●		
Dichrogaster schaffneri					●			●		
Diplazon ryukyuensis				E	●			●	●	
Dolichomitus macropunctatus					●	●				
Dolichomitus macropunctatus urainus					○	○				
Echthromorpha agrestoria					●		●			
Echthromorpha agrestoria notulatoria					○		○			

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Enicospilus analis					●			●		
Enicospilus erythrocerus					●			●		
Enicospilus flavicapus					●			●		
Enicospilus flavocephalus					●		●	●		
Enicospilus microstriatellus				E	●	●		●	●	
Enicospilus nigribasalis					●	●		●		
Enicospilus nigristigma					●	●		●		
Enicospilus nocturnus					●			●		
Enicospilus okinawensis					●	●	●	●		
Enicospilus pungens					●	●				
Enicospilus sakaguchii					●			●		
Enicospilus semiopacus					●	●				
Enicospilus shinkanus					●			●		
Enicospilus striolatus					●			●		
Enicospilus tripartitus					●			●		
Enicospilus uncivena					●			●		
Enicospilus yonezawanus					●	●				
Eriborus acutulus				E	●	●			●	
Eriborus niger				E	●	●				
Eriborus ryukyuensis				E	●	●		●		
Eriborus samuelsoni				E	●				●	
Eriborus similis				E	●				●	
Eriborus vulgaris					●		●	●		
Euchalinus multimaculatus					●			●		
Eugalta cameroni					●	●				
Eurycryptus sakaguchii					●			●		
Eurycryptus unicolor					●	●				
Exochus affinis					●	●			●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Exochus ornatus					●	●				
Friona okinawana					●	●		●		
Gelis takadai				E	●	●		●		
Gerdius iriomotensis				E	●				●	
Glypta densa				E	●	●				
Glypta tumor				E	●	●				
Gnotus chionops					●	●		●		
Goryphus albofasciatus				E	●			●		
Gotra interrupta				E	●				●	
Gotra ryukyuensis				E	●				●	
Habronyx heros					●				●	
Hemiteles hirashimai					●	●			●	
Heterocola concava				E	●	●		●		
Homotropus tarsatorius					●	●				
Hybophanes angustus				E	●	●		●	●	
Hypsicera bicolor					●	●		●		
Hypsicera brevicornis					●	●				
Hypsicera carinata					●	●		●		
Hypsicera harrelli					●	●		●		
Hypsicera incarinata					●				●	
Hypsicera intermedia					●	●				
Hypsicera nigribasis					●	●		●		
Hypsicera rugosa					●	●		●		
Hypsicera watanabei				E	●	●				
Hypsicera yoshimotoi				E	●	●				
Intermedichneumon ocellus					●	●		●		
Ischnojoppa luteator					●				●	
Itoplectis naranyae					●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Javra taniguchiae				E	●	●	●			
Leptobatopsis babai					●	●				
Leptobatopsis indica					●				●	
Lissosculpta javanica					●	●		●		
Mastrus ecornutus				E	●	●				
Mastrus takadai				E	●	●		●		
Mesochorus takizawai					●			●		
Metopius dissectorius					●	●				
Microcharops australis					●			●		
Myrmeleonostenus babai					●	●				
Necolio sidereus				E	●				●	
Nematopodius kusigematii				E	●	●				
Neoparacryptus formosanus					●	●				
Netelia formosana					●	●		●		
Netelia hayashii					●	●	●	●	●	
Netelia ishiharai					●	●		●		
Netelia kodai					●	●		●		
Netelia latro					●	●		●	●	
Netelia latro latro					○	○		○	○	
Netelia major					●	●				
Netelia okinawana				E	●			●		
Netelia orientalis					●			●		
Netelia uchidai					●			●		
Netelia vulgaris					●	●		●		
Nipponaetes haeussleri					●	●		●		
Nipponaetes striatus				E	●				●	
Paraphylax agelenae					●			●		
Paraphylax subtilis					●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Phaedraspis fulvitergus					●	●				
Phytodietus leucaspis				E	●			●		
Phytodietus longicauda					●	●				
Picardiella rufa					●	●		●		
Pimplopterus mesorufus				E	●	●		●		
Pimplopterus samuelsoni				E	●				●	
Platylabus okui				E	●	●				
Plectochorus iwatensis					●	●				
Pristomerus punctatus					●			●	●	
Rhembobius quadristriatus				E	●	●				
Schreineria geniculata					●			●		
Sericopimpla ryukyuensis				E	●	●				
Stictopisthus miyatakei				E	●	●				
Teleutaea minamikawai					●	●				
Theronia zebra					●	●		●		
Theronia zebra diluta					○	○		○		
Theroscopus striatus				E	●	●		●		
Thymaris niger				E	●	●				
Thymaris rufomaculatus				E	●	●			●	
Thymaris taiwanensis					●	●		●		
Torbda rufa				E	●		●			
Torbda sauteri					●			●		
Townostilpnus rufinator					●				●	
Triancyra hirashimai				E	●				●	
Triancyra striatiscutellaris				E	●		●			
Triancyra taniguchiae				E	●		●			
Trichionotus seminiger				E	●				●	
Trichionotus suzukii					●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Tricholinum orientalis				E	●	●		●		
Triclistus aitkini					●	●				
Triclistus dimidiatus					●	●		●		
Triclistus glabrosus					●	●				
Triclistus kamijoi					●	●				
Triclistus nigripes					●	●				
Triclistus parvulus					●	●				
Triclistus planus					●	●		●		
Triclistus semistriatus				E	●			●		
Tromatobia maculata					●	●				
Venturia exareolata				E	●	●				
Venturia linearis				E	●				●	
Vulgichneumon diminutus				E	●	●		●	●	
Vulgichneumon leucaniae					●	●				
Vulgichneumon taiwanensis					●	●		●		
Vulgichneumon takagii				E	●	●				
Vulgichneumon uchidai				E	●	●				
Xanthopimpla clavata					●			●	●	
Xanthopimpla flavolineata					●			●	●	
Xanthopimpla konowi					●	●	●	●		
Xanthopimpla naenia					●			●		
Xanthopimpla punctata					●	●		●	●	
Xanthopimpla stemmator					●			●	●	
Xorides nasensis				E	●	●		●		
Xoridescopus nigrispeculum				E	●				●	
Xoridescopus taihokensis					●	●	●	●		
Zaglyptus semirufus				E	●	●		●		
Zygoglypta iwatai					●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
LEUCOSPIDIDAE										
Leucospis nambui				E	●				●	
MEGACHILIDAE										
Chalicodoma disjunctiformis					●	●	●	●		
Chalicodoma esakii				E	●	●			●	
Chalicodoma monticola					●	●	●	●	●	
Chalicodoma sculpturalis					●	●		●		
Euaspis basalis					●	●				
Heriades sakishimanus				E	●	●		●	●	
Lithurge collaris					●	●		●	●	
Megachile angustistrigata					●				●	
Megachile igniscopata					●			●	●	
Megachile nipponica					●	●	●	●		
Megachile nipponica amamiensis				e	○	○	○	○		
Megachile okinawana					●	●	●	●		
Megachile remotissima					●			●		
Megachile rixator					●			●	●	
Megachile rixator sakishimana					○			○	○	
Megachile sudai				E	●			●		
Megachile yaeyamaensis				E	●				●	
MEGASPILIDAE										
Dendrocerus amamensis				E	○	○				
MUTILLIDAE										
Ephucilla naja					●			●		
Mickelomyrme hageni					●			●	●	
Neotrogaspidia pustulata					●	●				
Petersenidia fukudai					●	●	●	●		
Squamulotilla ardescens					●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
MYMARIDAE										
Mymar taprobanicum					○		○			
NYSSONIDAE										
Bembecinus bimaculatus				E	●			●	●	
Bembecinus hungaricus					○	○		○		
Bembecinus hungaricus amamiensis				e	○	○		○		
Bembecinus tanoi				E	●				●	
Bembix formosana		NT			●				●	
Gorytes ishigakiensis		NT		E	●				●	
Nippononysson rufopictus					●	●				
ORUSSIDAE										
Orussus striatus				E	○				○	
PEMPHREDONIDAE										
Polemistus annulicornis					●		●			
Psen caocinnus					●	●				
Psen exaratus					●	●		●	●	
Psen exaratus intermedius				e	○			○		
Psen exaratus taiwanus					○				○	
Psen exaratus santaro				e	○	○				
Psen hirashimai				E	●	●				
Psen koreanus					●	●		●		
Psen opacus					●	●				
Psen opacus gressitti				e	○	○				
Psen sp.				E	●				●	
Psenulus okinawanus				E	●	●		●	●	
Stigmus shirozui					●	●				
PHILANTHIDAE										
Cerceris amamiensis				E	●	●	●	●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Cerceris amamiensis amamiensis				e	○	○	○	○		
Cerceris amamiensis tokunosimana		NT		e	○		○			
Cerceris amamiensis geboharti				e	○			○		
Cerceris lauta				E	●				●	
Cerceris okumurai				E	●	●				
Cerceris tomiyamai		NT		E	●			●		
Cerceris variaesimilis					●		●	●	●	
Cerceris xanthosoma				E	●	●				
Cerceris yuwanensis				E	●	●				
PLATYGASTRIDAE										
Platygaster tubulosa					●	●	●			
Trichacoides hirsutus					●	●		●		
Trichacoides hirsutus ryukyuensis				e	○	○		○		
POMPILIDAE										
Anoplius dorsalis					●	●		●	●	
Anoplius iriomotensis				E	●				●	
Anoplius liukiu					●	●		●	●	
Anoplius nozakae				E	●			●		
Anoplius nozakae nozakae				e	○			○		
Anoplius pacificus					●			●		
Anoplius reflexus					●			●		
Anoplius ryukyuensis					●	●		●	●	
Anoplius sakishimanus				E	●				●	
Anoplius surusumi					●				●	
Anoplius surusumi yaeyamanus				e	○				○	
Anoplius tanoi				E	●			●	●	
Anoplius valdezi					●	●			●	
Anoplius valdezi ryukyuensis				e	○	○			○	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Anoplius yonagunianus				E	●				●	
Auplopus carbonarius					●	●		●		
Auplopus carbonarius japonicus					○	○		○		
Auplopus chiponensis					●	●			●	
Auplopus deceptrix					●	●				
Auplopus esaki				E	●	●				
Auplopus nagatomii				E	●				●	
Auplopus nozakae				E	●			●	●	
Auplopus nozakae okinawanus				e	○			○		
Auplopus nozakae nozakae				e	○				○	
Auplopus obtusus					●	●				
Auplopus takachihoi					●	●		●		
Auplopus williamsi					●			●	●	
Batozonellus annulatus					●	●		●	●	
Batozonellus maculifrons					●	●	●	●	●	
Ctenopriocnemis sp.					●	●				
Cyphononyx abdominalis				E	●				●	
Cyphononyx dorsalis					●	●	●	●	●	
Cyphononyx iridipennis					●				●	
Episyron arrogans					●	●		●		
Ferreola hirayamae				E	●				●	
Hatanomus granulosus				E	●				●	
Hemipepsis amamiensis					●	●		●	●	
Hemipepsis apicata				E	●				●	
Hemipepsis hanedai				E	●				●	
Hemipepsis sinensis					●			●	●	
Hemipepsis yaeyamana				E	●				●	
Homonotus okinawanus				E	●	●		●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Leptodialepis nicevillei					●				●	
Cryptocheilus sugiharai		DD			●	●				
Macromerella honesta					●				●	
Macromeris maculifrons					●	●		●		
Morochares nigripennis					●			●	●	
Morochares nigripennis okinawana				e	○			○		
Morochares nigripennis yayeyamana				e	○				○	
Phanagenia kyotensis					●	●		●		
Phanagenia kyotensis esakii					○	○		○		
Phanagenia yaeyamaensis				E	●				●	
Platydialepis ryoheii					●	●				
Pompilus cinereus					●			●		
Priocnemis azumai				E	●				●	
Pseudagenia ochracea					●	●				
Ridestus sibatanii				E	●			●		
Tachypompilus analis					●	●	●	●	●	
PTEROMALIDAE										
Callitula yasudai				E	●			●		
Cleonymus angustatus					●	●		●		
Cleonymus ryukyuensis				E	●	●		●		
Dibrachys kojimae					●			●		
Pachyneuron groenlandicum					●		●			
Sphegigaster hamugurivora				E	●			●		
SCELIONIDAE										
Eumicrosoma blissae					●	●		●		
Gryon fellah					●		●		●	
Gryon festivus					●			●		
Gryon insulare					●			●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Gryon lala					●			●		
Gryon nixoni					●				●	
Gryon viggianii					●		●	●		
Maruzza japonica				E	●			●		
Telenomus euproctidis					●			●		
Telenomus kuboi				E	●			●		
Telenomus kyushuensis				E	●	●				
Telenomus lucullus					●	●				
Trissolcus mitsukurii					●	●		●		
SCOLIIDAE										
Campsomeriella annulata					●	●	●	●	●	
Campsomeriella annulata sakaguchii				e	○	○	○	○	○	
Campsomeriella annuloides				E	●				●	
Campsomeriella quadrifasciata					●	●		●	●	
Campsomeriella quadrifasciata sauteri					○	○		○	○	
Liacos erythrosoma					●				●	
Liacos erythrosoma formosana					○				○	
Megacampsomeris grossa					●	●		●		
Megacampsomeris grossa matsumurai					○	○		○		
Megacampsomeris mojiensis					●	●	●	●	●	
Megacampsomeris mojiensis ryukyuana					○	○	○	○	○	
Megacampsomeris schulthessi					●	●		●		
Megacampsomeris stoetzneri					●				●	
Scolia kuroiwae					●	●	●	●		
Scolia melanosoma					●		●	●	●	
Scolia melanosoma melanosoma					○		○	○	○	
Scolia quadripustulata					●	●	●	●	●	
Scolia quadripustulata formosensis					○	○	○	○	○	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Scolia sinensis					●	●		●	●	
SIRICIDAE										
Eriotremex formosanus					●	●				
Tremex okinawensis				E	●			●		
SPHECIDAE										
Ammophila atripes					●			●	●	
Ammophila atripes formosana					○			○	○	
Ammophila infesta					●	●		●		
Chalybion bengalense					●			●		
Chalybion japonicum					●	●		●	●	
Isodontia maidli					●	●				
Isodontia nigella					●	●	●	●	●	
Prionyx viduatus					●	●	●	●	●	
Psenulus carinifrons					●			●		
Psenulus carinifrons iwatai					○			○		
Sceliphron deforme					●			●		
Sceliphron deforme taiwanum					○			○		
Sceliphron madraspatanum					●	●	●	●	●	
Sceliphron madraspatanum kohli					○	○	○	○		
Sceliphron madraspatanum formosanum					○				○	
Sphex argentatus					●	●	●	●	●	
Sphex argentatus argentatus					○	○	○	○	○	
Sphex diabolicus					●	●	●	●	●	
Sphex diabolicus flammitricus					○	○	○	○	○	
Sphex sericeus					●			●		
Sphex sericeus lineolus					○			○		
STEPHANIDAE										
Athalia cinctus					●	●		●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
TENTHREDINIDAE										
Abeleses metallicus				E	●	●		●		
Beleses metallicus				E	●	●		●		
Macrophya liukiuana				E	●			●		
Neostromboceros okinawaensis				E	●			●		
Nesoselandria formosana					●	●				
Nesoselandria ryukyuensis				E	●			●		
Nesoselandria shirozui				E	●				●	
TIPHIIDAE										
Methocha sp.				E	●			●		
Tiphia vulgata					●				●	
Tiphia brevilineata					●	●	●			
Tiphia iriomotensis				E	●				●	
Tiphia okinawana				E	●			●		
Tiphia okinawana okinawana				e	○			○		
Tiphia popilliavora					●				●	
Tiphia sternata					●				●	
Tiphia tokunoshimana				E	●		●			
TORYMIDAE										
Diomorus armatus					●	●				
Pachytomoides epibulum					●				●	
Pachytomoides hornianus					●			●		
TRICHOGRAMMATIDAE										
Trichogramma australicum					●			●		
VESPIDAE										
Parapolybia indica					●			●		
Parapolybia indica indica					○			○		
Parapolybia varia					●	●				

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Polistes chinensis					●			●		
Polistes chinensis chinensis				e	○			○		
Polistes japonicus					●	●	●	●	●	
Polistes japonicus formosanus					○				○	
Polistes japonicus japonicus		DD			○	○	○	○	○	
Polistes jokahamae					●	●		●	●	
Polistes rothneyi					●	●	●	●	●	
Polistes rothneyi iwatai					○	○	○			
Polistes rothneyi ingrami				e	○			○		
Polistes rothneyi yayeyamae				e	○				○	
Ropalidia fasciata					●	●	●	●	●	
Vespa affinis					●			●	●	
Vespa affinis affinis					○			○	○	
Vespa analis					●	●	●	●	●	
Vespa analis nagatomii				e	○				○	
Vespa analis eisa				e	○	○	○	○		
Vespa ducalis					●	●	●	●	●	
Vespa ducalis loochooensis				e	○				○	
Vespa ducalis ducalis					○	○	○	○		
Vespula shidai				E	●	●				
Vespula shidai amamiana				e	○	○				
XIPHYDRIIDAE										
Genaxiphia hirashimai				E	●	●				
Hyperxiphia nodai				E	●	●				
MECOPTERA										
PANORPIDAE										
Panorpa amamiensis		DD		E	●	●				
DIPTERA										

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
ACROCERIDAE										
Oligoneura shirakii				E	●	●				
AGROMYZIDAE										
Agromyza lunulata				E	●	●				
Agromyza phragmitidis					●	●				
Agromyza potentillae					●	●				
Calycomyza artemisiae					●	●		●	●	
Cerodontha bisetiorbita					●	●				
Cerodontha geniculata					●	●				
Cerodontha luctuosa					●	●				
Cerodontha omissa					●			●		
Cerodontha setariae					●	●				
Liriomyza asterivora					●	●		●		
Liriomyza brassicae					●	●		●	●	
Liriomyza debilis					●	●				
Liriomyza pusilla					●	●				
Melanagromyza metallica					●			●	●	
Melanagromyza pubescens					●	●		●		
Melanagromyza shirakii				E	●			●		
Ophiomyia anguliceps					●				●	
Ophiomyia conspicua					●			●	●	
Ophiomyia cornuta					●			●		
Ophiomyia curvipalpis					●	●				
Ophiomyia ricini					●				●	
Phytoliriomyza perpusilla					●	●				
Phytomyza flavofemoralis					●	●				
Phytomyza plantaginis					●	●				
Phytomyza ranunculi					●	●				

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Phytomyza ranunculi albipes					○	○				
Phytomyza ranunculi flavoscutellata					○	○				
Phytomyza yasumatsui				E	●	●				
Phytomyza yasumatsui anemoneae				e	○	○				
Tropicomyia flacourtiae					●			●	●	
Tropicomyia styricicola					●	●				
Tropicomyia theae					●			●		
ANTHOMYIIDAE										
Adia cinerella					●	●				
Anthomyia illocata					●	●	●	●		
Anthomyia latifasciata					●	●				
Anthomyia plumiseta					●	●				
Emmesomyia similata					●	●				
Fucellia boninensis					●	●		●		
Pegomya holosteae					●	●				
Pegomya orientis					●	●				
ASILIDAE										
Asilus fallaciosus				E	●			●		
Asilus okinawaensis				E	●			●		
Cophinopoda chinensis					●			●		
Goneccalypsis lucida					●				●	
Laphria okinawaensis				E	●			●		
Maira aterrima					●	●		●		
Microstylum dimorphum					●	●		●		
Molobratia nipponi				E	●	●		●		
Pagidolaphria remota					●	●		●		
Promachus sp.					●			●		
Scylaticus degener					●			●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Scylaticus sayano				E	●				●	
ASTEIIDAE										
Astiosoma okinawae					●			●		
ATHERICIDAE										
Atrichops fulvithorax				E	●				●	
Suragina uruma				E	●	●		●		
Suragina yaeyamana				E	●				●	
BIBIONIDAE										
Bibio holomaurus					●	●				
Bibio obuncus				E	●	●				
Bibio rufiventris					●	●		●		
BOMBYLIIDAE										
Anthrax distigma					●			●		
Bombylius major					●			●		
Ligyra tantalus					●			●		
CALLIPHORIDAE										
Aldrichina grahami					●	●		●		
Bengalia latro					●				●	
Calliphora lata					●	●				
Chrysomya megacephala					●	●	●	●	●	
Chrysomya pinguis					●	●	●	●	●	
Chrysomya rufifacies					●	●		●		
Hemipyrellia ligurriens					●	●	●	●	●	
Idiella sternalis					●	●				
Isomyia electa					●				●	
Isomyia prasina					●	●			●	
Isomyia ryukyuensis				E	●	●		●		
Lucilia bazini					●	●				

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Lucilia porphyrina					●	●		●	●	
Melinda pruinosa					●	●		●		
Melinda pusilla					●	●		●		
Paradichosia itoi					●	●		●		
Paradichosia tsukamotoi					●	●		●		
Phumosia coomani					●			●		
Rhyncomyia setipyga					●				●	
Stomorhina obsoleta					●	●	●	●	●	
Tainanina pilisquama					●		●	●		
Tainanina saruephagoides					●			●		
CANACIDAE										
Chaetocanace biseta					●				●	
Nocticanace pacificus					●	●				
Procanace aestuaricola					●			●		
Procanace grisescens					●			●	●	
Procanace nakazatoi				E	●	●		●		
CECIDOMYIIDAE										
Ametrodiplosis sp.					●			●		
Asphondylia sp. 2				E	●			●		
Asphondylia sp. 3					●	●				
Asphondylia sphaera					●			●		
Asteralobia sasaki					●			●		
Asteralobia sp.				E	●			●		
Asteralobia styraci					●			●		
Celticecis japonica					●	●				
Contarinia sp. 1				E	●	●		●		
Daphnephila machilicola					●	●		●		
Lasioptera camelliae					●			●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Lasioptera paederiae					●			●		
Lasioptera sp. 2					●			●		
Orseolia miscanthi					●			●		
Pseudasphondylia neolitseae					●			●		
Pseudasphondylia sp.					●			●		
Rhopalomyia cinerarius					●		●	●		
Rhopalomyia styracohila					●	●				
Rhopalomyia yomogicola					●	●	●	●		
Thecodiplosis japonensis					●	●		●		
Tokiwadiplosis matecola					●	●		●		
CERATOPOGONIDAE										
Alluaudomyia spinosipes				E	●			●		
Atrichopogon citrinipes					●			●		
Atrichopogon insularis					●			●		
Atrichopogon jejunus					●			●		
Atrichopogon maritimus					●			●		
Atrichopogon minimus					●			●		
Atrichopogon okinawensis				E	●			●		
Atrichopogon palmatus					●			●		
Atrichopogon ryukyuensis				E	●			●		
Bezzia micronyx					●			●		
Culicoides actoni					●			●		
Culicoides amamiensis					●	●	●	●	●	
Culicoides arakawae					●	●		●	●	
Culicoides arnaudi					●			●		
Culicoides aterinervis					●	●		●		
Culicoides brevipalpis					●			●	●	
Culicoides charadraeus					●	●		●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Culicoides circumscriptus					●			●		
Culicoides crassipilosus					●	●		●		
Culicoides cylindratus				E	●	●				
Culicoides dendrophilus					●	●		●		
Culicoides iriomotensis				E	●				●	
Culicoides jacobsoni					●	●	●	●	●	
Culicoides japonicus					●	●		●		
Culicoides kadensis				E	●			●		
Culicoides kibunensis					●	●	●	●	●	
Culicoides komiensis				E	●			●		
Culicoides longidens					●	●		●	●	
Culicoides maculatus					●	●	●	●	●	
Culicoides nagahanai					●	●		●		
Culicoides nipponensis					●	●		●	●	
Culicoides okinawensis					●	●		●	●	
Culicoides oxystoma				E	●			●	●	
Culicoides panpangensis					●	●				
Culicoides paraflavescens					●				●	
Culicoides peregrinus					●	●		●	●	
Culicoides schultzei					●	●		●	●	
Culicoides subdubius					●				●	
Culicoides suzukii				E	●	●			●	
Culicoides verbosus					●			●		
Culicoides wakuensis				E	●	●		●	●	
Culicoides yaeyamaensis				E	●				●	
Dasyhelea breviceps				E	●			●		
Dasyhelea claviculifera				E	●			●		
Dasyhelea dufouri					●			●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Dasyhelea flaviventris					●			●		
Dasyhelea insularis					●			●		
Dasyhelea luteicauda				E	●			●		
Dasyhelea okinawensis				E	●			●		
Dasyhelea robusticeps				E	●			●		
Dasyhelea symmetria				E	●			●		
Dasyhelea yoshimurai					●			●		
Forcipomyia adhesipes					●			●		
Forcipomyia albiradialis					●			●		
Forcipomyia arcigera					●			●		
Forcipomyia asahinai				E	●	●				
Forcipomyia edgari					●			●		
Forcipomyia esakiana					●			●		
Forcipomyia fascicornia				E	●			●		
Forcipomyia fidens					●			●	●	
Forcipomyia formosae					●			●		
Forcipomyia formosana					●			●		
Forcipomyia fuliginosa					●			●		
Forcipomyia fuscimanus					●			●		
Forcipomyia hikosanensis					●			●		
Forcipomyia latipes					●				●	
Forcipomyia longicornis					●			●		
Forcipomyia monilis				E	●	●		●		
Forcipomyia nibleyi				E	●			●		
Forcipomyia pallida					●			●		
Forcipomyia sauteri					●			●		
Forcipomyia subpallida				E	●			●		
Forcipomyia tokunagai					●			●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Forcipomyia yapensis					●			●		
Monohelea inflativena					●			●		
Stilobezzia alba					●			●		
Stilobezzia esakiana					●			●		
Stilobezzia festiva					●			●		
Stilobezzia notata					●			●		
Stilobezzia okinawensis				E	●			●		
Stilobezzia subviridis					●			●		
CHAOBORIDAE										
Corethrella nippon					●	●				
Corethrella urmense				E	●				●	
CHIRONOMIDAE										
Ablabesmyia amamisimplex				E	●	●				
Ablabesmyia monilimormis					●			●		
Chironomus circumdatus					●	●		●		
Chironomus glauciventriss					●			●		
Chironomus javanus					●	●		●		
Chironomus kiiensis					●	●		●		
Chironomus longilobus					●			●		
Chironomus okinawanus					●	●		●		
Chironomus samoensis					●			●		
Chironomus tainanus					●			●		
Clinotanypus japonicus					●	●				
Clinotanypus sugiyamai					●			●		
Clunio takahashii					●	●				
Conchapelopia amamiaurea				E	●	●		●		
Conchapelopia okisimilis				E	●	●		●		
Cricotopus bicinctus					●	●		●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Cryptochironomus hentonensis				E	●			●		
Dicrotendipes pelochloris					●			●		
Dicrotendipes tamaviridis					●			●		
Einfeldia dissidens					●			●		
Einfeldia kanazawai				E	●				●	
Eukiefferiella amamipubescia					●	●				
Eukiefferiella yaraensis				E	●	●		●		
Glyptotendipes tokunagai					●			●		
Harnischia acuta				E	●			●		
Harnischia okilurida				E	●			●		
Harnischia viridula					●			●		
Kiefferulus glauciventris				E	●			●		
Krenopelopia amaminova				E	●	●				
Kribiocosmus kanazawai				E	●				●	
Limnophyes minimus					●	●		●		
Macropelopia goetghebueri					●	●				
Macropelopia nipponotana					●	●				
Macropelopia tomosecunda					●	●				
Metriocnemus amamianomalis				E	●	●				
Metriocnemus ryutanus				E	●			●		
Microtendipes amamihoseides				E	●	●		●		
Monopelopia okigenga				E	●			●		
Nilodorum tainanus					●			●		
Paramerina okimaculata				E	●			●		
Paramerina divisa					●			●		
Polypedilum benokiense					●			●		
Polypedilum cultellatum					●	●		●		
Polypedilum kunigamiense					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Polypedilum medivittatum					●			●		
Polypedilum miyakoense				E	●	●				
Polypedilum nubifer					●			●		
Polypedilum okiflavum				E	●			●		
Polypedilum okigrandis				E	●			●		
Polypedilum okiharaki				E	●			●		
Polypedilum okipallidum				E	●			●		
Polypedilum tritum					●	●				
Polypedilum uncinatum					●	●				
Polypedilum unifascium					●			●		
Psectrocladius amamikonaseus				E	●	●				
Psectrotanypus tokunagai					●	●				
Pseudosmittia amamiagina				E	●	●				
Pseudosmittia amamibifurca				E	●	●				
Pseudosmittia ikemaensis				E	●			●		
Pseudosmittia nishiharaensis				E	●			●		
Rheocricotopus chalybeatus					●	●		●		
Rheocricotopus okifoveatus				E	●			●		
Rheotanytarsus amamiflavus				E	●	●				
Rheotanytarsus okisimplex				E	●			●		
Smittia aterrima					●			●		
Smittia gusukuensis				E	●			●		
Smittia nudipennis					●			●		
Smittia pratora					●			●		
Stenochironomus okialbus				E	●			●		
Tanytarsus kitaokinawanus				E	●			●		
Tanytarsus oyaberotundus					●			●		
Tanytarsus sakishimanus				E	●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Tanytarsus shouautumnalis				E	●	●				
Thienemanniella okigrata				E	●			●		
Trisopelopia longimana				E	●	●				
Xylotopus amamiapitatus				E	●	●				
Yaetanytarsus iriomotensis				E	●				●	
CHLOROPIDAE										
Anatrichus pygmaeus					●	●		●	●	
Anthracophagella albovariegata					●	●	●	●		
Aprometopis hirashimai					●	●		●		
Cadrema minor					●			●		
Cadrema ryukyuana					●		●	●	●	
Chlorops canaliculatus					●	●				
Chlorops lenis					●			●	●	
Chlorops leymi					●	●		●	●	
Chlorops stigmatellus					●			●	●	
Chloropsina citrivora					●			●		
Conioscinella formosa					●	●		●	●	
Dicraeus flavipes					●				●	
Dicraeus flavoscutellatus					●			●		
Dicraeus nartshukae					●	●				
Dicraeus phyllostachyus					●			●		
Disciphus flavitarsis					●	●		●		
Elachiptera insignis					●	●		●		
Eutropha noctilux					●				●	
Formosina cincta					●	●		●	●	
Gampsocera magnisinuosa					●	●		●		
Gampsocera tenuisinuosa				E	●				●	
Luzonia incisa					●	●	●	●		

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Meijerella flavisetosa					●			●	●	
Meijerella inaequalis					●	●		●	●	
Melanochaeta umbrosa					●	●		●	●	
Metopostigma nigritriangulum					●	●				
Neoloxotaenia gracilis					●	●		●	●	
Polyodaspis ruficornis					●	●				
Psilacrum sabroskyi				E	●				●	
Rhodesiella dimidiata					●				●	
Rhodesiella elegantula					●			●	●	
Rhodesiella nitidifrons					●	●			●	
Rhodesiella simulans				E	●	●	●	●	●	
Rhodesiella yamagishii					●	●		●		
Scoliophthalmus consimilis					●	●		●		
Semaranga dorsocentralis					●	●				
Siphunculina bella					●			●		
Siphunculina nitidissima					●	●		●		
Siphunculina striolata					●			●		
Speccafrans coStå /is					●	●				
Steleocerellus ensifer					●	●	●			
Steleocerellus maculicoxa					●	●				
Tricimba stigma					●			●	●	
CONOPIDAE										
Conopus santaroi					●	●	●		●	
Thecophone abdominalis					●	●				
Thecophone atra					●	●				
CULICIDAE										
Aedes albopictus					●	●		●		
Aedes aureostriatus					●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Aedes aureostriatus okinawanus					○	○		○		
Aedas flavopictus				E	●	●		●		
Aedas flavopictus downsi				e	○	○		○		
Aedes japonica					●	●				
Aedes japonica amamiensis				e	○	○				
Aedes nipponicus					●	●				
Aedes nishikawai					●	●	●			
Aedes nobukonis					●			●	●	
Aedes riversi					●	●		●	●	
Aedes togoi					●	●		●	●	
Aedes vexans					●	●		●	●	
Aedes watasei					●	●		●	●	
Anopheles aitkenii					●	●				
Anopheles aitkenii bengalensis					○	○				
Anopheles lesteri					●	●		●		
Anopheles minimus					●				●	
Anopheles saperoi		NT		E	●			●	●	
Anopheles sinensis					●	●		●	●	
Anopheles tessellatus					●			●	●	
Armigeres subalbatus					●	●		●	●	
Coquillettidia crassipes					●				●	
Coquillettidia ochracea					●	●		●	●	
Culex bicornutus					●				●	
Culex bitaeniorhynchus					●	●		●	●	
Culex brevipalpis					●			●	●	
Culex cinctellus					●				●	
Culex fuscanus					●			●	●	
Culex fuscocephala					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Culex halifaxii					●	●		●	●	
Culex hayashii					●	●		●	●	
Culex hayashii ryukyuanus				e	○	○		○	○	
Culex infantulus					●	●		●	●	
Culex mimeticus					●	●		●	●	
Culex nigropunctatus					●				●	
Culex okinawae					●	●		●	●	
Culex pallidothorax					●	●		●		
Culex pipiens					●	●		●	●	
Culex pipiens quinquefasciatus					○	○		○	○	
Culex pseudovishnui					●	●		●	●	
Culex rubithoracis					●	●				
Culex ryukyensis					●	●		●	●	
Culex sinensis					●	●		●		
Culex sitiens					●			●	●	
Culex tritaeniorhynchus					●	●		●	●	
Culex tuberis				E	●	●		●	●	
Culex vagans					●	●		●		
Culex vorax				E	●	●				
Culex whitmorei					●	●		●		
Ficalbia sp.				E	●				●	
Heizmannia kana				E	●	●				
Malaya genurostris					●	●		●	●	
Mansonia crassipes					●	●		●		
Mansonia ochracea					●	●		●		
Mansonia uniformis					●	●		●	●	
Mimomyia elegans					●			●	●	
Mimomyia luzonensis					●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Orthopodomyia anopheloides					●	●		●	●	
Topomyia yanbarensis					●	●		●		
Toxorhynchites manicatus					●	●			●	
Toxorhynchites manicatus yamadai				e	○	○			○	
Toxorhynchites sp.				E	●			●		
Tripteroides sp.				E	●				●	
Tripteroides bambusa					●				●	
Tripteroides bambusa yaeyamensis					○				○	
Uranotaenia annandalei					●			●	●	
Uranotaenia jacksoni					●			●		
Uranotaenia lateralis					●				●	
Uranotaenia Uranotaenia					●			●	●	
Uranotaenia Uranotaenia macfarlanei					○			○	○	
Uranotaenia nivipleura					●			●		
Uranotaenia novobscura					●	●		●	●	
Uranotaenia novobscura novobscura					○	○			○	
Uranotaenia novobscura ryukyuana				e	○	○		○		
Uranotaenia ohamai				E	●				●	
Uranotaenia yaeyamana				E	●				●	
DOLICHOPODIDAE										
Medetera apicalis					●	●				
DROSOPHILIDAE										
Amiota nagatai					●				●	
Amiota okinawana					●				●	
Colocasiomyia alocasiae					●	●		●		
Colocasiomyia xenalocasiae					●	●		●		
Drosophila albomicans					●	●		●		
Drosophila ananassae					●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Drosophila ancora				E	●				●	
Drosophila asahinai				E	●	●	●		●	
Drosophila bipectinata					●	●		●		
Drosophila bizonata					●	●		●		
Drosophila busckii					●	●		●		
Drosophila daruma					●	●			●	
Drosophila ficusphila					●	●		●		
Drosophila hydei					●	●				
Drosophila immigrans					●			●		
Drosophila kikkawai					●	●		●		
Drosophila lacertosa					●	●				
Drosophila lacteicornis				E	●				●	
Drosophila nepalensis					●	●				
Drosophila nigromaculata					●	●				
Drosophila pulchrella					●			●		
Drosophila quadrilineata					●	●			●	
Drosophila repleta					●	●		●		
Drosophila suzukii					●	●		●		
Drosophila takahashii					●	●		●	●	
Drosophila triauraria					●	●				
Drosophila virilis					●			●		
Drosophila yuwanensis				E	●	●				
Hirtodrosophila hirtinokogiri					●				●	
Hirtodrosophila longecrinita					●				●	
Hirtodrosophila manonoensis					●				●	
Hirtodrosophila nudinokogiri					●				●	
Hirtodrosophila seminigra				E	●				●	
Hirtodrosophila seminokogiri				E	●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Hirtodrosophila unicolorata					●				●	
Hirtodrosophila unicolorata exilis				e	○				○	
Leucophenga angusta					●	●		●	●	
Leucophenga argentata					●				●	
Leucophenga bellula					●	●				
Leucophenga concilia					●	●			●	
Leucophenga interrupta					●	●				
Leucophenga lacteusa					●			●		
Leucophenga meijerei					●	●				
Leucophenga orientalis					●	●		●		
Leucophenga ornata					●	●		●	●	
Leucophenga subpollinosa					●			●		
Liodrosophila aerea					●	●				
Liodrosophila bicolor					●	●			●	
Liodrosophila globosa					●				●	
Liodrosophila nitida					●	●				
Lordiphosa acutissima					●	●				
Lordiphosa stackelbergi					●	●				
Lordiphosa tenuicauda					●				●	
Microdrosophila elongata					●				●	
Microdrosophila latifrons					●			●		
Microdrosophila matsudairai					●				●	
Microdrosophila pleurolineata					●				●	
Microdrosophila pseudopleurolineata					●			●		
Microdrosophila submarginata					●				●	
Mulgravea asiatica					●	●			●	
Mycodrosophila erecta					●				●	
Mycodrosophila gratiosa					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Mycodrosophila subgratiosa				E	●			●	●	
Mycodrosophila takachihonis					●	●			●	
Mycodrosophila wassermani					●			●		
Paramycodrosophila pictula					●				●	
Scaptodrosophila bryani					●	●		●		
Scaptodrosophila coracina					●	●				
Scaptodrosophila dorsata					●	●				
Scaptodrosophila dorsocentralis				E	●	●		●		
Scaptodrosophila kyushuensis					●	●				
Scaptomyza pallida					●			●	●	
Scaptomyza polygonia					●				●	
Stegana nigripennis					●			●	●	
Stegana ornatipes					●				●	
EMPIDIDAE										
Empis sp.				E	●			●		
Rhamphomyia auripilosa				E	●			●		
Rhamphomyia ciliatopoda				E	●	●				
Rhamphomyia clariventris				E	●			●		
Rhamphomyia taenia				E	●	●				
Rhamphomyia yasumatsui				E	●			●		
Syneches amamiensis				E	●	●				
Syneches claripilosus				E	●	●				
Syneches deformitarsis				E	●				●	
Syneches flavipalpis				E	●				●	
Syneches miyamotoi				E	●	●		●		
EPHYDRIDAE										
Brachydeutera argentata					●			●		
Brachydeutera longipes					●			●		

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Discocerina peculiaris					●			●		
Donaceus nigronotatus					●				●	
Hecamede albicans					●			●	●	
Hyadina pulchella					●			●		
Hyadina sauteri					●			●	●	
Hydrellia orientalis				E	●			●	●	
Lamproscatella fluvialis					●			●		
Notiphila canescens				E	●			●	●	
Notiphila dorsopunctata					●			●	●	
Ochthera circularis					●				●	
Paralimna major					●			●		
Paralimna sinensis					●				●	
Parydra pacifica				E	●				●	
Pelignellus lituscola					●			●	●	
Polytrichophora luteicornis					●			●	●	
Pseudopelina setosa					●				●	
Psilopa flavimana					●			●		
Scatella septempunctata				E	●				●	
Scatella stagnalis					●			●	●	
Setacera fluxa					●			●		
Typopsilopa chinensis					●			●	●	
Zeros orientalis					●			●		
FANNIIDAE										
Fannia dupla					●	●				
Fannia japonica					●	●				
Fannia japonica amamiensis				e	○	○				
Fannia leucosticta					●	●	●	●		
Fannia prisca					●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
HELEOMYZIDAE										
Suillia shirozui				E	●			●		
HIPPOBOSCIDAE										
Icosta amamiensis				E	●	●				
Pseudolynchia canariensis					●			●		
LAUXANIIDAE										
Drepanephora piliseta					●			●		
Homoneura acrostichalis					●			●	●	
Homoneura bistriata					●			●	●	
Homoneura brevicornis					●	●		●	●	
Homoneura dicyrta				E	●			●		
Homoneura discoglauca					●	●		●	●	
Homoneura furcistylis				E	●			●		
Homoneura latifrons					●	●				
Homoneura ornatifrons					●	●			●	
Homoneura paraforcipata				E	●	●		●		
Homoneura quinquevittata					●				●	
Homoneura repanda					●	●	●		●	
Homoneura spinicauda					●				●	
Homoneura striatifrons					●	●		●		
Homoneura tridentata					●			●	●	
Homoneura unguiculata					●	●		●	●	
Homoneura variinervis					●	●		●		
Homoneura yamagishii					●			●	●	
Melinomyia flava					●	●				
Minettia tubifera					●	●				
Prosopophorella iriomotensis				E	●				●	
Protrigonometopus okinawanus				E	●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Sapromyza flavopleura					●	●		●		
Sapromyza zebra					●	●				
Steganopsis convergens					●	●		●	●	
Trypetisoma fenestrata					●	●		●		
Wawu corunuta					●				●	
LEPTOCONOPIDAE										
Leptoconopus sp. (spp.?)				E	●			●		
MICROPEZIDAE										
Mimegralla albimana					●			●		
Mimegralla albimana galbula					○			○		
MILICHIIDAE										
Desmometopa singaporensis					●				●	
Desmonetopa microps					●				●	
MUSCIDAE										
Atherigona boninensis					●	●		●		
Atherigona orientalis					●	●		●		
Atherigona oryzae					●	●		●		
Brontaea ascendens					●	●		●	●	
Brontaea flexa					●				●	
Brontaea nigrogrisea					●	●		●	●	
Dichaetomyia bibax					●	●		●		
Dichaetomyia flavipalpis					●	●		●		
Dichaetomyia japonica					●	●		●		
Dichaetomyia quadrata					●				●	
Graphomya rufitibia					●	●		●	●	
Haematobosca sanguinolenta					●	●		●		
Helina lateralis					●	●		●	●	
Hydrotaea chalcogaster					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Hydrotaea exigua					●	●				
Hydrotaea obscurifrons					●			●		
Limnophora argentifrons				E	●	●		●	●	
Limnophora argentigena				E	●			●		
Limnophora aureifrons				E	●	●		●		
Limnophora exigua					●			●	●	
Limnophora melanocephala				E	●				●	
Limnophora ryukyuensis				E	●	●		●	●	
Limnophora suzukii				E	●	●				
Lispe aquamarina					●	●				
Lispe binotata					●			●		
Lispe bivittata					●	●		●		
Lispe geniseta					●	●				
Lispe kowarzi					●	●				
Lispe leucospila					●	●		●		
Lispe leucospila sinica					○	○		○		
Lispe orientalis					●	●		●		
Lispe pacifica					●				●	
Megophyra multisetosa					●	●				
Morellia hortensia					●	●		●		
Musca conducens					●	●	●			
Musca confiscata					●				●	
Musca convexifrons					●				●	
Musca sorbens					●	●	●	●	●	
Musca ventrosa					●	●	●	●		
Muscina angustifrons					●	●	●	●		
Muscina japonica					●	●				
Muscina pascuorum					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Muscina stabulans					●			●		
Myospila argentata					●	●	●	●	●	
Myospila bina					●	●		●	●	
Myospila bina bina					○	○		○	○	
Myospila femorata					●	●		●	●	
Myospila flavibasis					●	●				
Myospila japonica					●	●				
Myospila laevis					●	●	●	●	●	
Myospila lenticeps					●	●		●	●	
Myospila pudica					●	●			●	
Neomyia coeruleifrons					●	●				
Neomyia indica					●	●		●		
Neomyia lauta					●			●	●	
Neomyia timorensis					●	●	●			
Orchisia costata					●	●		●		
Phaonia amamiensis				E	●	●	●			
Stomoxys calcitrans					●	●		●		
Stomoxys indicus					●	●		●		
Stomoxys uruma					●				●	
Synthesiomyia nudiseta					●	●		●		
MYDIDAE										
Neomydas gruenbergi					●				●	
NEMESTRINIDAE										
Atriadops amamioshimensis					●	●				
Atriadops javanus					●				●	
NERIIDAE										
Gymnonerius sp.				E	●			●		
PHORIDAE										

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Conicera formosensis					●			●		
Megaselia araneivora				E	●			●		
Megaselia scalaris					●			●		
Megaselia setipennis				E	●			●		
Megaselia spiracularis					●			●		
Phora lacunifera					●			●		
Plastophora conferta				E	●			●		
Spiniphora okinawa				E	●			●		
PIOPHILIDAE										
Protopiophila contecta					●			●	●	
PIPUNCULIDAE										
Cephalops pulvillatus					●			●		
Dorylomorpha lini					●			●		
Eudorylas javanensis					●	●		●		
Eudorylas macropygus					●			●		
Eudorylas mutillatus					●				●	
Eudorylas roralis					●			●		
Pipunculus boharti				E	●			●		
Tomosvaryella coquilletti					●	●				
Tomosvaryella epichalca					●	●		●		
Tomosvaryella oryzaetora					●	●		●		
Tomosvaryella subvirescens					●	●		●		
Tomosvaryella sylvatica					●	●		●		
PLATYSTOMATIDAE										
Rivellia basilaris					●	●				
Rivellia yaeyamensis				E	●				●	
PSYCHODIDAE										
Burunettia spinistoma					●			●	●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Chodopsyche harrisi					●			●	●	
Chodopsyche malleola					●			●		
Chodopsyche serosa				E	●				●	
Clogmia albipunctatus					●			●		
Logima zetterstedti					●			●		
Pericoma miyatakei				E	●				●	
Pericoma palopsis				E	●				●	
Philosepedon memnonius				E	●				●	
Psycha formosana					●			●		
Psychoda allodapa					●			●		
Psychoda contigua				E	●				●	
Psychoda crenula					●			●		
Psychoda innoatabilis					●			●		
Psychoda quadrifilis					●			●		
Psychoda savaiiensis					●			●		
Psychoda umbratica					●			●	●	
Psychodocha bifurcata				E	●			●		
Psychodocha itoco					●			●		
Psychodocha longiseta					●			●		
Psychodocha yama				E	●			●	●	
Telmatoscopus aquilus				E	●			●		
Telmatoscopus lanceolatus					●				●	
Telmatoscopus obtusalus				E	●				●	
Telmatoscopus spinitibialis				E	●			●		
Telmatoscopus spinitibialis okinawanus				e	○			○		
Tinearia alternata					●	●		●		
Trichopsychoda arnaudi				E	●			●	●	
Trichopsychoda okinawensis				E	●			●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
RACHICERIDAE										
Rachicerus galloisi					●				●	
Rachicerus sakishimanus				E	●				●	
Rachicerus sp.				E	●				●	
RHAGIOMIDAE										
Chrysopilus fenestratus					●	●		●	●	
Chrysopilus poecilopterus					●	●		●		
Chrysopilus sauteri					●				●	
Rhagio iriomotensis				E	●				●	
Rhagio latifasciatus					●			●		
SARCOPHAGIDAE										
Bellieriomima josephi					●	●	●	●	●	
Bellieriomima pseudosubulata				E	●			●		
Bellieriomima uniseta					●			●		
Blaesoxipha amamiensis				E	●	●				
Blaesoxipha palauensis					●			●		
Boettcherisca peregrina					●	●	●	●	●	
Chaetoanicia sauteri					●	●				
Goniophyto honshuensis					●	●		●		
Goniophyto yaeyamaensis				E	●	●		●	●	
Helicophagella melanura					●	●		●		
Heteronychia obscurata					●			●		
Leucomyia cinerea					●	●		●		
Metopia argyrocephala					●	●		●		
Parasarcophaga albiceps					●	●	●	●		
Parasarcophaga magensi				E	●				●	
Parasarcophaga misera					●	●		●	●	
Parasarcophaga oshimensis				E	●	●	●			

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Parasarcophaga ruficornis					●	●		●		
Parasarcophaga shirakii					●			●		
Parasarcophaga tuberosa					●	●		●		
Phallosphaera gravelyi					●	●				
Pierretia asahinai				E	●			●		
Pierretia calicifera					●	●	●	●	●	
Pierretia kanekoi				E	●	●				
Robineauella uemotoi					●			●		
Sarcophaga yuwanensis				E	●	●				
Sarcorohdendorfia aurata					●	●	●	●		
Sarcorohdendorfia inextricata					●	●	●	●	●	
Senotainia japonensis				E	●	●				
Sinonipponia aniyai				E	●				●	
Sarcophaga yonahaensis		EN		E	●			●		
Thyrsocnema crinitula					●	●		●		
SCIOMYZIDAE										
Sepedon aenescens					●	●		●	●	
SEPSIDAE										
Australosepsis frontalis					●			●		
Australosepsis niveipennis					●			●		
Sepsis albopunctata					●	●		●	●	
Sepsis coprophila					●	●		●	●	
Sepsis indica					●				●	
Sepsis lateralis					●			●		
Sepsis monostigma					●	●		●		
Sepsis nitens					●			●		
Sepsis thoracica					●	●				
SIMULIIDAE										

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Simulium aureohirtum					●	●	●	●	●	
Simulium batoense					●				●	
Simulium bidentatum					●	●	●			
Simulium japonicum					●	●	●	●		
Simulium mie					●	●		●		
Simulium okinawaense				E	●	●		●	●	
Simulium sakishimaense				E	●				●	
Simulium suzukii					●	●	●	●		
STRATIOMYIDAE										
Allognosta japonica					●	●				
Microchrysa flaviventris					●	●		●		
Microchrysa nigrimaculata					●	●				
Odontomyia garatas					●			●		
Odontomyia okinawae				E	●			●		
Ptecticus aurifer					●	●		●	●	
Ptecticus okinawae				E	●			●	●	
Ptecticus okinawaensis				E	●	●			●	
Ptecticus shirakii				E	●	●				
Ptecticus sinchangensis					●				●	
Ptecticus tenebrifer					●	●		●		
Wallacea albiesta					●			●		
Wallacea albiesta albiseta					○			○		
Wallacea tsudai					●	●				
STREBLIDAE										
Brachytarsina suzukii				E	●				●	
SYRPHIDAE										
Allobaccha amphithoe					●	●		●	●	
Allobaccha apicalis				E	●	●				

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Allobaccha nubilipennis					●	●		●		
Allograpta iavana					●	●				
Asarkina erictorum					●	●		●		
Asarkina erictorum formosae					○	○		○		
Asarkina porcina					●	●				
Betasyrphus nipponennsis				E	●	●				
Brachypalpoides splendens				E	●	●		●		
Chalcosyrphus shirakii				E	●	●				
Chlcosyrphus (Xylotina) nemorum				E	●	●				
Chrysotoxum testaceum					●	●		●		
Dasysyrphus bilineatus				E	●	●				
Didea fasciata				E	●	●				
Dideopsis aegrata					●				●	
Episyrphus balteatus					●			●		
EriStå linus arvorum					●			●	●	
EriStå linus basalis				E	●				●	
EriStå linus ishigakiensis					●			●	●	
EriStå linus quinquestriatus					●	●		●	●	
EriStå lis cerealis					●			●		
EriStå lis tenax					●			●		
Eumerus figurans				E	●	●		●		
Eumerus japonicus					●	●		●		
Eumerus okinawaensis					●	●		●		
Eupeodes confrater					●			●		
Eupeodes corollae				E	●	●				
Eupeodes kuroiwae				E	●			●		
Eupeodes okinawensis					●			●		
Eupeodes riukiuensis				E	●			●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Graptomyza ihai				E	●	●				
Ischiodon scutellaris					●			●	●	
Kertesziomyia calliphoroides				E	●	●				
Melanostoma scalare					●	●				
Meliscaeva omogensis				E	●	●				
Mesembrius okinawaensis					●			●		
Milesia elegans				E	●			●		
Milesia oshimaensis					●	●		●		
Milesia yaeyamana				E	●				●	
Paragus crenulatus				E	●				●	
Paragus politus					●			●		
Paragus tibialis					●	●		●		
Paragus (Pandasyophthalmus) haemorrhous				E	●	●				
Phytomia errans					●			●	●	
Phytomia zonata					●			●		
Sphaerophoria macrogaster				E	●	●				
Sphegina amamiensis				E	●	●				
Volucella nigricans				E	●	●				
Xanthandrus comtus				E	●	●				
Xylota amamiensis				E	●	●				
TABANIDAE										
Atylotus angusticornis					●			●	●	
Atylotus kakeromaensis				E	●	●				
Atylotus keegani				E	●				●	
Atylotus sawadai				E	●	●				
Chrysops vanderwulpi				E	●				●	
Chrysops vanderwulpi sakishimaensis				e	○				○	
Hirosia amamiensis				E	●	●				

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Hirosia kotoshoensis					●				●	
Nagatomyia melanica					●	●				
Silvius dorsalis					●			●		
Silvius formosensis					●				●	
Silvius oshimaensis				E	●	●				
Silvius shirakii					●	●		●		
Stonemyia amamiensis				E	●	●				
Stonemyia yezoensis					●	●				
Tabanus amaenus					●	●		●		
Tabanus kanoi					●	●				
Tabanus masamitsui				E	●			●		
Tabanus okinawanus				E	●	●		●		
Tabanus ryukyuensis				E	●	●				
Tabanus signatipennis					●	●				
Tabanus taiwanus					●			●		
Tabanus takasagoensis					●	●		●		
Tabanus tokunoshimaensis				E	●		●			
Tabanus toshiokai					●	●				
Tabanus yaeyamaensis				E	●				●	
Tabanus yanbaruensis				E	●			●		
TACHINIDAE										
Blepharipa jacobsoni					●			●		
Blepharipa zebina					●		●			
Cavillatrix gymnopa					●			●		
Compsilura concinnata					●	●		●	●	
Dexia flavipes					●			●		
Dexia gilva				E	●	●				
Dexia longipennis					●	●				

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Drino atropivora					●			●		
Exorista sorbillans					●			●		
Lixophaga latigena				E	●		●			
Nemorilla aquila					●	●				
Nemorilla maculosa					●	●		●		
Paradrino longicornis					●			●		
Peribaea insularis				E	●	●				
Peribaea ussuriensis					●	●				
Prosena siberita					●	●				
Rhinomyodes emporomyioides					●	●				
Senometopia excisa					●	●	●			
Senometopia orientalis				E	●	●				
Urodexia penicillum					●	●				
Uromedina atrata					●			●		
Vibrissina angustifrons					●	●				
Winthemia sumatrana					●	●		●		
TEPHRITIDAE										
Acanthonevra formosana					●	●				
Acidiella mushaensis					●	●		●		
Acrotaeniostola flavoscutellata					●			●		
Actinoptera montana					●				●	
Anomoia amamioshimensis				E	●	●				
Anomoia apicalis					●			●		
Anomoia belliata				E	●			●		
Anomoia okinawaensis					●	●		●	●	
Anomoia proba				E	●		●			
Anomoia tranquilla				E	●	●				
Bactrocera depressa					●	●		●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Bactrocera garniciae					●				●	
Bactrocera hyalina					●	●		●		
Bactrocera ishigakiensis				E	●				●	
Bactrocera kuniyoshii				E	●				●	
Bactrocera sctellata					●	●		●		
Bactrocera tsuneonis					●	●				
Campiglossa deserta					●				●	
Campiglossa hirayamae					●			●		
Carpophthoracidia matsumotoi					●	●		●		
Ceratitella sobrina					●	●				
Chenacidiella purpureiseta					●	●				
Dacus ihai				E	●			●		
Dioxyna bidentis					●	●		●	●	
Dioxyna sororcula					●	●		●	●	
Ensina sonchi					●			●	●	
Fusciludia ensifera				E	●			●		
Oxyaciura formosae					●			●	●	
Paragastrozona tripunctata				E	●			●		
Philophylla fossata					●	●			●	
Philophylla nigrescens					●	●				
Philophylla superflucta					●	●		●	●	
Pliomelaena assimilis					●	●			●	
Pliomelaena shirozui					●			●	●	
Rhabdochaeta asteria					●	●	●	●	●	
Rhabdochaeta naevia					●		●	●	●	
Scedella formosella					●				●	
Spathulina acroleuca					●			●	●	
Sphaeniscus atilius					●			●	●	

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Sphenella sinensis					●	●	●	●	●	
Trupanea convergens					●			●		
TETHINIDAE										
Dasyrhicnoessa platypes				E	●			●		
Dasyrhicnoessa yoshiyasui				E	●				●	
Pseudorhicnoessa spinipes					●			●	●	
Tethina orientalis					●			●	●	
THEREVIDAE										
Irwiniella sauteri					●	●		●	●	
TIPULIDAE										
Dicranomyia okinawensis				E	●			●		
Geranomyia sakaguchii				E	●			●		
Gonomyia bibarbata				E	●				●	
Gonomyia longipennis				E	●				●	
Hexatoma iriomotensis				E	●				●	
Holorusia esakii				E	●	●				
Nephrotoma medioflava				E	●			●		
Nephrotoma virgata					●	●				
Styringomyia bidens				E	●				●	
Styringomyia digitostylus				E	●				●	
Teucholabis iriomotensis				E	●				●	
Tipula okinawensis				E	●			●		
XENASTEIIDAE										
Xenasteia okinawaensis				E	●			●		
TRICHOPTERA										
ANNULIPALPIA										
Chimarra sp. 1				E	●	●				
Chimarra sp. 2				E	●			●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Wormaldia sp.				E	●	●		●		
GLOSSOSOMATIDAE										
Agapetus yasensis					●			●		
GOERIDAE										
Goera sp. 1				E	●	●				
Goera sp. 2				E	●			●		
HELICOPSYCHIDAE										
Helicopsyche sp.				E	●			●		
HYDROBIOSIDAE										
Apsilochorema sp.				E	●	●				
HYDROPSYCIDAE										
Cheumatopsyche sp. 1				E	●	●		●		
Diplectrona sp.				E	●			●		
Hydatomanicus sp.				E	●			●		
Hydropsyche orientalis					●	●		●		
Hydropsyche sp. 1				E	●	●				
Hydropsyche sp. 2				E	●			●		
Hydropsyche yaeyamensis				E	●				●	
Macrostemum okinawanum		NT		E	●	●	●	●		
HYDROPTILIDAE										
Hydroptila sp.				E	●			●		
LEPIDOSTOMATIDAE										
Goerodes amamiensis				E	●	●				
Goerodes arcuatus					●				●	
Goerodes ebebacanthus				E	●				●	
Goerodes nanseiensis				E	●	●		●		
Goerodes ryukyuensis				E	●			●		
Goerodes ryukyuensis				E	●			●		

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
LEPTOCERIDAE										
Oecetis sp.				E	●			●		
ODONTOCERIDAE										
Psilotreta sp.				E	●			●		
POLYCENTROPODIDAE										
Nyctiophylax sp.				E	●			●		
Plectrocnemia sp.				E	●			●		
Polycentropus sp.				E	●			●		
Polyplectropus sp.				E	●			●		
Pseudoneureclipsis sp.				E	●			●		
PSYCHOMYIIDAE										
Paduniella sp.				E	●	●		●		
RHYACOPHILIDAE										
Rhyacophila clemens				E	●				●	
Rhyacophila coclearis				E	●			●		
Rhyacophila formosana				E	●				●	
Rhyacophila kawamurae				E	●	●		●		
Rhyacophila satoi				E	●	●		●		
Rhyacophila shikotsuensis					●			●		
Rhyacophila spp.				E	●	●		●		
SERICOSTOMATIDAE										
Gumaga okinawaensis				E	●			●		
STENOPSYCHIDAE										
Stenopsyche schmidi				E	●	●		●		
XIPHOCENTRONIDAE										
Melanotrichia kibuneana(?)				E	●			●		
LEPIDOPTERA										
HEPIALIDAE										

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						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Endoclyta sinensis					●				●	
ADELIDAE										
Nemophora marisella				E	●	●				
COSSIDAE										
Zeuzera caudata					●				●	
Zeuzera caudata rhabdota					○				○	
Zeuzera coffeae					●	●	●	●	●	
Zeuzera miltistrigata					●	●				
Zeuzera miltistrigata leuconota					○	○				
TORTRICIDAE										
Acleris enitescens					●	●				
Acroclita nigrovenana					●			●	●	
Adoxophyes dubia					●			●		
Apeleptera semnodryas					●	●		●		
Apotomis biemina					●			●		
Archips insulanus					●	●		●	●	
Archips meridionalis				E	●	●		●		
Archips nigricaudanus					●	●				
Archips peratratus					●	●		●	●	
Argyrotaenia congruentana					●	●	●	●	●	
Asaphistis praeceps					●	●			●	
Bactra cerata					●			●		
Bactra hostilis					●			●		
Cephalophyes cyanura					●	●				
Cryptaspasma angulicostana					●	●			●	
Cryptophlebia horii				E	●			●	●	
Cryptophlebia repletana					●			●	●	
Cydia leucostoma					●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Dactylioglypha tonica					●	●				
Didrimys tokui					●	●				
Dudua hemigrapta					●	●		●		
Dudua ptarmicopa					●	●		●	●	
Endothenia banausopis					●			●		
Epiblema foenella					●			●		
Eucosma melanoneura					●	●		●	●	
Eucosma okubiensis				E	●			●	●	
Eucosma threnodes					●	●		●	●	
Eudemis gyrotis					●	●				
Gatesclarkeana idia					●	●		●	●	
Gnorismoneura exulis					●	●	●	●	●	
Grapholita hyalitis					●			●		
Hedya iophaea					●	●				
Homona magnanima					●	●		●		
Hystrichoscelus spathanum					●	●				
Lobesia aeolopa					●				●	
Lobesia candida					●				●	
Loboschiza koenigana					●			●	●	
Matsumuraeses falcana					●			●		
Matsumuraeses phaseoli					●				●	
Neocalyptis affinisana					●	●		●		
Olethreutes castaneana					●			●		
Phaecadophora acutana					●	●				
Phaecadophora fimbriata					●	●		●		
Phaecasiophora fernaldana					●	●			●	
Proschistis marmaropa					●	●		●	●	
Ptycholoma lecheana					●	●				

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Retinia cristata					●			●		
Rhodacra pyrrhocrossa					●	●				
Rhodocosmaria occidentalis					●				●	
Rhopobota naevana					●	●				
Sorolopha plinthograpta					●	●				
Spilonota algosa					●			●	●	
Spilonota distyliana					●	●				
Spilonota meleanocopa					●	●				
Statherotoxys hedraea					●	●				
Strepsicrates rhothia					●			●	●	
Tetramoera schistaceana					●	●	●	●	●	
COCHYLIDAE										
Eupoecilia ambiguella					●	●		●		
Piercea vectisana					●			●		
PSYCHIDAE										
Chalioides kondonis					●	●				
Eumeta japonica					●			●	●	
Mahasena aurea					●	●	●	●		
TINEIDAE										
Comodica saitoi				E	●				●	
Erechthias atririvis					●				●	
Erechthias zebrina					●	●				
Monopis monachella					●			●	●	
Morophaga bucephala					●			●		
Morophaga iriomotensis				E	●				●	
LYONETIIDAE										
Bedellia ipomoella					●	●		●		
Lyonetia ledi					●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Microthauma glycinella					●			●		
GRACILLARIIDAE										
Caloptilia kadsurae					●				●	
Caloptilia protiella					●				●	
Caloptilia querci					●	●				
Caloptilia ryukyuensis					●		●		●	
Caloptilia syrphetias					●				●	
Caloptilia theivora					●			●		
Cryphiomystis yaeyamensis				E	●				●	
Dialectica geometra					●	●				
Eumetriochroa hiranoi					●			●	●	
Gibbovalva civica					●	●		●		
Gibbovalva quadrifasciata					●				●	
Katapangia regulifera					●				●	
Melanocercops ficuvorella					●	●				
Systoloneura geometropis					●			●		
Telamoptilia cathedraea					●	●				
Telamoptilia hemistacta					●	●				
Telamoptilia prosacta					●			●		
PHYLLOCNISTIDAE										
Phyllocnistis citrella					●			●	●	
YPONOMEUTIDAE										
Kessleria insulella					●		●		●	
Leuroperna sera					●				●	
Lycophantis bradleyi				E	●	●				
Plutella xylostella					●			●	●	
Teinoptila guttella					●	●				
Yponomeuta griseatus				E	●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
AMPHITHERIDAE										
Agriothera elaeocarpophaga					●				●	
GLYPHIPTERIGIDAE										
Glyphipterix ditiorana					●			●		
Glyphipterix melania					●	●		●		
BRACHODIDAE										
Nigilgia limata					●			●	●	
Paranigilgia bushii				E	●				●	
SESIIDAE										
Macroscelesia japona					●	●				
Melittia formosana					●	●				
Melittia inouei					●	●		●		
Nokona rubra				E	●	●		●		
Pennisetia insulicola				E	●	●	●	●		
Sesia okinawana				E	●			●	●	
Synanthedon esperi				E	●			●		
Trichocerota esakii					●	●		●		
CHOREUTIDAE										
Brenthia formosensis					●	●	●		●	
Choreutis achyrodes					●			●	●	
Choreutis amethystodes					●				●	
Choreutis basalis					●				●	
Choreutis cyanogramma				E	●				●	
Choreutis japonica					●	●		●	●	
Choreutis minuta				E	●			●	●	
Choreutis ophiosema					●			●	●	
Saptha beryllitis					●				●	
Saptha divitiosa					●				●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Tebenna micalis					●			●		
Tebenna yamashitai				E	●				●	
OECOPHORIDAE										
Acria ceramitis					●				●	
Autosticha pachysticta					●				●	
Cryptolechia malacobyrsa					●				●	
ETHMIIDAE										
Ethmia assamensis					●			●	●	
Ethmia nigroapicella					●			●		
STATHMOPODIDAE										
Stathmopoda auriferella					●				●	
ELACHISTIDAE										
Elachista amamii				E	●	●				
BLASTOBASIDAE										
Neoblastobasis brevicornis				E	●				●	
Neoblastobasis decolor					●				●	
COSMOPTERIGIDAE										
LECITHOCERIDAE										
Homaloxestis myeloxesta					●			●	●	
GELECHIIDAE										
Anarsia incerta				E	●			●		
Anarsia tortuosa					●				●	
Dendrophila saxigera					●				●	
Helcystogramma arotraeum					●			●	●	
Hypatima spathota					●			●	●	
ALUCITIDAE										
Alucita pusilla				E	●				●	
Alucita straminea				E	●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
CARPOSINIDAE										
Commatarcha palaeosema					●	●				
Peragrarchis syncholleta					●	●		●		
ZYGAENIDAE										
Artona martini					●	●		●	●	
Chalcosia formosana					●				●	
Chalcosia formosana formosana				e	○				○	
Erasmia pulchella					●			●	●	
Erasmia pulchella fritzei				e	○			○		
Erasmia pulchella sakishimana				e	○				○	
Eterusia aedea					●	●		●	●	
Eterusia aedea okinawana				e	○				○	
Eterusia aedea sakaguchii				e	○			○		
Eterusia aedea tomokunii				e	○	○				
Histia flabellicornis					●			●		
Histia flabellicornis atrovirens				e	○			○		
Histia flabellicornis azurea				e	○				○	
Histia flabellicornis obsoleta				e	○	○				
Illiberis tenuis					●	●		●		
Inouela exiguitata				E	●	●	●			
LIMACODIDAE										
Belippa horrida					●	●		●	●	
Demonarosa rufotessellata					●			●	●	
Demonarosa rufotessellata issikii					○			○	○	
Matsumurides okinawanus				E	●	●	●	●	●	
Narosa azumai				E	●			●	●	
Narosa corusca					●	●		●	●	
Narosa corusca amamiana				e	○	○		○	○	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Narosoideus flavidorsalis					●	●	●	●		
Narosoideus flavidorsalis ochridorsalis				e	○	○	○	○		
Natada takemurai					●			●		
Parasa consocia					●				●	
Phrixolepia tenebrosa				E	●	●				
Susica nasuta					●			●	●	
Trichogyia circulifera					●				●	
HYBLAEIDAE										
Hyblaea constellata					●			●	●	
Hyblaea puera					●	●		●	●	
THYRIDIDAE										
Addaea polyphoralis					●				●	
Banisia owadai					●	●		●	●	
Calindoea polygraphalis					●				●	
Canaea ryukyuensis					●	●		●	●	
Hypolamprus ypsilon					●			●		
Microbelia canidentalis					●				●	
Microbelia intimalis					●				●	
Pharambara splendida					●				●	
Picrostomastis marginepunctalis					●	●				
Pyrinioides sinuosus					●	●				
Striglina oceanica				E	●			●	●	
Striglina paravenia					●			●	●	
Striglina suzukii					●	●		●	●	
PYRALIDAE										
Addyme inductalis					●	●				
Aethaloessa calidalis					●	●	●	●	●	
Aethaloessa calidalis tiphalis					○	○	○	○	○	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Agathodes ostentalis					●	●		●	●	
Agrotera basinotata					●	●		●	●	
Analthes euryterminalis					●	●		●		
Analthes insignis					●	●				
Ancylolomia japonica					●			●		
Ancylolomia westwoodi					●				●	
Ancylolomia westwoodi bitubirosella					○				○	
Aripana cribrata					●			●		
Arippara indicator					●			●	●	
Assara korbi					●				●	
Ategumia adipalis					●	●		●		
Bocchoris inspersalis					●	●		●	●	
Botyodes asialis					●	●		●		
Botyodes diniasalis					●				●	
Botyodes principalis					●	●			●	
Bradina anguStå /is					●				●	
Bradina anguSt???is ryukyuensis				e	○				○	
Bradina erilitoides					●	●		●	●	
Bradina geminalis					●	●				
Bradina trigonalis					●	●				
Calamotropha formosella					●				●	
Calamotropha paludella					●			●		
Calamotropha paludella purella					○			○		
Calamotropha shichito					●	●				
Calamotropha yamanakai					●			●	●	
Calamotropha yamanakai owadai				e	○			○	○	
Calguia defigualis					●	●		●	●	
Camptomastix hisbonalis					●			●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Cangetta rectilinea					●	●			●	
Ceratarcha umbrosa					●	●		●		
Chilo suppressalis					●			●	●	
Circobotys cryptica					●		●	●		
Cirrhochrista brizoalis					●	●		●	●	
Cirrhochrista kosemponialis					●	●		●	●	
Citripestis sagittiferalis					●	●		●	●	
Clupeosoma pryeri					●	●		●	●	
Clupeosoma purpureum					●	●			●	
Cnaphalocrocis stereogona					●			●	●	
Cnaphalocrocis medinalis					●	●		●	●	
Cnaphalocrocis pilosa					●	●	●		●	
Cnaphalocrocis poeyalis					●				●	
Conobathra sp.					●			●		
Conogethes punctiferalis					●	●	●	●		
Conogethes sp.					●	●		●	●	
Crambus okinawanus					●			●		
Crypsiptya coclesalis					●			●	●	
Daulia afralis					●	●		●	●	
Diaphania indica					●	●	●	●	●	
Diasemia accalis					●	●		●	●	
Diathrausta brevifascialis					●	●		●	●	
Dioryctria pryeri					●	●				
Dioryctria sylvestrella					●	●		●	●	
Dipha aphidivora					●			●	●	
Doloessa ochrociliella					●			●	●	
Dysallacta negatalis					●			●	●	
Elophila melagynalis					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Elophila nigralbalis					●			●		
Elophila turbata					●	●			●	
Emmalocera gensanalis					●			●		
Endotricha inouei					●	●	●	●		
Endotricha minialis					●	●		●		
Endotricha olivacealis					●	●		●	●	
Endotricha ruminalis					●			●		
Endotricha theonalis					●			●	●	
Eoophyla conjunctalis					●			●		
Eoophyla inouei				E	●				●	
Eristena argentata					●	●				
Etiella behrii					●		●			
Etiella grisea					●				●	
Etiella zinckenella					●			●		
Eucampyla estriatella					●	●		●		
Eurrhyparodes accessalis					●	●				
Galleria mellonella					●			●		
Gargela xanthocasis					●			●		
Glycythyma chrysorycta					●				●	
Glyphodes actorionalis					●	●		●	●	
Glyphodes bipunctalis					●	●		●		
Glyphodes bivitralis					●	●	●	●	●	
Glyphodes crithealis					●				●	
Glyphodes duplicata					●	●		●	●	
Glyphodes eurytusalis					●				●	
Glyphodes itysalis					●	●		●	●	
Glyphodes multilinealis					●				●	
Glyphodes onychinalis					●				●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Glyphodes perspectalis					●			●		
Glyphodes pyloalis					●	●		●	●	
Goniorhynchus butyrosa					●				●	
Haritalodes derogata					●	●		●	●	
Heliothela nigralbata					●		●			
Hellula undalis					●			●	●	
Hendecasis pulchella					●	●				
Herculia drabicilialis					●	●		●		
Herpetogramma basalis					●			●		
Herpetogramma cynaralis					●	●		●	●	
Herpetogramma fuscescens					●	●				
Herpetogramma licarsisalis					●	●	●	●	●	
Herpetogramma luctuosalis					●	●		●		
Herpetogramma luctuosalis zelleri					○	○		○		
Herpetogramma phaeopteralis					●				●	
Herpetogramma sp.				E	●				●	
Herpetogramma tultalis					●	●	●			
Herpetogramma submarginalis					●		●	●	●	
Hyalobathra dialychna					●	●		●	●	
Hyalobathra illectalis					●			●	●	
Hydriris ornatalis					●	●		●	●	
Hyperanalyta apicalis					●	●	●	●	●	
Hypsopygia mauritialis					●			●		
Hypsopygia postflava					●	●		●		
Hypsopygia regina					●			●		
Lamida obscura					●			●	●	
Lamoria adaptella					●	●		●	●	
Lamoria infumatella					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Locastra muscosalis					●	●	●	●	●	
Mabra eryxalis					●			●		
Mabra nigriscripta					●	●				
Maruca amboinalis					●			●	●	
Maruca vitrata					●	●		●	●	
Melanochroa yasuda				E	●			●		
Mesolia bipunctella					●				●	
Metoeca foedalis					●	●		●		
Micraglossa aureata					●			●		
Nacoleia charesalis					●	●		●	●	
Nacoleia commixta					●	●		●		
Nacoleia satsumalis					●	●		●		
Nausinoe perspectata					●			●		
Neomusotima fuscolinealis					●	●		●		
Nephopterix mikadella					●	●				
Nephopterix proximalis					●				●	
Nevrina procopia					●	●		●	●	
Nomophila noctuella					●			●	●	
Noorda amethystina					●			●		
Notesia tranquillalis					●				●	
Nymphicula junctalis					●	●				
Nymphicula mesorphna					●	●			●	
Omiodes decisalis					●			●	●	
Omiodes diemenalis					●			●	●	
Omiodes indicatus					●				●	
Omiodes similis					●			●		
Oncocera semirubella					●	●				
Orthaga olivacea					●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Orthopygia glaucinalis					●	●		●		
Orthopygia igniflualis					●				●	
Orthopygia nannodes					●	●				
Orthopygia repetita					●			●	●	
Ostrinia zaguliaevi					●	●	●	●	●	
Ostrinia zaguliaevi ryukyuensis				e	○	○	○	○	○	
Pachybotys spissalis					●				●	
Pachynon sabelialis					●	●	●	●	●	
Pagyda arbiter					●			●		
Pagyda quadrilineata					●			●		
Pagyda quinquelineata					●	●				
Paliga auratalis					●				●	
Paliga minnehaha					●	●			●	
Palpita homalia					●			●	●	
Palpita munroei					●	●		●	●	
Palpita nigropunctalis					●	●				
Paranacoleia lophophoralis					●	●			●	
Parapoynx bilinealis					●				●	
Parapoynx crisonalis					●	●				
Parapoynx diminutalis					●			●	●	
Parapoynx fluctuosalis					●	●	●	●	●	
Parapoynx stagnalis					●	●		●	●	
Parotis marginata					●	●				
Parotis suralis					●				●	
Parthenodes fuscalis					●	●	●			
Parthenodes niger					●				●	
Parthenodes okinawanus				E	●			●		
Pelena sericea					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Phycitodes rotundisigna				E	●			●	●	
Piletocera aegimiusalis					●	●	●	●		
Pleuroptya balteata					●	●				
Pleuroptya characteristica					●	●			●	
Pleuroptya chlorophanta					●	●		●	●	
Pleuroptya deficiens					●	●				
Pleuroptya inferior					●	●		●	●	
Pleuroptya iopasalis					●	●				
Pleuroptya plagiatalis					●		●	●	●	
Pleuroptya punctimarginalis					●	●		●		
Pleuroptya sabinusalis					●	●	●	●	●	
Pleuroptya ultimalis					●	●		●		
Preneopogon catenalis					●	●		●		
Prophantis adusta					●	●	●	●		
Protonoceras capitalis					●				●	
Pseudocatharylla duplicella					●				●	
Ptyobathra atrisquamella					●				●	
Pycnarmon lactiferalis					●			●		
Pyrausta deductalis					●				●	
Pyrausta teStå /is					●	●				
Rehimena surusalis					●	●		●		
Roxita albipennata				E	●	●				
Sameodes aptalis					●			●		
Sameodes cancellalis					●				●	
Scirpophaga excerptalis					●	●		●	●	
Scirpophaga nivella					●			●		
Scirpophaga praelata					●	●		●		
Scirpophaga xanthopygata					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Sitochroa palealis					●			●		
Spoladea recurvalis					●	●		●	●	
Sufetula sunidesalis					●	●				
Syllepte pallidinotalis					●		●	●	●	
Syllepte segnalis					●	●				
Syllepte verecunda					●			●	●	
Talanga nympha					●	●		●	●	
Tatobotys aurantialis					●	●		●	●	
Tatobotys biannulalis					●				●	
Tatobotys janapalis					●				●	
Tegulifera faviusalis					●	●		●		
Teliphasa elegans					●	●			●	
Teliphasa sakishimensis					●				●	
Terastia subjectalis					●	●	●	●	●	
Termioptycha bilineata					●				●	
Termioptycha eucarta				E	●			●	●	
Tetridia caletoralis					●				●	
Thalamorrhyncha isoneura					●				●	
Thliptoceras amamiale				E	●	●	●	●		
Tirathaba mundella					●			●	●	
Tirathaba sp.				E	●				●	
Tyspanodes gracilis				E	●			●	●	
Udea testacea					●	●		●		
Uresiphita gracilis					●	●				
Uresiphita polygonalis					●	●		●		
Uresiphita quinquigera					●				●	
Vinicia inouella					●			●		
Volobilis chloropterella					●			●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
MACROPIRATIDAE										
Agdistopis sinhala					●				●	
PTEROPHORIDAE										
Amblyptilia sythoffi					●			●	●	
Crombrugghia kinbane					●	●		●		
Deuterocopus albipunctatus					●	●			●	
Hellinsia hirosakianus					●	●				
Ochyrotica yanoi					●		●	●	●	
Platyptilia farfarella					●			●	●	
Pseudoxyroptila tectonica					●				●	
Pterophorus albidus					●	●	●	●	●	
Sphenarches anisodactylus					●			●		
Stenoptilodes taprobanes					●				●	
HESPERIIDAE										
Badamia exclamationis					●			●	●	
Borbo cinnara					●			●	●	
Choaspes benjaminii					●				●	
Choaspes benjaminii formosana					○				○	
Choaspes benjaminii japonica					○	○	○	○		
Hasora badra					●				●	
Hasora badra badra					○				○	
Hasora chromus					●	●	●	●	●	
Hasora chromus inermis				e	○	○	○	○	○	
Notocrypta curvifascia					●	●	●	●	●	
Notocrypta curvifascia curvifascia					○	○	○	○	○	
Ochlodes asahinai		VU		E	●				●	
Parnara guttata					●	●	●	●	●	
Parnara guttata guttata					○	○	○	○	○	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Parnara bada		NT			●	●	●	●	●	
Pelopidas agna					●			●	●	
Pelopidas agna agna					○			○	○	
Pelopidas mathias					●	●	●	●	●	
Pelopidas mathias oberthueri					○	○	○	○	○	
Suastus germius					●		●	●	●	
Suastus germius germius					○		○	○	○	
Tagiades trebellius					●				●	
Tagiades trebellius martinus					○				○	
Telicota colon					●			●	●	
Telicota colon stinga					○			○	○	
Udaspes folus					●	●		●	●	
PAPILIONIDAE										
Atrophaneura alcinous					●	●	●	●	●	
Atrophaneura alcinous bradanus				e	○				○	
Atrophaneura alcinous loochooana				e	○	○	○	○		
Graphium cloanthus					●				●	
Graphium cloanthus kuge					○				○	
Graphium doson					●	●	●	●	●	
Graphium doson albidum					○	○	○	○		
Graphium doson perillus				e	○				○	
Graphium sarpedon					●	●	●	●	●	
Graphium sarpedon nipponum					○	○	○	○	○	
Pachliopta aristolochiae					●			●	●	
Pachliopta aristolochiae interposita					○			○	○	
Papilio alphenor					●				●	
Papilio ryukyuensis					●	●	●	●		
Papilio ryukyuensis amamiensis				e	○	○	○			

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Papilio ryukyuensis ryukyuensis				e	○			○		
Papilio bianor					●				●	
Papilio bianor okinawensis				e	○				○	
Papilio helenus					●	●	●	●	●	
Papilio helenus nicconicolens					○	○	○	○	○	
Papilio machaon					●			●		
Papilio machaon hippocrates					○			○		
Papilio memnon					●	●	●	●	●	
Papilio memnon thunbergii					○	○	○	○	○	
Papilio polytes					●	●	●	●	●	
Papilio polytes polytes					○	○	○	○	○	
Papilio protenor					●	●		●	●	
Papilio protenor demetrius					○	○				
Papilio protenor liukiuensis				e	○			○	○	
Papilio rumanzovia					●				●	
Papilio xuthus					●	●		●	●	
Princeps demoleus					●	●			●	
Princeps demoleus libanius					○	○			○	
PIERIDAE										
Appias albina					●	●	●	●	●	
Appias albina semperi					○	○	○	○	○	
Appias lyncida					●				●	
Appias lyncida formosana					○				○	
Appias paulina					●	●	●	●	●	
Appias paulina minato					○	○	○	○	○	
Artogeia canidia					●				●	
Artogeia canidia canidia					○				○	
Artogeia rapae					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Artogeia rapae crucivora					○	○	○	○	○	
Catopsilia pomona					●	●	●	●	●	
Catopsilia pomona pomona					○	○	○	○	○	
Catopsilia pyranthe					●			●	●	
Colias erate					●	●	●	●	●	
Eurema blanda					●			●	●	
Eurema blanda arsakia					○			○	○	
Eurema brigitta					●	●		●	●	
Eurema hecabe					●	●	●	●	●	
Eurema hecabe hecabe					○	○	○	○	○	
Eurema laeta					●	●	●	●	●	
Eurema laeta betheseba		EN			○	○	○	○	○	
Hebomoia glaucippe					●	●	●	●	●	
Hebomoia glaucippe liukiuensis					○	○	○	○	○	
Ixias pyrene					●	●				
Ixias pyrene insignis					○	○				
Leptosia nina					●				●	
Leptosia nina niobe					○				○	
Saletara panda					●				●	
Saletara panda nathalia					○				○	
LYCAENIDAE										
Acytolepis puspa					●	●	●	●	●	
Acytolepis puspa ishigakiana					○	○	○	○	○	
Artipe eryx	LC				●	●	●	●	●	
Artipe eryx okinawana	LC	NT		e	○	○	○	○	○	
Catochrysops panormus					●			●	●	
Catochrysops panormus exiguus					○			○	○	
Catochrysops strabo					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Catochrysops strabo luzonensis					○				○	
Celastrina argiolus					●	●				
Celastrina argiolus ladonides					○	○				
Celastrina dilecta					●	●		●	●	
Celastrina dilecta dilecta					○	○		○	○	
Chilades mindorus					●			●		
Chilades pandava					●			●		
Chilades pandava pandava					○			○		
Curetis acuta					●	●	●		●	
Curetis acuta paracuta					○	○	○		○	
Euchrysops cnejus					●	●	●	●	●	
Everes argiades					●	●		●	●	
Everes argiades argiades					○	○		○	○	
Everes lacturnus					●	●	●	●	●	
Everes lacturnus rileyi					○	○	○	○	○	
Famegana alsulus					●				●	
Jamides alecto					●				●	
Jamides alecto dromicus					○				○	
Jamides bochus					●			●	●	
Jamides bochus ishigakianus				e	○			○	○	
Lampides boetieus					●	●		●	●	
Megisba malaya					●	●	●	●	●	
Megisba malaya sikkima					○	○	○	○	○	
Nacaduba kurava					●	●	●	●	●	
Nacaduba kurava septentrionalis					○	○	○	○	○	
Narathura bazalus					●	●	●	●	●	
Narathura bazalus turbata					○	○	○	○	○	
Narathura japonica					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Narathura rama					●		●		●	
Neopithecops zalmora					●				●	
Pithecops corvus					●			●	●	
Pithecops corvus ryukyuensis		NT		e	○			○	○	
Prosotas nora					●				●	
Prosotas nora kanoi					○				○	
Pseudozizeeria maha					●	●	●	●	●	
Pseudozizeeria maha okinawana					○	○	○	○	○	
Syntarucus plinius					●				●	
Udara albocaerulea					●	●		●		
Udara albocaerulea albocaerulea					○	○		○		
Zizeeria karsandra		VU			●			●	●	
Zizina otis					●	●	●	●	●	
Zizina otis riukuensis					○	○	○	○	○	
Zizula hylax					●			●	●	
LIBYTHEIDAE										
Libythea celtis					●	●	●	●	●	
Libythea celtis amamiana					○	○	○	○	○	
Libythea celtis formosana					○				○	
Libythea geoffroy					●				●	
Libythea geoffroy philippina					○				○	
DANAIDAE										
Anosia chrysippus					●	●	●	●	●	
Anosia chrysippus chrysippus					○	○	○	○	○	
Danaus plexippus					●	●		●	●	
Danaus plexippus plexippus					○	○		○	○	
Euploea camaralzeman					●			●	●	
Euploea camaralzeman cratis					○			○	○	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Euploea core					●			●	●	
Euploea core godartii					○			○	○	
Euploea radamanthus					●			●		
Euploea radamanthus radamanthus					○			○		
Euploea eunice					●			●	●	
Euploea klugii					●				●	
Euploea klugii erichsonii					○				○	
Euploea midamus					●			●	●	
Euploea mulciber					●	●	●	●	●	
Euploea mulciber barsine					○	○	○	○	○	
Euploea swainson					●			●		
Euploea swainson swainson					○			○		
Euploea sylvester					●				●	
Euploea sylvester laetifica					○				○	
Euploea tulliolus					●			●	●	
Euploea tulliolus koxinga					○			○	○	
Euploea tulliolus polita					○			○	○	
Idea leuconoe					●	●		●	●	
Idea leuconoe clara				e	○	○		○		
Idea leuconoe riukiuensis				e	○				○	
Ideopsis similis					●	●	●	●	●	
Ideopsis similis similis					○	○	○	○	○	
Parantica aglea					●			●	●	
Parantica aglea maghaba					○			○	○	
Parantica luzonensis					●	●		●	●	
Parantica luzonensis luzonensis					○	○		○	○	
Parantica melaneus					●	●	●	●	●	
Parantica melaneus swinhoei					○	○	○	○	○	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Parantica sita					●	●	●	●	●	
Parantica sita niphonica					○	○	○	○	○	
Salatura genutia					●	●		●	●	
Salatura genutia genutia					○	○		○	○	
Salatura melanippus					●			●	●	
Salatura melanippus edmondii					○			○	○	
Tirumala hamata					●			●	●	
Tirumala hamata orientalis					○			○	○	
Tirumala ishmoides					●			●	●	
Tirumala ishmoides sontinus					○			○	○	
Tirumala limniace					●	●		●	●	
Tirumala septentrionis					●			●	●	
Tirumala septentrionis septentrionis					○			○	○	
NYMPHALIDAE										
Argyreus hyperbius					●	●	●	●	●	
Argyreus hyperbius hyperbius					○	○	○	○	○	
Ariadne ariadne					●				●	
Ariadne ariadne pallidior					○				○	
Athyma perius					●			●	●	
Athyma perius perius					○			○	○	
Athyma selenophora					●				●	
Athyma selenophora ishiana					○				○	
Cupha erymanthis					●			●	●	
Cupha erymanthis erymanthis					○			○	○	
Cynthia cardui					●	●	●	●	●	
Cyrestis thyodamas					●	●	●	●	●	
Cyrestis thyodamas mabella					○	○	○	○	○	
Dichorragia nesimachus					●	●	●	●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Dichorragia nesimachus ishigakianus				e	○				○	
Dichorragia nesimachus okinawaensis				e	○	○	○	○		
Doleschallia polibeta					●			●	●	
Doleschallia polibeta philippensis					○			○	○	
Hestina assimilis					●	●	●			
Hestina assimilis shirakii		NT		e	○	○	○			
Hypolimnas anomala					●			●	●	
Hypolimnas anomala truentus					○			○	○	
Hypolimnas bolina					●	●	●	●	●	
Hypolimnas misippus					●	●		●	●	
Junonia almana					●	●	●	●	●	
Junonia atlites					●				●	
Junonia hedonia					●				●	
Junonia hedonia iwasakii					○				○	
Junonia lemonias					●			●	●	
Junonia lemonias lemonias					○			○	○	
Junonia orithya					●			●	●	
Kallima inachus					●			●	●	
Kallima inachus eucerca		NT		e	○			○	○	
Kaniska canace					●	●	●	●	●	
Kaniska canace ishima					○	○	○	○	○	
Neptis hylas					●	●	●	●	●	
Neptis hylas luculenta					○	○	○	○	○	
Parthenos sylla					●			●		
Parthenos sylla philippensis					○			○		
Phalanta phalantha					●			●	●	
Polygonia c-aureum					●	●	●	●	●	
Polyura eudamippus		NT			●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Polyura eudamippus weismanni		NT		e	○			○		
Timelaea albescens					●	●				
Timelaea albescens formosana					○	○				
Vanessa indica					●	●	●	●	●	
Vanessa indica indica					○	○	○	○	○	
Yoma sabina					●			●	●	
Yoma sabina podium					○			○	○	
SATYRIDAE										
Lethe europa					●				●	
Lethe europa pavida		NT			○				○	
Melanitis boisduvalia					●	●				
Melanitis boisduvalia boisduvalia					○	○				
Melanitis leda					●	●	●	●	●	
Melanitis leda leda					○	○	○	○	○	
Melanitis phedima					●	●		●	●	
Melanitis phedima oitensis					○	○		○	○	
Mycalesis madjicosa				E	●	●	●	●		
Mycalesis madjicosa amamiana				e	○	○	○	○		
Mycalesis madjicosa madjicosa				e	○				○	
Ypthima masakii		NT		E	●				●	
Ypthima riukiuana		NT		E	●			●		
Ypthima yayeyamana		NT		E	●				●	
DREPANIDAE										
Callidrepana hirayamai					●			●		
Callidrepana melanonota				E	●	●		●	●	
Hypsomadius insignis					●	●		●	●	
Macrauzata maxima					●	●		●		
Macrocilix mysticata					●	●				

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Macrocilix mysticata watsoni					○	○				
Nordstromia duplicata					●				●	
Oreta fuscopurpurea					●			●		
Oreta loochooana					●	●	●	●	●	
Oreta loochooana loochooana					○	○	○	○	○	
Tridrepana unispina					●	●		●		
THYATIRIDAE										
Habrosyne fraterna					●	●		●		
Habrosyne fraterna japonica					○	○		○		
Horipsestis mushana					●	●				
Horithyatira kawamurae					●	●		●		
Thyatira batis					●	●		●	●	
Thyatira batis japonica					○	○		○	○	
GEOMETRIDAE										
Abraxas formosilluminata					●				●	
Abraxas miranda					●			●	●	
Abraxas miranda aesia				e	○			○	○	
Abraxas niphonibia					●	●		●		
Acasis viretata					●	●				
Acolutha pictaria					●	●		●	●	
Acolutha pictaria shirozui					○	○		○	○	
Acolutha pulchella					●	●				
Acolutha pulchella semifulva					○	○				
Acrodontis tanchame				E	●			●		
Acrodontis yazakii				E	●	●		●		
Agathia laetata					●				●	
Agathia lycaenaria					●	●		●	●	
Agathia lycaenaria chizumon					○	○				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Agathia lycaenaria samuelsoni				e	○			○	○	
Alcis angulifera					●	●				
Amblychia angeronaria					●	●	●		●	
Amraica recursaria					●	●		●	●	
Antitrygodes divisaria					●	●		●	●	
Antitrygodes divisaria perturbatus					○	○		○	○	
Apochima praeacutaria					●	●		●		
Apocleora rimosa					●	●				
Biston marginata					●	●		●	●	
Biston robustus					●	●		●	●	
Biston robustus ryukyuense				e	○	○		○	○	
Borbacha pardaria					●			●	●	
Carige obsoleta				E	●			●		
Celenna festivaria					●	●		●	●	
Celenna festivaria manifesta					○	○		○	○	
Chlorissa obliterata					●	●		●		
Chloroclystis neoconversa					●	●				
Chrysocraspeda faganaria					●			●		
Chrysocraspeda sanguinea					●				●	
Cleora amamiensis				E	●	●		●		
Cleora injectaria					●	●		●	●	
Cleora minutaria					●	●	●	●	●	
Cleora repulsaria					●	●	●	●	●	
Collix ghosha					●	●		●	●	
Comibaena diluta					●	●	●	●		
Comibaena insulana				E	●	●				
Comibaena procumbaria					●	●	●	●	●	
Comostola rubripunctata					●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Comostola subtiliaria					●	●		●	●	
Comostola subtiliaria kawazoei				e	○	○		○	○	
Corymica pryeri					●	●		●	●	
Corymica arnearia					●	●		●		
Crypsicometa ochracea				E	●			●	●	
Cusiala stipitaria					●	●				
Cusiala stipitaria kariuzawensis					○	○				
Derambila fragilis					●				●	
Dilophodes elegans					●	●				
Dindica virescens					●	●				
Diplodesma ussuriaria					●			●	●	
Doratoptera amabilis				E	●	●		●		
Echthrocollix minuta					●				●	
Ecliptopera umbrosaria					●	●		●	●	
Ectropis crepuscularia					●			●	●	
Ectropis excellens					●	●		●	●	
Entomopteryx combusta					●				●	
Eois grataria					●			●		
Episteira eupena					●	●		●		
Episteira nigrilinearia					●	●		●	●	
Erannis golda					●			●		
Eriopithex ishigakiensis					●			●	●	
Eschatarchia lineata					●	●		●		
Eucrostes disparata					●			●	●	
Eucyclodes infracta					●	●		●		
Eumelea biflavata					●	●	●	●	●	
Eumelea biflavata insulata					○	○	○	○	○	
Eumelea ludovicata					●		●			

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Eupithecia antivulgaria					●	●				
Eupithecia aritai					●				●	
Eupithecia kuroshio					●	●				
Eupithecia niphonaria					●	●			●	
Eupithecia rigida					●				●	
Eupithecia ryukyuensis					●			●	●	
Eupithecia tabidaria					●	●		●		
Fascellina chromataria					●				●	
Gandaritis fixseni					●	●				
Glaucochrystis azumai				E	●			●	●	
Glaucochrystis spinosa				E	●	●			●	
Godonela emersaria					●			●		
Godonela hebesata					●	●		●		
Gymnoscelis esakii					●			●		
Gymnoscelis expedita					●	●		●		
Gymnoscelis semialbida					●	●				
Gymnoscelis tristrigosa					●	●		●		
Hemithea aestivaris					●				●	
Hemithea tritonaria					●	●		●	●	
Heterolocha aristonaria					●	●		●		
Heterophleps endoi		EN		E	●				●	
Hypomecis yuwanina					●	●				
Hyposidra talaca					●	●		●	●	
Idaea contravalida				E	●				●	
Idaea crassipuncta					●				●	
Idaea neovalida					●	●	●	●	●	
Idaea okinawensis				E	●			●		
Idaea sakuraii					●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Idiochlora minuscula				E	●	●		●	●	
Jankowskia fuscaria					●	●		●		
Jankowskia fuscaria naitoi				e	○	○		○		
Jodis amamiensis				E	●	●				
Jodis angulata					●	●				
Krananda latimarginaria					●	●		●		
Krananda semihyalina					●	●		●	●	
Lassaba fuliginosa				E	●	●		●		
Lomographa inamata					●	●				
Luxiaria amasa					●				●	
Macaria abydata					●			●		
Maxates fuscofrons					●	●				
Maxates protrusa					●	●		●	●	
Maxates versicauda					●				●	
Maxates versicauda microptera				e	○				○	
Megabiston plumosaria					●			●		
Melanthia catenaria					●			●	●	
Melanthia catenaria mesozona					○			○	○	
Melanthia procellata					●	●				
Melanthia procellata szechuanensis				e	○	○				
Menophra senilis					●	●				
Microcalcarifera obscura					●	●				
Milionia basalis					●	●		●	●	
Milionia basalis pryeri					○	○		○	○	
Myrteta angelica					●			●		
Nadagara subnubila					●	●				
Ninodes watanabei					●			●	●	
Nipponogelasma chlorissoides					●			●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Nothomiza aureolaria					●	●		●		
Odontopera arida					●	●		●		
Odontopera arida arida					○	○		○		
Organopoda carnearia					●	●		●	●	
Orthocabera tinagmaria					●			●		
Orthonama obstipata					●	●		●		
Ourapteryx nivea					●	●		●	●	
Oxymacaria temeraria					●	●		●		
Ozola defectata					●			●	●	
Pamphlebia rubrolimbraria					●	●		●	●	
Pareclipsis gracilis					●	●		●		
Pelagodes antiquadrata					●			●		
Pelagodes proquadrata					●			●	●	
Peratostega deletaria					●	●		●		
Peratostega deletaria hypotaenia					○	○		○		
Perixera minorata					●				●	
Perixera minorata dubiosa					○				○	
Perixera obliviaria					●			●		
Perixera obrinaria					●			●	●	
Phthonoloba viridifasciata					●	●		●	●	
Phthonosema tendinosaria					●	●				
Pingasa ruginaria					●	●		●	●	
Pingasa ruginaria pacifica					○	○		○	○	
Plesiomorpha flaviceps					●	●		●	●	
Plesiomorpha punctilinearia					●	●		●	●	
Pogonopygia nigralbata					●	●		●		
Pogonopygia pavida				E	●	●		●	●	
Pogonopygia pavida contaminata				e	○	○		○	○	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Pomasia denticlathrata					●		●			
Problepsis albidior					●	●		●	●	
Problepsis albidior matsumurai					○	○		○	○	
Pseudocollix hyperythra					●	●		●	●	
Pseudocollix hyperythra catalalia					○	○		○	○	
Pseudonadagara semicolor					●	●		●	●	
Psilalcis breta					●	●		●		
Psilalcis breta rantaizana					○	○		○		
Racotis boarmiaria					●	●	●	●		
Racotis boarmiaria japonica					○	○	○	○		
Sarcinodes yaeyamana					●				●	
Sauris angustifasciata					●				●	
Sauris interruptaria					●	●		●		
Scopula anisopleura				E	●			●		
Scopula caesaria					●				●	
Scopula cineraria					●			●		
Scopula coniaria					●	●	●	●		
Scopula emissaria					●	●		●	●	
Scopula emma					●	●		●		
Scopula emma jordani					○	○		○		
Scopula epiorrhoe					●	●	●	●	●	
Scopula eulomata					●				●	
Scopula insolata					●	●			●	
Scopula insolata satsumaria					○	○			○	
Scopula kawabei					●				●	
Scopula limbata					●	●	●			
Scopula nesciaria					●	●		●		
Scopula nesciaria absconditaria					○	○		○		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Scopula personata					●	●		●	●	
Scopula plumbearia					●	●		●		
Scopula praesignipuncta					●			●		
Scopula pulchellata					●			●		
Scopula pulchellata takowensis					○			○		
Scopula uridata					●			●		
Scopula uridata sternecki					○			○		
Sibatania arizana					●			●	●	
Sibatania arizana fluctigera				e	○			○	○	
Spaniocentra hollowayi					●	●		●		
Spiralsigna subpumilata					●			●	●	
Synegia esther					●	●		●	●	
Tanaorhinus reciprocata					●	●		●	●	
Tanaorhinus reciprocata confuciaria					○	○		○	○	
Thalassodes immissaria					●	●		●	●	
Thalassodes immissaria intaminatus					○	○		○	○	
Thinopteryx crocoptera					●			●		
Thinopteryx crocoptera striolata					○			○		
Timandra convectaria					●	●		●	●	
Timandra dichela					●	●				
Traminda aventiaria					●				●	
Trichopterigia consobrinaria					●	●			●	
Tyloptera bella					●	●				
Tyloptera bella amamiensis				e	○	○				
Xerodes albonotaria					●	●		●	●	
Xerodes albonotaria aritai				e	○	○		○	○	
Xerodes sordidata				E	●				●	
Xyloscia subspersata					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
URANIIDAE										
Acropteris sparsaria					●				●	
Pseudomicronia advocataria					●	●	●	●	●	
EPIPLEMIDAE										
Chundana emarginatus					●	●	●	●		
Dysaethria cretacea					●	●		●		
Dysaethria flavistriga					●	●		●	●	
Dysaethria meridiana				E	●			●		
Dysaethria moza					●	●				
Europlema conchiferata					●			●		
Europlema desistaria					●			●	●	
Monobolodes prunaria					●	●	●	●	●	
Phazaca alikangensis					●	●		●	●	
Phazaca kosemponica					●	●		●		
Warreniplema fumicosta		NT			●	●			●	
CALLIDULIDAE										
Callidula attenuata					●	●		●	●	
LASIOCAMPIDAE										
Dendrolimus spectabilis					●	●		●		
Dendrolimus spectabilis okinawanus					○	○		○		
Kunugia undans					●			●	●	
Kunugia undans iwasakii				e	○			○	○	
BOMBYCIDAE										
Bombyx mori					●			●	●	
SATURNIIDAE										
Antheraea yamamai					●	●		●		
Antheraea yamamai yoshimotoi				e	○	○		○		
Attacus atlas		NT		E	●				●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Caligula japonica					●	●		●		
Caligula japonica ryukyuensis				e	○	○		○		
Loepa sakaei		NT		E	●	●		●		
Samia cynthia					●	●	●	●	●	
Samia cynthia pryeri					○	○	○	○	○	
SPHINGIDAE										
Acherontia lachesis					●			●		
Acherontia styx					●			●		
Acherontia styx medusa					○			○		
Acosmeryx castanea					●	●	●	●		
Acosmeryx naga					●	●	●	●		
Agrius convolvuli					●	●		●	●	
Ampelophaga rubiginosa					●	●				
Cephonodes hylas					●	●		●	●	
Cephonodes xanthus					●	●		●	●	
Clanis bilineata					●			●		
Clanis bilineata tsingtauica					○			○		
Deilephila elpenor					●			●		
Deilephila elpenor lewisii					○			○		
Dolbina inexacta					●				●	
Hemaris affinis					●			●		
Hemaris radians		VU			●			●	●	
Hippotion boerhaviae					●			●	●	
Hippotion celerio					●			●		
Hippotion echeclus					●			●		
Hippotion rosetta					●				●	
Hippotion velox					●				●	
Hyles livornica					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Macroglossum bombylans					●	●	●			
Macroglossum corythus					●	●	●	●	●	
Macroglossum corythus platyxanthum					○	○	○	○	○	
Macroglossum faro					●			●	●	
Macroglossum fritzei					●	●		●	●	
Macroglossum heliophilum					●	●		●	●	
Macroglossum mediovitta				E	●			●	●	
Macroglossum passalus					●	●	●	●	●	
Macroglossum poecilum					●	●		●	●	
Macroglossum Macroglossum					●	●		●	●	
Macroglossum saga					●			●		
Macroglossum stellatarum					●	●		●	●	
Macroglossum troglodytus					●			●		
Marumba sperchius					●			●		
Parum colligata					●	●		●	●	
Pergesa acteus					●	●	●	●	●	
Psilogramma increta					●	●		●	●	
Theretra alecto					●	●	●	●	●	
Theretra clotho					●	●	●		●	
Theretra japonica					●	●		●	●	
Theretra nessus					●	●	●	●	●	
Theretra oldenlandiae					●	●		●	●	
Theretra silhetensis					●	●		●	●	
Theretra suffusa					●				●	
NOTODONTIDAE										
Cerura tattakana					●			●	●	
Chadisra bipartita					●	●		●	●	
Clostera anastomosis					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Disparia nigrofasciata					●				●	
Epodonta lineata					●			●		
Mesophalera sigmata					●			●		
Neodrymonia acuminata					●	●		●	●	
Phalera minor					●	●		●		
Phalerodonta manleyi					●			●		
Phalerodonta manleyi yambaru				e	○			○		
Phycidopsis albovittata					●			●	●	
Pseudofentonia variegata					●	●	●	●	●	
Pseudofentonia variegata sordida					○	○	○	○	○	
Rabtala cristata					●	●		●	●	
Stauropus alternus					●				●	
Syntypistis amamiensis				E	●	●	●			
Syntypistis nachiensis					●				●	
Syntypistis subgeneris					●	●		●	●	
Vaneeckeia pallidifascia				E	●				●	
Vaneeckeia pallidifascia iriomotensis				e	○				○	
LYMANTRIIDAE										
Arctornis kanazawai					●				●	
Calliteara lunulata					●			●	●	
Calliteara taiwana					●	●		●		
Calliteara taiwana aurifera					○	○		○		
Euproctis kanshireia					●				●	
Euproctis okinawana				E	●			●	●	
Euproctis pulverea					●	●	●	●	●	
Euproctis sakaguchii					●	●	●	●	●	
Euproctis taiwana					●	●		●	●	
Ilema nachiensis					●	●		●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Laelia kunigamiensis		NT		E	●			●		
Lymantria dispar					●			●		
Lymantria dispar albescens				e	○			○		
Lymantria mathura					●			●		
Lymantria mathura aurosa					○			○		
Lymantria minomonis					●			●		
Lymantria minomonis okinawaensis				e	○			○		
Lymantria xylina					●	●		●		
Lymantria xylina xylina					○	○		○		
Orgyia postica					●	●	●	●	●	
Orgyia triangularis					●	●		●		
Perina nuda					●			●	●	
ARCTIIDAE										
Aloa lactinea		NT			●			●	●	
Argina astrea					●	●				
Asura alikangiae					●	●		●		
Asura alikangiae intermedia					○	○		○		
Asura dharma					●	●		●	●	
Asura dharma dharma					○	○		○	○	
Chamaita ranruna					●	●			●	
Chrysaeglia magnifica					●	●		●	●	
Chrysaeglia magnifica taiwana					○	○		○	○	
Creatonotos gangis					●			●		
Creatonotos transiens					●	●		●	●	
Creatonotos transiens vacillans					○	○		○	○	
Cyana hamata					●			●	●	
Cyana hamata hamata					○			○	○	
Cyana harterti					●			●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Cyana unipunctata					●	●	●	●	●	
Eilema antica					●	●	●	●	●	
Eilema fuscodorsalis		NT			●	●			●	
Eilema laevis					●	●		●		
Eugoa bipunctata					●				●	
Garudinia simulana					●				●	
Lemyra imparilis					●	●				
Lemyra inaequalis					●	●		●		
Lemyra inaequalis sakaguchii				e	○	○		○		
Miltochrista aberrans					●	●	●	●	●	
Miltochrista aberrans okinawana				e	○	○	○	○	○	
Miltochrista expressa				E	●				●	
Miltochrista ziczac					●	●				
Mithuna fuscivena					●	●		●	●	
Neasura melanopyga					●	●		●	●	
Nikaea matsumurai		NT			●				●	
Nipponasura sanguinea				E	●				●	
Nudaridia ochracea					●				●	
Nudaridia ochracea bani					○				○	
Nyctemera adversata					●	●	●	●	●	
Nyctemera cenis					●	●		●	●	
Nyctemera coleta					●				●	
Nyctemera lacticinia					●			●	●	
Pitasira okinawensis					●		●	●	●	
Rhyparioides metelkana					●	●		●		
Rhyparioides metelkana flavidus					○	○		○		
Siccia sordida					●				●	
Spilarctia seriatopunctata					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Spilarctia seriatopunctata azumai				e	○			○		
Spilarctia seriatopunctata nuda				e	○	○				
Spilarctia subcarnea					●	●		●	●	
Stictane rectilinea					●	●			●	
Stictane rectilinea chinensis					○	○			○	
Stigmatophora leacrita					●	●				
Tigrioides pallens				E	●			●	●	
Utetheisa lotrix					●	●		●	●	
Utetheisa pulchelloides					●	●		●	●	
AGANAIDAE										
Asota caricae					●			●	●	
Asota egens					●	●	●	●	●	
Asota egens confinis					○	○	○	○	○	
Asota ficus					●			●		
Asota heliconia					●	●	●	●	●	
Asota heliconia riukiuana					○	○	○	○	○	
Asota plana					●	●	●	●	●	
Asota plana lacteata					○	○	○	○	○	
NOLIDAE										
Nola angustipennis				E	●				●	
Nola ceylonica					●			●		
Nola exumbrata					●	●		●	●	
Nola infralba					●			●		
Nola infranigra					●	●				
Nola innocua					●	●				
Nola taeniata					●			●		
Nola trilinea					●	●		●		
Rhynchopalpus albula					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Rhynchopalpus albula formosana					○			○		
Rhynchopalpus banghaasi					●	●				
Rhynchopalpus banghaasi sumi					○	○				
Rhynchopalpus brunellus					●		●	●	●	
Rhynchopalpus izuensis					●				●	
Rhynchopalpus major					●	●				
Rhynchopalpus major caesiopennis					○	○				
Rhynchopalpus triangulalis					●	●		●	●	
Sarbena ustipennis					●			●		
CTENUCHIDAE										
Amata germana					●				●	
Amata germana nigricauda					○				○	
NOCTUIDAE										
Abrostola triplasia					●		●			
Acanthoplusia agnata					●				●	
Achaea melicerta					●	●		●	●	
Achaea serva					●			●	●	
Acontia marmorata					●	●		●	●	
Adrapsa ablualis					●	●		●	●	
Adrapsa simplex					●	●	●	●	●	
Adrapsa subnotigera					●	●	●	●		
Adris tyrannus					●			●	●	
Aedia leucomelas					●	●		●	●	
Aedia acronictoides					●			●		
Aegilia describens					●				●	
Agrotis ipsilon					●	●		●	●	
Agrotis segetum					●			●	●	
Amphipyra horiei					●	●	●	●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Amphipyra okinawensis		NT		E	●			●		
Amphipyra sublivida				E	●	●				
Amyna axis					●			●	●	
Amyna natalis					●	●				
Amyna punctum					●			●		
Anachrostis amamiana				E	●	●				
Anachrostis minutissima					●				●	
Anacronicta okinawensis				E	●			●		
Anadevidia peponis					●			●		
Anigraea albomaculata					●				●	
Anisoneura salebrosa					●				●	
Anomis albitibia					●	●		●	●	
Anomis flava					●			●	●	
Anomis flava flava					○			○	○	
Anomis fulvida					●			●		
Anomis involuta					●			●		
Anomis mesogona					●			●	●	
Antapamea okinawensis					●	●		●		
Anticarsia irrorata					●			●	●	
Apamea sodalis					●			●		
Araeopteron amoena					●			●		
Arcte coerula					●	●	●	●		
Artena dotata					●	●		●	●	
Athetis costiloba				E	●	●				
Athetis lineosella				E	●			●		
Athetis placida					●	●		●	●	
Athetis stellata					●	●		●		
Athetis striolata					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Athetis thoracica					●	●		●		
Autoba triStå /is					●	●			●	
Avitta fasciosa					●			●		
Avitta puncta					●			●		
Azumaia micardiopsis					●	●		●	●	
Bambusiphila vulgaris					●			●		
Bamra albicola					●				●	
Bertula sinuosa					●				●	
Blasticorhinus rivulosa					●			●	●	
Blenina senex					●	●		●		
Bocana manifeStå /is					●	●	●	●	●	
Bocula caradrinoides					●				●	
Bomolocha amamiensis				E	●	●				
Bomolocha sp.				E	●				●	
Borsippa diffusa					●				●	
Bryophila parva					●	●		●		
Bryophilina mollicula					●	●		●		
Caduca albopunctata					●				●	
Callopistria aethiops					●	●			●	
Callopistria duplicans					●	●		●	●	
Callopistria guttulalis					●				●	
Callopistria juventina					●			●	●	
Callopistria maillardi					●	●		●	●	
Callopistria placodoides					●	●				
Callopistria repleta					●			●	●	
Callopistria rivularis					●	●			●	
Callyna contracta					●	●				
Calyptra minuticornis					●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Carea internifusca					●	●		●	●	
Carmara subcervina					●			●	●	
Chalciope mygdon					●	●		●	●	
Characoma ruficirra					●				●	
Chasmina candida					●			●	●	
Chibidokuga hypenodes					●	●		●		
Chrysodeixis eriosoma					●	●		●	●	
Chrysodeixis heberachis					●				●	
Chrysodeixis minutus					●	●				
Cidariplura galadiata					●	●		●	●	
Condica albigutta					●				●	
Condica illecta					●			●	●	
Condica illustrata		EN			●				●	
Condica serva					●	●		●	●	
Conistra nawae					●	●		●		
Corgatha marumoi					●			●	●	
Corgatha nitens					●				●	
Corsa petrina					●				●	
Craniophora fasciata					●			●	●	
Cryphia maritima					●	●				
Ctenoplusia albostriata					●			●	●	
Ctenoplusia ichinosei					●	●		●		
Ctenoplusia placida					●				●	
Cucullia fraterna					●	●		●		
Cultripalpa partita					●				●	
Dactyloplusia impulsa					●				●	
Daddala lucilla					●	●		●	●	
Decticryptis deleta					●		●			

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Diarsia canescens					●			●		
Dictyestra dissecta					●				●	
Dinumma placens					●				●	
Diomea discisigna					●			●	●	
Diomea jankowskii					●			●	●	
Dunira diplogramma					●			●		
Dysgonia arctotaenia					●			●		
Dysgonia arcuata					●	●	●		●	
Dysgonia fulvotaenia					●	●		●	●	
Dysgonia illibata					●			●	●	
Dysgonia joviana					●	●		●		
Dysgonia maturata					●			●		
Dysgonia onelia					●			●	●	
Dysgonia stuposa					●	●		●	●	
Earias cupreoviridis					●				●	
Earias dilatifemur					●	●		●		
Earias roseifera					●			●	●	
Earias roseoviridis				E	●	●		●		
Ecpatia longinquua					●	●		●	●	
Ectogoniella insularis				E	●	●			●	
Enispa leucosticta					●	●	●	●		
Enispa lutefascialis					●			●	●	
Episparis okinawensis				E	●			●		
Ercheia dubia					●			●	●	
Erebus ephesperis					●			●	●	
Ericeia inangulata					●				●	
Ericeia pertendens					●	●		●	●	
Ericeia subcinerea					●	●			●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Ericeia sp.					●			●		
Erygia apicalis					●			●		
Erythroplusta pyropia					●				●	
Eublemma anachoresis					●				●	
Eublemma baccalix					●	●				
Eublemma cochylioides					●	●		●	●	
Eublemma ragusana					●	●		●	●	
Eudocima salaminia					●			●	●	
Eupatula macrops					●			●		
Eutelia adulatricoides					●			●	●	
Feliniopsis asahinai					●	●		●	●	
Gesonia obeditalis					●			●	●	
Giaura tortricoides					●			●		
Grammodes geometrica					●	●		●	●	
Gynaephila punctirena				E	●				●	
Gyrtothripa pusilla					●	●				
Hadennia obliqua					●	●		●	●	
Helicoverpa assulta					●	●		●	●	
Hepatica seinoi				E	●				●	
Herminia kurokoi					●			●	●	
Herminia ryukyuensis					●	●		●	●	
Herminia terminalis					●	●				
Hipoepa fractalis					●	●		●	●	
Hydrillodes lentalis					●	●		●	●	
Hydrillodes pacifica					●	●		●		
Hydrillodes uenoi				E	●				●	
Hypena conscitalis					●				●	
Hypena gonospilalis					●			●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Hypena indicatalis					●	●		●		
Hypena innocuoides					●	●		●		
Hypena masurialis					●	●			●	
Hypena occata					●	●				
Hypena sagitta					●			●	●	
Hypena sinuosa					●			●		
Hypena strigatus					●				●	
Hypena strigatus minna					○				○	
Hypena subcyanea					●			●		
Hypersypnoides submarginata					●	●		●		
Hypocala biarcuata					●			●	●	
Hypocala deflorata					●			●		
Hypocala deflorata deflorata					○			○		
Hypocala rostrata					●	●				
Hypocala subsatura					●			●		
Hyposada hirashimai				E	●			●	●	
Hyposemansis singha					●	●				
Hypospila bolinoides					●	●			●	
Idia fulvipicta					●	●				
Iscadia pulchra					●				●	
Iscadia sp.				E	●	●		●		
Ischyja ferrifracta					●	●			●	
Ischyja manlia					●	●		●	●	
Karana hoenei					●	●		●		
Karana hoenei inornata				e	○	○		○		
Karana laetevirens					●	●				
Labanda sp.				E	●				●	
Lacera noctilio					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Lacera procellosa					●			●		
Lagoptera juno					●			●	●	
Lophomilia takao					●	●				
Lophonycta nigropurpurata				E	●	●		●		
Lophoruza lunifera					●	●		●	●	
Loxioda parva				E	●				●	
Luceria fletcheri					●	●		●		
Luceria oculalis					●			●	●	
Macrobarasa albibasis					●	●			●	
Maliattha separata					●	●		●		
Maliattha signifera					●	●		●	●	
Masca abactalis					●			●		
Mecodina albodentata					●	●		●	●	
Mecodina cineracea					●	●				
Mecodina fasciata				E	●				●	
Mecodina kurosawai				E	●			●		
Melapia bifasciata					●	●		●		
Melapia japonica					●	●				
Melapia kishidai				E	●				●	
Metaemene atriguttata					●	●		●	●	
Metaemene atriguttata maculata					○	○		○	○	
Metaemene hampsoni					●			●	●	
Miaromima kobesi				E	●				●	
Micreremites azumai				E	●				●	
Micreremites pallens				E	●			●		
Mimachrostia fasciata					●				●	
Mimachrostia owadai				E	●			●		
Mocis undata					●	●		●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Mythimna compta					●	●		●	●	
Mythimna curvilinea					●			●		
Mythimna decisissima					●			●		
Mythimna formosana					●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Mythimna hamifera					●	●		●	●	
Mythimna inouei					●	●	●			
Mythimna nigrilinea					●			●		
Mythimna opada					●				●	
Mythimna polysticha					●	●		●		
Mythimna separata					●			●	●	
Mythimna simillima					●	●		●	●	
Mythimna stenographa					●			●		
Mythimna stolida					●	●	●	●	●	
Mythimna uruma				E	●			●		
Mythimna yu					●			●	●	
Naarda pectinata				E	●				●	
Naranga aenescens					●			●		
Narangodes haemorranta					●	●	●	●		
Neachrostia purpureoflava				E	●				●	
Neustrotia albicincta					●	●			●	
Nodaria externalis					●	●		●	●	
Nycteola coStå /is					●	●			●	
Olulis japonica					●			●		
Olulis puncticinctalis					●	●		●	●	
Olulis shigakii				E	●				●	
Ophisma gravata					●	●		●	●	
Ophiusa coronata					●			●		
Ophiusa disjungens					●	●		●		
Ophiusa disjungens indiscriminata					○	○		○		
Ophiusa microtirhaca					●			●	●	
Ophiusa tirhaca					●			●		
Ophiusa trapezium					●	●		●	●	

Scientific Name	IUCN -RL (2016)*2	MOEJ -RLn(2015)*3	National Natural Monuments*4	Endemic to Middle and South Ryukyus*5	Four Islands Containing the Nominated Property	Middle Ryukyus		South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Ophiusa triphaenoides					●	●	●	●		

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Oraesia emarginata					●			●		
Oraesia excavata					●			●	●	
Orthogonia sugii				E	●	●				
Orthosia fausta					●	●		●	●	
Orthosia nigromaculata					●				●	
Oruza brunnea					●			●	●	
Oruza glaucotorna					●	●			●	
Oruza obliquaria					●	●	●	●	●	
Oruza stragulata					●	●				
Othreis fullonia					●			●	●	
Othreis homaena					●				●	
Ozarba punctigera					●				●	
Pangrapta sp.				E	●	●		●		
Pangrapta flavomacula					●			●		
Pantydia metaspila					●			●	●	
Paracolax fentoni					●	●				
Paracolax pacifica					●	●				
Paracolax pryeri					●	●		●		
Paracrama angulata					●				●	
Penicillaria jocosatrix					●				●	
Penicillaria maculata					●	●				
Perinaenia accipiter					●			●		
Phalga clarirena					●			●		
Phyllodes consobrina					●	●		●		
Plataplecta pruinosa					●	●		●	●	
Plataplecta pruinosa consanguis					○	○		○	○	
Plusiodonta coelonota					●	●		●	●	
Plusiopalpa adrasta					●				●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Polydesma boarmoides					●	●				
Progonia kurosawai					●				●	
Progonia oileusalis					●	●		●	●	
Prolophota trigonifera					●	●			●	
Protodeltote pygarga					●	●				
Protoschrankia minuta				E	●	●				
Pseuderiopus albiscripta					●				●	
Pseudeustrotia bipartita					●	●		●	●	
Remigia frugalis					●	●		●	●	
Rhynchaglaea scitula					●	●		●		
Risoba basalis					●				●	
Risoba prominens					●	●		●	●	
Rivula albipunctata				E	●			●		
Rivula basalis					●			●		
Rivula cognata					●	●		●	●	
Rivula leucanioides					●	●		●		
Rivula sp.					●			●		
Sasunaga longiplaga					●			●		
Scedopla inouei				E	●	●				
Schrankia costaestrigalis					●	●		●		
Schrankia seinoi				E	●	●	●			
Scriptoplusia nigriluna					●	●		●		
Selepa celtis					●			●	●	
Seneratia praecipua					●				●	
Serrodes campana					●			●	●	
Sesamia azumai					●	●		●	●	
Sesamia inferens					●	●		●	●	
Sesamia turpis					●	●		●	●	

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Simplicia caeneusalis					●	●	●	●	●	
Simplicia mistacalis					●			●	●	
Simplicia niphona					●	●				
Simplicia xanthoma					●	●	●	●	●	
Spirama helicina					●				●	
Spodoptera cilium					●			●	●	
Spodoptera exempta					●			●		
Spodoptera exigua					●	●		●	●	
Spodoptera litura					●			●	●	
Spodoptera pecten					●			●	●	
Spodoptera picta					●	●		●	●	
Stenhypena longipennis				E	●	●		●	●	
Stictoptera curcullioides					●			●	●	
Sugia idiostygia					●	●				
Tamba gensanalis					●			●	●	
Targalla delatrix					●			●	●	
Thyas honesta					●				●	
Thysanoplusia orichalcea					●			●	●	
Tipasa renalis					●				●	
Tiracola aureata					●	●			●	
Trichoplusia daubei					●			●		
Trichoplusia lectula					●				●	
Trichoplusia ni					●			●	●	
Trichosea champa					●			●		
Trigonodes hyppasia					●			●	●	
Trigonodes hyppasia hyppasia					○			○	○	
Ulotrichopus macula					●	●				
Westermannia elliptica					●	●				

Scientific Name	IUCN -RL (2016)[*2]	MOEJ -RLn(2015)[*3]	National Natural Monuments[*4]	Endemic to Middle and South Ryukyus[*5]	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Xanthodes intersepta					●	●		●		
Xanthodes transversa					●	●		●	●	
Xenapamea pacifica					●			●		
Xylena formosa					●			●		
Xylena nihonica					●			●		
Xylopolia bella					●	●				
Xylopolia bella amamiensis				e	○	○				
Zanclognatha yaeyamalis				E	●			●	●	
Zanclognatha yakushimalis					●	●		●		
Zonoplusia ochreata					●	●		●	●	

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*1: As for Red List categories of IUCN, details are given on the last page.
*2: As for Red List categories of Ministry of the Environment Government of Japan, details are given on the last page.
*3: SNM: Special Natural Monument, NM: Natural Monument
*4: E: Endemic species, e: Endemic subspecies
●: shows the distribution of species, ○: shows the distribution of subspecies

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Endemic to Middle and South Ryukyus*4	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
DECAPODA										
ATYIDAE										
Paratya compressa	LC				●	●	●	●	●	
Atyopsis spinipes	LC				●	●	●	●	●	
Caridina leucosticta	LC				●	●	●	●	●	
Caridina multidentata	LC				●	●	●	●	●	
Caridina serratirostris	LC				●	●	●	●	●	
Caridina grandirostris	LC				●			●	●	
Caridina typus	LC				●	●	●	●	●	
Caridina celebensis	LC				●	●		●		
Caridina prashadi	LC	NT			●				●	
Caridina rubella	LC	NT			●			●		
Atyoida pilipes	LC	NT			●			●	●	
Caridina laoagensis	LC				●			●	●	
Halocaridinides trigonophthalma		NT			●			●		
Caridina okinawa	DD			E	●			●		
Caridina propinqua	LC	NT			●				●	
Caridina macrodentata	DD			E	●				●	
Neocaridina brevirostris				E	●				●	

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Endemic to Middle and South Ryukyus*4	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Neocaridina iriomotensis	LC	NT		E	●				●	
PALAEMONIDAE										
Macrobrachium australe	LC				●	●	●	●	●	
Macrobrachium formosense	LC				●	●	●	●	●	
Macrobrachium japonicum	LC				●	●	●	●		
Macrobrachium lar	LC				●	●	●	●	●	
Macrobrachium latimanus	LC				●			●	●	
Palaemon paucidens					●			●		
Macrobrachium gracilirostre	LC	NT			●			●	●	
Macrobrachium equidens	LC				●	●		●	●	
Macrobrachium grandimanus	LC				●			●	●	
Macrobrachium latidactylus	LC	NT			●			●	●	
Macrobrachium placidulum	LC	VU			●	?		●		?: Unverified information
Macrobrachium lepidactyloides	LC				●				●	
Macrobrachium shokitai	LC	NT		E	●				●	
Macrobrachium sp.				?	●				●	?: Unverified information
ALPHEIDAE										
Metabetaeus minutus		NT			●			●		
POTAMIDAE										
Geothelphusa minei	LC	NT		E	●				●	
Geothelphusa sakamotoana	LC	NT		E	●	●	●	●		
Geothelphusa obtusipes	LC	NT		E	●	●	●			
Amamiku amamensis	LC	VU		E	●	●	●			
Candidiopotamon okinawense	LC	NT		E	●			●		
Geothelphusa grandiovata	LC	VU		E	●			●		
Geothelphusa aramotoi	LC	VU		E	●			●		

Scientific Name	IUCN -RL (2016)*1	MOEJ -RL (2015)*2	National Natural Monuments*3	Endemic to Middle and South Ryukyus*4	Four Islands Containing the Nominated Property	Middle Ryukyus			South Ryukyus	Notes
						Amami-Oshima Is.	Tokunoshima Is.	Okinawa Is.	Iriomote Is.	
Geothelphusa tenuimanus	NT	CR+EN		E	●			●		
Geothelphusa fulva	LC	NT		E	●				●	
Ryukyum yaeyamense	LC	NT		E	●				●	
VARUNIDAE										
Eriocheir japonicus					●	●	●	●		
Varuna litterata					●	●		●	●	
Utica gracilipes					●				●	
Utica borneensis					●	●		●	●	

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The Categories of Red List

* Categories of IUCN Red List

EX	EXTINCT: A taxon is Extinct when there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its histori
EW	EXTINCT IN THE WILD: A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalized population (or populations) well outside the past range. A taxon is presumed Extinct in the Wild when exhaustive surveys
CR	CRITICALLY ENDANGERED: A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered, and it is therefore considered to be facing an extremely high risk of extinction in the
EN	ENDANGERED: A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered, and it is therefore considered to be facing a very high risk of extinction in the wild.
VU	VULNERABLE: A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable, and it is therefore considered to be facing a high risk of extinction in the wild.
NT	NEAR THREATENED: A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in t
LC	LEAST CONCERN: A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.
DD	DATA DEFICIENT: A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status.
LR(1994 category)	LOWER RISK: A taxon is Lower Risk when it has been evaluated, does not satisfy the criteria for any of the categories Critically Endangered, Endangered or Vulnerable. Taxa included in the Lower Risk category can be separated into three subcategories:
LR/cd	Conservation Dependent. Taxa which are the focus of a continuing taxon-specific or habitat-specific conservation programme targeted towards the taxon in question, the cessation of which would result in the taxon qualifying for one of the threatened catego
LR/nt	Near Threatened. Taxa which do not qualify for Conservation Dependent, but which are close to qualifying for Vulnerable.
LR/lc	Least Concern. Taxa which do not qualify for Conservation Dependent or Near Threatened.

** Categories of Red List published by Ministry of the Environment, Government of Japan.

EX	Extinct: A taxon is considered extinct in Japan.
EW	Extinct in the wild: A taxon known only to survive in cultivation or in captivity.
CR	Threatened IA: Critically Endangered. A taxon is facing an extremely high risk of extinction in the wild immediate future.
EN	Threatened IB: Endangered. A taxon is not Critically Endangered but is facing a very high risk of extinction in the wild in the near future.
VU	Threatened II: Vulnerable. A taxon believed likely to move into the upper rank in near future if the casual factors continue operating.
NT	Near threatened: A taxon which is close to qualifying for vulnerable.
DD	A taxon which has unsufficient information for evaluation.
LP	Popolations which is isolated locally and are highly at risk of extinction.

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Appendix 3

*****These documents are tentative translations for the appendices of the nomination of the property.

Legal instruments of protection applying to the nominated property

3-1: Natural Parks Act (Excerpt)
3-2: Law on the Administration and Management of National Forests (Extract)
3-3: National Forests Administration and Management Bylaw (Extract)
3-4: Guidelines for Establishment and Administration of Protected Forests
3-5: Wildlife Protection, Control and Hunting Management Act (Excerpt)
3-6: Act on Conservation of Endangered Species of Wild Fauna and Flora (Excerpt)
3-7: Act on the Prevention of Adverse Ecological Impacts Caused by Specified Invasive Alien Species (Excerpt)
3-8: Law for the Protection of Cultural Property (Extract)
3-9: The Ordinance to Protect Endangered Wild Fauna and Flora of Kagoshima Prefecture
3-10: Amami-Oshima Island and Tokunoshima Island Municipal Ordinances to Protect Endangered Species of Wild Fauna and Flora
3-11: Pet Cat Ordinances in Amami-Oshima Island, Tokunoshima Island, Yambaru, and Iriomote Island

3-1 Natural Parks Act

(Excerpt)

(Act No. 161 of June 1, 1957)

Last amended by Act No. 69 of June 13, 2014

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- Section 4 Protection and Utilization (Article 20 to Article 37)
- Section 5 Ecosystem Maintenance and Recovery Programs (Article 38 to Article 42)
- Section 6 Scenic Area Protection Agreements (Article 43 to Article 48)
- Section 7 Park Management Organizations (Article 49 to Article 54)
- Section 8 Expenses (Article 55 to Article 61)
- Section 9 Miscellaneous Provisions (Article 62 to Article 71)

Chapter III Prefectural Natural Parks (Article 72 to Article 81)

Chapter IV Penal Provisions (Article 82 to Article 90)

Supplementary Provisions

Chapter I General Provisions

(Purpose)

Article 1

The purpose of this Act is to contribute to the health, recreation and enlightenment of citizens and to contribute to the conservation of biological diversity by protecting excellent natural scenic areas and promoting the utilization of those areas.

(Definitions)

Article 2

In this Act, the meanings of the terms listed in the following items are as prescribed respectively in those items.

(i) "Natural Parks" means National Parks, Quasi-National Parks, and Prefectural Natural Parks.

(ii) "National Park" means an outstanding natural scenic area (including a marine landscape area; the same applies hereinafter except for Section 6 of the following Chapter and Article 74) that is prominent enough to represent the scenery of Japan and that is designated by the Minister of the Environment pursuant to the provisions of Article 5, paragraph (1).

(iii) "Quasi-National Park" means an excellent natural scenic area that is equivalent to a National Park and is designated by the Minister of the Environment pursuant to the provisions of Article 5, paragraph (2).

(iv) "Prefectural Natural Park" means an excellent natural scenic area designated by a prefecture pursuant to the provisions of Article 72.

(v) "Park Plan" means a plan concerning a regulation or project for the protection or utilization of a National Park or Quasi-National Park.

(vi) "Park Facility Project" means a project implemented based on a Park Plan concerning the facilities, specified by a Cabinet Order, for the protection or utilization of a National Park or a Quasi-National Park.

(vii) "Ecosystem Maintenance and Recovery Program" means a project implemented based on a Park Plan for the maintenance or recovery of an ecosystem in a National Park or a Quasi-National Park.

(Responsibility of the State, etc.)

Article 3

(1) In accordance with the basic principles of environmental conservation prescribed in Articles 3 through 5 of the Basic Environment Act (Act No. 91 of 1993), the State, local

public entities, business operators, and users of Natural Parks shall each make efforts in their respective positions to protect excellent natural scenic areas and promote the proper use of those areas.

(2) In light of the fact that the protection of fauna and flora living or growing in Natural Parks is significant for protecting the scenery of Natural Parks, the State and local public entities shall take measures to protect the scenery of Natural Parks with the aim of ensuring ecosystem diversity and other biological diversity in Natural Parks.

(Respect for Property Rights and Accommodating Other Public Interests)

Article 4

In the application of this Act, in addition to the provisions governed by Article 3 of the Nature Conservation Act (Act No. 85 of 1972), the ownership, mining rights and other property rights of relevant persons must be respected and national land development and other public interests must also be taken into consideration.

Chapter II National Parks and Quasi-National Parks

Section 1 Designations

(Designation)

Article 5

(1) National Parks are to be designated by the Minister of the Environment by specifying their boundaries after hearing the opinions of the prefectures concerned and the Central Environment Council (hereinafter referred to as the “Council”).

(2) Quasi-National Parks are to be designated by the Minister of the Environment, based on a request by the prefectures concerned, by specifying their boundaries after hearing the opinion of the Council.

(3) If the Minister of the Environment designates a National Park or Quasi-National Park, he/she shall give public notice in the official gazette of that designation and the boundaries of that National Park or Quasi-National Park.

(4) The designation of a National Park or Quasi-National Park will take effect upon public notice under the preceding paragraph.

(Withdrawal of Designation and Changes to Boundaries)

Article 6

(1) If the Minister of the Environment intends to withdraw the designation or change the boundaries of a National Park, he/she shall hear the opinions of the prefectures concerned and the Council.

(2) If the Minister of the Environment intends to withdraw the designation or change the boundaries of a Quasi-National Park, he/she shall hear the opinions of the prefectures concerned and the Council; provided, however, that the expansion of the boundaries of a Quasi-National Park must be based on a request by the prefectures concerned.

(3) The provisions of paragraphs (3) and (4) of the preceding Article apply *mutatis mutandis* to the withdrawal of the designation and the change to the boundaries of a National Park or Quasi-National Park.

Section 2 Park Plans

(Establishment of Park Plans)

Article 7

(1) Park Plans concerning National Parks are to be established by the Minister of the Environment after hearing the opinions of the prefectures concerned and the Council.

(2) Park Plans concerning Quasi-National Parks are to be established by the Minister of the Environment based on a request by the prefectures concerned after hearing the opinion of the Council.

(3) If the Minister of the Environment establishes a Park Plan, he/she shall give public notice of an outline of that Park Plan in the official gazette and make that Park Plan available for public inspection.

(Abolishment of and Changes to Park Plans)

Article 8

(1) If the Minister of the Environment intends to abolish or change a Park Plan concerning a National Park, he/he shall hear the opinions of the prefectures concerned and the Council.

(2) If the Minister of the Environment intends to abolish or change a Park Plan concerning a Quasi-National Park, he/she shall hear the opinions of the prefectures concerned and the Council; provided, however, that any addition to a Park Plan must be based on a request by the relevant prefecture.

(3) The provisions of paragraph (3) of the preceding Article apply *mutatis mutandis* to an abolishment of or change to a Park Plan by the Minister of the Environment.

Section 3 Park Facility Projects

(Establishment of Park Facility Projects)

Article 9

(1) Park Facility Projects concerning National Parks (hereinafter referred to as "National Park Facility Project") are to be established by the Minister of the Environment after hearing the opinion of the Council.

(2) Park Facility Projects concerning Quasi-National Parks (hereinafter referred to as "Quasi-National Park Facility Project") are to be established by a prefectural governor.

(3) If the Minister of the Environment establishes a National Park Facility Project, he/she shall give public notice of an outline of that project.

(4) If a prefectural governor establishes a Quasi-National Park Facility Project, he/she shall give public notice of an outline that project.

(5) The provisions of paragraphs (1) and (3) apply *mutatis mutandis* to any discontinuance of or change to a National Park Facility Project by the Minister of the Environment, and the provisions of the preceding paragraph apply *mutatis mutandis* to any discontinuance of or change to a Quasi-National Park Facility Project by a prefectural governor.

(Implementation of National Park Facility Projects)

Article 10

(1) National Park Facility Projects are to be implemented by the State.

(2) A local public entity or another public entity specified by a Cabinet Order (hereinafter referred to as "Public Entity") may, after consulting with the Minister of the Environment, implement part of a National Park Facility Project as provided by an Ordinance of the Ministry of the Environment.

(3) A person other than the State or a Public Entity may implement part of a National Park Facility Project as provided by an Ordinance of the Ministry of the Environment after obtaining accreditation from the Minister of the Environment.

(4) A person seeking consultation under paragraph (2) or a person seeking accreditation under the preceding paragraph shall submit a written request for consultation or a written application with a description of the following matters to the Minister of the Environment as provided by an Ordinance of the Ministry of the Environment.

(i) Name and address, and in the case of a juridical person, the name of the representative person of that juridical person

(ii) Type of facilities specified by a Cabinet Order stipulated in Article 2, paragraph (6) (hereinafter referred to as "Park Facilities" in this Article)

(iii) Location of the Park Facilities

(iv) Size of the Park Facilities

(v) Method of managing or operating the Park Facilities

(vi) In addition to the preceding items, any matter specified by an Ordinance of the Ministry of the Environment

(5) A written request for consultation or written application under the preceding paragraph must be submitted together with a drawing showing the location of the Park Facilities and other documents specified by an Ordinance of the Ministry of the Environment.

(6) If a person that has consulted under paragraph (2) or obtained accreditation under paragraph (3) (hereinafter referred to as a "National Park Facility Project Operator") intends to change any matter listed in the items of paragraph (4), the person shall consult with the Minister of the Environment if it is a Public Entity, and that person shall obtain accreditation from the Minister of the Environment if it is a person other than the State or a Public Entity; provided, however, that this does not apply to minor changes specified by an Ordinance of the Ministry of the Environment.

(7) A person seeking consultation or accreditation under the preceding paragraph shall submit the written request for consultation or a written application with a description of the matters pertaining to that change to the Minister of the Environment as provided by an Ordinance of the Ministry of the Environment.

(8) The provisions of paragraph (5) apply *mutatis mutandis* to any written request for consultation or written application under the preceding paragraph.

(9) If a National Park Facility Project Operator makes a minor change specified by an Ordinance of the Ministry of the Environment under the proviso of paragraph (6), that operator shall notify the Minister of the Environment of that change without delay.

(10) Conditions may be attached to an accreditation under paragraph (3) or (6) to the extent required for the protection or utilization of a National Park.

(Orders for Improvement)

Article 11

If the Minister of the Environment considers it necessary to ensure the proper implementation of a National Park Facility Project, he/she may issue an order to a person who has obtained accreditation under paragraph (3) of the preceding Article to implement necessary measures to improve the facilities pertaining to that National Park Facility Project or to otherwise improve the implementation of that National Park Facility Project.

(Succession)

Article 12

(1) If a juridical person that is a National Park Facility Project Operator has effected a merger (except when that juridical person that is a National Park Facility Project Operator merges with a juridical person that is not a National Park Facility Project Operator and the former

is the surviving juridical person) or a split (limited to where the entire National Park Facility Project is to be succeeded) and if the surviving juridical person after the merger, the juridical person established in the merger, or the juridical person to succeed to the entire National Park Facility Project after the split (hereinafter referred to as "Merging Juridical Person, Etc." in this paragraph) is a Public Entity, and that Merging Juridical Person, Etc. has consulted with the Minister of the Environment, or if the Merging Juridical Person, Etc. is a juridical person other than the State or a Public Entity and that Merging Juridical Person, Etc. has obtained approval from the Minister of the Environment, that Merging Juridical Person, Etc. will succeed to the position of that National Park Facility Project Operator.

(2) If a National Park Facility Project Operator dies and his/her heir (if there are two heirs or more and if the heirs have selected the heir to succeed to the National Park Facility Project by the unanimous consent of the heirs, he/she will mean that heir, hereinafter the same applies in this Article) intends to continue that National Park Facility Project, that heir shall submit an application to the Minister of the Environment and obtain that approval within 60 days from the death of the decedent.

(3) If an heir has applied for approval under the preceding paragraph, the approval under Article 10, paragraph (3) provided to the decedent will be deemed to have been provided to that heir from the date of the death of the decedent until that heir receives notice of whether he/she will receive that approval.

(4) An heir who has obtained approval under paragraph (2) shall succeed to the position of National Park Facility Project Operator pertaining to the decedent.

(Suspension or Discontinuance of National Park Facility Projects)

Article 13

If a National Park Facility Project Operator intends to suspend or discontinue a National Park Facility Project in whole or in part, it shall notify the Minister of the Environment to that effect in advance as provided by an Ordinance of the Ministry of the Environment.

(Loss of Effect and Revocation of Accreditation)

Article 14

(1) If a project to be implemented as a National Park Facility Project requires the permission, accreditation, or other measure by an administrative agency pursuant to the provisions of any other law or regulation and that measure is revoked or otherwise ceases to be effective, the accreditation under Article 10, paragraph (3) pertaining to that project will cease to be effective.

(2) If an authorization under Article 10, paragraph (3) ceases to be effective pursuant to the provisions of the preceding paragraph, the person with respect to which that accreditation has ceased to be effective shall notify the Minister of the Environment to that effect within 30 days from the date on which that accreditation ceases to be effective.

(3) If a person that has obtained accreditation under Article 10, paragraph (3) falls under any of the following items, the Minister of the Environment may revoke the authorization under that paragraph.

(i) If that person violates the provisions of Article 10, paragraph (6) or (9) or the provisions of the preceding Article

(ii) If that person violates a condition attached to an accreditation under Article 10, paragraph (3) or (6) pursuant to the provisions of paragraph (10) of that Article

(iii) If that person violates an order pursuant to the provisions of Article 11

(iv) If that person obtains accreditation under Article 10, paragraph (3) or (6) by deception or other wrongful means

(Restoration Orders, etc.)

Article 15

(1) If a person that has obtained accreditation under Article 10, paragraph (3) discontinues that National Park Facility Project, or if accreditation under that paragraph ceases to be effective or is revoked, the Minister of the Environment may, if it is considered necessary for the protection of the National Park, order the person that discontinued that project or the person with respect to which that accreditation has ceased to be effective or been revoked to restore that National Park to its original state or take necessary alternative measures within a reasonable period to the extent necessary for that protection.

(2) If the Minister of the Environment intends to give a restoration order or take necessary alternative measures pursuant to the provisions of the preceding paragraph (hereinafter referred to as “Restoration, Etc.” in this Article) and it is impossible to ascertain without fault the person to which that order of Restoration, Etc. is to be made, the Minister of the Environment may carry out that Restoration, Etc. or have a person ordered or delegated by the Minister of the Environment carry out that Restoration, Etc. at the expense of the person to which that order of Restoration, Etc. is to be made. In this case, the Minister of the Environment shall give public notice in advance that the that Restoration, Etc. will be carried out within a reasonable period and that the Minister of the Environment or a person ordered or delegated by the Minister of the Environment will carry out that Restoration, Etc. if that Restoration, Etc. is not carried out within that period.

(3) A person that intends to carry out Restoration, Etc. pursuant to the provisions of the preceding paragraph shall carry an identification card and present that to relevant persons.

(Implementation of Quasi-National Park Facility Projects)

Article 16

(1) Quasi-National Park Facility Projects are to be implemented by prefectures; provided, however, that the State is not precluded from implementing projects pertaining to roads or any other projects in accordance with the Road Act (Act No. 180 of 1952) or any other law.

(2) A Public Entity other than a prefecture may implement part of a Quasi-National Park Facility Project after consulting with the prefectural governor as provided by an Ordinance of the Ministry of the Environment.

(3) A person other than the State or a Public Entity may implement part of a Quasi-National Park Facility Project after obtaining accreditation from the prefectural governor as provided by an Ordinance of the Ministry of the Environment.

(4) The provisions of Article 10, paragraph (4) and (5) apply *mutatis mutandis* to consultation under paragraph (2) and accreditation under the preceding paragraph. The provisions of Article 10, paragraphs (6) to (9), Article 12, paragraph (1), and Article 13 apply *mutatis mutandis* to persons that have carried out consultation under paragraph (2). The provisions of Article 10, paragraphs (6) to (10), Articles 11 to 13, Article 14, paragraph (3), and the preceding Article apply *mutatis mutandis* to persons that have obtained accreditation under the preceding paragraph. The provisions of Article 14, paragraphs (1) and (2) apply *mutatis mutandis* to accreditation under the preceding paragraph. In this case, the phrase "the Ministry of the Environment" in those provisions is deemed to be replaced with "a prefectural governor," the phrase "National Park" in Article 10, paragraph (10) is deemed to be replaced with "Quasi-National Park," the phrase "National Park Facility Project" in Article 11, Article 14, paragraph (1), and paragraph (1) of the preceding Article is deemed to be replaced with "Quasi-National Park Facility Project," the phrase "that National Park Facility Project" in Article 12, paragraphs (1) and (2) is deemed to be replaced with "that Quasi-National Park Facility Project," the phrase "Public Entity" in paragraph (1) of that Article is deemed to be replaced with "Public Entity other than a prefecture," the phrase "of the National Park Facility Project" in Article 13 is deemed to be replaced with "of the Quasi-National Park Facility Project," and the phrase "of the National Park" in paragraph (1) of the preceding Article is deemed to be replaced with "of the Quasi-National Park."

(Collection of Reports and On-Site Inspections)

Article 17

(1) The Minister of the Environment may ask a person that has obtained accreditation under Article 10, paragraph (3) and a prefectural governor may ask a person that has obtained accreditation under paragraph (3) of the preceding Article, to the extent required for

enforcement of the provisions of this section, to report on the status of the implementation of that National Park Facility Project or Quasi-National Park Facility Project and other necessary matters, or cause an official of that ministry or prefecture to enter the facilities pertaining to that National Park Facility Project or Quasi-National Park Facility Project and inspect equipment, books, documents, and other items or question relevant persons.

(2) An official who carries out an on-site inspection pursuant to the provisions of the preceding paragraph shall carry an identification card and present that to relevant persons.

(3) The authority under the provisions of paragraph (1) must not be construed as extending to criminal investigations.

(Delegation to a Cabinet Order)

Article 18

In addition to the provisions in this Section, necessary matters concerning the implementation of Park Facility Projects are to be specified by a Cabinet Order.

(Maintenance of Cleanliness)

Article 19

The State and local public entities shall, when it is considered necessary, maintain the cleanliness of roads, open spaces for public uses, camping grounds, ski slopes, swimming areas, and other public use sites in National Parks or Quasi-National Parks in cooperation with the managers of those public use sites.

Section 4 Protection and Utilization

(Special Zones)

Article 20

(1) The Minister of the Environment may, in regard to a National Park, and prefectural governors may, in regard to Quasi-National Parks, designate special zones within the boundaries of those parks (excluding marine areas) based on Park Plans for the purpose of maintaining the scenic beauty of those parks.

(2) The provisions of Article 5, paragraphs (3) and (4) apply *mutatis mutandis* to the designation of special zones, the withdrawal of designations of special zones, and changes to the boundaries of special zones. In this case, the phrase “the Minister of the Environment” in Article 5, paragraph (3) is deemed to be replaced with “the Minister of the Environment or a prefectural governor” and the phrase “official gazette” in that paragraph is deemed to be replaced with “in the official gazette or a prefectural bulletin, respectively.”

(3) The acts listed in the following items must not be carried out within a special zone (with the exception of a special protection zone; hereinafter the same applies in this Article) without the permission of the Minister of the Environment in the case of a National Park or the permission of a prefectural governor in the case of a Quasi-National Park; provided, however, that this provision does not apply to acts to be carried out as emergency measures necessitated by an extraordinary disaster and acts set out in item (iii) to be implemented for the maintenance and conservation of forests.

(i) Constructing, reconstructing, or extending structures

(ii) Felling trees or bamboo

(iii) Damaging trees or bamboo within a zone designated by the Minister of the Environment

(iv) Mining minerals or quarrying soil and stones

(v) Raising or lowering the water level or water volume of a river, lake, pond, etc.

(vi) Discharging sewage or waste water into a lake, pond, or wetland designated by the Minister of the Environment or a water area or waterway that flows into such a lake, pond, or wetland and that is within one kilometer of such a designated lake, pond, or wetland by installing a drainage facility

(vii) Installing or setting up advertisements or other similar items, or displaying advertisements or other similar items on structures, etc.

(viii) Accumulating or storing soil and stones or other materials designated by the Minister of the Environment outdoors

(iv) Reclaiming land from a water area by landfill or drainage

(x) Cultivating land or otherwise changing the shape of land

(xi) Collecting or damaging alpine plants or other plants designated by the Minister of the Environment

(xii) Planting or sowing of seeds within a zone designated by the Minister of the Environment of plants that are not indigenous to that zone or plants designated by the Minister of the Environment as those with a potential risk to the conservation of the scenic beauty of that zone

(xiii) Capturing, killing, or wounding an animal that lives in the mountains or another animal designated by the Minister of the Environment, or collecting or damaging the eggs of such an animal

(xiv) Releasing within a zone designated by the Minister of the Environment an animal that is not indigenous to that zone or an animal designated by the Minister of the Environment as that with a potential risk to the conservation of the scenic beauty of that zone (if that designated animal is livestock, including the grazing of that livestock)

(xv) Altering the color of a roof, wall surface, fence or wall, bridge, steel tower, water-pipe, or similar item

(xvi) Entering into wetlands or similar areas designated by the Minister of the Environment during the period designated for each such area

(xvii) Using a horse, vehicle or motorboat, or landing an aircraft in an area other than an area designated by the Minister of the Environment other than on a road, open space for public use, rice field, pasture, or residential land

(xviii) Any act other than those listed in the preceding items that might affect the maintenance of the scenic beauty of a special zone and is specified by a Cabinet Order

(4) The Minister of the Environment or a prefectural governor shall not grant permission under the preceding paragraph if any activity listed in the items of the preceding paragraph fails to conform to the standards specified by an Ordinance of the Ministry of the Environment.

(5) If a prefectural governor intends to grant permission under paragraph (3) for a Quasi-National Park and an act pertaining to that permission constitutes an activity prescribed in an Ordinance of the Ministry of the Environment in view of its impact on the scenic beauty of that Quasi-National Park or other circumstances, he/she shall consult with the Minister of the Environment.

(6) A person that has already started an act listed in any item of paragraph (3) at the time that act becomes restricted may continue to conduct that act notwithstanding the provisions of that paragraph. In this case, that person shall give notice to that effect to the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park within three months from the day of the start of that restriction.

(7) A person that has conducted an act listed in any item of paragraph (3) within a special zone as a necessary emergency measure for an extraordinary disaster shall give notice to that effect to the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park within 14 days from the day on which it conducted that act.

(8) A person that intends to plant trees or bamboo or to graze livestock (excluding acts that fall under item (xii) or (xiv) of paragraph (3)) within a special zone shall give advance notice to that effect to the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park.

(9) The provisions of paragraph (3) and the preceding three paragraphs do not apply to the acts listed in the following items.

(i) Acts conducted as the implementation of a Park Facility Project

(ii) Acts conducted as a Certified Ecosystem Maintenance and Recovery Program, Etc. (meaning an Ecosystem Maintenance and Recovery Program to be carried out pursuant to the provisions of Article 39, paragraph (1) or Article 41, paragraph (1) and an Ecosystem Maintenance and Recovery Program that has obtained confirmation under Article 39, paragraph (2) or Article 41, paragraph (2) or that has received certification under Article 39, paragraph (3) or Article 41, paragraph (3), the same applies hereinafter)

(iii) Acts conducted within a Scenic Area Protection Agreement Zone under Article 43, paragraph (1), item (i) based on a Scenic Area Protection Agreement concluded pursuant to the provisions of Article 43, paragraph (1) in accordance with the matters listed in item (ii) or (iii) of that paragraph

(iv) Routine administrative activities, minor activities, and other activities specified by an Ordinance of the Ministry of the Environment

(Special Protection Zones)

Article 21

(1) The Minister of the Environment may, in regard to a National Park, and a prefectural governor may, in regard to a Quasi-National Park, designate a special protection zone within a special zone based on a Park Plan if that is particularly necessary for maintaining the landscape of that park.

(2) The provisions of Article 5, paragraphs (3) and (4) apply *mutatis mutandis* to the designation of special protection zones, the withdrawal of designations of special protection zones, and changes to the boundaries of special protection zones. In this case, the phrase “the Minister of the Environment” in Article 5, paragraph (3) is deemed to be replaced with “the Minister of the Environment or a prefectural governor” and the phrase “official gazette” in that paragraph is deemed to be replaced with “in the official gazette or a prefectural bulletin, respectively.”

(3) The acts listed in the following items must not be carried out within a special protection zone without the permission of the Minister of the Environment in the case of a National Park or the permission of a prefectural governor in the case of a Quasi-National Park; provided, however, that this provision does not apply to acts to be carried out as emergency measures necessitated by an extraordinary disaster.

(i) Acts listed in item (i), item (ii), items (iv) to (vii), item (ix), item (x), item (xv) and item (xvi) of paragraph (3) of the preceding Article

(ii) Damaging trees or bamboo

(iii) Planting trees or bamboo

(iv) Releasing animals (including grazing livestock)

(v) Accumulating or storing items outdoors

(vi) Engaging in controlled burning or making a bonfire

(vii) Collecting or damaging plants other than trees and bamboo, or collecting fallen leaves or fallen branches

(viii) Planting or sowing seeds of plants other than trees or bamboo

(ix) Capturing, killing, or wounding animals, or collecting or damaging their eggs

(x) Using horses, vehicles or motorboats, or landing aircraft in areas other than roads or open spaces for public use

(xi) Any act other than those listed in the preceding items that might affect the maintenance of the landscape of a special protection zone and is specified by a Cabinet Order

(4) The Minister of the Environment or a prefectural governor shall not grant permission under the preceding paragraph if any activity listed in the items of the preceding paragraph fails to conform to the standards prescribed by an Ordinance of the Ministry of the Environment.

(5) If a prefectural governor intends to grant permission under paragraph (3) for a Quasi-National Park and an act pertaining to that permission constitutes an activity prescribed in an Ordinance of the Ministry of the Environment in view of its impact on the landscape of that Quasi-National Park or other circumstances, he/she shall consult with the Minister of the Environment.

(6) A person that has already started an act listed in the items of paragraph (3) at the time that act becomes restricted may continue to conduct that act notwithstanding the provisions of that paragraph. In this case, that person shall give notice to that effect to the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park within three months from the day of the start of that restriction.

(7) A person that has conducted an act listed in any item of paragraph (3) within a marine special zone as a necessary emergency measure for an extraordinary disaster shall give notice to that effect to the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park within 14 days from the day on which it conducted that act.

(8) The provisions of paragraph (3) and the preceding two paragraphs do not apply to The acts listed in the following items.

(i) Acts conducted as the implementation of a Park Facility Project

(ii) Acts conducted as a Certified Ecosystem Maintenance and Recovery Program, Etc.

(iii) Acts conducted within a Scenic Area Protection Agreement Zone under Article 43, paragraph (1), item (i) based on a Scenic Area Protection Agreement concluded

pursuant to the provisions of Article 43, paragraph (1) in accordance with the matters listed in item (ii) or (iii) of that paragraph

(iv) Routine administrative activities, minor activities, and other activities specified by an Ordinance of the Ministry of the Environment

(Marine Special Zones)

Article 22

(1) The Minister of the Environment may, in regard to a National Park, and a prefectural governor may, in regard to a Quasi-National Park, designate a marine special zone in the marine area of that park based on a Park Plan for the purpose of maintaining the marine landscape of that park.

(2) The provisions of Article 5, paragraphs (3) and (4) apply *mutatis mutandis* to the designation of marine special zones, the withdrawal of designations of marine special zones, and changes to the boundaries of marine special zones. In this case, the phrase "the Minister of the Environment" in Article 5, paragraph (3) is deemed to be replaced with "the Minister of the Environment or a prefectural governor" and the phrase "official gazette" in that paragraph is deemed to be replaced with "in the official gazette or a prefectural bulletin, respectively."

(3) The acts listed in the following items must not be carried out within a marine special zone without the permission of the Minister of the Environment in the case of a National Park or the permission of a prefectural governor in the case of a Quasi-National Park; provided, however, that this provision does not apply to acts to be carried out as emergency measures necessitated by an extraordinary disaster and acts set out in item (i), item (iv), item (v), and item (vii) that are necessary for fishery operations such as setting up fishing gear.

(i) Acts listed in Article 20, paragraph (3), item (i), item (iv), and item (vii)

(ii) Capturing, killing or wounding, collecting, or damaging tropical fish, coral, seaweed, or other plants or animals designated by the Minister of the Environment with the consent of the Minister of the Agriculture, Forestry, and Fisheries within an area designated by the Minister of the Environment

(iii) Reclaiming land from a marine area by landfill or drainage

(iv) Changing the shape of the seabed

(v) Mooring items

(vi) Discharging sewage or waste water by installing a drainage facility

(vii) Using a motorboat within areas designated by the Minister of the Environment during the period designated for each such area

(viii) Any act other than those listed in the preceding items that might affect the maintenance of the landscape of a marine special zone and is specified by a Cabinet Order

(4) The Minister of the Environment or a prefectural governor shall not grant permission under the preceding paragraph if any activity listed in the items of the preceding paragraph fails to conform to the standards prescribed by an Ordinance of the Ministry of the Environment.

(5) If a prefectural governor intends to grant permission under paragraph (3) for a Quasi-National Park and an act pertaining to that permission constitutes an activity prescribed in an Ordinance of the Ministry of the Environment in view of its impact on the landscape of a marine area in that Quasi-National Park or other circumstances, he/she shall consult with the Minister of the Environment.

(6) A person that has already started an act listed in the items of paragraph (3) at the time that act becomes restricted may continue to conduct that act notwithstanding the provisions of that paragraph. In this case, that person shall give notice to that effect to the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park within three months from the day of the start of that restriction.

(7) A person that has conducted an act listed in any item of paragraph (3) within a marine special zone as a necessary emergency measure for an extraordinary disaster shall give notice to that effect to the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park within 14 days from the day on which it conducted that act.

(8) The provisions of paragraph (3) and the preceding two paragraphs do not apply to the acts listed in the following items:

(i) Acts conducted as the implementation of a Park Facility Project

(ii) Acts conducted as a Certified Ecosystem Maintenance and Recovery Program, Etc.

(iii) Routine administrative activities, minor activities, and other activities specified by an Ordinance of the Ministry of the Environment

(Utilization Management Zones)

Article 23

(1) The Minister of the Environment may, in regard to a National Park, and a prefectural governor may, in regard to a Quasi-National Park, designate a utilization management zone within a special zone or a marine special zone based on a Park Plan when particularly necessary for maintaining the scenic beauty or landscape of that park and promoting the proper use of that park.

(2) The provisions of Article 5, paragraphs (3) and (4) apply *mutatis mutandis* to the designation of utilization management zones, the withdrawal of designations of utilization management zone, and changes to the boundaries of utilization management zone. In this case, the phrase "the Minister of the Environment" in Article 5, paragraph (3) is deemed to be replaced with "the Minister of the Environment or a prefectural governor" and the phrase "official gazette" in that paragraph is deemed to be replaced with "in the official gazette or a prefectural bulletin, respectively."

(3) Any person shall not enter a regulated utilization zone during a period designated by the Minister of the Environment without certification under paragraph (1) or paragraph (7) of the following Article; provided, however, that this provision does not apply to any case listed in the following items.

(i) Entry in order to conduct an act with permission under Article 20, paragraph (3), Article 21, paragraph (3), or paragraph (3) of the preceding Article (including an act pertaining to consultation pursuant to the provisions of the last sentence of Article 68, paragraph (1)) or an act notified as prescribed in the last sentence of Article 20, paragraph (6) or (8), the last sentence of Article 21, paragraph (6), or the last sentence of paragraph (6) of the preceding Article (including an act pertaining to notice given pursuant to the provisions of Article 68, paragraph (3))

(ii) Entry in order to carry out emergency measures necessitated by an extraordinary disaster

(iii) Entry in order to implement a Park Facility Project

(iv) Entry in order to implement a Certified Ecosystem Maintenance and Recovery Program, Etc.

(iii) Entry in order to conduct acts within a Scenic Area Protection Agreement Zone under Article 43, paragraph (1), item (i) based on a Scenic Area Protection Agreement concluded pursuant to the provisions of Article 43, paragraph (1) in accordance with the matters listed in item (ii) or (iii) of that paragraph

(iv) Entry in order to carry out routine administrative activities, minor activities, and other activities specified by an Ordinance of the Ministry of the Environment

(vii) Any entry other than those listed in the preceding items where the Minister of the Environment or a prefectural governor finds that there are unavoidable circumstances and grants permission

(Certification of Entry)

Article 24

(1) If a user of a National Park or a Quasi-National Park intends to enter a utilization management zone during a period stipulated in paragraph (3) of the preceding Article,

he/she shall obtain certification from the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park with respect to compliance with the following items; provided, however, that this provision does not apply to a user who enters an area after obtaining certification under paragraph (7).

(i) Entry for the purpose of utilizing a National Park or a Quasi-National Park

(ii) Compliance with standards specified by an Ordinance of the Ministry of the Environment that require an entry not to impair the maintenance of the scenic beauty or landscape and the proper use of that park

(2) A person who intends to obtain certification under the preceding paragraph shall, as provided by an Ordinance of the Ministry of the Environment, apply for certification to the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park.

(3) The Minister of the Environment or a prefectural governor shall grant certification under paragraph (1) if he/she finds that the entry for which an application has been made for that certification under paragraph (1) complies with the items of that paragraph.

(4) The Minister of the Environment or a prefectural governor shall issue an entry certification as provided by an Ordinance of the Ministry of the Environment upon granting of a certification under paragraph (1).

(5) If a person who has obtained certification under paragraph (1) loses or destroys the entry certificate under the preceding paragraph, he/she may, as provided by an Ordinance of the Ministry of the Environment, apply for reissuance of that certificate to the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park.

(6) A person who has obtained certification under paragraph (1) shall carry the entry certification certificate issued under paragraph (4) when entering the relevant utilization management zone.

(7) If a person who is a user of a National Park or a Quasi-National Park and who complies with the requirements specified by an Ordinance of the Ministry of the Environment intends to have another user enter a utilization management zone under his/her supervision during the period stipulated in paragraph (3) of the preceding Article, he/she may obtain certification from the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park with respect to compliance of entry by that person and any person who enters a utilization management zone under his/her supervision with the items of paragraph (1).

(8) The provisions of paragraphs (2) to (6) apply *mutatis mutandis* to certification under the preceding paragraph. In this case, the phrase “loses” in paragraph (5) is deemed to be

replaced with “that person and any person who enters a utilization management zone under his/her supervision loses,” and the phrase “person who has obtained certification” in paragraph (6) is deemed to be replaced with “person who has obtained certification and any person who enters a utilization management zone under his/her supervision.”

(Designated Certification Organizations)

Article 25

(1) The Minister of the Environment may, in regard to a National Park, and a prefectural governor may, in regard to a Quasi-National Park, cause a person he/she designates (hereinafter referred to as a “Designated Certification Organization”) to perform all or part of his/her affairs stipulated in the preceding Article (hereinafter referred to as “Certification-Related Affairs”).

(2) Designation of a Designated Certification Organization (hereinafter referred to simply as “Designation” in this Article to Article 29) will be made upon application by a person that intends to perform Certification-Related Affairs.

(3) A person that falls under any of the following items will not receive a Designation:

(i) A minor, adult ward, or person under curatorship

(ii) A person that has filed for bankruptcy and has not had its rights restored

(iii) A person who has been sentenced to imprisonment or a heavier punishment, punished under the provisions of this Act or the Nature Conservation Act, or for whom two years have not passed since the day on which the execution of such a sentence was completed or that person was no longer subject to the execution of such a sentence

(iv) A person with respect to which a Designation has been revoked pursuant to the provisions of Article 29, paragraph (2) or (3) and two years have not passed since the day of that revocation

(v) A juridical person where an officer of that juridical person falls under any of the preceding items

(4) If the Minister of the Environment or a prefectural governor makes a Designation, he/she shall not perform Certification-Related Affairs concerning the utilization management zone pertaining to that Designation.

(5) If the Minister of the Environment or a prefectural governor makes a Designation, he/she shall give public notice to that effect in the official gazette or a prefectural bulletin, respectively.

(6) With respect to the application of the provisions of the preceding Article if Certification-Related Affairs are performed by a Designated Certification Organization, the phrase “the Minister of the Environment in the case of a National Park or the relevant

prefectural governor in the case of a Quasi-National Park" in paragraphs (1) and (7) of that Article, the phrase "the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park" in paragraphs (2) and (5) of that Article (including where those provisions are applied *mutatis mutandis* under paragraph (8) of that Article), and the phrase "The Minister of the Environment or a prefectural governor" in paragraphs (3) and (4) of that Article (including where those provisions are applied *mutatis mutandis* under paragraph (8) of that Article) are deemed to be replaced with "a Designated Certification Organization."

(Standards for Designation)

Article 26

The Minister of the Environment or a prefectural governor shall not make a Designation unless there is no other person that has received Designation as a Designated Certification Organization for the utilization management zone pertaining to an application under paragraph (2) of the preceding Article and that application conforms to the following standards.

(i) The plan concerning the implementation of the Certification-Related Affairs regarding matters such as employees and the method of implementing those Certification-Related Affairs is appropriate for the proper implementation of those Certification-Related Affairs

(ii) The applicant has a financial and technical basis that is sufficient to properly implement the plan for the implementation of the Certification-Related Affairs under the preceding item

(iii) If the applicant is engaged in a business other than the Certification-Related Affairs, there is no risk that the engagement in that business will impair the fair implementation of the Certification-Related Affairs

(iv) In addition to the preceding three items, the applicant is able to fairly and properly implement the Certification-Related Affairs

(Matters to be Observed by Designated Certification Organization)

Article 27

(1) Before a Designated Certification Organization starts to implement Certification-Related Affairs, it shall, as provided by an Ordinance of the Ministry of the Environment, stipulate the rules for the implementation of those Certification-Related Affairs and obtain accreditation for those rules from the Minister of the Environment or the relevant prefectural governor. The same applies if a Designated Certification Organization intends to amend any such rules.

(2) A Designated Certification Organization shall prepare a business plan and an income and expenditure budget for each business year before the beginning of that business year (immediately after the Designation, for the business year during which the date of Designation falls), and obtain accreditation for that plan and budget from the Minister of the Environment or the relevant prefectural governor. The same applies if a Designated Certification Organization intends to amend any such plan or budget.

(3) A Designated Certification Organization shall, within three months after the end of each business year, prepare a business report and statement of accounts for that business year and submit those to the Minister of the Environment or the relevant prefectural governor.

(4) A Designated Certification Organization shall not suspend or discontinue all or part of its Certification-Related Affairs without the permission of the Minister of the Environment or the relevant prefectural governor.

(5) If a Designated Certification Organization suspends all or part of its Certification-Related Affairs with permission under the preceding paragraph, or it becomes difficult for that Designated Certification Organization to implement all or part of those Certification-Related Affairs due to a natural disaster or other event, the Minister of the Environment or the relevant prefectural governor shall, when he/she considers it necessary, implement all or part of those Certification-Related Affairs.

(6) If the Minister of the Environment or a prefectural governor implements all or part of the Certification-Related Affairs under the preceding paragraph, if a Designated Certification Organization discontinues all or part of its Certification-Related Affairs with permission under paragraph (4), or if the Minister of the Environment or a prefectural governor revokes a Designation under Article 29, paragraph (2) or (3), the transfer of the Certification-Related Affairs and other necessary matters will be specified by an Ordinance of the Ministry of the Environment.

(Duty of Confidentiality, etc.)

Article 28

(1) A Designated Certification Organization (if that is a juridical person, its officers, the same applies in the following paragraph), and its employees, and persons formerly in such positions shall not divulge any confidential information he/she comes to know in connection with the Certification-Related Affairs or use that information for his/her personal benefit.

(2) A Designated Certification Organization and its employees who engage in the Certification-Related Affairs will be deemed officials engaged in public service under laws and regulations with respect to the application of the Penal Code (Act No. 45 of 1907) and other penal provisions.

(Supervision Orders, etc. to Designated Certification Organizations)

Article 29

(1) The Minister of the Environment or a prefectural governor may issue to a Designated Certification Organization an order necessary for supervision of Certification-Related Affairs to the extent required for the enforcement of the provisions of Articles 24 to 31.

(2) If a Designated Certification Organization falls under any of the items (except item 4) of paragraph (3) of Article 25, the Minister of the Environment or the relevant prefectural governor shall revoke the Designation issued to that Designated Certification Organization.

(3) If a Designated Certification Organization violates the provisions of Article 27, implements the Certification-Related Affairs in a manner that is not in accordance with the rules in paragraph (1) of that Article, violates an order issued under the provisions of paragraph (1), or is otherwise considered to be unable to implement the Certification-Related Affairs properly and reliably, the Minister of the Environment or the relevant prefectural governor may revoke the Designation issued to that Designated Certification Organization.

(4) The provisions of Article 25, paragraph (5) apply *mutatis mutandis* to the revocation of a Designation under the preceding two paragraphs.

(Collection of Reports and On-Site Inspection)

Article 30

(1) The Minister of the Environment or a prefectural governor may, to the extent required for the enforcement of the provisions of Article 24 to the following Article, request a Designated Certification Organization to report on the Certification-Related Affairs concerned, or cause an official of that ministry or prefecture to enter the offices of a Designated Certification Organization and inspect books, documents, and other necessary items or question relevant persons.

(2) An official who carries out an on-site inspection pursuant to the provisions of the preceding paragraph shall carry an identification card and present that to relevant persons.

(3) The authority under the provisions of paragraph (1) must not be construed as extending to criminal investigations.

(Charges)

Article 31

(1) A person that intends to obtain certification under Article 24, paragraph (1) or (7) or receive reissuance of an entry certification certificate under paragraph (5) of that Article

(including where that is applied *mutatis mutandis* under paragraph (8) of that Article) with respect to a National Park shall pay to the State (if a Designated Certification Organization is implementing the Certification-Related Affairs, that Designated Certification Organization) a charge in an amount specified by a Cabinet Order taking into consideration the actual costs.

(2) If a prefecture collects a charge for a certification under Article 24, paragraph (1) or (7) or reissuance of an entry certificate under paragraph (5) of that Article (including where that is applied *mutatis mutandis* under paragraph (8) of that Article) based on the provisions of Article 227 of the Local Autonomy Act (Act No. 67 of 1947), it may cause the person that intends to receive that certification or reissuance of the entry certificate made by a Designated Certification Organization pursuant to the provisions of Article 25 to pay that charge to that Designated Certification Organization as provided by a Prefectural Ordinance.

(3) Charges paid to a Designated Certification Organization pursuant to the provisions of the preceding two paragraphs are regarded as income of that organization.

(Conditions)

Article 32

Conditions may be attached to a permission under Article 20, paragraph (3), Article 21, paragraph (3), Article 22, paragraph (3), or Article 23, paragraph (3), item (vii) to the extent necessary for the protection of the scenic beauty or landscape of a National Park or a Quasi-National Park.

(Ordinary Zones)

Article 33

(1) A person who intends to undertake the following acts in an area within a National Park or a Quasi-National Park that is not a special zone or a marine special zone (hereinafter referred to as "Ordinary Zone") shall, as provided by an Ordinance of the Ministry of the Environment, notify the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park of the matters specified by an Ordinance of the Ministry of the Environment such as the type of acts, place, implementation method and scheduled date of commencement; provided, however, that this provision does not apply to a person who intends to conduct Acts listed in items (i), (iii), (v) and (vii) that are necessary for fishery operations such as setting up fishing gear in a marine area.

(i) Constructing, reconstructing or extending a structure whose size exceeds the standards specified by an Ordinance of the Ministry of the Environment (including

reconstructing or extending of a structure if the size of that structure will exceed the standards specified by an Ordinance of the Ministry of the Environment after that reconstruction or extension)

(ii) Causing the water level or water volume of a river, lake, pond, etc. in a special zone to increase or decrease

(iii) Installing or setting up advertisements or other similar items, or displaying advertisements or other similar items on structures, etc.

(iv) Reclaiming land from a water area by landfill or drainage

(v) Mining minerals or quarrying soil and stones (in marine areas, limited to marine areas connected to a marine special zone within one kilometer of that marine special zone)

(vi) Changing the shape of land

(vii) Changing the shape of the seabed (limited to marine areas connected to a marine special zone within one kilometer of that marine special zone)

(2) The Minister of the Environment may, in regard to a National Park, and a prefectural governor may, in regard to a Quasi-National Park, when he/she considers it necessary to protect the scenery of that park, give an order to a person that intends to conduct or has conducted an act in a Ordinary Zone that requires notification and is set out in any of the items of the preceding paragraph prohibiting or restricting that act or to take necessary measures to the extent necessary for the protection of the scenery of that park.

(3) A disposition under the preceding paragraph may be made against a person that has given notification under paragraph (1) only within 30 days from the date of that notification.

(4) If a notification is given under paragraph (1) and an on-site inspection is required or there are any other reasonable grounds for it to be impossible to issue a disposition under paragraph (2) within the period prescribed in the preceding paragraph, the Minister of the Environment or the relevant prefectural governor may extend the period prescribed in the preceding paragraph during the time those grounds exist. In this case, a person that has given a notification under paragraph (1) must be notified of that extension and the grounds for that extension within the period prescribed in the preceding paragraph.

(5) A person that has given a notification under paragraph (1) shall not start an act pertaining to that notification unless a period of 30 days has passed after the date of that notification.

(6) The Minister of the Environment may, in regard to a National Park, and a prefectural governor may, in regard to a Quasi-National Park, shorten the period prescribed in the preceding paragraph if he/she considers that there is no risk that that will impair the protection of the scenery of that park.

(7) The provisions of paragraphs (1) and (2) do not apply to the following acts.

(i) Acts conducted as the implementation of a Park Facility Project

(ii) Acts conducted as a Certified Ecosystem Maintenance and Recovery Program, Etc.

(iii) Acts conducted within a Scenic Area Protection Agreement Zone under Article 43, paragraph (1), item (i) based on a Scenic Area Protection Agreement concluded pursuant to the provisions of Article 43, paragraph (1) in accordance with the matters listed in item (ii) or (iii) of that paragraph

(iv) Routine administrative activities, minor activities, and other activities specified by an Ordinance of the Ministry of the Environment

(v) Acts that have already started at the time of the designation of a National Park, a Quasi-National Park, or a Marine special zone or the expansion of the boundaries of any such park

(vi) Acts to be carried out as emergency measures necessitated by an extraordinary disaster

(Discontinuance Orders, etc.)

Article 34

(1) The Minister of the Environment may, in regard to a National Park, and a prefectural governor may, in regard to a Quasi-National Park, if he/she considers it necessary for the protection of that park, order a person that has violated the provisions of Article 20, paragraph (3), Article 21, paragraph (3), Article 22, paragraph (3), or Article 23, paragraph (3), the conditions attached to a permission under Article 32, or a disposition issued under paragraph (2) of the preceding Article to discontinue that act or order any such person or another person that has succeeded to the rights in that land, building, or other structure or item from any such person to restore that zone to its original state or take necessary alternative measures within a reasonable period if restoration to its original state is extremely difficult, to the extent necessary for that protection in both cases.

(2) If the Minister of the Environment or a prefectural governor intends to give a restoration order or take necessary alternative measures pursuant to the provisions of the preceding paragraph (hereinafter referred to as “Restoration, Etc.” in this Article) and it is impossible to ascertain without fault the person to which that order of Restoration, Etc. is to be made, he/she may carry out that Restoration, Etc. or have a person ordered or delegated by him/her carry out that Restoration, Etc. at the expense of the person to which that order of Restoration, Etc. is to be made. In this case, the Minister of the Environment or a prefectural governor shall give public notice in advance that the that Restoration, Etc. will be carried out within a reasonable period and that the Minister of the Environment or a person ordered or delegated by the Minister of the Environment or that prefectural governor will carry out that Restoration, Etc. if that Restoration, Etc. is not carried out within that period.

(3) A person that intends to carry out Restoration, Etc. pursuant to the provisions of the preceding paragraph shall carry an identification card and present that to relevant persons.

(Collection of Reports and On-Site Inspection)

Article 35

(1) The Minister of the Environment may, in regard to a National Park, and a prefectural governor may, in regard to a Quasi-National Park, if he/she considers it necessary for the protection of that park, request a person that has obtained permission under the provisions of Article 20, paragraph (3), Article 21, paragraph (3), Article 22, paragraph (3), or Article 23, paragraph (3), item (vii) or a person whose activities have been restricted or that has been ordered to take necessary measures under Article 33, paragraph (2) to report on the implementation status of those activities and other necessary matters.

(2) The Minister of the Environment may, in regard to a National Park, and a prefectural governor may, in regard to a Quasi-National Park, if he/she considers it necessary for a disposition issued in accordance with the provisions of Article 20, paragraph (3), Article 21, paragraph (3), Article 22, paragraph (3), Article 23, paragraph (3), item (vii), Article 33, paragraph (2), or the preceding Article, to the extent necessary therefor, cause an official of that ministry or prefecture to enter land or a building within the boundaries of that park and inspect the implementation status of the acts listed in each item of Article 20, paragraph (3), each item of Article 21, paragraph (3), each item of Article 22, paragraph (3), Article 23, paragraph (3), item (vii), or each item of Article 33, paragraph (1), or investigate the impact of those acts on the scenery of that park.

(3) An official who carries out an on-site inspection or an on-site investigation under the provisions of the preceding paragraph shall carry an identification card and present that to relevant persons.

(4) The authority under the provisions of paragraphs (1) and (2) must not be construed as extending to criminal investigations.

(Facility Complex Zones)

Article 36

(1) The Minister of the Environment will, in regard to a National Park, and the prefectural governor shall, in regard to a Quasi-National Park, designate a facility complex zone within the boundaries of that park based on a Park Plan for the purpose of collectively developing facilities for the utilization of that park.

(2) The provisions of Article 5, paragraphs (3) and (4) apply *mutatis mutandis* to the designation of facility complex zones, the withdrawal of designations of facility complex zones, and changes to the boundaries of facility complex zones. In this case, the phrase

"the Minister of the Environment" in Article 5, paragraph (3) is deemed to be replaced with "the Minister of the Environment or a prefectural governor" and the phrase "official gazette" in that paragraph is deemed to be replaced with "in the official gazette or a prefectural bulletin, respectively."

(Regulations for Utilization)

Article 37

(1) Any person shall not conduct without due cause any act listed in the following items within a special zone, a marine special zone, or a facility complex zone of a National Park or a Quasi-National Park.

(i) Dumping or leaving garbage or other filthy materials or waste in a manner that is extremely offensive to users of that National Park or Quasi-National Park

(ii) Emitting an extremely offensive odor, generating an extremely loud noise with loud speakers, radios, etc., occupying a viewing spot or resting area, etc. in a selfish manner, touting customers in a repulsive manner, or otherwise significantly annoying users of that National Park or Quasi-National Park

(2) If there is a person conducting any act listed in item (ii) of the preceding paragraph within a special zone, marine special zone, or facility complex zone, an official of the State or the relevant prefecture may instruct that person to stop that act.

(3) An official referred to in the preceding paragraph shall carry an identification card and present that to relevant persons.

Section 5 Ecosystem Maintenance and Recovery Project

(Ecosystem Maintenance and Recovery Project Plans)

Article 38

(1) The Minister of the Environment and the head of a national government organ that is to implement an Ecosystem Maintenance and Recovery Program (hereinafter referred to as the "Minister of the Environment, Etc.") will formulate a plan concerning an Ecosystem Maintenance and Recovery Project (hereinafter referred to as "Ecosystem Maintenance and Recovery Project Plan") in a National Park based on a Park Plan after hearing the opinion of the Council for the purpose of contributing to the proper and effective implementation of an Ecosystem Maintenance and Recovery Project in that National Park.

(2) A prefectural governor may formulate an Ecosystem Maintenance and Recovery Program Plan in a Quasi-National Park based on a Park Plan for the purpose of contributing to the proper and effective implementation of an Ecosystem Maintenance and Recovery Program in that Quasi-National Park.

(3) An Ecosystem Maintenance and Recovery Program Plan must prescribe the following matters.

(i) The goal of the Ecosystem Maintenance and Recovery Program

(ii) The area in which the Ecosystem Maintenance and Recovery Program is to be implemented

(iii) The contents of the Ecosystem Maintenance and Recovery Program

(iv) In addition to the preceding three items, any matter necessary for the proper and effective implementation of the Ecosystem Maintenance and Recovery Program

(4) After formulating an Ecosystem Maintenance and Recovery Program Plan, the Minister of the Environment, Etc. or the relevant prefectural governor shall give public notice of an outline of that plan.

(5) If the Minister of the Environment, Etc. intends to abolish or change an Ecosystem Maintenance and Recovery Program Plan, they shall hear the opinion of the Council.

(6) The provisions of paragraph (4) apply *mutatis mutandis* to the abolishment of or change to an Ecosystem Maintenance and Recovery Program Plan by the Minister of the Environment, Etc. or a prefectural governor.

(Ecosystem Maintenance and Recovery Programs in National Parks)

Article 39

(1) If it is considered necessary to maintain or recover an ecosystem in order to protect a natural scenic area within a National Park, the State will implement an Ecosystem Maintenance and Recovery Program in accordance with an Ecosystem Maintenance and Recovery Program Plan in that National Park.

(2) A local public entity may, as provided by an Ordinance of the Ministry of the Environment, implement an Ecosystem Maintenance and Recovery Program in accordance with an Ecosystem Maintenance and Recovery Program Plan in a National Park after obtaining confirmation from the Minister of the Environment to the effect that that Ecosystem Maintenance and Recovery Program is in compliance with that Ecosystem Maintenance and Recovery Program Plan.

(3) A person other than the State or a local public entity may, as provided by an Ordinance of the Ministry of the Environment, implement an Ecosystem Maintenance and Recovery Program in accordance with an Ecosystem Maintenance and Recovery Program Plan in a National Park after obtaining certification from the Minister of the Environment to the effect that it is able to properly and reliably implement that Ecosystem Maintenance and Recovery Program and that that Ecosystem Maintenance and Recovery Program is in compliance with that Ecosystem Maintenance and Recovery Program Plan.

(4) A person intending to obtain confirmation under paragraph (2) or certification under the preceding paragraph shall submit a written application with a description of the following matters to the Minister of the Environment as provided by an Ordinance of the Ministry of the Environment.

(i) Name and address, and in the case of a juridical person, the name of the representative person of that juridical person

(ii) The area in which the Ecosystem Maintenance and Recovery Program is to be implemented

(iii) The contents of the Ecosystem Maintenance and Recovery Program

(iv) In addition to the preceding three items, any matter specified by an Ordinance of the Ministry of the Environment

(5) A written application prescribed in the preceding paragraph must be submitted together with a drawing showing the areas to be covered by the Ecosystem Maintenance and Recovery Program and other documents specified by an Ordinance of the Ministry of the Environment.

(6) If a person that has obtained confirmation under paragraph (2) or certification under paragraph (3) intends to change any matter listed in the items of paragraph (4), that person shall obtain confirmation from the Minister of the Environment if it is a local public entity and that person shall obtain certification from the Minister of the Environment if it is a person other than the State or a local public entity; provided, however, that this does not apply to minor changes prescribed in an Ordinance of the Ministry of the Environment.

(7) A person intending to obtain confirmation or certification under the preceding paragraph shall submit a written application with a description of the matters pertaining to that change to the Minister of the Environment as provided by an Ordinance of the Ministry of the Environment.

(8) The provisions of paragraph (5) apply *mutatis mutandis* to any written application under the preceding paragraph.

(9) If a person that has obtained confirmation under paragraph (2) or certification under paragraph (3) makes a minor change prescribed by an Ordinance of the Ministry of the Environment under the proviso of paragraph (6), that person shall notify the Minister of the Environment of that change without delay.

(Revocation of Certification)

Article 40

If a person that has obtained certification under paragraph (3) of the preceding Article falls under any of the following items, the Minister of the Environment may revoke the certification under that paragraph.

(i) If it is found that that person is not implementing the Ecosystem Maintenance and Recovery Program in accordance with the Ecosystem Maintenance and Recovery Program Plan in a National Park

(ii) If it is found that that person is no longer able to implement that Ecosystem Maintenance and Recovery Program properly and reliably

(iii) If that person violates the provisions of paragraph (6) or (9) of the preceding Article

(iv) If that person fails to give a report pursuant to the provisions of Article 42 or gives a false report

(v) If that person obtains certification under paragraph (3) or (6) of the preceding Article by deception or other wrongful means

(Ecosystem Maintenance and Recovery Programs in Quasi-National Parks)
Article 41

(1) If it is considered necessary to maintain or recover an ecosystem in order to protect a natural scenic area within a Quasi-National Park, the relevant prefecture may implement an Ecosystem Maintenance and Recovery Program in accordance with an Ecosystem Maintenance and Recovery Program Plan in that Quasi-National Park.

(2) A local public entity other than the State or a prefecture may, as provided by an Ordinance of the Ministry of the Environment, implement an Ecosystem Maintenance and Recovery Program in accordance with an Ecosystem Maintenance and Recovery Program Plan in a Quasi-National Park after obtaining confirmation from the relevant prefectural governor to the effect that that Ecosystem Maintenance and Recovery Program is in compliance with that Ecosystem Maintenance and Recovery Program Plan.

(3) A person other than the State or a local public entity may, as provided by an Ordinance of the Ministry of the Environment, implement an Ecosystem Maintenance and Recovery Program in accordance with an Ecosystem Maintenance and Recovery Program Plan in a Quasi-National Park after obtaining certification from the relevant prefectural governor to the effect that it is able to properly and reliably implement that Ecosystem Maintenance and Recovery Program and that that Ecosystem Maintenance and Recovery Program is in compliance with that Ecosystem Maintenance and Recovery Program Plan.

(4) The provisions of Article 39, paragraph (4) and (5) apply *mutatis mutandis* to confirmations under paragraph (2) and certifications under the preceding paragraph, the provisions of paragraphs (6) to (9) of that Article apply *mutatis mutandis* to persons that have obtained confirmation under paragraph (2), and the provisions of paragraphs (6) to (9) of that Article and the preceding Article apply *mutatis mutandis* to persons that have obtained certification under the preceding paragraph. In this case, the phrase “the Minister of the Environment” in those provisions is deemed to be replaced with “the relevant

prefectural governor," and the phrase "National Park" in paragraph (1) of the preceding Article is deemed to be replaced with "Quasi-National Park."

(Collection of Reports)

Article 42

The Minister of the Environment may ask a person that has obtained certification under Article 39, paragraph (3), and the relevant prefectural governor may ask a person that has obtained certification under paragraph (3) of the preceding Article, to report on the implementation status of that Ecosystem Maintenance and Recovery Program and other necessary matters.

Section 6 Scenic Area Protection Agreements

(Conclusion of Scenic Area Protection Agreements, etc.)

Article 43

(1) The Minister of the Environment, a local public entity, or a park management organization designated under Article 49, paragraph (1) that conducts acts related to management of a natural scenic area based on a Scenic Area Protection Agreement from among the operations set out in Article 50, item (i) may, if it is considered necessary to protect that natural scenic area within a National Park or a Quasi-National Park, manage the natural scenic area within the boundary of land within that park by concluding an agreement prescribing the following matters (hereinafter referred to as a "Scenic Area Protection Agreement") with an owner of land or trees and bamboo within the boundary (excluding marine areas) of that park or a person with the right (except when that right has clearly been established for temporary facilities or other temporary use) to use and earn profits from that land or trees and bamboo (hereinafter collectively referred to as the "Owners of Land, Etc.").

(i) Area of land subject to the Scenic Area Protection Agreement (hereinafter referred to as the "Scenic Area Protection Agreement Zone")

(ii) Matters concerning the method of managing a natural scenic area within the Scenic Area Protection Agreement Zone

(iii) If it is necessary to improve facilities that are necessary with respect to the protection of a natural scenic area within the Scenic Area Protection Agreement Zone, matters concerning the improvement of those facilities

(iv) Effective period of the Scenic Area Protection Agreement

(v) Measures to be taken in the event of a violation of the Scenic Area Protection Agreement

(2) A Scenic Area Protection Agreement must have the consent of all the Owners of Land, Etc. within the Scenic Area Protection Agreement Zone.

(3) The contents of a Scenic Area Protection Agreement must conform to the following standards.

(i) The contents are effective and appropriate for the protection of the natural scenic area

(ii) The contents do not unreasonably restrict the use of the land or trees and bamboo

(iii) The matters mentioned in each item of paragraph (1) conform to the standards specified by an Ordinance of the Ministry of the Environment

(4) If a local public entity intends to conclude a Scenic Area Protection Agreement, it shall, in advance, consult with and obtain consent from the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park; provided, however, that this does not apply if a prefecture concludes a Scenic Area Protection Agreement with respect to land within that prefecture with respect to a Quasi-National Park.

(5) If a park management organization referred to in paragraph (1) intends to conclude a Scenic Area Protection Agreement, it shall obtain accreditation in advance from the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park.

(Public Inspection of Scenic Area Protection Agreement, etc.)

Article 44

(1) If the Minister of the Environment, a local public entity, or a prefectural governor intends to conclude a Scenic Area Protection Agreement or intends to accredit an application for a Scenic Area Protection Agreement under paragraph (5) of the preceding Article, that person shall give public notice to that effect in accordance with an Ordinance of the Ministry of the Environment and make that Scenic Area Protection Agreement available for public inspection by relevant persons for two weeks from the date of that public notice.

(2) If public notice is given pursuant to the preceding paragraph, a relevant person may submit a written opinion about that Scenic Area Protection Agreement to the Minister of the Environment, the relevant local public entity, or the relevant prefectural governor on or before the date of expiration of the inspection period under that paragraph.

(Accreditation for Scenic Area Protection Agreements)

Article 45

If an application for accreditation for a Scenic Area Protection Agreement under Article 43, paragraph (5) falls under all of the following items, the Minister of the Environment or the

relevant prefectural governor shall grant accreditation for that Scenic Area Protection Agreement.

(i) The application procedures are not in violation of any law or regulation

(ii) The contents of the Scenic Area Protection Agreement conform to the standards listed in each item of Article 43, paragraph (3)

(Public Notice, etc. of Scenic Area Protection Agreements)

Article 46

If the Minister of the Environment, a local public entity, or a prefectural governor concludes a Scenic Area Protection Agreement or accredits a Scenic Area Protection Agreement under the preceding Article, that person shall, as provided by an Ordinance of the Ministry of the Environment, give public notice to that effect, make a copy of that Scenic Area Protection Agreement available for public inspection, and explicitly indicate that area is a Scenic Area Protection Agreement Zone.

(Changes to Scenic Area Protection Agreements)

Article 47

The provisions of Article 43, paragraphs (2) to (5) and the preceding three Articles apply *mutatis mutandis* to any change to a matter prescribed in a Scenic Area Protection Agreement.

(Effect of Scenic Area Protection Agreements)

Article 48

A Scenic Area Protection Agreement with respect to which public notice has been given under Article 46 (including where that is applied *mutatis mutandis* under the preceding Article) will also be effective for a person that becomes an Owner of Land, Etc. within the boundary of that Scenic Area Protection Agreement Zone after that public notice.

Section 7 Park Management Organization

(Designations)

Article 49

(1) The Minister of the Environment may, in regard to a National Park, and a prefectural governor may, in regard to a Quasi-National Park, upon application, designate as a park management organization for the purpose of protecting and promoting the proper use of a natural scenic area within that National Park or Quasi-National Park a person that is a general incorporated association, a general incorporated foundation, a specified nonprofit organization under Article 2, paragraph (2) of the Act on Promotion of Specified

Nonprofit Activities (Act No. 7 of 1998), or another juridical person specified by an Ordinance of the Ministry of the Environment and is acknowledged as being capable of properly and reliably performing the operations listed in the items of the following Article.

(2) If the Minister of the Environment or a prefectural governor makes a designation under the preceding paragraph, he/she shall give public notice of the name and address of that park management organization and the location of its office.

(3) If a park management organization intends to change its name or address or the location of its office, it shall give advance notification to that effect to the Minister of the Environment in the case of a National Park or the relevant prefectural governor in the case of a Quasi-National Park.

(4) If notification is given under the preceding paragraph, the Minister of the Environment or the relevant prefectural governor shall give public notice of the matters pertaining to that notification.

(Operations)

Article 50

A park management organization will perform the following operations.

(i) Managing the natural scenic area and conducting other activities that contribute to protection of the natural scenic area based on the Scenic Area Protection Agreement

(ii) Repairing and otherwise maintaining and managing facilities within the National Park or the Quasi-National Park

(iii) Collecting and providing information or materials concerning the protection and promotion of the proper use of the National Park or the Quasi-National Park

(iv) Providing necessary advice and guidance concerning the protection and promotion of the proper use of the National Park or the Quasi-National Park

(v) Conducting investigations and research on the protection and promotion of the proper use of the National Park or the Quasi-National Park

(vi) Conducting operations incidental to the operations listed in the preceding items

(Coordination)

Article 51

A park management organization shall perform the operations listed in item (i) of the preceding Article in close coordination with the Minister of the Environment and any relevant local public entity.

(Orders for Improvement)

Article 52

If the Minister of the Environment or a prefectural governor considers that it is necessary to improve management of the operations by a park management organization, he/she may order that park management organization to take measures necessary for that improvement.

(Revocation of Designations, etc.)

Article 53

(1) If a park management organization violates an order under the provisions of the preceding Article, the Minister of the Environment or the relevant prefectural governor may revoke the designation issued to that park management organization.

(2) If the Minister of the Environment or a prefectural governor revokes a designation under the provisions of the preceding paragraph, he/she shall give public notice to that effect.

(Provision, etc. of Information)

Article 54

The State and local public entities shall provide a park management organization with information and provide guidance and advice necessary for that park management organization to perform its operations.

Section 8 Expenses

(Expenses Necessary for Implementation of Park Facility Projects)

Article 55

The expenses necessary for the implementation of a Park Facility Project are to be borne by the person that implements that Park Facility Project.

(Government Subsidies)

Article 56

The State may, within the limits of the budget, provide a subsidy for part of the expenses necessary for the implementation of a Park Facility Project to the prefecture that is implementing that Park Facility Project, as provided by a Cabinet Order.

(Expenses to be Borne by Local Public Entities)

Article 57

(1) If the State implements a National Park Facility Project and a local public entity gains any particular benefit from the implementation of that National Park Facility Project, the State

may cause that local public entity to bear part of the expenses necessary for that implementation to the extent of that benefit.

(2) If the State intends to cause a local public entity to bear part of the expenses necessary for the implementation of a National Park Facility Project under the provisions of the preceding paragraph, it shall hear the opinion of that local public entity.

(Expenses to be Borne by Beneficiaries)

Article 58

If there is a person that receives a significant benefit from the implementation of a Park Facility Project, the State or a local public entity may cause that person to bear part of the expenses necessary for the implementation of that Park Facility Project to the extent of that benefit.

(Sharing of Expenses by Other Parties)

Article 59

If it becomes necessary to implement a Park Facility Project due to another construction or another act, the State or a local public entity may cause the person that bears expenses for the construction or act that is the cause of that implementation becoming necessary to bear all or a part of those expenses to the extent to which the implementation of that Park Facility Project has become necessary.

(Method of Collecting Expenses to be Borne)

Article 60

The method of collecting expenses to be borne under the provisions of the preceding three Articles and other necessary matters concerning expenses to be borne are to be specified by a Cabinet Order.

(Exclusion from Application)

Article 61

The provisions of this Section do not apply to any Park Facility Project that is a project pertaining to roads under the Road Act or another project with respect to which there are separate provisions in another law regarding the expenses necessary for the implementation of that project.

Section 9 Miscellaneous Provisions

(On-Site Investigations)

Article 62

(1) If an on-site investigation is necessary, the Minister of the Environment may, in regard to the designation of a National Park or a Quasi-National Park, the establishment of a Park Plan, the implementation of a Park Facility Project, or the establishment of a Park Facility Project of a National Park, a prefectural governor may, in regard to the designation of a Quasi-National Park or application for expansion of the boundaries of that park, the establishment of a Park Plan or application for addition to a Park Plan, or the establishment or implementation of a Park Facility Project, and a national government organ other than the Minister of the Environment may, in regard to the implementation of a Park Facility Project, have the relevant officials enter the land of another person, install signs, survey the land, and fell or remove trees or bamboo, or hedges or fences, etc. that pose an impediment to that on-site investigation; provided however, that if there are provisions concerning an on-site investigation in the Road Act or any other law, that on-site investigation must be conducted in accordance with those provisions.

(2) If a national government organ or a prefectural governor intends to have the relevant officials conduct acts pursuant to the provisions of the preceding paragraph, that person shall give notice in advance to that effect to the owner (if the address of the owner is unknown, the possessor of the land; hereinafter the same applies in this Article) and possessor of that land and the owner of the trees and bamboo or the hedges, fences, etc., and give that owner or possessor an opportunity to submit a written opinion.

(3) An official referred to in paragraph (1) shall not enter residential land or land enclosed with hedges, fences, etc. before sunrise or after sunset.

(4) An official referred to in paragraph (1) shall carry an identification card and present that to relevant persons.

(5) An owner or possessor of land or an owner of trees and bamboo or hedges or fences shall not deny or interfere with an entry, installation of signs, or other acts conducted pursuant to provisions of paragraph (1) without reasonable justification.

(Rulings by the Environmental Disputes Coordination Commission)

Article 63

(1) A person that is dissatisfied with a disposition by the Minister of the Environment or a prefectural governor pursuant to the provisions of Article 20, paragraph (3), Article 21, paragraph (3), Article 22, paragraph (3), or Article 33, paragraph (2) may apply to the Environmental Dispute Coordination Committee for a ruling if the reason for that person's complaint concerns coordination with mining, stone quarrying, or gravel quarrying. In this case, that person may not make a request for examination.

(2) The provisions of Article 22 of the Administrative Appeal Act (Act No. 68 of 2014) apply *mutatis mutandis* to cases when an administrative authority that has made a disposition

under the preceding paragraph erroneously instructs that the person may make a request for examination or re-investigation with respect to that disposition.

(Compensation for Losses)

Article 64

(1) The State, in regard to a National Park, and the relevant prefectural governor, in regard to a Quasi-National Park, compensate for losses that would ordinarily arise to a person that suffers losses due to an inability to obtain permission under Article 20, paragraph (3), Article 21, paragraph (3), or Article 22, paragraph (3), due to conditions attached to a permission under the provisions of Article 32, or due to a disposition pursuant to the provisions of Article 33, paragraph (2).

(2) A person that intends to claim for compensation pursuant to the provisions of the preceding paragraph shall make a request for that compensation to the Minister of the Environment with respect to compensation to be paid by the State and to the relevant prefectural governor with respect to compensation to be paid by a prefecture.

(3) If the Minister of the Environment or a prefectural governor receives a request pursuant to the provisions of the preceding paragraph, he/she shall determine the amount of compensation and notify the requestor of that amount.

(4) The State or the relevant prefecture shall compensate for losses that would ordinarily arise to a person that suffers losses due to an act by an official of the State or that prefecture under the provisions of Article 62, paragraph (1).

(5) The provisions of paragraph (2) and (3) apply *mutatis mutandis* to compensation for losses under the provisions of the preceding paragraph. In this case, the phrase “the Minister of the Environment” in paragraphs (2) and (3) is deemed to be replaced with the “minister with jurisdiction over affairs concerning on-site inspections prescribed in Article 62, paragraph (1).”

(Filing of an Action)

Article 65

(1) A person that is dissatisfied with a decision under the provisions of paragraph (3) of the preceding Article (including where that is applied *mutatis mutandis* under paragraph (5) of that Article) may request an increase of the amount of the compensation by filing an action within six months from the date on which that notice is received.

(2) The State or the relevant prefecture will be the defendant in any action filed under the preceding paragraph.

(Compulsory Collection of Expenses to be Borne)

Article 66

(1) If there is a person that has not paid expenses that are to be paid to the State pursuant to the provisions of this Act, the Minister of the Environment shall demand that person make that payment in a written demand specifying a due date for payment.

(2) In the case of the preceding paragraph, the Minister of the Environment may charge a delinquency charge as provided by an Ordinance of the Ministry of the Environment; provided, however, that the delinquency charge must not be more than an amount calculated at an annual rate of 14.5%.

(3) If a person that has received a written demand under the provisions of paragraph (1) does not pay the amount to be paid by the specified due date, the Minister of the Environment may charge expenses to be borne and the delinquency charge pursuant to the provisions of the preceding two paragraphs pursuant to national tax delinquency procedures. In this case, the order of the statutory lien on the expenses to be borne and the delinquency charge will come after national taxes and local taxes.

(4) The delinquency charge will be collected prior to the expenses to be borne.

(Consultation)

Article 67

(1) If the Minister of the Environment intends to make a designation of or expand the boundaries of a National Park or a Quasi-National Park, establish or change a Park Plan, or designate or expand the boundaries of a special zone, special protection zone, marine special zone, or utilization management zone in a National Park, he/she shall consult with the heads of the relevant administrative organs.

(2) If a prefectural governor intends to designate or expand the boundary of a special zone, special protection zone, marine special zone or utilization management zone in a Quasi-National Park, he/she shall consult with the heads of the relevant administrative organs.

(3) If a national government organ other than the Minister of the Environment intends to implement a National Park Facility Project pursuant to the provisions of Article 10, paragraph (1), it shall consult with the Minister of the Environment.

(4) If a national government organ intends to implement a Quasi-National Park Facility Project pursuant to the provisions of the proviso of Article 16, paragraph (1), it shall consult with the relevant prefectural governor.

(Special Provisions in relation to the State)

Article 68

(1) Permission under the provisions of Article 20, paragraph (3), Article 21, paragraph (3), Article 22, paragraph (3), or Article 23, paragraph (3), item (vii) is not required with respect to acts to be carried out by a national government organ. In this case, if that national government organ intends to conduct such an act, it shall consult in advance with the Minister of the Environment in the case of a National Park or with the relevant prefectural governor in the case of a Quasi-National Park.

(2) If a prefectural governor is consulted by a national government organ under the preceding paragraph with respect to a Quasi-National Park and an act pertaining to that consultation constitutes an act prescribed in an Ordinance of the Ministry of the Environment in view of its impact on the scenic beauty or landscape of that Quasi-National Park or other circumstances, he/she shall consult with the Minister of the Environment.

(3) If a national government organ has or intends to conduct an act for which notification is required under the provisions of the last sentence of paragraph (6), or paragraph (7) or (8) of Article 20, the last sentence of paragraph (6), or paragraph (7) of Article 21, the last sentence of paragraph (6), or paragraph (7) of Article 22, or Article 33, paragraph (1), it shall inform the Minister of the Environment in the case of the National Park or the relevant prefectural governor in the case of a Quasi-National Park to that effect pursuant to the procedures for notification set out in those provisions.

(4) If the Minister of the Environment or a prefectural governor receives a notice pursuant to the procedures for notification set out in Article 33, paragraph (1) and he/she considers it necessary for the protection of the scenery of that park, he/she may ask that national government organ to consult on the measures to be taken for the protection of that scenery.

(Delegation of Authority)

Article 69

The authority of the Minister of the Environment prescribed in this Act may be delegated to the director of a Regional Environment Office pursuant to an Ordinance of the Ministry of the Environment.

(Classification of Affairs)

Article 70

The affairs to be processed by a prefecture pursuant to the provisions of Article 20, paragraph (1), Article 5, paragraph (3) as applied *mutatis mutandis* under Article 20, paragraph (2), Article 21, paragraph (1), Article 5, paragraph (3) as applied *mutatis mutandis* under Article 21, paragraph (2), Article 22, paragraph (1), Article 5, paragraph (3) as applied *mutatis mutandis* under Article 22, paragraph (2), and Article 67, paragraph (2) (excluding the provisions

pertaining to utilization management zones) are the item (i) statutory delegated affairs prescribed in Article 2, paragraph (9), item (i) of the Local Autonomy Act.

(Relationship with Wilderness Areas)

Article 71

Any wilderness area designated pursuant to the provisions of Article 14, paragraph (1) of the Nature Conservation Act is excluded from the area of a National Park or a Quasi-National Park.

Chapter III Prefectural Natural Parks (entirely omitted)

Chapter IV Penal Provisions

Article 82

A person who has violated an order under the provisions of Article 15, paragraph (1) (including where that is applied *mutatis mutandis* under Article 16, paragraph (4)) or Article 34, paragraph (1) will be punished by imprisonment with work for not more than one year or a fine of not more than 1,000,000 yen.

Article 83

A person who falls under any of the following items will be punished by imprisonment with work for not more than six months or a fine of not more than 500,000 yen:

(i) A person (limited to a person who has obtained accreditation under Article 10, paragraph (3) or Article 16, paragraph (3)) who has changed a matter listed in any item of Article 10, paragraph (4) (including where that is applied *mutatis mutandis* under Article 16, paragraph (4)) in violation of the provisions of Article 10, paragraph (6) (including where that is applied *mutatis mutandis* under Article 16, paragraph (4))

(ii) A person who has violated the conditions attached to an accreditation under the provisions of Article 10, paragraph (10) (including where that is applied *mutatis mutandis* under Article 16, paragraph (4))

(iii) A person who has violated the provisions of Article 20, paragraph (3), Article 21, paragraph (3), Article 22, paragraph (3), or Article 23, paragraph (3)

(iv) A person who has obtained certification under paragraph (1) or (7) of Article 24 by deception or other wrongful means

(v) A person who has violated the conditions attached to a permission pursuant to the provisions of Article 32

Article 84

A person who has violated the provisions of Article 28, paragraph (1) will be punished by imprisonment with work for not more than six months or a fine of not more than 500,000 yen.

Article 85

A person who has violated an order under the provisions of Article 11 (including where that is applied *mutatis mutandis* under Article 16, paragraph (4)), Article 33, paragraph (2), or Article 52 will be punished by a fine of not more than 500,000 yen.

Article 86

A person who falls under any of the following items will be punished by a fine of not more than 300,000 yen.

(i) A person who has failed to make a report or made a false report under the provisions of Article 17, paragraph (1) or who has refused, obstructed, or evaded an on-site inspection or failed to make a statement or made a false statement in response to a question under the provisions of that paragraph

(ii) A person who has obtained reissuance of an entry certificate under Article 24, paragraph (5) (including where that is applied *mutatis mutandis* under paragraph (8) of that Article) by deception or other wrongful means

(iii) A person who has discontinued all of the Certification-Related Affairs without permission under Article 27, paragraph (4)

(iv) A person who has failed to make a report or made a false report under the provisions of Article 30, paragraph (1), or who has refused, obstructed, or evaded an on-site inspection or failed to make a statement or made a false statement in response to a question under the provisions of that paragraph

(v) A person who has failed to give a notification or given a false notification in violation of the provisions of Article 33, paragraph (1)

(vi) A person who has violated the provisions of Article 33, paragraph (5)

(vii) A person who has failed to make a report or made a false report under the provisions of Article 35, paragraph (1)

(viii) A person who has refused, obstructed, or evaded an on-site inspection or on-site investigation under the provisions of Article 35, paragraph (2)

(ix) A person who has conducted without due cause an act set out in Article 37, paragraph (1), item (i) within a special zone, marine special zone or facility complex zone of a National Park or a Quasi-National Park

(x) A person who has conducted without due cause an act set out in Article 37, paragraph (1), item (ii) without complying with an instruction by a relevant official

3-2 Law on the Administration and Management of National Forests (Extract)

(Law No. 246 of June 23, 1951)

Last amended by Law No. 42 of June 27, 2012

Contents of the Law

Chapter I General Provisions (Articles 1 to 3)

Chapter I-2 Administration and Management Plan (Articles 4 to 6-4)

Chapter I-3 Consignment of Research (Articles 6-5 to 6-16)

Chapter II Lending, Using and Selling (Articles 7 to 8-4)

Chapter III Long-Term Profit-Sharing Afforestation (Articles 9 to 17)

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Chapter V National Forests Permitted to be (Jointly) Used by Local Dwellers (Articles 18 to 24)

Chapter VI Miscellaneous Provisions (Article 25)

Chapter VII Penal Provisions (Articles 26 and 27)

Supplementary Provisions

Chapter I General Provisions

(Purpose of this Law)

Article 1

The purpose of this Law shall be to ensure the appropriate and efficient administration and management of national forests by clarifying administration and management plans and providing matters related to lending, selling, etc. with respect to national forests.

(2) The special rules for the acquisition, maintenance, conservation, utilization, and disposal of national forests under the National Property Law (Law No. 73 of 1948) shall be as provided in this Law, unless otherwise provided by other Law.

(Definitions)

Article 2

"National forests" in this Law means those listed in the following:

(i) state-owned forests and range land which the state provides or has decided to provide for forest management; and

(ii) state-owned forests and range land which are no longer provided for forest management on the basis of consideration for national welfare and thus are ordinary properties as defined in Article 3(3) of the National Property Law (excluding those whose jurisdiction has been transferred to another ministry, agency, etc. as provided in Article 4(2) of said Law and those whose affiliation has been transferred to another department or bureau as provided in Article 4(3) of said Law).

(2) "National forestry business" in this Law means operations for the administration and management of national forests (including maintenance and preservation of private forests carried out by the State where it is considered to be appropriate to regard them as an integral part of national forests for maintain and preserve; the same applies hereinafter.).

(Objectives of Administration and Management of National Forests)

Article 3

The objectives of administration and management of national forests shall be to maintain and improve land conservation function and other public-interest functions of national forests, and to supply forest products in a sustainable and planned way, as well as to use national forests to contribute to the development of industry and the improvement of the welfare of residents in the relevant region.

Chapter I-2 Administration and Management Plan

(Basic Plan for Administration and Management)

Article 4

The Minister of Agriculture, Forestry and Fisheries must establish a basic plan for administration and management of national forests every five years as prescribed by Cabinet Order, while considering 10 years as one term (hereinafter referred to as the "Basic Plan for Administration and Management").

(2) The following matters shall be provided in the Basic Plan for Administration and Management:

(i) basic policy for the administration and management of national forests;

(ii) basic matters related to the maintenance and conservation of national forests;

(iii) basic matters related to the supply of forest products from national forests;

(iv) basic matters related to the utilization of national forests;

(v) basic matters related to the maintenance and preservation of private forests where it is considered to be appropriate to regard them as an integral part of national forests to be maintained and preserved;

(vi) matters related to the system to carry out the national forests business, and other matters related to operation of the business; and

(vii) other matters necessary for the administration and management of national forests.

(3) The Basic Plan for Administration and Management shall be prepared by taking into account preservation of biodiversity in forests, supply of forest products that should meet demands of people, and development and retention of human resources needed for efficient and stable forestry management, and comprehensive and integrated promotion of other measures related to national forest business and private forests.

(4) The Basic Plan for Administration and Management must be consistent with the National Forests Plan, which was established in accordance with the provisions of Article 4(1) of the Forest Law (Law No. 249 of 1951), and other plans for forest maintenance in accordance with the provisions of other laws.

(Public Inspection of Draft Basic Plan for Administration and Management, etc.)

Article 5

The Minister of Agriculture, Forestry and Fisheries, when intending to establish or alter the Basic Plan for Administration and Management, must publicly announce such as prescribed by the Ministry of Agriculture, Forestry and Fisheries Ordinance in advance and provide a draft of the relevant Basic Plan for Administration and Management for public inspection for 30 days from the date of the relevant announcement.

(2) When the Minister of Agriculture, Forestry and Fisheries has made an announcement in accordance with the provisions of the preceding paragraph, those who have comments on the draft Basic Plan for Administration and Management provided for public inspection may give their comments to the

Minister by reasoned documents before the date of the expiration of the public inspection period as in the preceding paragraph.

(3) After the expiration of the public inspection period as in Paragraph (1), the Minister of Agriculture, Forestry and Fisheries must ask for the opinions of the Forestry Policy Council by attaching the summary of comments about the relevant draft Basic Plan for Administration and Management which were made in accordance with the provisions of the preceding paragraph.

(4) If the Minister of Agriculture, Forestry and Fisheries has established or altered the Basic Plan for Administration and Management, he/she must announce such without delay. In doing so, the Minister must also announce the summary of comments made in accordance with the provisions of Paragraph (2) and the results of considerations of the relevant comments.

(Regional Administration and Management Plan)

Article 6

The Director of the Regional Forest Office must establish a plan for the administration and management of national forests (hereinafter referred to as the "Regional Administration and Management Plan") every five years in line with the Basic Plan for Administration and Management, for each forest planning area as in Article 7-2(1) of the Forest Law with respect to national forests under his/her administration and management that is related to the relevant forest planning area, while setting the start of the period of the forest plan for the relevant forest planning area as the start of the period of the relevant plan and considering five years as one term.

(2) The following matters shall be provided in the Regional Administration and Management Plan:

(i) basic matters related to the administration and management of national forests covered by the plan;

(ii) matters related to patrol, the extermination of forest diseases and pests or the prevention of their infestation, and other matters related to the maintenance and conservation of national forests;

(iii) matters related to the establishment of stable business relations for timber, and other matters related to the supply of forest products;

(iv) matters related to the development of industry or the improvement of the welfare of residents in the region, and other matters related to the utilization of national forests;

(v) basic policy for the maintenance of areas provided for public health use and forests within the relevant areas as well as facilities provided for public health use;

(vi) matters related to the construction of forest roads based on the Agreement for the Maintenance and Enhancement of Public Benefit Functions, prescribed in Article 10-15 (1) of the Forest Law, and other matters related to the maintenance and preservation of private forests where it is considered to be appropriate to regard them as an integral part of national forests to be maintained and preserved; and

(vii) other matters necessary for the administration and management of national forests.

(3) The provisions of Article 4(3) shall apply mutatis mutandis to the Regional Administration and

Management Plan.

(4) The Regional Administration and Management Plan must be consistent with the forest plan established in accordance with the provisions of Article 7-2(1) of the Forest Law.

(5) The provisions of the preceding article shall apply mutatis mutandis to the establishment and alteration of the Regional Administration and Management Plan. In such case, "Minister of Agriculture, Forestry and Fisheries" in said article shall read "Director of the Regional Forest Office," and "Forestry Policy Council" in Paragraph (3) of said article shall read "related prefectural governor, related municipal governor, and those who have academic backgrounds for matters mentioned in the items of Paragraph (2) of the following article."

(6) The Director of the Regional Forest Office may ask the governors of the relevant prefectures and the mayors of the relevant municipalities for cooperation he/she regards as necessary for comprehensive and integrated promotion of measures related to national forest business and private forests.

3-3 National Forests Administration and Management Bylaw (Extract)

(January 21, 1999)

Ministry of Agriculture, Forestry and Fisheries Directive No. 2
[Last amendment] Ministry of Agriculture, Forestry and Fisheries Directive No. 7 of March 29, 2013

Chapter 1 General Provisions

(Principle)
Article 1
With respect to the administration and management of national forests, these rules shall apply in addition to the provisions of laws and orders and other governmental instructions.

(Division of National Forests into Blocks)
Article 2
1. The division of National Forests shall be classified in compartments and subcompartments.
2. A block shall be established, in principle, by dividing forests in need of preservation (which means national forests as set forth in Article 2, paragraph 1, of the Law on Administration and Management of National Forests (Law No. 246, 1951: hereafter called the "LAW": the same shall apply hereafter)) for each forest planning area (which means the forest planning area as set forth in Article 5, paragraph 1, of the Forest Law (Law No. 249, 1951: the same shall apply hereafter)) for purposes of making clear the locations of national forests and of contributing to the convenience of the execution of business, and subcompartments shall be established by dividing the block in question if parts exist in a block for which the state of the forest is different from that of the rest, or for which the handling relating to the administration and management is different or otherwise.

(Functional Categories of National Forests)
Article 3
1. Within national forests, the forests needing preservation shall be classified into such categories as listed in any one of the following subparagraphs in terms of a function that is primarily to be demonstrated among various functions held by it:
   (1) Forest Disaster Prevention Type
   (2) Nature Conservation type
   (3) Forest Space Utilization Type
   (4) Comfortable Environment Creation Type
   (5) Water Conservation Type

2. The Forest Disaster Prevention Type is composed of the national forests that should primarily demonstrate the functions of forest disaster prevention and soil conservation from the viewpoint of generating a national land infrastructure that can resist disaster.
3. The Nature Conservation Type is composed of national forests that should primarily demonstrate the function of preserving biodiversity from the viewpoint of preserving biodiversity by taking into account importance of forests as ecosystems.
4. The Forest Space Utilization Type is composed of national forests that should primarily demonstrate the health and recreation or culture function from the viewpoint of offering people places for relaxation and learning, or forming rich natural landscape or historical scenery.
5. The Comfortable Environment Creation Type is composed of national forests that should primarily demonstrate the function of creating comfortable environments from the viewpoint of keeping noise, dust, etc. away from places with conformable living environments.
6. The Water Conservation Type is composed of all the national forests other than those mentioned in paragraph 2 through the preceding paragraph from the viewpoint of ensuring the stable supply of excellent quality water, taking into consideration that the fostering of water resources should be a basic function that all the national forests are expected to demonstrate.

Chapter 2 Regional Administration and Management plan

(Detailed Items of Planned Matters)
Article 4
Details of items to be set forth in the Regional administration and management plan under Article 6, paragraph 1, of the Law shall be as follows:

(1) Basic matters concerning the administration and management of national forests
a. Basic policy for the administration of national forests
b. Matters concerning the administration corresponding to functional categories

(i) Guideline for the administration and management of the Forest Disaster Prevention Type, or other matters concerning the type
(ii) Guideline for the administration and management of the Nature Conservation Type, or other matters concerning the type
(iii) Guideline for the administration and management of the Forest Space Utilization Type, or other matters concerning the type
(iv) Guideline for the administration and management of the Comfortable Environment Creation Type, or other matters concerning the type
(v) Guideline for the administration and management of the Water Conservation Type, or other matters concerning the type

c. Matters that are necessary for contribution for rehabilitation of forests and the forestry industry under the watershed control system

d. Matters concerning the execution of major management
   (i) Total cutting volume
   (ii) Total regeneration volume
   (iii) Total tending volume
   (iv) Total volume of opening and improvement of forest roads
e. Other necessary matters

(2) Matters concerning maintenance and preservation of national forests
a. Matters concerning patrol
b. Matters concerning expelling or preventing infestation of harmful insects in forests
c. Matters concerning forests for which special protection is necessary
d. Other necessary matters

(3) Matters concerning supply of forestry products
a. Matters concerning the establishment of a stable transaction relationship for lumber
b. Other necessary matters

(4) Matters concerning utilization of national forests
a. Policy of promoting utilization of national forests
b. Detailed method of utilization of national forests
c. Other necessary matters

(5) Basic policy concerning areas that are offered for the purpose of public health and concerning the maintenance of forest and of facilities that are offered for the purpose of public health in the area in question
a. Area that is offered for the purpose of public health
b. Basic policy concerning the maintenance of facilities in the area that is offered for the purpose of public health
c. Basic policy concerning the maintenance of forests in the area

(6) Matters concerning the construction of forest roads based on the Agreement for the Maintenance and Enhancement of Public Benefit Functions (the Agreement prescribed in Article 10-15 (1) of the Forest Law; the same applies hereinafter) and other matters concerning the maintenance and preservation of private forests where it is considered appropriate to regard them as an integral part of national forests to be maintained and preserved
a. Basic policy concerning the conclusion of the Agreement for the Maintenance and Enhancement of Public Benefit Functions
b. Matters concerning the maintenance and preservation of private forests where it is considered appropriate to regard them as an integral part of national forests to be maintained and preserved
(7) Matters concerning the maintenance of forests by national participation
a. Matters concerning national participation forests
b. Matters concerning profit sharing forests

c. Other necessary matters

(8) Other matters that are necessary for the administration and management of national forests

a. Matters concerning the development, guidance, and dissemination of technology for the forestry industry

b. Matters concerning regional development

c. Other necessary matters

(Details of Plan)

Article 5

1. The total cutting volume set forth in "(i), d," subparagraph 1, of the preceding Article shall be specified for cases of final cutting and of thinning, by giving due consideration to the matters stated below, in a manner that is consistent with the cutting of standing tree volume set forth in the forest planning of national forests by areas in the forest planning area under paragraph 1, Article 7-2, of the Forest Law (hereafter called the "Forest Planning"):

(1) With respect to the Nature Conservation Type, cutting shall not be carried out except for cutting that is necessary according to the characteristic feature of a subject for which protection is to be considered.

(2) With respect to the Forest Disaster Prevention Type, the Forest Space Utilization Type, and the Comfortable Environment Creation Type, cutting shall be carried out to the extent necessary to maintain the respective functions that are primarily to be demonstrated.

(3) With respect to the Water Conservation Type, the maximum cutting area for the final cutting shall be specified, making it a rule to maintain and enhance the function of conserving water for respective management groups, and the cutting area shall not exceed the maximum cutting area. On such occasions, management groups shall be established by totaling the areas of forest to be treated, relating similarly to management.

2. The purpose of matters concerning the utilization of national forests under subparagraph 4 of the preceding Article shall be described, making it a rule to ensure the development of industry and the enhancement of welfare of residents and so on in the region based on the principle under Article 3, paragraphs 1 and 2, of the Law for Utilization of National Forests (Law No. 108, 1971).

3. The basic policy under subparagraph 5 of the preceding Article concerning areas that are offered for the purpose of public health and concerning the maintenance of facilities and forests that are offered for the public in the area in question shall be determined in the following manner:

(1) Areas under "a" that are offered for the purpose of public health shall be the national forests that are classified into the Forest Space Utilization Type and shall have a specified scope of area that has a predetermined level of unity that is capable of demonstrating highly the function of health and recreation or culture held by the forest from the viewpoint of natural and social conditions and for which the utilization for public health is to be promoted by carrying out the maintenance of facilities and forests that are of substantial size and offered for the purpose of health.

(2) The basic policy under "b" concerning the maintenance of facilities in the area that is offered for the

purpose of public health shall describe the major pattern of use for public health that is to be promoted in the area in question and the maintenance of major facilities that are necessary for such pattern of use and are offered for the purpose of public health, based on natural and social conditions of the national forests in the area in question.

In addition, such basic policy shall describe the harmonization with public benefit functions other than the function of public health held by national forests and other matters for which due consideration is to be given with regard to the maintenance of facilities that are offered for the purpose of public health, based on the natural and social conditions of the national forests in the area in question.

(3) The basic policy under "c" concerning the maintenance of forests in the area shall describe the basic policy concerning the maintenance of forests that is necessary to ensure the promotion of the function of public health held by the national forests in the area in question and the harmonization with public benefit functions other than the function of public health held by national forests in accordance with the guidelines of administration and management and according to the maintenance of facilities in the area that is offered for the purpose of public health.

4. The forests of national participation under "a," subparagraph 7, of the preceding Article shall be selected from among the national forests that are classified as the Forest Space Utilization Type, and for which it is considered appropriate to promote the use for voluntary forest maintenance by people.

(Procedure for Approval and Change of Plan)

Article 6

1. When a Director of a regional forest office intends to specify a regional administration and management plan, the Director shall hear the opinion of the manager of the district forest office that is stationed in the forest area in question.
2. When the Director of the Regional Forest Office drafts a Regional Administration and Management Plan, where he/she finds it necessary, he/she shall hear the opinions of a broad range of the people, in cooperation with the heads of the District Forest Offices.
3. The regional administration and management plan shall be prepared by preparing a written plan.
4. The public notice pursuant to Article 5, paragraph 1, of the Law that is amended to read and applies mutatis mutandis in Article 6, paragraph 5 of the Law shall be given at the regional forest office or at the district forest office having the forest planning area covered by the forest planning area in question, in whole or in part, as its area of jurisdiction, and the public inspection under said paragraph of said Article shall be made at the regional forest office or district forest office having the forest planning area covered by the forest plan in question, in whole or in part, as its area of jurisdiction by making available a draft of such plan to the public inspection.
5. An opinion submitted pursuant to Article 5, paragraph 2, of the Law that is amended to read and applies mutatis mutandis in Article 6, paragraph 5, of the Law shall be properly handled by establishing an opinion settlement commission, etc., in the regional forest office.
6. A hearing of opinions from governors of concerned prefectures and heads of concerned cities, towns, and villages pursuant to Article 5, paragraph 3, of the Law that is amended to read and applies mutatis mutandis in Article 6, paragraph 5 of the Law shall be conducted by using a written instrument by

showing them the draft plan, summary of opinion, and draft processing plan of such opinion.

7. When an opinion is heard from persons having an academic career in such matters as are listed in Article 6, paragraph 2, pursuant to Article 5, paragraph 3, of the Law that is amended to read and applies mutatis mutandis in Article 6, paragraph 5 of the Law, such opinion shall be heard from more than one person.
8. The public announcement of the regional administration and management plan pursuant to Article 5, paragraph 4, of the Law that is amended to read and applies mutatis mutandis in Article 6, paragraph 5, of the Law, summary of opinion from the general public in terms of which a petition was filed pursuant to Article 5, paragraph 2 of the Law, and the result of processing of such opinion shall be made at the regional forest office or at the district forest office having the forest planning area covered by the forest planning area in question, in whole or in part, as its area of jurisdiction by making available the written plan and document that indicates the summary of opinion and the result of processing of such opinion to public inspection. On such occasion, the period of public announcement shall be the planning period of the plan in question.
9. A Director of a regional forest office may change the regional management plan if the Director deems it necessary to do so by reason of change in the present situation of the national forests or the economic situation and other factors.
10. Provisions of paragraphs 1 through 7 inclusive shall apply mutatis mutandis to the procedure in case of change set forth in the preceding paragraph. On such occasion, "written plan" under paragraph 6 shall be amended to read "a section relating to the change of the written plan."

(Report of Plan, etc.)

Article 7

When a Director of a regional forest office specifies or changes a regional administration and management plan, the Director shall report to the Director General of the Forestry Agency without delay and shall give notice to concerned managers of the district forest office.

Chapter 3 Plan to Offer for the Purpose of Public Health

(snip)

Chapter 4 National Forests Operation Plan

(Details of Plan, etc.)

Article 12

1. A Director of a regional forest office shall, in line with forest planning and a regional administration and management plan, specify a national forests operation plan (hereafter called the "Implementation Plan") that has the same planning period as the regional management plan relating to a forest planning area with respect to preservation of the needed forest relating to the area in question for respective

forest planning areas.

2. The Implementation Plan shall specify the following matters:
(1) Name and area of a compartment of national forests
(2) District by functional category set forth in Article 3
(3) Name and area of the management group, cutting age or circulation period, maximum cutting area, cutting method and cutting volume for each cutting place, as well as regeneration method and regeneration volume for each regeneration place
(4) Matters concerning maintenance of forest roads
(5) Matters concerning soil preservation
(6) Name and area of protected forest and green corridor
(7) Name and area of the Agreement for the Maintenance and Enhancement of Public Benefit Functions
(8) Name and area of recreation forest
(9) Other necessary matters

(Details of Plan)
Article 13

1. The name and area of a compartment of national forests under paragraph 2, subparagraph 1, of the preceding Article, as well as the area by functional category mentioned in subparagraph 2 of said paragraph as specified in Article 3 shall be indicated in the drawings of the National Forests Operation Plan.
2. The cutting method and cutting volume for each cutting place, as well as the regeneration method and regeneration volume for each regeneration place under paragraph 2, subparagraph 3, of the preceding Article shall be specified in accordance with the matters listed in the subparagraphs under Article 5, paragraph 1, and taking into account selected functions other than that to be demonstrated primarily, efficient utilization of forest roads or other network of roads, wind hazard, forest fire, prevention of damage by insects, and local situations, and with the predetermined cutting order being imagined and indicated in the cutting and planting plan.
3. The forest reserve under paragraph 2, subparagraph 6, of the preceding Article shall select such national forests as are included in the Nature Conservation Type of the forests set forth in Article 3, paragraph 3, and for which it is considered appropriate to carry out control, taking into account the inhabitation of animals and plants and the situation of the inhabitation and requests of the region, for the purpose of contributing specifically to the maintenance of the natural environment consisting of the ecosystem of virgin forest, protection of animals and plants, conservation of genetic resources, and development of operation and management technology, and other factors.
4. Green corridors under paragraph 2, subparagraph 6, of the preceding Article shall select such national forests for which it is considered appropriate to carry out control, taking into account the distribution of wild animals and plants, the establishment situation of forest reserve, and requests of the region, for the purpose of securing a migration pathway for wild animals and plants and of contributing to the expansion of habitats and exchange of wild animals and plants between them.
5. Recreation forests under paragraph 2, subparagraph 8, of the preceding Article shall select such national forests as are included in the Forest Space Utilization Type set forth in Article 3, paragraph 4,

and for which it is considered appropriate to maintain the facility and forest offered for health, cultural, and educational utilization by people in a specifically active manner, taking into account the natural landscape, the present situation and future prospect of utilization of the forest on health, cultural, and educational grounds and requests of the region.

(Omitted below)

3-4 Guidelines for Establishment and Administration of Protected Forests

Date of the revision, 27, Sep 2015

Section 1. Purpose

During the passage of the quarter century from the last revision of the Protected Forest System to meet more sophisticated and diversified public demands in 1989, a surroundings of the system include advancement of scientific knowledge on conservation of biodiversity and methodologies for administration of protected areas have been vastly changed.

With a view to responding to these changes, and protecting and administering forest ecosystems and rare wildlife in national forests into the future, these Guidelines have been established to adopt a more concise and effective categorization of protected forest focusing on sustainability of forest ecosystems and populations there, rebuild an easier-to-understand and more efficient administration system, and introduce the concept of restoration of forest ecosystems, as well as to set out other basic principles that should be applied to establishment and administration of protected forests into the future for contributing conserve biodiversity of the national forests.

Section 2. Definitions

In these Guidelines, the following terms are defined as follows:

1. Primeval natural forest

   Natural forests with no record of cutting, or those with conditions similar to those of neighboring areas with no record of cutting.

   Natural forests affected by, for instance, any human act or immigrants at parts of their upper-story trees or under-story vegetation are also included when they form an endemic forest ecosystem that should especially be protected and administered.
2. Restoration

   Work to be performed for forests that, despite global-level value they could deliver, have lost the ability of self-sustained rehabilitation due to human act, natural disaster, or isolation from populations of the same species, by establishing target forest type and technical method while taking into

consideration opinions offered by experts based on their scientific knowledge, and, based on them, implementing adaptive management mainly in long-term forest operations, to lead them to grow to be biocenoses composed basically of their potential natural vegetation.

3. Monitoring

A survey to be performed on a continuous basis to maintain appropriate understanding of the state of a protected forest, once established, and evaluate it in light of the purpose of designation according to the "Manual for the Monitoring Survey of Protected Forests," stipulated in the "Implementation Procedures for Measures for Maintenance and Conservation of Protected Forests, etc." (Notification of the Director-General of the Forestry Agency, 21-Rin/Koku/Kei No. 64, dated April 9, 2010).

Section 3. Classification of protected forests

Protected forests are classified, according to their purpose, into Forest Ecosystem Reserves, Biocenosis Protection Forests, and Rare Population Protection Forests.

Section 4. Establishment and administration of protected forests

1. Forest Ecosystem Reserves

(1) Purpose

A Forest Ecosystem Reserve is established for protecting and administering primeval natural forests representative of climates or forest zones observed in Japan for preservation of natural environments composed of forest ecosystems, protection of wildlife and genetic resources, development of forest operation and administration techniques, and research for scientific study, among others.

(2) Basic principles for designation

The Director-General of the Regional Forest Office is to designate as a Forest Ecosystem Reserve an area covered mainly with primeval natural forests representative of climates or forest zones observed in Japan and serving as an integrated ecosystem, stretching over 2,000 hectares or more in principle (for specific environments, such as islands and peninsulas, 500 hectares or more, in principle) when they especially need protection and administration for the purpose stated above in (1).

Any area designated as stated above may include grasslands, wetlands, alpine zones, rocky lands, or other landforms that should be protected and administered in an integrated manner together with primeval natural forests representative of climates or forest zones observed in Japan.

(3) Classification of zones

An area of Forest Ecosystem Reserve is divided into Preservation Zone and Conservation and Utilization Zone.

(A) Preservation Zone is parts of an area to be covered mainly with primeval natural forests representative of climates or forest zones observed in Japan.

(B) Conversation and Utilization Zone is the area to be covered mainly, in principle, with the same type of natural forests as those in Preservation Zone, having land large enough to serve as a buffer keeping it free from direct influence from the outside. A Conservation and Utilization Zone may include artificial forests when it is appropriate to protect and administer them in an integrated manner together with natural forests.

(4) Principles for treatment

In a Forest Ecosystem Reserve, Preservation Zone and Conservation and Utilization Zone are to be dealt with in the manner as stated below.

(A) Preservation Zone

Preservation Zone, in principle, is to leave to natural transition without human act.

(B) Conservation and Utilization Zone

(a) Natural forests there are to be dealt with in the same manner as those in a Preservation Zone. Artificial forests may undergo operations of multi-storied forests (man-made multi-storied forest operations) to transform into natural forests in the future.

(b) Grasslands, wetlands, alpine zones, rocky lands, or other specific environments there may be protected and administered together, when necessary.

(C) The acts stated below are allowed, when necessary:

(a) Those recognized as necessary for scientific research, nature observation and education, utilization of genetic resources, or other public interest grounds (other than those stated below in (d));

(b) Those recognized as necessary for emergency and disaster management, including extinction of forest fires, and recovery from disasters, such as large-scale forestland collapse, landslide, and eruptions, as well as any measures to prevent and/or control such disasters;

(c) Those recognized as necessary to control damage caused by pests and invasion of immigrants;

(d) Construction of small-scale facilities used for scientific research, nature observation and education, and other, similar purposes;

(e) Cutting and carrying out of dead or damaged trees found in a Conservation and Utilization Zone;

(f) Installation of signs and other similar objects; and

(g) Other acts to be performed pursuant to other laws and regulations.

(5) Others

(A) In any forests adjacent to a Forest Ecosystem Reserve, for the purpose of avoiding drastic changes in environments of the protected forest, clear- or phased-cutting are not to be conducted in principle as part of forest operations there, and instead man-made

multi-storied forest or natural forest operations, mainly multi-storied and selective cutting, are to be conducted.

(B) The area of a Forest Ecosystem Reserve is to be demarcated along geographical lines, in principle, with signs installed there when necessary to distinguish it.

(C) A Conservation and Utilization Zone is to be set up, in principle, along a geographical line in such a manner that it will completely enclose a Preservation Zone in it. This may apply on a discretionary basis; however, if, due to its location or other conditions, a Preservation Zone is considered to be kept free from external influence without Conservation and Utilization Zones completely enclosing it.

2. Biocenosis Protection Forest

(1) Purpose

A Biocenosis Protection Forest is established for protecting and administering forests with an endemic biological community for preservation of natural environments composed of forest ecosystems, protection of wildlife and genetic resources, development of forest operation and administration techniques, and research for scientific study, among others.

(2) Basic principles for designation

The Director-General of the Regional Forest Office is to designate as a Biocenosis Protection Forest an area that corresponds to any of the following items when it especially needs protection and administration for the purpose stated above in (1).

(A) An area covered mainly with well-preserved natural forests with endemic biological community of a certain scale, stretching over 300 hectares or more, in principle; or

(B) An area covered with well-preserved natural forests with endemic biological community, including periphery forests to be expected efforts of restoration, stretching over 1,000 hectares or more, in principle;

Any area designated as stated above may include grasslands, wetlands, alpine zones, rocky lands, or others that should be protected and administered in an integrated manner together with natural forests with fully preserved natural conditions.

(3) Classification of zones

An area of Biocenosis Protection Forest is to be divided into Preservation Zone and Conservation and Utilization Zone. This may not apply, however, when there is no rational reason for zone classification.

(A) Preservation Zone is to be covered mainly with primeval natural forests.

(B) Conversation and Utilization Zone is the area to be covered mainly, in principle, with the same type of natural forests as those in Preservation Zone, having land large enough to serve as a buffer keeping it free from direct influence from the outside. A Conservation and Utilization Zone may include artificial forests when it is appropriate to protect and administer them in an integrated manner together with natural forests.

(4) Principles for treatment

In a Biocenosis Protection Forest, Preservation Zone and Conservation and Utilization Zone are to be dealt with in a manner as stated below.

(A) Preservation Zone

Preservation Zone, in principle, is to leave to natural transition without human act.

(B) Conservation and Utilization Zone

(a) Natural forests there are to be dealt with in the same manner as those in a Preservation Zone. Artificial forests may undergo operations of multi-storied forests (man-made multi-storied forest operations) to transform into natural forests in the future.

(b) Grasslands, wetlands, alpine zones, rocky lands, or other specific environments there may be protected and administered together, when necessary.

(C) The acts stated below are allowed, when necessary:

(a) Those recognized as necessary for scientific research, nature observation and education, utilization of genetic resources, restoration, or other public interest grounds (other than those stated below in (d));

(b) Those recognized as necessary for emergency and disaster management, including extinction of forest fires, and recovery from disasters, such as large-scale forestland collapse, landslide, eruptions, as well as any measures to prevent and/or control such disasters;

(c) Those recognized as necessary to control damage caused by pests and invasion of immigrants;

(d) Construction of small-scale facilities used for scientific research, nature observation and education, and other, similar purposes;

(e) Cutting and carrying out of dead or damaged trees found in a Conservation and Utilization Zone;

(f) Installation of signs and other similar objects; and

(g) Other acts to be performed pursuant to other laws and regulations.

(5) Restoration

Biocenosis Protection Forests, which is considered that it needs restoration, is to be dealt with in a manner as stated below.

(A) Preparation of a Restoration Plan

The Director-General of the Regional Forest Office is to prepare a Restoration Plan which includes stated below by compiling the measures presented by the Sub-committee for Restoration of Protected Forests to be established pursuant to Section 6-2-(2) for Biocenosis Protection Forest for which restoration is recognized as necessary.

(a) Significance and purpose of restoration;

(b) Current state of the Forest, and the target forest type;

(c) Area for restoration;

(d) Methodology and policy for restoration; and

(e) Scheme for implementation management;

(B) Coordination with the Forestry Agency

The Director-General of the Regional Forest Office is to, prior to start the restoration, present the Director-General of the Forestry Agency with his/her opinion on it to ask for his/her opinion.

(C) Public relations

Regular meetings are to be held with people, especially local residents, to offer to a broad range of stakeholders' information on work underway for restoration and the accumulation of restoration techniques, among others.

(6) Others

(A) In any forests adjacent to a Biocenosis Protection Forest, for the purpose of avoiding drastic changes in environments of the protected forest, clear- or phased-cutting are not to be conducted in principle as part of forest operations there, and instead man-made multi-storied forest or natural forest operations, mainly multi-storied and selective cutting, are to be conducted.

(B) The area of a Biocenosis Protection Forest is to be demarcated along geographical lines, in principle, with signs installed there when necessary to distinguish it.

(C) A Conservation and Utilization Zone is to be set up, in principle, along a geographical line in such a manner that it will completely enclose a Preservation Zone in it. This may apply on a discretionary basis, however, if, due to its location or other conditions, a Preservation Zone is considered to be kept free from external influence without Conservation and Utilization Zones completely enclosing it.

3. Rare Population Protection Forest

(1) Purpose

A Rare Population Protection Forest is established for the purpose of preserving and administering forests necessary for inhabitation of rare wildlife to improve sustainability of the wildlife population ("population") and facilitate protection of wildlife and genetic resources, and research for scientific study, among others.

(2) Basic principles for designation

The Director-General of the Regional Forest Office is to designate as a Rare Population Protection Forest an area with a population that corresponds to any of the following items when, in principle, it stretches over a land of five hectares or more that satisfies conditions necessary for survival of the population and especially needs protection and administration for the purpose stated above in (1). For the designation, not only habitats for the wildlife but also other appropriate places for regeneration of forests necessary for population for its survival, among others, are to take into consideration.

(A) a rare population;

(B) a population found around the distribution limit, etc.;

(C) a population isolated from other populations;

(D) a population for preserving genetic resources;

(E) a population formed under special conditions of location, such as grasslands, wetlands, alpine zones, and rocky lands;

(F) a population which it is feared may disappear in the future due to global warming or other harmful impact; or

(G) Other populations whose protection is recognized as necessary;

When any enclaves are found around a forest or other types of land lying in a critical situation as it is feared that a population set as a target for protection there may disappear, and they serve as habitats for populations with some genetic connection or places appropriate for regeneration, said enclaves, together with the forest or other types of land forming a core, may be designated, for the purpose of protecting a group of populations (meta-population) necessary for survival of wildlife there, as the same Rare Forest Protection Forest for their protection and administration.

(3) Principles for treatment

(A) According to the state of population there, Rare Forest Protection Forests are to be managed as stated below:

(a) Forest operations may be conducted as far as they are necessary for protection and/or multiplication of population set as a target.

(b) When any disturbances, such as temporary appearance of bare area, needs to take place through the process of transition for sustainable inhabitation of target population, necessary forest operations may be conducted to create such environments.

(B) The acts stated below are allowed, when necessary:

(a) Those recognized as necessary for scientific research, nature observation and education, utilization of genetic resources, or other public interest grounds (other than those stated below in (d));

(b) Those recognized as necessary for emergency and disaster management, including extinction of forest fires, and recovery from disasters, such as large-scale forestland collapse, landslide, eruptions, as well as any measures to prevent and/or control such disasters;

(c) Those recognized as necessary to control damage caused by pests and invasion of immigrants;

(d) Construction of small-scale facilities used for scientific research, nature observation and education, and other, similar purposes;

(e) Installation of signs and other similar objects; and

(f) Other acts to be performed pursuant to other laws and regulations.

(4) Others

(A) In any forests adjacent to a Rare Population Protection Forest, for the purpose of avoiding drastic changes in environments of the protected forest, clear- or phased-cutting are not to be conducted in principle as part of forest operations there, and instead man-made multi-storied forest or natural forest operations, mainly multi-storied and selective cutting,

are to be conducted. This may not apply, however, when clear- or phased-cutting is recognized as necessary for creating environments of the protected forest, among others.

(B) The area of a Rare Population Protection Forest is to be demarcated along geographical lines, in principle, with signs installed there when necessary to distinguish it.

(C) The shape of a Rare Population Protection Forest is to be made consideration to minimize the edge effect which affects internal habitat caused by exposing most peripheral part of fragmented habitats directly to completely different external environments.

Section 5. Monitoring

1. The Director-General of the Regional Forest Office is to conduct monitoring or other, simpler types of current-conditions survey for established protected forests to have correct understanding of their conditions.
2. Monitoring is to be conducted for each of the protected forests, taking into consideration their own circumstances, at one of the intervals stated below:
   (1) Less than five years for protected forests
   Serving to preserve populations faced with great risk of becoming extinct in the near future in the region;
   (2) Five years for protected forests
   (A) Going through the process of transition;
   (B) Undergoing restoration;
   (C) Inhabited by populations with difficulty in sustainability although designated as target for protection there;
   (D) Influenced by impact coming from the outside;
   (E) Clearly showing damage caused by beasts, birds, pests, disease and impact of immigrants;
   (F) Clearly showing impact of global warming; or
   (G) Expected to undergo other significant changes during a short period of time; or
   (3) Ten years for protected forests
   Other than those which correspond to either (1) or (2).
3. A monitoring survey is to be performed before a fiscal year in which work gets started for preparing a National Forests Operation Plan ("Operation Plan"). For protected forests for which monitoring is to be conducted at intervals of ten years, when an Operation Plan is prepared during a period in which no monitoring is conducted, some simpler type of current-conditions survey, such as inspection tours carried by Forest Officers and photo-shooting at fixed points, or for remote places, inspection of aerial photos, are to be conducted before a fiscal year in which work gets started for the preparation.
4. For protected forests with, for instance, so great stability seen in their vegetation that no significant changes are expected to take place there, a scheduled monitoring survey may be postponed to the next interval after consulting the need of the scheduled survey to the Committee for Administration

of Protected Forests, to be established pursuant to Section 6-1, at a meeting to be held in a fiscal year before the scheduled survey.

5 When a monitoring survey detects any changes in conditions of a protected forest, modification of demarcation or other procedures is to be conducted promptly as stipulated in Section 7-3.

Section 6. Committee for Administration of Protected Forests

1. Establishment of the Committee, and consideration

The Director-General of the Regional Forest Office is to, for the purpose of considering matters concerning, among others, establishment of protected forests, as well as their modification, abolition, administration and monitoring, and conservation of biodiversity related to protected forests, establish the Committee for Administration of Protected Forests ("Administration Committee"), and ask it for opinions.

2. Membership of the Administration Committee, and establishment of sub-committee, etc.

(1) Membership of the Administration Committee

The Administration Committee is to be composed of experts on forests, the forestry industry, and the natural environment, officials of relevant local governments, and others, all of whom are to be appointed by the Director-General of the Regional Forest Office.

(2) Establishment of sub-committee, etc.

The Director-General of the Regional Forest Office may, when necessary, set up a sub-committee under the Administration Committee to ask it to consider technical issues.

For restoration work, however, the Director-General is to set up a Sub-committee for Restoration of Protected Forests ("Restoration Sub-committee") under the Administration Committee for each of the protected forests for which the work is to be performed. The Restoration Sub-committee is to be composed of experts on forests, the forestry industry, and the natural environment, officials of relevant local governments, local stakeholders, and others, all of whom are to be appointed by the Director-General of the Regional Forest Office, and consider about the target forest type and methodology for restoration, among others.

3. Points to note

(1) When the Administration Committee of a Regional Forest Office considers a matter which may concern the jurisdiction of another Regional Forest Office, the relevant Administration Committees are to establish enough communication and coordination between them by, for instance, holding joint meetings, so that the matter will be dealt with in a consistent and unified manner.

(2) The Director-General of the Regional Forest Office is to, for the purpose of maintaining a simple and efficient administration scheme for protection and administration of protected forests, set up the smallest possible number of sub-committees under the Administration Committee only when they are really necessary.

Section 7. Policy for Administration of Protected Forests

1. Preparation

   The Director-General of the Regional Forest Office is to, when intending to establish a protected forest, collect data on the site to be designated and conduct necessary surveys to prepare, based on them, Policy for Administration of Protected Forests ("Administration Policy") for each protected forest, which is to contain:

   (1) Name;
   (2) Hectares;
   (3) Date of establishment/modification;
   (4) Location and area (For Forest Ecosystem Reserves and Biocenosis Protection Forests, locations and areas of Preservation Zones and Conservation and Utilization Zones);
   (5) Matters concerning forest ecosystems and populations to be protected and administered;
   (6) Matters concerning protection and administration, and usage;
   (7) Intervals between monitoring surveys to be conducted, and points to note;
   (8) General state of designation under laws and regulations; and
   (9) Other points to note.

2. Treatment

   The Administration Policy is to be used for administration of protected forests, and treated as reference material for the Administration Committee.

3. Modification

   When any changes takes place in conditions of a protected forest, the Administration Policy is to be revised to reflect the changes, and, if necessary, procedures are to be taken for modification or abolition of the protected forest.

Section 8. Coordination with private forests

1. When a forest to be designated as protected forests adjacent to or near a private forest, and therefore forest ecosystems there can be protected and administered together in an integrated manner, relevant local governments and stakeholders are to be provided with explanations on the purpose of the designation and methodologies for protection and administration of the protected forest, together with some advice, if necessary, to maintain a level of protection and administration.
2. When a group of national forests lying scattered in a private forest is to be designated as protected forest, if the level of administration for the private forest can be kept substantially equal to that for the national forests, the total area (hectares) of the scattered forests are to be included in an area (hectares) required for designation as protected forest.

Section 9 Adaptation to international standards

All protected forests are to in principle be classified into categories of protected area administration recognized under international standards, so that work will be performed to get them registered with international databases that collect information on protected areas in countries around the world.

Section 10. Others

1. Natural Environment Conservation Areas, and places that have been designated as a certain type of area under laws and regulations concerning the natural monument are to also be designated as protected forests when they satisfy the conditions for a certain type of protected forest, so they will be positioned clearly as part of a National Forestry Project, and protected and administered in an appropriate manner. Information is to be exchanged with relevant ministries and agencies, local governments, and other stakeholders, whenever necessary, as part of efforts to protect and administer protected forests in an integrated manner.
2. Active public relations work is to be conducted to inform people about the protected forest system and the general states of the protected forests located in the jurisdiction, and enrich their understanding about efforts made for national forests. Especially before any forests operations are conducted in a protected forest, the people is to be carefully informed about the purpose, plan, and other issues concerned, with scientific justifications for them, for instance.
3. The Director-General of the Regional Forest Office is to give a name to each of the protected forests. The name is to clearly represent the target for protection, and accordingly, in principle, Forest Ecosystem Reserves and Biocenosis Protection Forests are to be named after the region in which they are located, and mountains and rivers there, for instance, and Rare Population Protection Forests are to be named that includes the names of the region and wildlife to be protected there, or those of such wildlife only.
4. The Director-General of the Regional Forest Office is to have the Administration Policy fully understood and implemented by the Directors of the District Forest Offices, the District Forest Branch Offices, the Forest Administration Offices, the Forestry Technology Development and Support Centers, the Forest Ecosystem Conservation Centers and the Forest Environmental Education Facilitation Centers, and instruct them to recognize the current state of protected forests and work to protect and administer them in an appropriate manner.
5. For protected forests, monitoring, patrols for fire prevention and other purposes, public relations and education campaigns, and other similar activities may be conducted by volunteers.
6. The Director-General of the Regional Forest Office is to develop human resources with expertise needed to protect and administer protected forests in an appropriate manner.

3-5 Wildlife Protection, Control and Hunting Management Act

(Excerpt)

(Act No. 88 of July 12, 2002)

Last amended by Act No. 46 of May 30, 2014

The Wildlife Protection and Hunting Act (Act No. 32 of 1918) is hereby fully revised.

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Chapter I General Provisions

(Purpose)

Article 1

The purpose of this Act is to ensure the protection and control of wildlife and the management of hunting by implementing programs that promote wildlife protection and management, and by preventing hazards associated with the use of hunting equipment, thereby securing the lives of the citizenry that can enjoy the benefits of the natural environment and the sound development of local communities by contributing to the conservation of biodiversity (including ecosystem protection; the same applies hereinafter), the preservation of living environments, and the sound development of agriculture, forestry, and fisheries.

(Definitions, etc.)

Article 2

(1) The term "Wildlife" as used in this Act means wild animals classified as birds or mammals.

(2) The term "Protection" as applied to Wildlife in this Act means strengthening populations to appropriate levels, expanding habitats to appropriate geographical areas, or maintaining population levels and the geographical areas of habitats from the perspective of conserving biodiversity, preserving living environments, or promoting the sound development of agriculture, forestry, and fisheries.

(3) The term "Control" as applied to Wildlife in this Act means reducing populations to appropriate levels or reducing habitats to appropriate geographical areas from the perspective of conserving biodiversity, preserving living environments, or promoting the sound development of agriculture, forestry, and fisheries.

(4) The term "Rare Wildlife Species" in this Act means Wildlife specified in an Ordinance of the Ministry of the Environment as requiring international or national Protection.

(5) The term "Designated Wildlife Species for Control" in this Act means Wildlife other than Rare Wildlife Species specified in an Ordinance of the Ministry of the Environment as requiring intensive Control across a wide area.

(6) The term "Statutory Hunting Methods" in this Act means hunting methods using firearms (meaning powder-charged firearms and air guns (including guns that fire projectiles using compressed gas; the same applies hereinafter), the same applies hereinafter), nets, or traps specified in an Ordinance of the Ministry of the Environment and other hunting methods specified in an Ordinance of the Ministry of the Environment.

(7) The term “Game Species” in this Act means Wildlife (except for bird chicks) other than Rare Wildlife Species that becomes the subject of capture (meaning capturing, killing, or injuring; the same applies hereinafter) to be used for its meat or fur, for the purpose of Control, or for any other purpose and that is specified in an Ordinance of the Ministry of the Environment as Wildlife whose status is unlikely to be significantly affected by that capture.

(8) The term “Hunting” in this Act means the capture of Game Species by a Statutory Hunting Method.

(9) The term “Hunting Period” in this Act means the period from October 15 of each year (or September 15 of each year in Hokkaido) until April 15 of the following year during which the capture of Game Species is allowed.

(10) Before establishing or amending an Ordinance of the Ministry of the Environment referred to in paragraph (7), the Minister of the Environment shall hold public hearings to hear the opinions of interested persons, consult with the Minister of Agriculture, Forestry and Fisheries, and hear the opinion of the Central Environment Council.

Chapter II Basic Guidelines (partially omitted)

(Basic Guidelines)

Article 3

(1) The Minister of the Environment shall establish basic guidelines (hereinafter referred to as “Basic Guidelines”) to implement programs for the Protection and Control of Wildlife (including matters pertaining to areas in which the use of specified hunting equipment is prohibited and areas in which the use of specified hunting equipment is restricted, as stipulated in Article 35, paragraph (1), as well as areas for paid game hunting stipulated in Article 68, paragraph (1), hereinafter referred to as “Wildlife Protection and Control Programs”).

(2) The Basic Guidelines are to specify the following matters.

(i) Basic matters concerning the implementation of the Wildlife Protection and Control Programs

(ii) Standards to be complied with when seeking to specify the period of a Wildlife Protection Program plan referred to in paragraph (2), item (i) of the following Article in the Wildlife Protection and Control Program Plan specified in paragraph (1) of that Article and other matters pertaining to the preparation of that Wildlife Protection and Control Program plan

(iii) Matters pertaining to the Protection of Rare Wildlife Species

(iv) Matters pertaining to the Control of Designated Wildlife Species for Control

(v) Other matters necessary for the implementation of the Wildlife Protection and Control Program

(3) Before establishing or amending the Basic Guidelines, the Minister of the Environment shall consult with the Minister of Agriculture, Forestry and Fisheries and hear the opinion of the Central Environment Council.

(4) When the Basic Guidelines are established or amended, the Minister of the Environment shall give public notice and notify the relevant prefectural governors without delay.

(Rare Wildlife Species Protection Plans)

Article 7-3

(1) The Minister of the Environment may establish a plan for the Protection of Rare Wildlife Species (hereinafter referred to as a "Rare Wildlife Species Protection Plan") if he/she considers that to be particularly necessary for the Protection of that Rare Wildlife Species.

(2) A Rare Wildlife Species Protection Plan is to specify the following matters.

(i) Species of Rare Wildlife Species

(ii) Period of the Rare Wildlife Species Protection Plan

(iii) Areas in which the Rare Wildlife Species is to be protected

(iv) Appropriate population levels and appropriate geographical areas of the habitat of the Rare Wildlife Species' and other objectives for the Protection of the Rare Wildlife Species

(v) Other matters necessary for the implementation of programs for the Protection of the Rare Wildlife Species

(3) Before establishing or amending a Rare Wildlife Species Protection Plan, the Minister of the Environment shall hear the opinion of the Central Environment Council.

(4) If a Rare Wildlife Species Protection Plan is established or amended, the Minister of the Environment shall give public notice and notify relevant local public entities without delay.

(5) The provisions of paragraphs (4), (5), and (7) of Article 7 apply *mutatis mutandis* to Rare Wildlife Species Protection Plans. In this case, the phrase "Wildlife Protection and Control Program plan" in paragraph (4) of that Article is deemed to be replaced with "Basic Guidelines," and the phrase "the relevant prefectural governors" in paragraphs (5) and (7) of that Article is deemed to be replaced with "Minister of the Environment."

Chapter III Implementation of Wildlife Protection and Control Programs

Section 1 Regulations for the Capture of Wildlife or Collection of Bird Eggs (partially omitted)

(Prohibition on Capturing Wildlife and Collecting Bird Eggs)

Article 8

Wildlife and bird eggs must not be captured or collected (meaning collecting or damaging; the same applies hereinafter) except in the following cases:

(i) Capture or collection with permission obtained under paragraph (1) of the following Article where that capture or collection pertains to that permission

(ii) Capture of Game Species pursuant to the provisions of Article 11, paragraph (1)

(iii) Capture or collection of Wildlife or bird eggs as stipulated in Article 13, paragraph (1) pursuant to the provisions of that paragraph

(Permission for the Capture of Wildlife and Collection of Bird Eggs)

Article 9

(1) A person who intends to capture Wildlife or collect bird eggs for the purpose of academic research, Wildlife Protection or Control, or another purpose specified in an Ordinance of the Ministry of the Environment shall obtain permission from the Minister of the Environment in the following cases or from the relevant prefectural governor in any other case.

(i) Capture of Wildlife or collection of bird eggs within a Wildlife Protection Area designated by the Minister of the Environment pursuant to the provisions of Article 28, paragraph (1)

(ii) Capture of Rare Wildlife Species or collection of bird eggs of Rare Wildlife Species

(iii) Capture of Wildlife with nets or traps specified in an Ordinance of the Ministry of the Environment as significantly hindering the Protection of Wildlife in light of their configuration, materials, or method of use

(2) A person who intends to obtain permission under the preceding paragraph shall apply for permission to the Minister of the Environment or the relevant prefectural governor as provided by an Ordinance of the Ministry of the Environment.

(3) Upon receiving an application for permission under the preceding paragraph, the Minister of the Environment or the prefectural governor shall grant permission under paragraph (1) unless the capture or collection to which that application pertains falls under any of the following items.

(i) The purpose of the capture or collection does not conform to the purpose stipulated in paragraph (1)

(ii) It is likely that capture or collection will significantly hinder the Protection of Wildlife (except for capture or collection for the purpose of Wildlife Control specified in an Ordinance of the Ministry of the Environment)

(iii) It is likely that capture or collection will significantly hinder the Control of Wildlife pertaining to a Category 2 Specified Wildlife Control Plan or a Specified Rare Wildlife Species Control Plan.

(iv) It is likely that capture or collection will hinder the safety of residents or maintenance of peace and quiet in an area specified in an Ordinance of the Ministry of the Environment (hereinafter referred to as a "Designated Area")

(4) When granting permission under paragraph (1), the Minister of the Environment or the relevant prefectural governor shall specify the effective period of that permission.

(5) When granting permission under paragraph (1), the Minister of the Environment or the relevant prefectural governor may attach certain conditions to that permission he/she considers necessary for the Protection of Wildlife, the Control of Wildlife pertaining to a Category 2 Specified Wildlife Control Plan or a Specified Rare Wildlife Species Control Plan, or ensuring the safety of residents and maintaining peace and quiet in a Designated Area.

(6) If a plan specified in the following items has been established, the Minister of the Environment or the relevant prefectural governor shall give due consideration when granting permission under paragraph (1) with respect to Wildlife specified in the item corresponding to that plan so that that permission will contribute to achieving the plan set forth in that item.

(i) Category 1 Specified Wildlife Protection Plan: Category 1 Specified Wildlife pertaining to that Type 1 Wildlife Protection Plan

(ii) Category 2 Specified Wildlife Control Plan: Category 2 Specified Wildlife pertaining to that Category 2 Specified Wildlife Control Plan

(iii) Rare Wildlife Species Protection Plan or Specified Rare Wildlife Species Control Plan: Rare Wildlife Species pertaining to that Rare Wildlife Species Protection Plan or that Specified Rare Wildlife Species Control Plan

(7) In cases in which permission under paragraph (1) is granted, the Minister of the Environment or the relevant prefectural governor shall issue a certificate of permission pursuant to the Ordinance of the Ministry of the Environment.

(8) A person that has obtained permission under paragraph (1) that is the State, a local public entity, a certified entity engaged in the capture of Wildlife prescribed in Article 18-5, paragraph (2), item (i) (in Article 14-2 referred to as a "Certified Wildlife Capture Entity"), or another juridical person specified

by the Minister of the Environment as a person that is authorized to perform the capture or collection pertaining to permission under paragraph (1) effectively and appropriately may, as provided by an Ordinance of the Ministry of the Environment, by applying to the Minister of the Environment or the relevant prefectural governor, receive an operator certificate certifying that it is a person that is engaged in the capture or collection pertaining to that permission under the supervision of the Minister of the Environment or the relevant prefectural governor (hereinafter referred to as an "Operator").

(9) If a person that has obtained permission under paragraph (1) or an Engaged Person loses its certificate of permission referred to in paragraph (7) (hereinafter simply referred to as "Certificate of Permission") or operator certificate referred to in the preceding paragraph (hereinafter simply referred to as "Operator Certificate"), or if its Certificate of Permission or Operator Certificate is destroyed, that person may have a Certificate of Permission or an Operator Certificate reissued upon application to the Minister of the Environment or the relevant prefectural governor as provided by an Ordinance of the Ministry of the Environment.

(10) A person that has obtained permission under paragraph (1) or an Operator shall carry its Certificate of Permission or Operator Certificate when engaged in capture or collection and present that certificate if so requested by an official of the State or a local public entity, a police officer, or another relevant person.

(11) If any of the following items applies to a person that has obtained permission under paragraph (1), that person shall return its Certificate of Permission or Operator Certificate (or, in the case referred to in item (iv), the Certificate of Permission or Operator Certificate that has been discovered or restored) to the Minister of the Environment or the relevant prefectural governor as provided by an Ordinance of the Ministry of the Environment.

(i) If permission has been revoked pursuant to the provisions of paragraph (2) of the following Article

(ii) If permission ceases to be effective pursuant to the provisions of Article 87

(iii) If the effective period specified pursuant to the provisions of paragraph (4) has expired

(iv) If, after the reissuance of a Certificate of Permission or Operator Certificate pursuant to the provisions of paragraph (9), the lost Certificate of Permission or Operator Certificate is discovered or restored

(12) When a person that has obtained permission under paragraph (1) or an Operator captures Wildlife, that person shall display its address and name and other information specified in an Ordinance of the Ministry of the Environment at an easily visible place on each piece of hunting equipment it uses (limited to those specified in an Ordinance of the Ministry of the Environment).

(13) Upon the expiration of the effective period of a permission specified by the provisions of paragraph (4), the person that obtained that permission under paragraph (1) shall report the results of the capture

or collection pertaining to that permission to the Minister of the Environment or the relevant prefectural governor within 30 days after that expiration date, inclusive of the expiration date, as provided by an Ordinance of the Ministry of the Environment.

(14) With respect to the capture of Wildlife or collection of bird eggs referred to in paragraph (1) pertaining to a national endangered species of wild fauna or flora prescribed in Article 4, paragraph (3) of the Act on Conservation of Endangered Species of Wild Fauna and Flora (Act No. 75 of 1992) or a temporarily designated species prescribed in Article 5, paragraph (1) of that Act (hereinafter referred to as "National Endangered Species of Wild Fauna and Flora"), permission under paragraph (1) (limited to permission pertaining to the Minister of the Environment) is not required if permission under Article 10, paragraph (1) of that Act has been obtained, that capture or collection is performed as a certified protection and recovery program, etc. prescribed in Article 47, paragraph (1) of that Act, or a national government organ or local public entity has consulted with the Minister of the Environment pursuant to the provisions of Article 54, paragraph (2) of that Act.

(Order to Take Measures Pertaining to Permission)

Article 10

(1) The Minister of the Environment or a prefectural governor may order a person engaged in the capture of Wildlife or collection of bird eggs without permission in violation of the provisions of paragraph (1) of the preceding Article or a person that has violated a condition attached to a permission pursuant to the provisions of paragraph (5) of that Article to release the Wildlife pertaining to that violation and take other necessary measures in the following cases.

(i) If those measures are considered necessary for the Protection of Wildlife

(ii) If those measures are considered necessary for the Control of Wildlife pertaining to a Category 2 Specified Wildlife Control Plan or a Specified Rare Wildlife Species Control Plan

(iii) If those measures are considered necessary to ensure the safety of residents or to maintain peace and quiet in a Designated Area during the capture or collection

(2) If a person that has obtained permission under paragraph (1) of the preceding Article violates the provisions of this Act or an order or disposition issued under this Act, the Minister of the Environment or the relevant prefectural governor may revoke that permission to the extent that any item of the preceding paragraph applies.

(Capture of Game Species)

Article 11

(1) In the following cases, notwithstanding the provisions of Article 9, paragraph (1), the capture of Game Species (in areas specified by the provisions of Article 14, paragraph (1), the term "Game Species" is limited to Category 2 Specified Wildlife pertaining to those areas, and for periods extended pursuant to the provisions of paragraph (2) of that Article, the term "Game Species" is limited to specified Wildlife pertaining to that extended period) may be performed without permission of the Minister of the Environment or the relevant prefectural governor in areas outside the Wildlife Protection Areas prescribed in Article 28, paragraph (1), temporary closed hunting areas prescribed in Article 34, paragraph (1) (except for areas designated pursuant to the provisions of Article 14, paragraph (1), if any), and other areas specified in an Ordinance of the Ministry of the Environment, as those in which the protection of ecosystems, or the ensuring of the safety of residents or maintenance of peace and quiet, is particularly necessary (hereinafter referred to as "Hunting Open Areas") only during the Hunting Period (as limited pursuant to the provisions of the following paragraph or extended pursuant to the provisions of Article 14, paragraph (2), if applicable).

(i) If hunting is performed in accordance with the provisions of the following Article, Article 14, Articles 15 through 17, and Sections 1 through 3 of the following Chapter

(ii) If the capture of Game Species set forth below is performed in accordance with the provisions of the following Article, Articles 14 through 17, Article 36, and Article 37

(a) Capture of Game Species by hunting methods other than Statutory Hunting Methods

(b) Capture of Game Species on residential land enclosed by a hedge, fence, or similar partition without the use of a firearm

(2) The Minister of the Environment may limit the period of capture of Game Species (including chicks of birds (limited to birds that are Game Species), hereinafter referred to as "Game Species including Chicks") during the Hunting Period when that is considered necessary for the Protection of that Game Species including Chicks.

(3) The provisions of Article 3, paragraph (3) apply *mutatis mutandis* to the limitation of the Hunting Period under the provisions of the preceding paragraph.

Section 1-2 Certification of Wildlife Capture Programs (entirely omitted)

Section 2 Regulations for Raising and Selling Wildlife (entirely omitted)

Section 3 Wildlife Protection Areas

(Wildlife Protection Areas)

Article 28

(1) The Minister of the Environment or the relevant prefectural governor may designate each of the following areas as Wildlife Protection Areas if that is considered particularly necessary for the Protection of Wildlife in consideration of the species of that Wildlife and the other status of that Wildlife.

(i) Areas the Minister of the Environment considers important for international or national Wildlife Protection

(ii) Areas a prefectural governor considers important for Wildlife Protection within the relevant prefecture other than areas set forth in the preceding item

(2) A designation under the provisions of the preceding paragraph or a change to such a designation must specify guidelines on the name, area, and duration of the Wildlife Protection Area and the protection of that Wildlife Protection Area.

(3) Before the Minister of the Environment or a prefectural governor makes a designation under the provisions of paragraph (1) or changes such a designation (changes are limited to the expansion of the area of a Wildlife Protection Area, the same applies from the following paragraph through paragraph (6)), he/she shall hear the opinions of relevant local public entities.

(4) Before the Minister of the Environment or a prefectural governor makes a designation under the provisions of paragraph (1) or changes such a designation, he/she shall, as provided by an Ordinance of the Ministry of the Environment, give public notice of that designation or change and make available for public inspection the name, area, and duration of that Wildlife Protection Area and a draft of guidelines regarding the Protection of that Wildlife Protection Area (in the following paragraph and paragraph (6) referred to as the "Draft Guidelines") for a period of 14 days (or for a period specified by the relevant prefectural governor roughly equivalent to 14 days) from the date of public notice, inclusive of the date of public notice.

(5) If a public notice is made under the provisions of the preceding paragraph, residents and interested persons in the area where the Minister of the Environment or the relevant prefectural governor intends to make a designation under the provisions of paragraph (1) or change such a designation may submit written opinions concerning the Draft Guidelines to the Minister of the Environment or the relevant prefectural governor before the expiration of the period prescribed in the preceding paragraph.

(6) If a written opinion submitted under the preceding paragraph sets forth an objection to the Draft Guidelines or if it is otherwise considered necessary to hear opinions from a broader spectrum concerning the designation of the Wildlife Protection Area or a change to that designation, the Minister of the Environment shall hold a public hearing, or the relevant prefectural governor shall hold a public hearing and take other necessary measures.

(7) The duration of a Wildlife Protection Area may not exceed 20 years; provided, however, that that term may be renewed for a period not exceeding 20 years.

(8) If a designation made under the provisions of paragraph (1) is considered to be no longer necessary due to changes in the status of the Wildlife or changes in other circumstances, or if the continuation of that designation is considered inappropriate, the Minister of the Environment or the relevant prefectural governor shall withdraw that designation.

(9) The provisions of paragraph (2) and Article 15, paragraphs (2), (3), (13), and (14) apply *mutatis mutandis* to any renewal under the provisions of the proviso of paragraph (7). The provisions of Article 3, paragraph (3) apply *mutatis mutandis* to any designation made by the Minister of the Environment under the provisions of paragraph (1) and any change to such a designation (limited to the expansion of a Wildlife Protection Area). The provisions of Article 4, paragraph (4) and Article 12, paragraph (4) apply *mutatis mutandis* to any designation made by a prefectural governor under the provisions of paragraph (1) and any change to such a designation (limited to the expansion of a Wildlife Protection Area in the case referred to in Article 4, paragraph (4)). The provisions of Article 15, paragraphs (2), (3), (13), and (14) apply *mutatis mutandis* to any designation made by under the provisions of paragraph (1) and any change to such a designation. In those cases, the phrase "that effect as well as its name, area, and duration" in paragraph (2) of that Article is deemed to be replaced with "that effect as well as guidelines on the name, area, and duration of the Wildlife Protection Area and the Protection of that Wildlife Protection Area," and the phrase "public notice under the provisions of the preceding paragraph" in paragraph (3) of that Article is deemed to be replaced with "public notice under the provisions of the preceding paragraph as applied *mutatis mutandis* pursuant to Article 28, paragraph (9) following the deemed replacement of terms."

(10) The provisions of Article 12, paragraph (4) apply *mutatis mutandis* to any withdrawal of a designation of a Wildlife Protection Area by a prefectural governor under the provisions of paragraph (8). The provisions of paragraphs (2) and (3) of Article 15 apply *mutatis mutandis* to any withdrawal of a designation under the provisions of paragraph (8). In those cases, the phrase "that effect as well as its name, area, and duration" in paragraph (2) of that Article is deemed to be replaced with "that effect and the area subject to withdrawal," the phrase "public notice under the provisions of the preceding paragraph" in paragraph (3) of that Article is deemed to be replaced with "public notice under the provisions of the preceding paragraph as applied *mutatis mutandis* pursuant to Article 28, paragraph (10) following the deemed replacement of terms."

(11) A person that has ownership or other rights with respect to land, or trees or bamboo within the area of a Wildlife Protection Area shall not object without reasonable justification to the installation by the Minister of the Environment or the relevant prefectural governor on that land, or trees or bamboo of nesting, water supply, feeding, or other facilities necessary for promoting the living and breeding of Wildlife.

(Conservation Programs in Wildlife Protection Areas)

Article 28-2

(1) If it is considered necessary in light of the status of Wildlife in a Wildlife Protection Area, the State shall implement a conservation program (meaning a program for installing Wildlife breeding facilities to protect and improve the habitat of Wildlife and another program specified in an Ordinance of the Ministry of the Environment, the same applies hereinafter) in a Wildlife Protection Area designated by the Minister of the Environment pursuant to the provisions of paragraph (1) of the preceding Article (hereinafter referred to as "National Wildlife Protection Area") or the relevant prefectural government shall implement a conservation program in a Wildlife Protection Area designated by that prefectural governor pursuant to the provisions of that paragraph (hereinafter referred to as "Prefectural Wildlife Protection Area").

(2) If a national government organ other than the Ministry of the Environment intends to implement a conservation program in a National Wildlife Protection Area, it shall consult with the Minister of the Environment.

(3) A local public entity may implement part of a conservation program in a National Wildlife Protection Area after consulting with and obtaining consent from the Minister of the Environment in the following cases or after consulting with the Minister of the Environment in any other case.

(i) Capture of Rare Wildlife Species or collection of bird eggs of Rare Wildlife Species under that conservation program

(ii) Capture of Wildlife under that conservation program with nets or traps as specified in the Ordinance of the Ministry of the Environment referred to in Article 9, paragraph (1), item (iii)

(4) A local public entity other than a prefectural government may implement part of a conservation program in a Prefectural Wildlife Protection Area after consulting with and obtaining consent from the relevant prefectural governor in cases corresponding to those specified in the items of the preceding paragraph or after consulting with the relevant prefectural governor in any other case.

(5) If a prefectural government implements a conservation program pursuant to the provisions of paragraph (1) in any case set forth in the items of paragraph (3) or if the relevant prefectural governor intends to grant consent in connection with a conservation program pursuant to the provisions of the preceding paragraph, that prefectural government or that prefectural governor shall consult with and obtain consent from the Minister of the Environment.

(6) The provisions of Article 8, paragraphs (1) and (2) of Article 16, and paragraph (7) of the following Article do not apply to acts conducted as a conservation program pursuant to the provisions of paragraphs (1), (3), or (4).

(Special Protection Zones)

Article 29

(1) The Minister of the Environment or a prefectural governor may designate an area within a Wildlife Protection Area as a Special Protection Zone if that is considered particularly necessary for the Protection of Wildlife or the Protection of the habitat of Wildlife.

(2) The duration of a Special Protection Zone shall be specified by the Minister of the Environment or by the relevant prefectural governor for a period up to but not exceeding the duration of the Wildlife Protection Area to which such Special Protection Zone belongs.

(3) If a designation made under the provisions of paragraph (1) is considered to be no longer necessary due to changes in the status of the Wildlife or changes in other circumstances, or if the continuation of that designation is considered inappropriate, the Minister of the Environment or the relevant prefectural governor shall withdraw that designation.

(4) The provisions of paragraph (2) apply *mutatis mutandis* to changes to designations under the provisions of paragraph (1). The provisions of Article 3, paragraph (3) apply *mutatis mutandis* to any designation made by the Minister of the Environment under the provisions of paragraph (1) and any change to such a designation (limited to the expansion of a Special Protection Zone or the extension of its duration). The provisions of Article 4, paragraph (4) and Article 12, paragraph (4) apply *mutatis mutandis* to any designation made by a prefectural governor under the provisions of paragraph (1) and any change to such a designation (limited to the expansion of a Special Protection Zone or the extension of its duration in the case of Article 4, paragraph (4)). The provisions of paragraphs (2), (3), (13), and (14) of Article 15 and paragraphs (2) through (6) of Article 28 apply *mutatis mutandis* to any designation made under the provisions of paragraph (1) and any change to such a designation (limited to the expansion of a Special Protection Zone or the extension of its duration in the case of paragraphs (3) through (6) of that Article). In those cases, the phrase "shall notify the Minister of the Environment" in Article 12, paragraph (4) is deemed to be replaced with "shall notify the Minister of the Environment if, after the expiration of the duration of a Special Protection Zone, an area whose boundaries are the same as those of that Special Protection Zone continues to be designated as a Special Protection Zone or if the duration of a Special Protection Zone is extended, and shall consult with the Minister of the Environment in all other cases," the phrase "that effect as well as its name, area, and duration" in Article 15, paragraph (2) is deemed to be replaced with "that effect as well as guidelines on the name, area, and duration of the Special Protection Zone and the Protection of that Special Protection Zone," and the phrase "public notice under the provisions of the preceding paragraph" in paragraph (3) of that Article is deemed to be replaced with "public notice under the provisions of the preceding paragraph as applied *mutatis mutandis* pursuant to Article 29, paragraph (4) following the deemed replacement of terms."

(5) The provisions of Article 12, paragraph (4) apply *mutatis mutandis* to any withdrawal of a designation by a prefectural governor under the provisions of paragraph (3). The provisions of paragraphs (2) and (3) of Article 15 apply *mutatis mutandis* to any withdrawal of a designation under the provisions of paragraph (3). In those cases, the phrase "shall notify" in Article 12, paragraph (4) is deemed to be replaced with "shall consult with," the phrase "that effect as well as its name, area, and duration" in Article 15, paragraph (2) is deemed to be replaced with "that effect as well as the area subject to withdrawal," and the phrase "public notice under the provisions of the preceding paragraph" in paragraph (3) of that Article is deemed to be replaced with "public notice under the provisions of the preceding paragraph as applied *mutatis mutandis* pursuant to Article 29, paragraph (5) following the deemed replacement of terms."

(6) If the Minister of the Environment is consulted under the provisions of Article 12, paragraph (4) as applied *mutatis mutandis* pursuant to the provisions of paragraph (4) following the deemed replacement of terms (limited to the expansion of a Special Protection Zone in the case of a change to a designation pursuant to the provisions of paragraph (1)), he/she shall consult with the Minister of Agriculture, Forestry and Fisheries.

(7) The acts set forth below must not be conducted within the area of a Special Protection Zone without permission of the Minister of the Environment if that area is a Special Protection Zone designated by the Minister of the Environment under the provisions of paragraph (1) (hereinafter referred to as "National Special Protection Zone") or without the permission of the relevant prefectural governor if that area is a Special Protection Zone designated by that prefectural governor under the provisions of that paragraph (hereinafter referred to as "Prefectural Special Protection Zone"); provided, however, that this does not apply to any act considered to be an act that does not hinder the Protection of Wildlife as specified by the Minister of the Environment for a National Wildlife Protection Area or as specified by the relevant prefectural governor for a Prefectural Wildlife Protection Area.

(i) Construction, renovation, or expansion of a building or other structure

(ii) Reclaiming land from a water area by landfill or drainage

(iii) Felling trees or bamboo

(iv) Conducting any act other than those set forth in the preceding three items when that act is specified by a Cabinet Order as likely to affect the Protection of Wildlife in an area within a National Special Protection Zone designated by the Minister of the Environment or an area within a Prefectural Special Protection Zone designated by a prefectural governor

(8) A person who intends to obtain permission under the preceding paragraph shall submit an application to the Minister of the Environment in the case of a National Special Protection Zone or to the relevant prefectural governor in the case of a Prefectural Special Protection Zone, as provided by an Ordinance of the Ministry of the Environment.

(9) Upon receiving an application for permission under the preceding paragraph, the Minister of the Environment or the relevant prefectural governor shall grant permission under paragraph (7) unless the act pertaining to that application falls under either of the following items.

(i) It is likely that act will significantly hinder the Protection of Wildlife

(i) It is likely that act will significantly hinder the Protection of the habitat of Wildlife

(10) The Minister of the Environment or a prefectural governor may attach certain conditions to a permission granted under paragraph (7) if that is considered necessary for the Protection of Wildlife or the Protection of the habitat of Wildlife.

(Order to Take Measures)

Article 30

(1) If considered necessary for the Protection of Wildlife, the Minister of the Environment may, with respect to a National Special Protection Zone, or a prefectural governor may, with respect to a Prefectural Special Protection Zone, issue instructions regarding the manner in which acts are to be conducted to persons permitted to conduct the acts set forth in the items of paragraph (7) of the preceding Article within the area of that Special Protection Zone.

(2) If it is considered necessary for the Protection of Wildlife or the Protection of the habitat of Wildlife, the Minister of the Environment may, with respect to a National Special Protection Zone, or a prefectural governor may, with respect to a Prefectural Special Protection Zone, order a person who has violated the provisions of paragraph (7) of the preceding Article or any condition attached to a permission pursuant to the provisions of paragraph (10) of that Article to discontinue that act to the extent necessary for the Protection of Wildlife or the Protection of the habitat of Wildlife, or order that person or a person that has succeeded to the rights of that person in that land, building or other structure or property to restore that land, building or other structure or property to its original condition within a reasonable period, or if that restoration is extremely difficult, order that person to take necessary alternative measures.

(3) If the Minister of the Environment or a prefectural governor intends to give an order for restoration or necessary alternative measures pursuant to the provisions of the preceding paragraph (hereinafter referred to as “Restoration”) and it is impossible to ascertain without error the person to which that order for Restoration is to be made, he/she may perform that Restoration or have a person ordered or commissioned by him/her to perform that Restoration at the expense of that person. In this case, the Minister of the Environment or a prefectural governor shall give public notice in advance that that Restoration will be performed within a reasonable period and that the Minister of the Environment or that prefectural governor or a person ordered or commissioned by the Minister of the Environment or

that prefectural governor will perform that Restoration if that Restoration is not performed within that period.

(4) A person that intends to perform Restoration pursuant to the provisions of the preceding paragraph shall carry an identification card and present that if requested by a relevant person.

(On-Site Investigations)

Article 31

(1) The Minister of the Environment or a prefectural governor may cause an official of that ministry or prefecture to enter land belonging to another person to the extent necessary for an on-site investigation for the purpose of a designation pursuant to the provisions of Article 28, paragraph (1) or Article 29, paragraph (1) or paragraph (7), item (iv).

(2) If the Minister of the Environment or a prefectural governor intends to cause an official of that ministry or prefecture to enter land pursuant to the provisions of the preceding paragraph, he/she shall notify the owner or possessor of that land and to give that owner or possessor an opportunity to express his/her opinion in advance.

(3) A ministry or prefectural official who enters land pursuant to the provisions of paragraph (1) shall carry an identification card and present that to relevant persons.

(4) The landowner or possessor shall not refuse or interfere with entry pursuant to the provisions of paragraph (1) without reasonable justification.

(Compensation for Losses)

Article 32

(1) The State shall, with respect to a National Wildlife Protection Area, or the relevant prefectural governor shall, with respect to a Prefectural Wildlife Protection Area, compensate for losses that would ordinarily arise to a person that suffer losses due to the installation of facilities pursuant to the provisions of Article 28, paragraph (11), the rejection of permission under Article 29, paragraph (7), or the attachment of conditions pursuant to the provisions of paragraph (10) of that Article.

(2) A person that intends to receive compensation under the preceding paragraph shall make a request to the Minister of the Environment or the relevant prefectural governor.

(3) If the Minister of the Environment or a prefectural governor receives a request under the preceding paragraph, he/she shall determine the compensation amount and notify the requestor of that amount.

(4) A person dissatisfied with the amount determined under the provisions of the preceding paragraph may request an increase in that amount by filing an action within six months of the date of receipt of the notice under the provisions of that paragraph.

(5) The State or the relevant prefecture will be the defendant in any action filed under the preceding paragraph.

(Relationship between National Wildlife Protection Areas and Prefectural Wildlife Protection Areas)

Article 33

If all or part of the area of a Prefectural Wildlife Protection Area is designated as a National Wildlife Protection Area, notwithstanding the provisions of Article 28, paragraph (2) and Article 15, paragraphs (2) and (3) as applied *mutatis mutandis* pursuant to Article 28, paragraphs (9) and (10), it will be deemed that the designation of that Prefectural Wildlife Protection Area has been withdrawn or that that Prefectural Wildlife Protection Area has been changed to exclude the overlapping part of that National Wildlife Protection Area.

Section 4 Temporary Closed Hunting Areas (entirely omitted)

Chapter IV Management of Hunting (entirely omitted)

Chapter V Miscellaneous Provisions (entirely omitted)

Chapter VI Penal Provisions (partially omitted)

Article 83

(1) A person who falls under any of the following items will be punished by imprisonment with work for not more than one year or a fine of not more than 1,000,000 yen.

(i) A person who has captured Wildlife other than Game Species or collected bird eggs in violation of the provisions of Article 8 (except for persons not required to obtain permission)

(ii) A person who has captured Game Species in an area other than a Hunting Open Area or during a period outside a Hunting Period (if the Hunting Period is limited pursuant to the provisions of Article 11, paragraph (2) or extended pursuant to the provisions of Article 14, paragraph (2), that

period) (except for a person who has obtained permission under Article 9, paragraph (1) or a person who captures Game Species pursuant to the provisions of Article 13, paragraph (1))

(iii) A person who has violated an order under the provisions of Article 10, paragraph (1), Article 25, paragraph (6), Article 37, paragraph (10), or Article 38-2, paragraph (10)

(2) Attempts to commit offences prescribed in items (i) through (ii)-2, item (iv) (limited to the part pertaining to Article 35, paragraph (2), Article 36, or Article 38), and item (v) of the preceding paragraph are punishable.

(3) Any item used in a criminal act prescribed in items (i) through (ii)-2, item (iv), and item (v) of paragraph (1) and any Wildlife captured or bird eggs collected through that criminal act in the possession of the offender will be confiscated.

Article 84

A person who falls under any of the following items will be punished by imprisonment with work for not more than six months or a fine of not more than 500,000 yen.

(i) A person who has violated a condition attached to a permission pursuant to the provisions of Article 9, paragraph (5), Article 37, paragraph (5), or Article 38-2, paragraph (5)

(ii) A person who has allowed another person to use his or her Certificate of Permission or Operator Certificate, certificate of permission to use dangerous hunting methods, certificate of permission to use a tranquilizer gun, or Hunter Registration

(iii) A person who has used another person's Certificate of Permission or Operator certificate, certificate of permission to use dangerous hunting methods, certificate of permission to use a tranquilizer gun, or Hunter Registration

(v) A person who has violated the provisions of Article 15, paragraph (4), Article 16, paragraph (1) or (2), Article 20, paragraph (1) or (2), Article 23, Article 26, paragraph (2), (5) or (6), Article 27, Article 29, paragraph (7), or Article 35, paragraph (3)

(vi) A person who has violated an order under the provisions of Article 15, paragraph (10), Article 18-6, paragraph (2), Article 22, paragraph (1), Article 24, paragraph (9), Article 30, paragraph (2), or Article 35, paragraph (11)

Article 85

A person who falls under any of the following items will be punished by a fine of not more than 500,000 yen.

(i) A person who has violated a condition attached to a permission or approval pursuant to the provisions of Article 15, paragraph (6), Article 24, paragraph (4), Article 29, paragraph (10), or Article 35, paragraph (7)

(iv) A person who has violated the provisions of Article 28, paragraph (11) or Article 74, paragraph (1)

Article 86

A person who falls under any of the following items will be punished by a fine of not more than 300,000 yen.

(i) A person who has violated the provisions of Article 9 paragraph (10) or (11), Article 15, paragraph (8) or (9), Article 18, Article 18-9, Article 21, paragraph (1), Article 24, paragraph (7) or (8), Article 25, paragraph (5), Article 35, paragraph (9) or (10), Article 37, paragraph (8) or (9), Article 38-2, paragraph (8) or (9), Article 54, Article 62, paragraph (1), or Article 65

(i)-2 A person who has captured Wildlife using hunting equipment that does not display identity information in violation of the provisions of Article 9, paragraph (12)

(ii) A person who has failed to make a report or made a false report pursuant to the provisions of Article 9, paragraph (13), Article 66, or Article 75, paragraph (1)

(iii) A person who has moved, defaced, damaged, or removed a sign referred to in Article 15, paragraph (13) (including cases in which that provision is applied *mutatis mutandis* pursuant to Article 28, paragraph (9) and Article 29, paragraph (4)), Article 34, paragraph (5) (including cases in which that provision is applied *mutatis mutandis* pursuant to Article 35, paragraph (12)), or Article 70, paragraph (2), or facilities referred to in Article 28, paragraph (11)

(v) A person who has refused or obstructed an entry pursuant to the provisions of Article 31, paragraph (1) in violation of the provisions of paragraph (4) of that Article

Article 87

If a person that has obtained permission under Article 9, paragraph (1) or a Hunting License violates the provisions of this Act and is punishable by a fine or heavier punishment, that person's permission or Hunting License will cease to be effective.

Article 88

If a representative of a juridical person or if an agent, employee, or other worker of a juridical person or an individual commits an offense prescribed in Articles 83 through 86 in connection with the business of that

juridical person or individual, in addition to the offender, that juridical person or individual will be punished by the fine in the corresponding Article.

Supplementary Provisions (entirely omitted)

3-6 Act on Conservation of Endangered Species of Wild Fauna and Flora (Excerpt)

(Act No. 75 of June 5, 1992)

Last amended by Act No. 69 of June 13, 2014

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Chapter I General Provisions

(Purpose)

Article 1

In view of the fact that wild fauna and flora are not only important constituent elements of ecosystems, but are essential for enriching the lives of human beings as an important part of the natural environment, the purpose of this Act is to secure biodiversity and to conserve a satisfactory natural environment by ensuring the conservation of endangered species of wild fauna and flora, thereby contributing to securing healthy and cultured lives for present and future generations of citizens.

(Responsibilities)

Article 2

(1) The State shall, at all times, monitor the status of wild fauna and flora species (if any species has subspecies or varieties, those subspecies or varieties; the same applies hereinafter), and enhance scientific knowledge on the conservation of endangered species of wild fauna and flora, as well as formulate and implement comprehensive measures for the conservation of those species.

(2) Each local public entity shall endeavor to formulate and implement measures for the conservation of endangered species of wild fauna and flora depending on the natural and social conditions within the territory of that local public entity.

(3) Citizens shall endeavor to contribute to the conservation of endangered species of wild fauna and flora in such ways as cooperating with the measures carried out by the State and local public entities set forth in the preceding two paragraphs.

(Respect for Property Rights, etc.)

Article 3

In the application of this Act, respect shall be shown for ownership and any other property rights held by persons concerned, consideration shall be given to the stability of residents' lives as well as the maintenance and promotion of their welfare, and attention shall be paid to the accommodation of conservation of national land and other public interest.

(Definitions, etc.)

Article 4

(1) The term “Endangered" as used in this Act means that, with regard to a species of wild fauna and flora, the number of individual organisms of that species is notably small, the number of individual organisms of that species is decreasing notably, the major habitats or natural environments of the individual organisms of that species are disappearing, or the environment where the individual organisms of that species live or grow is deteriorating notably, to a level that would be detrimental to

the survival of that species, or there are other circumstances that would be detrimental to the survival of that species.

(2) The term “Endangered Species" as used in this Act means National Endangered Species set forth in the following paragraph, International Endangered Species set forth in paragraph (4), and temporarily designated species set forth in paragraph (1) of the following Article.

(3) The term "National Endangered Species" as used in this Act means endangered species of wild fauna and flora, of which individual organisms live or grow in Japan, designated by Cabinet Order.

(4) The term "International Endangered Species" as used in this Act means endangered species of wild fauna and flora for which arrangements have been made to ensure conservation through international cooperation (excluding National Endangered Species) designated by Cabinet Order.

(5) The term "Specified National Endangered Species" as used in this Act means National Endangered Species that satisfy both of the following requirements and that are designated by Cabinet Order:

(i) individual organisms of the species may be bred or propagated commercially; and

(ii) no arrangements have been made to ensure conservation of the species through international cooperation.

(6) When the Minister of the Environment drafts the Cabinet Order referenced in the preceding three paragraphs, upon its enactment, revision, or abolition, he/she shall hear the opinions of the Central Environment Council.

(Temporarily Designated Species)

Article 5

(1) If the Minister of the Environment considers it necessary and especially urgent to ensure the conservation of any species of wild fauna or flora that is neither a National Endangered Species nor an International Endangered Species, he/she may designate that species as a temporarily designated species.

(2) Prior to making a designation under the provisions of the preceding paragraph (hereinafter referred to as the "designation" in this Article), the Minister of the Environment shall consult with the head of the relevant administrative organ.

(3) The period of the designation must not exceed three years.

(4) When making a designation, the Minister of the Environment shall give public notice in the official gazette of that designation and of the species of wild fauna or flora to which the designation pertains.

(5) The designation will become effective on the second day following the day of the public notice under the provisions of the preceding paragraph.

(6) If the Minister of the Environment finds that the designation is no longer necessary, he/she shall withdraw that designation.

(7) The provisions of paragraphs (2), (4), and (5) apply *mutatis mutandis* to the withdrawal of a designation under the provisions of the preceding paragraph. In this case, the phrase "on the second day following the day of the public notice under the provisions of the preceding paragraph" in

paragraph (5) will be deemed to be replaced with "upon giving public notice under the provisions of the preceding paragraph as applied *mutatis mutandis* pursuant to paragraph (7)."

(Basic Policy for the Conservation of Endangered Species of Wild Fauna and Flora)

Article 6

(1) The Minister of the Environment shall prepare a draft basic policy for the conservation of Endangered Species after hearing opinions of the Central Environment Council and shall seek a cabinet decision thereon.

(2) The basic policy set forth in the preceding paragraph (hereinafter referred to as the "Basic Policy for the Conservation of Endangered Species of Wild Fauna and Flora" in this Article) must provide for the following matters:

(i) the basic concept for the conservation of endangered species of wild fauna and flora;

(ii) basic matters concerning the selection of Endangered Species;

(iii) basic matters concerning the treatment of individual organisms (including eggs or seeds which are specified by Cabinet Order; the same applies hereinafter) of Endangered Species, any part of those individual organisms (limited to those organs that require the species conservation measures under this Act such as regulation of transfers, etc., from which the species can be easily identified and which are specified by Cabinet Order; the same applies hereinafter), and any processed products made from those individual organisms or organs thereof (limited to those processed products from which the species can be easily identified and which are specified by Cabinet Order; the same applies hereinafter);

(iv) basic matters concerning the protection of the habitat or natural environment of individual organisms from National Endangered Species;

(v) basic matters concerning protection and recovery programs (meaning programs for promoting the breeding or propagation of individual organisms of National Endangered Species, maintaining their habitat or natural environment, or otherwise ensuring the conservation of National Endangered Species; the same applies in Chapter IV); and

(vi) other important matters concerning the conservation of endangered species of wild fauna and flora in addition to what is listed in the preceding items.

(3) When the cabinet decision set forth in paragraph (1) is made on the Basic Policy for the Conservation of Endangered Species of Wild Fauna and Flora, the Minister of the Environment shall publicly announce that cabinet decision without delay.

(4) The provisions of paragraph (1) and the preceding paragraph apply *mutatis mutandis* to any amendment to the Basic Policy for the Conservation of Endangered Species of Wild Fauna and Flora.

(5) The contents of any disposition based on the provisions of this Act and other measures and programs for the conservation of endangered species of wild fauna and flora must be in harmony with the Basic Policy for the Conservation of Endangered Species of Wild Fauna and Flora.

Chapter II Regulation of the Treatment of Individual Organisms, etc.

Section 1 Obligations, etc. of Owners of Individual Organisms, etc.

(Obligations of Owners etc. of Individual Organisms, etc.)

Article 7

An owner or possessor of an individual organism from an Endangered Species of Wild Fauna or Flora, any part of that individual organism, or any processed product made from that individual organism or part (hereinafter collectively referred to as an "Individual Organism, Etc.") shall be aware of the importance of the conservation of Endangered Species of Wild Fauna and Flora, and endeavor to treat that Individual Organism, Etc. appropriately.

(Advice or Guidance)

Article 8

If the Minister of the Environment considers it necessary for the conservation of Endangered Species of Wild Fauna and Flora, he/she may provide an owner or possessor of an Individual Organism, Etc. from an Endangered Species of Wild Fauna or Flora with necessary advice or guidance concerning the treatment of that Individual Organism, Etc.

Section 2 Prohibition of the Capture of Individual Organisms and Transfer, etc. of Individual Organisms, etc.

(Prohibition of Taking)

Article 9

A person shall not capture, collect, kill, wound, or damage (hereinafter collectively referred to as "Take" or "Taking") a living individual organism from a National Endangered Species or from a Temporarily Designated Species (hereinafter collectively referred to as a "National Endangered Species, Etc." in this Section and Article 54, paragraph (2)); provided, however, that this does not apply in any of the following cases:

(i) where a person obtains permission under paragraph (1) of the following Article and carries out the Taking to which that permission pertains;

(ii) cases specified by Ordinance of the Ministry of the Environment as those in which it is particularly necessary for a person to carry out the Taking to earn his/her living, and where that Taking poses no risk of impeding the conservation of the species; or

(iii) where other unavoidable grounds specified by Ordinance of the Ministry of the Environment exist, such as the protection of human life and limb.

(Permission for Taking)

Article 10

(1) A person who intends to Take a living individual organism from a National Endangered Species, etc. for the purpose of academic research, breeding, or propagation or for any other purpose specified by Ordinance of the Ministry of the Environment shall obtain the permission of the Minister of the Environment.

(2) A person who intends to obtain permission set forth in the preceding paragraph, shall apply for permission to the Minister of the Environment as provided by Ordinance of the Ministry of the Environment.

(3) If any of the following grounds exist with regard to the Taking to which an application set forth in the preceding paragraph pertains, the Minister of the Environment shall not grant permission under paragraph (1):

(i) the purpose of the Taking does not conform to any of the purposes prescribed in paragraph (1);

(ii) the Taking poses a risk of impeding the conservation of the National Endangered Species, etc.; or

(iii) the person carrying out the Taking is found to be unable to appropriately care for the individual organism he/she intends to Take, due to not having an appropriate rearing and/or cultivating facility or for any other grounds.

(4) When granting permission under paragraph (1), if either of the circumstances specified in the following items for the respective categories of permission set forth therein exist, the Minister of the Environment may attach conditions to that permission to the extent necessary:

(i) permission other than that prescribed in the following item: if the minister considers it necessary for the conservation of the National Endangered Species, etc.; or

(ii) permission to Take a living individual organism from a Specified National Endangered Species for the purpose of breeding or propagation for transfer or delivery in connection with the business set forth in Article 30, paragraph (1): if the minister considers it necessary to contribute to the conservation of the Endangered Species of Wild Fauna or Flora through the promotion of breeding or propagation of individual organisms of the Specified National Endangered Species.

(5) When the Minister of the Environment grants permission set forth in paragraph (1), he/she shall issue a permit as provided by Ordinance of the Ministry of the Environment.

(6) Any recipient of permission set forth in paragraph (1) that is specified by Ordinance of the Ministry of the Environment as a juridical person or another person with unavoidable circumstances for having another person engage in the Taking to which that permission pertains may, as provided by Ordinance of the Ministry of the Environment, apply to the Minister of the Environment for an operator certificate certifying that the certificate holder engages in the Taking to which the permission pertains under that person's supervision.

(7) A recipient of permission set forth in paragraph (1) may, if that person or a person engaged in the Taking to which that permission pertains under that person's supervision loses the permit set forth in paragraph (5) or the operator certificate set forth in the preceding paragraph or if that permit or that

operator certificate is destroyed, apply to the Minister of the Environment for that permit or operator certificate to be reissued as provided by Ordinance of the Ministry of the Environment.

(8) A recipient of permission set forth in paragraph (1) or a person engaged in the Taking to which the permission pertains under that person's supervision shall carry the permit set forth in paragraph (5) or the operator certificate set forth in paragraph (6) when carrying out the Taking.

(9) A person who has carried out the Taking after obtaining permission set forth in paragraph (1) shall appropriately treat the individual organism he/she has Taken by housing it in an appropriate rearing and/or cultivation facility or by any other method specified by Ordinance of the Ministry of the Environment.

(10) The Minister of the Environment shall consult with the Minister of Agriculture, Forestry and Fisheries prior to granting permission set forth in paragraph (1) to Take a living individual organism from a Specified National Endangered Species for the purpose of breeding or propagation for transfer or delivery in connection with the business set forth in Article 30, paragraph (1) or attaching conditions to that permission pursuant to the provisions of paragraph (4).

(Order to Take Measures etc. Issued to a Person Permitted to Carry out Taking)

Article 11

(1) Where a recipient of permission set forth in paragraph (1) of the preceding Article violates the provisions of paragraph (9) of that Article or the conditions attached pursuant to the provisions of paragraph (4) of that Article, if either of the circumstances specified in the following items exists for the respective categories of persons who have obtained that permission, the Minister of the Environment may order that person to improve his/her rearing and/or cultivation facilities or to take other necessary measures:

(i) a person not prescribed in the following item: if the Minister of the Environment considers it necessary for the conservation of the National Endangered Species, etc.; or

(ii) a recipient of permission set forth in paragraph (1) of the preceding Article to Take a living individual organism from a Specified National Endangered Species for the purpose of breeding or propagation for transfer or delivery in connection with the business set forth in Article 30, paragraph (1): if the Minister of the Environment considers it necessary to contribute to the conservation of Endangered Species of Wild Fauna and Flora through promotion of the breeding or propagation of individual organisms from the Specified National Endangered Species.

(2) Where a recipient of permission set forth in paragraph (1) of the preceding Article violates the provisions of this Act or any order issued or disposition made under this Act, if either of the circumstances specified in the following items exist for the respective categories of persons who have obtained the permission set forth therein, the Minister of the Environment may revoke that permission:

(i) a person not prescribed in the following item: if the Minister of the Environment finds that the violation impedes the conservation of the National Endangered Species, etc.; or

(ii) a person set forth in item (ii) of the preceding paragraph: if the Minister of the Environment finds that the violation impedes contribution to the conservation of Endangered Species of Wild Fauna and Flora through promotion of the breeding or propagation of individual organisms from the Specified National Endangered Species.

(3) The Minister of the Environment shall consult with the Minister of Agriculture, Forestry and Fisheries prior to issuing an order under the provisions of paragraph (1) against a person set forth in item (ii) of that paragraph or revoking that person's permission pursuant to the provisions of the preceding paragraph.

(Prohibition of Transfer)

Article 12

(1) A person shall not transfer or receive a transfer of or deliver or receive a delivery of (hereinafter collectively referred to as “Transfer”) an Individual Organism, Etc. from an Endangered Species of Wild Fauna or Flora; provided, however, that this does not apply in any of the following cases:

(i) where a person obtains permission under paragraph (1) of the following Article and carries out the Transfer to which said permission pertains;

(ii) where a person Transfers an Individual Organism, Etc. from a Specified National Endangered Species;

(iii) where a person Transfers a part from an International Endangered Species or a processed product made from that part that is specified by Cabinet Order as a raw material for products within Japan (hereinafter referred to as a "Raw Material Part, Etc.") or any processed product made from a Raw Material Part, Etc. that satisfies the requirements specified by Cabinet Order in terms of its form, size, or other matters according to the type of the Raw Material Part, Etc. or the processed product made therefrom (hereinafter referred to as a "Specified Part, Etc.");

(iv) where a person Transfers an individual organism from a National Endangered Species, Etc. that he/she has Taken in the case prescribed under Article 9, item (ii), any part from that individual organism, or any processed product made from that individual organism or part;

(v) where a person Transfers an Individual Organism, Etc. from an International Endangered Species for which a registration set forth in Article 20, paragraph (1) has been obtained or a Raw Material Part, Etc. for which an advance registration certificate set forth in Article 20-3, paragraph (1) has been completed pursuant to the provisions of the main clause of that paragraph;

(vi) cases specified by Ordinance of the Ministry of the Environment where one or both of the parties involved in a Transfer of an Individual Organism, Etc. from an Endangered Species of Wild Fauna or Flora are national government organs or local public entities; or

(vii) in addition to what is listed in the preceding items, cases specified by Ordinance of the Ministry of the Environment as those in which a Transfer poses no risk of impeding the conservation of Endangered Species of Wild Fauna or Flora.

(2) If the Minister of the Environment intends to establish the Ordinance of the Ministry of the Environment set forth in item (vi) or (vii) of the preceding paragraph, he/she shall consult with the Minister of Agriculture, Forestry and Fisheries and the Minister of Economy, Trade and Industry.

(Permission for Transfer)

Article 13

(1) A person who intends to Transfer an Individual Organism, Etc. from an Endangered Species of Wild Fauna or Flora for the purpose of academic research, breeding, or propagation or for any other purpose specified by Ordinance of the Ministry of the Environment (excluding a person who intends to carry out a Transfer in any of the cases listed in paragraph (1), items (ii) through (vii) of the preceding Article) shall obtain the permission of the Minister of the Environment.

(2) A person who intends to obtain permission set forth in the preceding paragraph shall apply for permission to the Minister of the Environment as provided by Ordinance of the Ministry of the Environment.

(3) If any of the following grounds exist with regard to the Transfer to which the application set forth in the preceding paragraph pertains, the Minister of the Environment shall not grant permission under in paragraph (1):

(i) the purpose of the Transfer does not conform to any of the purposes prescribed in paragraph (1); or

(ii) the transferee or the recipient of delivery is found to be unable to appropriately care for the Individual Organism, Etc. he/she receives by Transfer or delivery for the conservation of the species due to not having an appropriate rearing and/or cultivation facility or for any other grounds.

(4) The provisions of Article 10, paragraph (4) apply *mutatis mutandis* to the permission set forth in paragraph (1), the provisions of paragraph (9) of that Article apply *mutatis mutandis* to any person who has received a Transfer or delivery after obtaining the permission set forth in paragraph (1), and the provisions of paragraph (2) of the preceding Article apply *mutatis mutandis* to the enactment, revision, or abolition of the Ordinance of the Ministry of the Environment set forth in paragraph (1). In this case, the phrase "individual organism he/she has Taken" in Article 10, paragraph (9) will be deemed to be replaced with "Individual Organism, Etc. he/she has received by Transfer or delivery."

(Order to Take Measures etc. Issued to a Person Permitted to Carry Out a Transfer)

Article 14

Where a recipient of a permission set forth in paragraph (1) of the preceding Article violates the provisions of Article 10, paragraph (9) as applied *mutatis mutandis* pursuant to paragraph (4) of the preceding Article or the conditions attached pursuant to the provisions of Article 10, paragraph (4) as applied *mutatis mutandis* pursuant to paragraph (4) of the preceding Article, if the Minister of the Environment considers it necessary

for the conservation of the Endangered Species of Wild Fauna or Flora, he/she may order that person to improve the rearing and/or cultivation facility or to Take any other necessary measures.

(Prohibition of Export and Import)

Article 15

(1) An Individual Organism, Etc. from a National Endangered Species other than Specified National Endangered Species must not be exported or imported; provided, however, that this does not apply if that export or import is carried out for the purpose of academic research involving international cooperation or is otherwise particularly necessary, if it does not impede the conservation of the National Endangered Species in Japan, or if it satisfies any other requirements specified by Cabinet Order.

(2) A person who intends to export or import an Individual Organism, Etc. from an Endangered Species of Wild Fauna or Flora other than Specified National Endangered Species bears an obligation to obtain approval for the export or import pursuant to the provisions of Article 48, paragraph (3) or Article 52 of the Foreign Exchange and Foreign Trade Act (Act No. 228 of 1949).

(Order to Take Measures, etc. Issued to an Illegal Importer)

Article 16

(1) If the Minister of Economy, Trade and Industry considers it necessary where an Individual Organism, Etc. from an Endangered Species of Wild Fauna or Flora other than Specified National Endangered Species has been imported without approval under the provisions of the Cabinet Order based on the provisions of Article 52 of the Foreign Exchange and Foreign Trade Act, he/she may order the importer of that Individual Organism, Etc. to return that Individual Organism, Etc. by designating a facility or other place appropriate for the protection of the Individual Organism, Etc. located within the exporting country or the country of origin.

(2) If the Minister of the Environment and the Minister of Economy, Trade and Industry find it to be necessary where a person has received a Transfer of an Individual Organism, Etc. from an Endangered Species of Wild Fauna or Flora other than Specified National Endangered Species in violation of the provisions of Article 12, paragraph (1) from a person who has imported that Individual Organism, Etc. without approval under the provisions of the Cabinet Order based on the provisions of Article 52 of the Foreign Exchange and Foreign Trade Act, with knowledge that that Individual Organism, Etc. has been imported without that approval, they may order the person who has received that Transfer to return that Individual Organism, Etc. by designating a facility or other place appropriate for the protection of that Individual Organism, Etc. located within the exporting country or the country of origin.

(3) Where the Minister of Economy, Trade and Industry has issued an order under the provisions of paragraph (1) or the Minister of the Environment and the Minister of Economy, Trade and Industry have issued an order under the provisions of the preceding paragraph, if the person who has received

that order fails to return the Individual Organism, Etc. as ordered, the Minister of Economy, Trade and Industry or the Minister of the Environment and the Minister of Economy, Trade and Industry (collectively referred to as the "Minister of Economy, Trade and Industry, Etc." in Article 52) may return the Individual Organism, Etc. to the facility or other place prescribed in the preceding two paragraphs himself/herself and have that person bear all or part of the costs incurred.

(Prohibition of Display or Advertisement)

Article 17

An Individual Organism, Etc. from an Endangered Species of Wild Fauna or Flora must not be displayed or advertised for the purpose of sale or distribution; provided, however, that this does not apply to the display or advertisement of an Individual Organism, Etc. from a Specified National Endangered Species, a Specified Part, Etc., an individual organism from a National Endangered Species, etc. Taken in the case set forth in Article 9, item (ii), any part of that individual organism, or processed product made from that individual organism or organ, an Individual Organism, Etc. from an International Endangered Species for which the registration set forth in Article 20, paragraph (1) has been obtained, or a Raw Material Part, Etc. pertaining to the advance registration certificate set forth in Article 20-3, paragraph (1) that has been completed pursuant to the provisions of the main clause of that paragraph or to any other cases specified by Ordinance of the Ministry of the Environment wherein that display or advertisement poses no risk of impeding the conservation of the Endangered Species of Wild Fauna or Flora.

(Order to Take Measures Issued to a Person Displaying or Advertising an Individual Organism)

Article 18

The Minister of the Environment may order a person who is displaying or advertising an Individual Organism, Etc. from an Endangered Species of Wild Fauna or Flora in violation of the provisions of the preceding Article to cease that display or advertisement or order any other necessary matters to secure the observance of the provisions of that Article.

(Collection of Reports and On-Site Inspections)

Article 19

(1) The ministers listed in the following items may, to the extent necessary for the enforcement of this Act, request the corresponding persons prescribed in those items to report on the status of the treatment of an Individual Organism, Etc. from an Endangered Species of Wild Fauna or Flora and other necessary matters or have ministry officials enter a facility related to the Taking of an individual organism from an Endangered Species of Wild Fauna or Flora or the Transfer, import, display, or advertisement of an Individual Organism, Etc. from an Endangered Species of Wild Fauna or Flora and inspect the Individual Organism, Etc., the rearing and/or cultivation facility, documents, or any other articles, or question relevant persons:

(i) the Minister of the Environment: a recipient of permission set forth in Article 10, paragraph (1) or Article 13, paragraph (1) or a person who is displaying or advertising an Individual Organism, Etc. from an Endangered Species of Wild Fauna or Flora for the purpose of sale or distribution;

(ii) the Minister of the Environment and the Minister of Economy, Trade and Industry: a person who has received Transfer of an imported Individual Organism, Etc. from an Endangered Species of Wild Fauna or Flora other than Specified National Endangered Species; and

(iii) the Minister of Economy, Trade and Industry: a person who has imported an Individual Organism, Etc. from an Endangered Species of Wild Fauna or Flora other than a National Endangered Species.

(2) A ministry official who carries out an on-site inspection under the provisions of the preceding paragraph shall carry an identification card and present it to relevant persons.

(3) The authority under the provisions of paragraph (1) must not be construed as extending to criminal investigations.

Section 3 Registration, etc. of Individual Organisms, Etc. from International Endangered Species (entirely omitted)

Section 4 Regulation of Businesses Dealing with Specified National Endangered Species and Businesses Dealing with Specified International Endangered Species

Subsection 1 Regulation of Businesses Dealing with Specified National Endangered Species

(Notification of Business Dealing with Specified National Endangered Species)
Article 30

(1) A person (excluding a person prescribed in the following paragraph) who intends to carry out a business activity that involves the Transfer or delivery of any Individual Organism, Etc. from a Specified National Endangered Species (hereinafter referred to as a "Business Dealing with Specified National Endangered Species" in this Section and Article 62, item (i)) shall notify the Minister of the Environment and the Minister of Agriculture, Forestry and Fisheries of the following matters in advance:

(i) the name and address, and in the case of a juridical person, the name of the representative person thereof;

(ii) the name and location of the facility for carrying out the Transfer or delivery of the Individual Organism, Etc. from a Specified National Endangered Species;

(iii) the Specified National Endangered Species subject to Transfer or delivery; and

(iv) in addition to what is listed in the preceding three items, any matter specified by Ordinance of the Ministry of the Environment and Ordinance of the Ministry of Agriculture, Forestry and Fisheries.

(2) A person who intends to carry out a Business Dealing with Specified National Endangered Species that involves a processed product shall notify the Minister of the Environment and the minister specified by Cabinet Order according to the type of processed product (hereinafter referred to as the "Minister Concerned with the Specified National Endangered Species" in this Section) of the following matters in advance:

(i) the matters listed in items (i) through (iii) of the preceding paragraph; and

(ii) in addition to what is listed in the preceding item, any matter specified by an order issued by the Minister of the Environment and the Minister Concerned with the Specified National Endangered Species.

(3) A person who has provided notification under the provisions of paragraph (1) shall, in the event of a change in any matter to which that notification pertains or when having abolished the Business Dealing with Specified National Endangered Species, notify the Minister of the Environment and the Minister of Agriculture, Forestry and Fisheries within thirty days from the day of that change or abolition.

(4) In addition to what is provided in paragraph (1) and the preceding paragraph, necessary matters concerning notification under these provisions are to be specified by Ordinance of the Ministry of the Environment and Ordinance of the Ministry of Agriculture, Forestry and Fisheries.

(5) The provisions of paragraph (3) apply *mutatis mutandis* to persons who have provided notification under the provisions of paragraph (2), and the provisions of the preceding paragraph apply *mutatis mutandis* to notifications under the provisions of paragraph (2). In this case, the term "Minister of Agriculture, Forestry and Fisheries" in paragraph (3) will be deemed to be replaced with " Minister Concerned with the Specified National Endangered Species," and the phrase "Ordinance of the Ministry of the Environment and Ordinance of the Ministry of Agriculture, Forestry and Fisheries" in the preceding paragraph will be deemed to be replaced with" order issued by the Minister of the Environment and the Minister Concerned with the Specified National Endangered Species."

(Matters to be Observed by a Person Carrying Out a Business Dealing with a Specified National Endangered Species)

Article 31

(1) A person who carries out a Business Dealing with Specified National Endangered Species after providing notification under the provisions of paragraph (1) of the preceding Article shall, when receiving Transfer or delivery of an Individual Organism, Etc. from a Specified National Endangered Species in connection with that Business Dealing with Specified National Endangered Species, confirm the name and address of the transferor or deliverer of the Individual Organism, Etc., and if the

transferor or deliverer is a juridical person, the name of the representative person thereof, and also ask the transferor or the deliverer about the following matters:

(i) whether that Individual Organism, Etc. is a bred or propagated individual organism, a part of that individual organism, or a processed product made from that individual organism or part (referred to as a "Bred or Propagated Individual Organism, Etc." in the following item) or a captured or collected individual organism, a part of that individual organism, or a processed product made from that individual organism or part (referred to as a "Captured or Collected Individual Organism, Etc." in item (iii));

(ii) if that Individual Organism, Etc. is a Bred or Propagated Individual Organism, Etc., the name and address of the person who bred or propagated that Individual Organism, Etc., and in the case of a juridical person, the name of the representative person thereof; and

(iii) if that Individual Organism, Etc. is a Captured or Collected Individual Organism, Etc., the place where that Individual Organism, Etc. was captured or collected, and the name and address of the person who captured or collected that Individual Organism, Etc.

(2) A person who carries out a Business Dealing with Specified National Endangered Species after providing notification under the provisions of paragraph (1) of the preceding Article shall, as provided by Ordinance of the Ministry of the Environment and Ordinance of the Ministry of Agriculture, Forestry and Fisheries, enter the matters confirmed or inquired about pursuant to the provisions of the preceding paragraph and other matters concerning the Transfer of the Individual Organism, Etc. of the Specified National Endangered Species in a document, and preserve that document.

(3) The provisions of the preceding two paragraphs apply *mutatis mutandis* to a person carrying out a Business Dealing with Specified National Endangered Species after providing notification under the provisions of paragraph (2) of the preceding Article. In this case, the phrase "Ordinance of the Ministry of the Environment and Ordinance of the Ministry of Agriculture, Forestry and Fisheries" in the preceding paragraph will be deemed to be replaced with "order issued by the Minister of the Environment and the Minister Concerned with the Specified National Endangered Species."

(Instructions, etc. Given to a Person Carrying Out a Business Dealing with a Specified National Endangered Species)

Article 32

(1) Where a person carrying out a Business Dealing with Specified National Endangered Species after providing notification under the provisions of Article 30, paragraph (1) violates the provisions of paragraph (1) or (2) of the preceding Article, the Minister of the Environment and the Minister of Agriculture, Forestry and Fisheries may instruct that person on matters necessary to secure the observance of those provisions if they find it necessary in order to contribute to the conservation of Endangered Species of Wild Fauna and Flora by regulating for proper operation of that Business Dealing with Specified National Endangered Species.

(2) Where a person carrying out a Business Dealing with Specified National Endangered Species after providing notification under the provisions of Article 30, paragraph (1) violates an instruction given under the preceding paragraph, the Minister of the Environment and the Minister of Agriculture, Forestry and Fisheries may order that person to suspend all or part of the Transfer or delivery of Individual Organisms, Etc. from a Specified National Endangered Species to which that Business Dealing with Specified National Endangered Species pertains for a period not exceeding three months, if they find that that violation will impede the conservation of Endangered Species of Wild Fauna or Flora accomplished by regulating for proper operation of that Business Dealing with Specified National Endangered Species.

(3) The provisions of the preceding two paragraphs apply *mutatis mutandis* to a person carrying out a Business Dealing with Specified National Endangered Species after providing notification under the provisions of Article 30, paragraph (2). In this case, the term "Minister of Agriculture, Forestry and Fisheries" in the preceding two paragraphs will be deemed to be replaced with "minister relevant to the specified national endangered species," and the phrase "paragraph (1) or (2) of the preceding Article" in paragraph (1) will be deemed to be replaced with "paragraph (1) or (2) of the preceding Article as applied *mutatis mutandis* pursuant to paragraph (3) of that Article."

(Collection of Reports and On-Site Inspections)

Article 33

(1) The Minister of the Environment and the Minister of Agriculture, Forestry and Fisheries may, to the extent necessary for the enforcement of the provisions of this Section, request a person carrying out a Business Dealing with Specified National Endangered Species after providing notification under the provisions of Article 30, paragraph (1) to report on that business or have ministry officials enter a facility used to carry out that business to inspect documents and other articles or question relevant persons.

(2) The provisions of the preceding paragraph apply *mutatis mutandis* to a person carrying out a Business Dealing with Specified National Endangered Species after providing notification under the provisions of Article 30, paragraph (2). In this case, the term "Minister of Agriculture, Forestry and Fisheries" in the preceding paragraph will be deemed to be replaced with "minister relevant to the specified national endangered species."

(3) A ministry official who carries out an on-site inspection under the provisions of paragraph (1) (including where applied *mutatis mutandis* pursuant to the preceding paragraph; the same applies in the following paragraph) shall carry identification and present it to relevant persons.

(4) The authority under the provisions of paragraph (1) must not be construed as extending to criminal investigations.

Subsection 2 Regulation of Business Dealing with Specified International Endangered Species (entirely omitted)

Section 5 Certification, etc. that Processed Products are from Properly Acquired Raw Materials (entirely omitted)

Chapter III Regulations for Protection of Habitats, etc.

Section 1 Obligations, etc. of Landowners

(Obligations of Landowners, etc.)

Article 34

An owner or possessor of land shall give consideration to the conservation of National Endangered Species when using that land.

(Advice or Guidance)

Article 35

If the Minister of the Environment considers it necessary for the conservation of National Endangered Species, he/she may provide an owner or possessor of land with necessary advice or guidance concerning the method of use of that land or any other matter.

Section 2 Natural Habitat Protection Areas

(Natural Habitat Protection Areas)

Article 36

(1) If the Minister of the Environment considers it necessary for the conservation of a National Endangered Species, he/she may designate, as a natural habitat protection area, the habitat or natural environment of individual organisms of that species and the area that needs to be protected together with that habitat that are considered important for the conservation of that National Endangered Species in light of the distribution and ecological needs of those individual organisms and other matters related to the habitation and growth of those individual organisms.

(2) Designation under the provisions of the preceding paragraph (hereinafter referred to as "Designation" in this Article) is made by specifying the area to be designated, the National Endangered Species to which the designation pertains, and guidelines on protection of the area to be designated.

(3) The Minister of the Environment shall consult with the head of the relevant administrative organ and hear the opinions of the Central Environment Council and relevant local public entities prior to making a Designation.

(4) The Minister of the Environment shall give public notice prior to making a Designation and make a draft for the area to be subject to the Designation, the National Endangered Species to which the Designation pertains, and guidelines on the protection of the area subject to the Designation (hereinafter referred to as the "Designation Draft" in the following paragraph and paragraph (6)) available for public inspection within 14 days of the day of public notice as provided by Ordinance of the Ministry of the Environment.

(5) If public notice has been provided under the provisions of the preceding paragraph, any resident and/or interested person in the area to be subject to Designation may submit a written opinion on the Designation Draft to the Minister of the Environment during the period prescribed in that paragraph.

(6) The Minister of the Environment shall hold a public hearing if a written opinion objecting to a Designation Draft is submitted under the preceding paragraph or where he/she finds it to be otherwise necessary in order to solicit a wide range of opinions on the Designation.

(7) If the Minister of the Environment makes a Designation, he/she shall give public notice in the official gazette of that Designation and of the area to be subject to Designation, the National Endangered Species to which the Designation pertains, and guidelines on the protection of the area of the Designation.

(8) A Designation will become effective upon the giving of public notice under the provisions of the preceding paragraph.

(9) If the Minister of the Environment finds that there is no longer a need for a Designation or if he/she finds it to be inappropriate to continue a Designation due to a change in the habitation or growth status, or in any of the other circumstances in relation to the individual organisms from the National Endangered Species to which the natural habitat protection area pertains, he/she shall withdraw that Designation.

(10) The provisions of paragraphs (3), (7), and (8) apply *mutatis mutandis* to withdrawal of a Designation under the provisions of the preceding paragraph. In this case, the phrase "that Designation and of the area to be subject to Designation, the National Endangered Species to which the Designation pertains, and guidelines on the protection of the area of the Designation" in paragraph (7) will be deemed to be replaced with "that Designation and of the area for which the Designation is to be withdrawn," and the phrase "public notice under the provisions of the preceding paragraph" in paragraph (8) will be deemed to be replaced with "public notice under the provisions of the preceding paragraph as applied *mutatis mutandis* pursuant to paragraph (10)."

(11) A person who carries out any of the acts listed in the items under paragraph (4) of the following Article within a natural habitat protection area (for the act set forth in item (viii) of that paragraph, within one kilometer of a lake, pond, or wetland prescribed in that item) shall do so in a way that does not impede the conservation of the National Endangered Species while giving consideration to the guidelines set forth in paragraph (2).

(Special Management Zones)

Article 37

(1) The Minister of the Environment may designate any area within a natural habitat protection area which he/she finds to be particularly necessary for the conservation of a National Endangered Species as a special management zone.

(2) If the Minister of the Environment finds that there is no longer a need for a designation under the provisions of the preceding paragraph or when he/she finds it to be inappropriate to continue that designation due to a change in the habitation or growth status or in any of the other circumstances in relation to the individual organisms of the National Endangered Speciesto which the special management zone pertains, he/she shall withdraw that designation.

(3) The provisions of paragraphs (2) through (8) of the preceding Article apply *mutatis mutandis* to a designation under the provisions of paragraph (1), and the provisions of paragraphs (3), (7), and (8) of that Article apply *mutatis mutandis* to the withdrawal of a designation under the provisions of the preceding paragraph. In this case, the phrase "that Designation and of the area to be subject to Designation, the National Endangered Species to which the Designation pertains, and guidelines on the protection of the area of the Designation" in paragraph (7) of that Article will be deemed to be replaced with "that Designation and of the area for which the Designation is to be withdrawn," with regard to withdrawal of a designation under the provisions of the preceding paragraph, and the phrase "public notice under the provisions of the preceding paragraph" in paragraph (8) of that Article will be deemed to be replaced with "public notice under the provisions of the preceding paragraph as applied *mutatis mutandis* pursuant to paragraph (3) of the following Article."

(4) The following acts (with regard to acts listed in items (x) through (xiv), limited to those carried out within any area designated by the Minister of the Environment and during a period designated for each such area) must not be carried out without the permission of the Minister of the Environment within a special management zone (with regard to acts listed in item (viii), within one kilometer of a lake, pond, or wetland prescribed in that item; the same applies in Article 40, paragraph (1) and Article 41, paragraph (1)):

(i) construction, renovation, or expansion of a building or other structure;

(ii) development of residential land, cultivation of land or otherwise changing the form or nature of land (including the beds of bodies of water);

(iii) excavation of minerals or quarrying of soil and/or stone;

(iv) reclamation of land from a water surface by landfill or drainage;

(v) raising or lowering the water level or water volume of a river, lake, pond, etc.;

(vi) felling trees or bamboo;

(vii) Taking an individual organism or other item from a species of wild fauna or flora designated by the Minister of the Environment as required for the habitation or growth of individual organisms from a National Endangered Species;

(viii) discharging sewage or waste water into a lake, pond, or wetland designated by the Minister of the Environment within a special management zone or into any body of water or waterway that flows into such a lake, pond, or wetland by installing a drainage facility;

(ix) using a motor vehicle, horse, motorboat or landing an aircraft within any area designated by the Minister of the Environment other than on roads, open spaces set aside for public use, rice fields and other cultivated fields, pastures, and residential land;

(x) Taking an individual organism or other item from a species of wild fauna or flora other than an individual organism or other item from a species of wild fauna or flora designated by the Minister of the Environment pursuant to the provisions of item (vii);

(xi) releasing, planting, or sowing the seeds of an individual organism from a species of fauna or flora designated by the Minister of the Environment as one that poses a risk of impeding the habitation or growth of individual organisms from a National Endangered Species;

(xii) spreading any substance designated by the Minister of the Environment as one posing a risk of impeding the habitation or growth of individual organisms from a National Endangered Species;

(xiii) engaging in controlled burning or making an open fire; or

(xiv) observing an individual organism from a National Endangered Species by a method specified by the Minister of the Environment as posing a risk of impeding the habitation or growth of that individual organism from the National Endangered Species.

(5) A person who intends to obtain the permission set forth in the preceding paragraph shall apply to the Minister of the Environment as provided for by Ordinance of the Ministry of the Environment.

(6) If the act pertaining to the application set forth in the preceding paragraph does not conform to the guidelines set forth in paragraph (2) of the preceding Article as applied *mutatis mutandis* pursuant to paragraph (3), the Minister of the Environment may refuse to grant the permission set forth in paragraph (4).

(7) If the Minister of the Environment considers it necessary for the conservation of a National Endangered Species, he/she may attach conditions to the permission set forth in paragraph (4) to the extent necessary for that conservation.

(8) A person who had already commenced any of the acts listed in the items under paragraph (4) may, if it is decided that that act is to be regulated pursuant to the provisions of that paragraph, continue to conduct that act notwithstanding the provisions of that paragraph, if he/she notifies the Minister of the Environment of the matters specified by Ordinance of the Ministry of the Environment within three months of the decision on that regulation.

(9) The provisions of paragraph (4) do not apply to the following acts:

(i) an act carried out as a necessary emergency measure in response to an extraordinary disaster;

(ii) an ordinary act of management or a simple act specified by Ordinance of the Ministry of the Environment; and

(iii) felling trees or bamboo by a method and to an extent designated by the Minister of the Environment for each special management zone in consultation with the Minister of Agriculture, Forestry and Fisheries.

(10) A person who has carried out an act set forth in item (i) of the preceding paragraph that falls under any of the items under paragraph (4) shall notify the Minister of the Environment to that effect within fourteen days of the act.

(No Entry Zones)

Article 38

(1) The Minister of the Environment may designate, as a no entry zone, any area within a special management zone that he/she finds to be particularly necessary to the protection of the habitation or growth of individual organisms from a National Endangered Species.

(2) If the Minister of the Environment intends to make a designation under the provisions of the preceding paragraph, he/she shall obtain the consent of the owner or possessor of the land in that place (limited to the person having legitimate title to the land; the same applies in the following paragraph and Article 42, paragraph (2)), and consult with the head of the relevant administrative organ.

(3) If the owner or possessor of land requests withdrawal of the designation under the provisions of paragraph (1) based on justifiable grounds or if the Minister of the Environment finds that there is no longer a need for that designation, the Minister of the Environment shall withdraw that designation.

(4) Any person shall not enter a no entry zone during the period specified by the Minister of the Environment; provided, however, that this does not apply in any of the following cases:

(i) when entering the no entry zone in order to carry out a necessary emergency measure in response to an extraordinary disaster;

(ii) when entering the no entry zone in order to carry out an ordinary act of management or a simple act specified by Ordinance of the Ministry of the Environment; and

(iii) in addition to what is listed in the preceding two items, where the Minister of the Environment finds that unavoidable grounds exist and grants permission.

(5) The provisions of Article 36, paragraphs (7) and (8) apply *mutatis mutandis* to designation under the provisions of paragraph (1) and withdrawal of designation under the provisions of paragraph (3), and the provisions of paragraphs (5) and (7) of the preceding Article apply *mutatis mutandis* to the permission set forth in item (iii) of the preceding paragraph. In this case, the phrase "that Designation and of the area to be subject to Designation, the National Endangered Species to which the Designation pertains, and guidelines on the protection of the area of the Designation" in Article 36, paragraph (7) will be deemed to be replaced with "that Designation and the area to be subject to Designation" with regard to a designation under the provisions of paragraph (1) and "that Designation and the area for which the Designation is to be withdrawn " with regard to withdrawal of designation under the provisions of paragraph (3), and the phrase "public notice under the provisions of the preceding paragraph" in paragraph (8) of that Article will be deemed to be replaced with "public notice

under the provisions of the preceding paragraph as applied *mutatis mutandis* pursuant to Article 38, paragraph (5)."

(Monitoring Zones)

Article 39

(1) A person who intends to carry out any of the acts listed in Article 37, paragraph (4), items (i) through (v) within any part of a natural habitat special management zone that is not categorized as a protection zone (referred to as a "Monitoring Zone" in paragraph (1) of the following Article and Article 41, paragraph (1)) shall notify the Minister of the Environment of matters specified by Ordinance of the Ministry of the Environment in advance.

(2) Where notification under the provisions of the preceding paragraph (hereinafter referred to as "Notification" in this Article) has been provided, if the act to which the notification pertains does not conform to the guidelines set forth in Article 36, paragraph (2), the Minister of the Environment may prohibit or restrict the person who made the notification from carrying out the act to which the notification pertains or order that person to take necessary measures.

(3) An order under the provisions of the preceding paragraph may not be issued after thirty days have elapsed from the day of the Notification (or after a period specified by the Minister of the Environment not exceeding sixty days from the day of the Notification, if there are reasonable grounds for not being able to issue an order under the provisions of that paragraph within thirty days from the day of the Notification) or after providing notice under the provisions of the proviso to paragraph (5).

(4) If the Minister of the Environment has specified a period pursuant to the provisions of the preceding paragraph, he/she shall notify the person who provided notification of that fact and the grounds therefor without delay.

(5) A person who provided notification shall not commence the act to which the notification pertains until thirty days have elapsed from the day of the notification (if the Minister of the Environment has specified a period pursuant to the provisions of paragraph (3), until that period has elapsed). However, this does not apply if the Minister of the Environment finds that the act poses no risk of impeding the conservation of the National Endangered Species and notifies that person to that effect.

(6) The provisions of paragraph (1) do not apply to the following acts:

(i) an act carried out as a necessary emergency measure in response to an extraordinary disaster;

(ii) an ordinary act of management or a simple act specified by Ordinance of the Ministry of the Environment; and

(iii) an act that the person has already commenced upon designation under the provisions of Article 36, paragraph (1).

(Order to Take Measures, etc.)

Article 40

(1) If the Minister of the Environment considers it necessary for the conservation of a National Endangered Species, he/she may instruct a person carrying out any of the acts listed in the items under Article 37, paragraph (4) within a special management zone or a person carrying out any of the acts listed in items (i) through (v) of that paragraph within a Monitoring Zone with respect to the implementation methods of that act.

(2) Where a person who has violated the provisions of Article 37, paragraph (4) or Article 38, paragraph (4), a person who has violated a condition attached pursuant to the provisions of Article 37, paragraph (7) (including cases where that paragraph is applied *mutatis mutandis* pursuant to Article 38, paragraph (5)), a person who has carried out an act prescribed in paragraph (1) of the preceding Article without providing notification under the provisions of that paragraph, or a person who has violated an order under the provisions of paragraph (2) of that Article has impeded the protection of the habitat or natural environment of individual organisms from a National Endangered Species as a result of that violation, if the Minister of the Environment considers it necessary for the conservation of the National Endangered Species, he/she may order that person to restore the original conditions or take any other necessary measures for the protection of the habitat of individual organisms from the National Endangered Species within a reasonable time limit specified by the Minister of the Environment.

(3) If the recipient of an order issued by the Minister of the Environment under the provisions of the preceding paragraph fails to take measures prescribed in the order by the time limit pertaining to that order, the Minister of the Environment may himself/herself restore the original conditions or take any other necessary measures for the protection of the habitat or natural environment of individual organisms from the National Endangered Species and charge the recipient for all or part of the costs therefor.

(Collection of Reports and On-Site Inspections)

Article 41

(1) The Minister of the Environment may, to the extent necessary for the enforcement of this Act, request a person who has carried out any of the acts listed in the items under Article 37, paragraph (4) within a special management zone or any of the acts listed in items (i) through (v) of that paragraph within a Monitoring Zone to report on the implementation status of that act or any other necessary matters.

(2) The Minister of the Environment may, to the extent necessary for the enforcement of this Act, have ministry officials enter land owned or possessed by a person prescribed in the preceding paragraph within a natural habitat protection area and inspect the implementation status of the act carried out by that person or question relevant persons, or have them survey the impact of that act on the conservation of a National Endangered Species.

(3) A ministry official carrying out an on-site inspection or survey under the provisions of the preceding paragraph shall carry an identification card and present it to relevant persons.

(4) The authority under the provisions of paragraphs (1) and (2) must not be construed as extending to criminal investigations.

(Field Surveys)

Article 42

(1) The Minister of the Environment may have ministry officials enter a person's land to the extent necessary to conduct a field survey for the purpose of making a designation under the provisions of Article 36, paragraph (1), Article 37, paragraph (1), or Article 38, paragraph (1).

(2) If the Minister of the Environment intends to have ministry officials enter land under the provisions of the preceding paragraph, he/she shall notify the owner or possessor of that land of that fact and give that owner or possessor an opportunity to state his/her opinions in advance.

(3) A ministry official who enters land pursuant to the provisions of paragraph (1) shall carry an identification card and present it to relevant persons.

(4) An owner or possessor of land shall not refuse or obstruct entry under the provisions of paragraph (1) unless justifiable grounds exist.

(Ruling by the Environmental Disputes Coordination Commission)

Article 43

(1) A person who is dissatisfied with a disposition under the provisions of Article 37, paragraph (4), Article 39, paragraph (2), or Article 40, paragraph (2) may apply to the Environmental Disputes Coordination Commission for a ruling if the grounds for that dissatisfaction relate to coordination with a mining, stone quarrying, or gravel quarrying business. In this case, that person may not file a request for administrative review.

(2) The provisions of Article 22 of the Administrative Appeal Act apply *mutatis mutandis* if the administrative agency ordering a disposition erroneously announces that a request for administrative review or a request for reinvestigation may be filed against the disposition set forth in the preceding paragraph.

(Compensation for Losses)

Article 44

(1) If a person has incurred losses due to the inability to obtain a permission set forth in Article 37, paragraph (4) or due to an attachment of conditions pursuant to the provisions of Article 37, paragraph (7), or an order under the provisions of Article 39, paragraph (2), the State shall compensate that person for the losses that would normally be incurred in such a case.

(2) A person who intends to receive the compensation set forth in the preceding paragraph shall make a request for that compensation to the Minister of the Environment.

(3) If the Minister of the Environment receives a request set forth in the preceding paragraph, he/she shall determine the compensation amount and notify the requester thereof.

(4) A person dissatisfied with the amount determined under the provisions of the preceding paragraph may request an increase in that amount by filing an action within six months from the day on which he/she receives notice under the provisions of that paragraph.

(5) The State will be the defendant in any action brought under the preceding paragraph.

Chapter IV Protection and Recovery Program

(Plan for a Protection and Recovery Program)

Article 45

(1) The Minister of the Environment and the head of the national government administrative organ intending to carry out a protection and recovery program (collectively referred to as the "Minister of the Environment, Etc." in paragraph (3)) shall, in order to contribute to the proper and effective implementation of that protection and recovery program, establish a plan for that program after hearing the opinions of the Central Environment Council.

(2) A plan for a protection and recovery program set forth in the preceding paragraph must, for each National Endangered Species to be subject to that program, specify the goals of that program, the area where that program is to be carried out, the contents of that program, and any other matters necessary to properly and effectively implement that program.

(3) If the Minister of the Environment, etc. establishes a plan for a protection and recovery program set forth in paragraph (1), he/she shall give public notice of an outline thereof in the official gazette and make that protection and recovery program available for public inspection.

(4) The provisions of paragraph (1) and the preceding paragraph apply *mutatis mutandis* to any amendment to a plan for a protection and recovery program set forth in paragraph (1).

(Certified Protection and Recovery Program, etc.)

Article 46

(1) If the State considers it necessary for the conservation of a National Endangered Species, it shall carry out a protection and recovery program.

(2) If a plan for a protection and recovery program to be carried out by a local public entity conforms to a plan under paragraph (1) of the preceding Article, the local public entity may receive confirmation to that effect from the Minister of the Environment.

(3) A person other than the State or local public entity may obtain certification from the Minister of the Environment to the effect that that person is capable of properly and reliably implementing the protection and recovery program to be carried out by that person and that the business plan for that protection and recovery program conforms to the plan for a protection and recovery program under paragraph (1) of the preceding Article.

(4) If the Minister of the Environment grants a certification set forth in the preceding paragraph, he/she shall give public notice to that effect as provided by Ordinance of the Ministry of the Environment.

The same applies if that certification is revoked pursuant to the provisions of Article 48, paragraph (2) or (3).

Article 47

(1) A certified protection and recovery program, etc. (meaning a national protection and recovery program or a protection and recovery program for which a confirmation set forth in paragraph (2) of the preceding Article or a certification set forth in paragraph (3) of that Article has been obtained; hereinafter the same applies in this Article) must be carried out in accordance with a plan for the protection and recovery program set forth in Article 45, paragraph (1).

(2) The provisions of Article 9, Article 12, paragraph (1), Article 37, paragraphs (4) and (10), Article 38, paragraph (4), Article 39, paragraph (1), and Article 54, paragraphs (2) and (3) do not apply to an act implemented as a certified protection and recovery program, etc.

(3) An owner or possessor of land within a natural habitat protection area shall endeavor to cooperate with the installation of feeding facilities and/or any other facilities necessary for a protection and recovery program that is conducted as part of a certified protection and recovery program, etc.

(4) The Minister of the Environment may request a person carrying out a protection and recovery program after obtaining a certification set forth in paragraph (3) of the preceding Article to report on the implementation status of that program or on any other necessary matter.

Article 48

(1) If a person carrying out a protection and recovery program after obtaining confirmation set forth in Article 46, paragraph (2) or a certification set forth in paragraph (3) of that Article abolishes that program or becomes unable to carry out that program in accordance with the plan established under Article 45, paragraph (1), he/she shall notify the Minister of the Environment to that effect.

(2) If a person gives notice under the provisions of the preceding paragraph, the Minister of the Environment shall revoke the confirmation set forth in Article 46, paragraph (2) or the certification set forth in paragraph (3) of that Article to which that notice pertains.

(3) If the Minister of the Environment finds that a protection and recovery program for which a certification set forth in Article 46, paragraph (3) has been obtained is not being carried out in accordance with the plan for that program established under Article 45, paragraph (1), or finds that the person carrying out that program is no longer capable of properly and reliably implementing that program, or has failed to make a report or made a false report under the provisions of paragraph (4) of the preceding Article, he/she may revoke that certification.

Chapter V Miscellaneous Provisions (entirely omitted)

Chapter VI Penal Provisions (partially omitted)

Article 57-2

A person who has violated the provisions of Article 9, Article 12, paragraph (1), or Article 15, paragraph (1), will be punished by imprisonment with work for not more than five years, a fine of not more than five million yen, or both.

Article 58

A person who falls under either of the following items will be punished by imprisonment with work for not more than one year or a fine of not more than one million yen:

(i) a person who has violated an order under the provisions of Article 11, paragraph (1), Article 14, Article 16, paragraph (1) or (2), Article 18, or Article 40, paragraph (2); or

(ii) a person who has violated the provisions of Article 17 or Article 37, paragraph (4).

[Item (iii) has been intentionally omitted.]

Article 59

A person who falls under any of the following items will be punished by imprisonment with work for not more than six months or a fine of not more than five hundred thousand yen:

(i) a person who has violated any of the conditions attached pursuant to the provisions of Article 10, paragraph (4) (including where applied *mutatis mutandis* pursuant to Article 13, paragraph (4)) or Article 37, paragraph (7); or

[Item (ii) has been intentionally omitted.]

(iii) a person who has violated an order under the provisions of Article 20-3, paragraphs (4) through (6), Article 32, paragraph (2) (including where applied *mutatis mutandis* pursuant to paragraph (3) of that Article), Article 33-4, paragraph (2), or Article 33-6, paragraph (4).

[Item (iv) has been intentionally omitted.]

[Articles 60 and 61 have been intentionally omitted.]

Article 62

A person who falls under any of the following items will be punished by a fine of not more than five hundred thousand yen:

(i) a person who has carried out a Business Dealing with Specified National Endangered Species or a Business Dealing with Specified International Endangered Species without providing

notification or by providing false notification under the provisions of Article 30, paragraph (1) or (2) or Article 33-2.

[Items (ii) through (v) have been intentionally omitted.]

Article 63

A person who falls under any of the following items will be punished by a fine of not more than three hundred thousand yen:

(i) a person who has carried out Taking without having a permit or operator certificate in his/her possession in violation of the provisions of Article 10, paragraph (8);

(ii) a person who has failed to make a report or made a false report under Article 19, paragraph (1), who has refused, obstructed, or evaded an on-site inspection under the provisions of that paragraph, or who has failed to make a statement or made a false statement in response to a question under the provisions of that paragraph;

(iii) a person who has failed to provide a notification or provided a false notification under the provisions of Article 20, paragraph (9);

[Items (iv) and (v) have been intentionally omitted]

(vi) a person who has violated the provisions of Article 21, Article 22, paragraph (1), or Article 30, paragraph (3) (including where applied *mutatis mutandis* pursuant to paragraph (5) of that Article and Article 33-5); or

(vii) a person who has failed to make a report or made a false report under the provisions of Article 33, paragraph (1) (including where applied *mutatis mutandis* pursuant to paragraph (2) of that Article and Article 33-5; hereinafter the same applies in this item), who has refused, obstructed, or evaded an on-site inspection under the provisions of Article 33, paragraph (1), or who has failed to make a statement or made a false statement in response to a question under the provisions of that paragraph.

[Items (viii) through (xi) have been intentionally omitted.]

[Article 64 has been intentionally omitted.]

Article 65

(1) If a representative person of a juridical person or if an agent, employee, or other person engaged by a juridical person or an individual commits a violation set forth in the following items with regard to the business of that juridical person or individual, in addition to the offender, that juridical person will be

punished by the fine prescribed in the following corresponding item or that individual will be punished by the fine prescribed in the corresponding Article.

(i) Article 57-2 a fine of not more than one hundred million yen;

(ii) Article 58, item (i) (limited to those parts to which Article 18 pertains), item (ii) (limited to those parts to which Article 17 pertains), and item (iii) a fine of not more than twenty million yen; and

(iii) Article 58, item (i) (excluding those parts to which Article 18 pertains) and item (ii) (limited to those parts to which Article 37, paragraph (4) pertains), Article 59, Article 62, and Article 63 the fine prescribed in the corresponding Article.

(2) If a juridical person or an individual is punished by a fine due to a violation set forth in Article 57-2 pursuant to the provisions of the preceding paragraph, the period of prescription will be in accordance with the period of prescription for the offenses set forth in that Article.

[Article 66 has been intentionally omitted.]

Supplementary Provisions (entirely omitted)

3-7 Act on the Prevention of Adverse Ecological Impacts Caused by Specified Invasive Alien Species

(Excerpt)

(Act No. 78 of June 2, 2004)

Last amended by Act No. 69 of June 13, 2014

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Supplementary Provisions

Chapter I General Provisions

(Purpose)

Article 1

The purpose of this Act is to prevent adverse impacts pertaining to ecosystems, etc. by specified invasive alien species by regulating the raising, growing, storing, carrying (hereinafter referred to as "Raising"), importing, and other handling of Specified Invasive Alien Species and by taking measures such as controlling Specified Invasive Alien Species by the State, etc., and thereby to contribute to the stabilization and improvement of the lives of the citizenry by conserving biodiversity, protecting human life and limb, and contributing to the sound development of agriculture, forestry and fisheries.

(Definitions)

Article 2

(1) The term "Specified Invasive Alien Species" as used in this Act means individual organisms (including eggs, seeds, and other individual organisms designated by a Cabinet Order; limited to living organisms) and their parts (limited to those which require measures to be taken to prevent adverse ecological impacts under this Act such as regulations on Raising and that are designated by a Cabinet Order (limited to living parts)) that are designated by a Cabinet Order as organisms that exist outside of their original habitat or natural environment as a result of being introduced in Japan from overseas (including organisms generated as the result of crossbreeding; hereinafter referred to as "Alien Species") and that cause or are likely to cause adverse ecological impacts because their characteristics differ from organisms whose original habitat or natural environment is Japan (hereinafter referred to as "Native Species").

(2) The term "Adverse Ecological Impact" as used in this Act means damage to an ecosystem, human life or limb, or agriculture, forestry and fisheries.

(3) If a competent minister plans to enact, revise, or abolish a Cabinet Order mentioned in paragraph (1), that minister shall hear the opinions of people with expert knowledge and experience about the characteristics of the relevant organism.

(Basic Policy for Preventing Adverse Ecological Impacts Caused by Specified Invasive Alien Species)

Article 3

(1) The competent minister shall prepare a draft of basic policies for preventing Adverse Ecological Impact by a Specified Invasive Alien Species after hearing the opinions of the Central Environment Council and seek a cabinet decision on that draft.

(2) The basic policy in the preceding paragraph (hereinafter referred to as the "Basic Policy") is to specify the following matters:

(i) The basic concept concerning the prevention of Adverse Ecological Impact caused by a Specified Invasive Alien Species;

(ii) Basic matters concerning the selection of a Specified Invasive Alien Species;

(iii) Basic matters concerning the handling of a Specified Invasive Alien Species;

(iv) Basic matters concerning the control of a Specified Invasive Alien Species by the State, etc.; and

(v) in addition to the matters listed in the preceding items, important matters concerning the prevention of Adverse Ecological Impact by a Specified Invasive Alien Species.

(3) Upon the cabinet decision on the Basic Policy set forth in paragraph (1), the competent minister shall give public notice that cabinet decision without delay.

(4) The provisions of paragraph (1) and the preceding paragraph apply *mutatis mutandis* to any amendment to the Basic Policy.

Chapter II Regulations of the Handling of Specified Invasive Alien Species

(Prohibition of Raising)

Article 4

Raising of Specified Invasive Alien Species is prohibited; provided, however, that this does not apply to the following cases:

(i) if permission in paragraph (1) of the following Article is obtained and Raising is conducted in connection with that permission; or

(ii) in the case of capturing, etc. an organism in relation to control pursuant to the provisions of the following Chapter, or if there is an unavoidable reason specified by an ordinance of the competent ministry.

(Permission for Raising)

Article 5

(1) A person that performs Raising of a Specified Invasive Alien Species for the purpose of academic research or another purpose specified by an ordinance of the competent ministry shall obtain permission from the competent minister.

(2) A person that intends to obtain permission set forth in the preceding paragraph shall apply for permission to the competent minister pursuant to the provisions of an ordinance of the competent ministry.

(3) The competent minister shall not grant permission under paragraph (1) if any of the following grounds exist with regard to Raising to which an application set forth in the preceding paragraph pertains:

(i) the purpose of the Raising does not conform to any of the purposes prescribed in paragraph (1); or

(ii) the person engaging in the Raising is found to be unable to appropriately handle the Specified Invasive Alien Species pertaining to the Raising due to not having a Raising facility that conforms to standards specified by an ordinance of the competent ministry (hereinafter referred to as "Specified Raising Facility") according to the characteristics of that Specified Invasive Alien Species or for any other reason.

(4) If the competent minister finds it necessary to prevent Adverse Ecological Impact by that Specified Invasive Alien Species when granting permission under paragraph (1), he/she may attach conditions to that permission to the extent of that necessity.

(5) If a person that has received permission under paragraph (1) engages in Raising pertaining to that permission, it shall periodically inspect the Specified Raising Facility pertaining to that Specified Invasive Alien Species, clarify that it has received permission with regard to that Specified Invasive Alien Species, and conform to any other methods specified by an ordinance of the competent ministry.

Article 6

Deleted

(Prohibition of Import)

Article 7

A Specified Invasive Alien Species must not be imported; provided, however, that this does not apply to cases where a person that has received permission under Article 5, paragraph (1) imports a Specified Invasive Alien Species in connection with that permission.

(Prohibition of Transfers)

Article 8

A person shall not transfer or receive a transfer of or deliver or receive a delivery of (hereinafter referred to as "Transfer") a Specified Invasive Alien Species; provided, however, that this does not apply to cases where persons that perform or intend to perform Raising that falls under Article 4, item (i) conduct a Transfer to each other of Specified Invasive Alien Species pertaining to that Raising or to other cases specified by an ordinance of the competent ministry.

(Prohibition of Releasing)

Article 9

A Specified Invasive Alien Species pertaining to Raising, import, or Transfer must not be released, planted, or sown outside the Specified Raising Facility for that Specified Invasive Alien Species (hereinafter referred to as “Releasing”); provided, however, that this does not apply in the following cases:

(i) if permission in paragraph (1) of the following Article is obtained and Releasing is conducted in connection with that permission; or

(ii) if Releasing is performed in connection with control pursuant to the provisions of the following Chapter.

(Permission for Releasing)

Article 9-2

(1) A person who intends to perform Releasing of a Specified Invasive Alien Species for the purpose of academic research to contribute to the promotion of control pursuant to the provisions of the following Chapter shall obtain permission from the competent minister.

(2) A person who intends to obtain permission set forth in the preceding paragraph shall apply for permission to the competent minister pursuant to the provisions of an ordinance of the competent ministry.

(3) The competent minister shall not grant permission under paragraph (1) unless he/she finds that the purpose of the Releasing pertaining to the application under the preceding paragraph conforms to the purpose set forth in paragraph (1) and that Releasing is not likely to expand the habitat or natural environment of that Specified Invasive Alien Species and complies with other standards specified by an ordinance of the competent ministry.

(4) If the competent minister grants permission under paragraph (1), he/she shall issue a license certificate as specified by an ordinance of the competent ministry.

(5) A person who has received permission under paragraph (1) shall carry the license certificate set forth in the preceding paragraph when performing Releasing in connection with that permission.

(6) The provisions of Article 5, paragraph (4) apply *mutatis mutandis* to any permission set forth in paragraph (1).

(Order to Take Measures, Etc.)

Article 9-3

(1) The competent minister may, if he/she finds it necessary to prevent Adverse Ecological Impact by a Specified Invasive Alien Species, order, to the extent necessary for that prevention, a person that has violated any of the conditions attached under Article 4, Article 5, paragraph (5), Article 8 or Article 9, or the provisions of Article 5, paragraph (4) (including cases in which that is applied *mutatis mutandis* pursuant to paragraph (6) of the preceding Article) to suspend the Raising of that Specified Invasive Alien Species, improve the method of Raising of that Specified Invasive Alien Species, collect that Specified Invasive Alien Species that underwent Releasing, or take other necessary measures.

(2) If a person that has received permission under Article 5, paragraph (1) or paragraph (1) of the preceding Article violates the provisions of this Act, an order based on this Act, or a disposition based on this Act and Adverse Ecological Impact by a Specified Invasive Alien Species occurs or is considered likely to occur, the competent minister may revoke that permission.

(Collection of Reports and On-Site Inspection)

Article 10

(1) The competent minister may, to the extent necessary for the enforcement of this Act, request a person that has received permission under Article 5, paragraph (1) or Article 9-2, paragraph (1) to report on the status of handling of the relevant Specified Invasive Alien Species or any other necessary matters.

(2) The competent minister may, to the extent necessary for the enforcement of this Act, have ministry officials enter facilities pertaining to Raising or areas pertaining to Releasing of a Specified Invasive Alien Species, inspect a Specified Invasive Alien Species, documents and other items, or question relevant persons.

(3) A ministry official referred to in the preceding paragraph shall carry an identification card and present that to relevant persons.

(4) The authority under the provisions of paragraph (2) must not be construed as extending to criminal investigations.

Chapter III Control of Specified Invasive Alien Species

(Control by the Competent Minister)

Article 11

(1) If Adverse Ecological Impact by a Specified Invasive Alien Species has occurred or is likely to occur, and it is necessary to prevent occurrence of that impact, the competent minister and heads of relevant national administrative organs (hereinafter referred to as the "Competent Ministers") shall perform control pursuant to the provisions of this Chapter.

(2) When performing control under the preceding paragraph, the Competent Ministers shall hear the opinions of the relevant prefectures and specify the following matters and give public notice of those matters pursuant to the provisions of an ordinance of the competent ministry.

(i) The type of the Specified Invasive Alien Species to be subject to control

(ii) The area and period for control

(iii) Other details of the control such as capturing, collecting, or killing of that Specified Invasive Alien Species (hereinafter referred to as "Capturing") or Releasing of sterilized Specified Invasive Alien Species for the purpose of controlling that Specified Invasive Alien Species

(iv) In addition to what is listed in the preceding three items, any matter specified by an ordinance of the competent ministry

(Special Provisions on the Wildlife Protection, Control and Hunting Management Act)

Article 12

The provisions of the Wildlife Protection, Control and Hunting Management Act (Act No. 88 of 2002) do not apply to the Capturing of Specified Invasive Alien Species subject to control performed by the Competent Ministers under paragraph (1) of the preceding Article.

(Entry to Land and Other Measures)

Article 13

(1) The Competent Ministers may, to the extent required for control under Article 11, paragraph (1), have a ministry official enter the land or a water surface of another person, perform Capturing or Releasing of a Specified Invasive Alien Species, or fell trees or bamboo that interfere with the Capturing of a Specified Invasive Alien Species.

(2) If a ministry official is to conduct any act under the preceding paragraph, the Competent Ministers shall notify in advance the possessor of the land or the water surface, or the owner of the trees or bamboo about that act, and give that possessor or owner an opportunity to express his/her opinion.

(3) A ministry official referred to in paragraph (1) shall carry an identification card and present that to relevant persons.

(4) If, when the Competent Ministers give notice under paragraph (2), the identity or whereabouts of the addressee are unknown, the Competent Ministers shall post that notice at the place to give such notices at the office of the municipality where that land, water surface, or trees or bamboo is located, and publish an outline of that notice and the fact that its contents have been so posted in the official gazette. In that case, it will be deemed that that notice has arrived at the addressee 14 days from the day on which that notice was first posted or from the date of publication in the official gazette, whichever is later.

(Compensation for Losses)

Article 14

(1) The State shall compensate for losses that would ordinarily arise to any person who suffers losses as a result of an act conducted under paragraph (1) of the preceding Article.

(2) A person who intends to receive compensation under the preceding paragraph shall request that compensation from the Competent Ministers.

(3) If the Competent Ministers receive a request under the preceding paragraph, they shall determine the amount of compensation and notify the requester of that amount.

(Filing of an Action)

Article 15

(1) A person who is dissatisfied with a decision made under paragraph (3) of the preceding Article may demand an increase in the amount of compensation by filing an action within six months from the date of the receipt of the notice.

(2) The State will be the defendant in any action brought under the preceding paragraph.

(Expenses to be Borne by Person causing Control)

Article 16

If it becomes necessary to perform control under Article 11, paragraph (1) and there is a person who has conducted an act that caused that control to become necessary, the State may cause that person to bear all or part of the expenses for that control to the extent necessary to carry out the control.

(Method of Collecting Expenses to be Borne)

Article 17

(1) If the Competent Ministers intend to cause a person to bear expenses pursuant to the provisions of the preceding Article, they shall specify the amount of expenses they intend to cause that person to bear (hereinafter referred to as "Expenses to be Borne" in this Article) and the due date for their payment, and order the payment, pursuant to the provisions of an ordinance of the competent ministry.

(2) If a person does not pay Expenses to be Borne by the due date set forth in the preceding paragraph, the Competent Ministers shall demand payment by sending a demand letter and designating a due date, as provided by an ordinance of the competent ministry.

(3) If the Competent Ministers demand payment under the provisions of the preceding paragraph, they may, as provided by an ordinance of the competent ministry, collect a delinquency charge in an amount calculated by multiplying the amount of the Expenses to be Borne by a rate not exceeding 14.5% per annum based on the number of days from the day following the due date set forth in paragraph (1) until the day preceding either full payment of those Expenses to be Borne or property attachment pertaining to those Expenses to be Borne.

(4) If a person who receives a demand for payment under paragraph (2) fails to pay the Expenses to be Borne or the delinquency charge set forth in the preceding paragraph pertaining to those Expenses to be Borne (hereinafter referred to as the "Delinquency Charge" in this Article) by the due date designated in the demand letter described in paragraph (2), the Competent Ministers may collect those Expenses to be Borne or the Delinquency Charge in accordance with the rules for collection of delinquent national tax. In this case, the order of the statutory lien on the Expenses to be Borne and the Delinquency Charge will come after national taxes and local taxes.

(5) The Delinquency Charge is to be collected prior to the Expenses to be Borne.

(Control by a Person Other than the Competent Ministers)

Article 18

(1) With respect to the control of a Specified Invasive Alien Species that is performed by a local public entity and that conforms with matters publicly notified under Article 11, paragraph (2), that local public entity may obtain confirmation of that control from the competent minister, as provided by an ordinance of the competent ministry.

(2) A person other than the State or a local public entity may obtain certification of the competent minister, as provided by an ordinance of the competent ministry, that that person is capable of performing control of a Specified Invasive Alien Species properly and reliably and that that control conforms with matters publicly notified under Article 11, paragraph (2).

(3) When giving confirmation under paragraph (1) or certification under the preceding paragraph, the competent minister shall give public notice of that fact as provided by an ordinance of the competent ministry. The same applies to cases where a confirmation or certification is revoked under the provisions of Article 20, paragraph (2) or (4).

(4) The provisions of Article 12 apply *mutatis mutandis* to control that is performed by a local public entity that has received confirmation under paragraph (1) or control performed by a person other than the State or a local public entity that has received certification under paragraph (2), and the provisions of Article 13 to the preceding Article apply *mutatis mutandis* to local public entities taking charge of affairs related to the control with confirmation under paragraph (1). In those cases, “official gazette” in Article 13, paragraph (4) is deemed to be replaced with “bulletin of the local public entity.”

Article 19

The competent minister may request a person who performs control after obtaining a certification under paragraph (2) of the preceding Article to submit reports on the status of the performance of that control and other necessary matters.

Article 20

(1) If a person who performs control after obtaining a confirmation under Article 18, paragraph (1) or a certification under Article 18, paragraph (2) suspends that control or becomes unable to perform that control in conformity with matters publicly notified under Article 11, paragraph (2), that person shall notify the competent minister of that.

(2) If the competent minister receives a notice under the preceding paragraph, he/she shall revoke the confirmation set forth in Article 18, paragraph (1) or the certification set forth in Article 18, paragraph (2) pertaining to that notice.

(3) If the competent minister finds that the Releasing of any sterilized Specified Invasive Alien Species for the purpose of control for which a certification under Article 18, paragraph (2) has been obtained fails to comply with matters publicly notified under Article 11, paragraph (2), he/she may order the person engaged in that control to collect that Specified Invasive Alien Species that was subject to Releasing and take other necessary measures.

(4) If the competent minister finds that control for which a certification under Article 18, paragraph (2) has been obtained is not performed in conformity with matters publicly notified under Article 11, paragraph (2), or that the person who performs that control becomes unable to perform that control properly and reliably, fails to submit a report prescribed in the preceding Article, or submits a false report, he/she may revoke that certification.

Chapter IV Unevaluated Alien Species (entirely omitted)

Chapter IV-2 Inspection of Imported Goods (entirely omitted)

Chapter V Miscellaneous Provisions (entirely omitted)

Chapter VI Penal Provisions (partially omitted)

Article 32

A person who falls under any of the following items will be punished by imprisonment with work for a period not exceeding three years or a fine not exceeding three million yen, or both:

(i) a person who has performed Raising of a Specified Invasive Alien Species for the purpose of sale or distribution in violation of Article 4;

(ii) a person who has obtained permission under Article 5, paragraph (1) or Article 9-2, paragraph (1) through deception or other wrongful means;

(iii) a person who has violated Article 7 or Article 9;

(iv) a person who has sold or distributed a Specified Invasive Alien Species in violation of Article 8; or

(v) a person who has violated an order under Article 9-3, paragraph (1) or Article 24-2, paragraph (2).

Article 33

A person who falls under any of the following items will be punished by imprisonment with work for a period not exceeding one year or a fine not exceeding one million yen, or both.

(i) a person who has violated Article 4 or Article 8 (excluding a person who falls under item (i) or item (iv) of the preceding Article);

(ii) a person who has performed Raising of a Specified Invasive Alien Species in violation of the conditions attached under Article 5, paragraph (4);

(iii) a person who has performed Releasing of a Specified Invasive Alien Species in violation of the conditions attached under Article 5, paragraph (4) as applied *mutatis mutandis* pursuant to Article 9-2, paragraph (6); or

(iv) a person who has violated an order under Article 20, paragraph (3).

Article 34

A person who has violated Article 25, paragraph (1) or (2) will be punished by a fine not exceeding 500,000 yen.

Article 35

A person who falls under either of the following items will be punished by a fine not exceeding 300,000 yen:

(i) a person who has not made a report or has made a false report under Article 10, paragraph (1); or

(ii) a person who has refused, obstructed or evaded an on-site inspection under Article 10, paragraph (2) or has not given a statement or has given a false statement in reply to a question asked at an on-site inspection.

Article 36

If a representative of a juridical person or if an agent, employee, or other worker of a juridical person or an individual commits a violation set forth in Article 32 to the preceding Article with regard to the business of that juridical person or individual, in addition to the offender, that juridical person will be punished by the fine prescribed in the corresponding item below or that individual will be punished by the fine prescribed in the respective Articles.

(i) Article 32: punishment by a fine not exceeding 100,000,000 yen

(ii) Article 33: punishment by a fine not exceeding 50,000,000 yen

(iii) Preceding two Articles: punishment by the fine prescribed in the respective Articles

Supplementary Provisions (entirely omitted)

3-8 Law for the Protection of Cultural Property (Extract)

(Law No.214 of May 30, 1950)

Contents of the Law

Chapter	I	General Rules (Article 1 to Article 4)
Chapter	VII	Historic Sites, Places of Scenic Beauty and Natural Monuments (Article 109 to Article 133)
Chapter	XI	Consultation with the Council for Cultural Affairs (Article 153)
Chapter	XIII	Penal Rules (Article 193 to Article 203)

Chapter I General Rules (Article 1 to Article 4)

(Purpose of the Present Law)

Article 1

The purpose of the present law is to preserve and utilize cultural property objects so that the cultural quality of the nation can be enhanced, thereby contributing to the evolution of world culture.

(Definition of Cultural Property)

Article 2

1. "An object of cultural property" in the present law shall be as follows:

(1) Buildings, pictures, sculptures, applied crafts, calligraphic works, classical books, ancient documents, and other tangible cultural products that are of significant historical or artistic value to Japan (including lands and other objects which are combined with these objects to create such value): archaeological and other historical resources of significant scientific value (hereinafter referred to as "Tangible Cultural Property");

(2) Drama, music, applied art, and other intangible cultural products that are of a significant historical or artistic value to Japan (hereinafter referred to as "Intangible Cultural Property");

(3) (i)Manners and customs related to food, clothing and housing, to occupations, to religious faiths, and to annual festivals, etc.: (ii) folk performing arts: (iii) folk skills: (iv)clothes, utensils, houses and other objects used therefor, which are indispensable to the understanding of changes in the mode of life of Japan (hereinafter referred to as "Folk Cultural Property");

(4) (i) Shell mounds, tumuli, sites of fortified capitals, sites of forts, sites of castles, monument houses and other sites, which are of significant historical or scientific value to Japan: (ii) gardens, bridges, gorges, sea-shores, mountains, and other places of scenic beauty, which are of significant artistic or aesthetic value to Japan: (iii) animals (including their habitats, breeding areas and trails), plants (including their self-seeded areas), and geological features and minerals (including the areas where peculiar natural phenomena are recognizable), which are of significant scientific value to Japan (hereinafter referred to as "Monuments");

(5) Landscapes that have been created by people's lives or occupations in their community as well as by the climate prevailing in such community, and which are indispensable to the understanding of the mode of life or occupation of Japan (hereinafter referred to as "Cultural Landscapes");

(6) Groups of traditional buildings of a high value, which form a certain historic configuration in combination with their environments (hereinafter referred to as a "Group of Traditional Buildings");

2. The term "an object of 'Important Cultural Property'" prescribed in the provisions of the present law (except for the provisions of Articles 27 to 29 inclusive, Article 37, Article 55 paragraph 1 Item (4), Article 153 paragraph 1 Item (1), Article 165, Article 171, and additional rules' Article 3) shall include 'National Treasure'.

3. The term "Historic Sites, Places of Scenic Beauty and Natural Monuments" prescribed in the provisions of the present law (except for the provisions of Article 109, Article 110, Article 112, Article 122, Article 131 paragraph 1 Items (4), Article 153 paragraph 1 Items (7) and (8), Article 165, and

Article 171) shall include ‘Special Historic Sites, Places of Scenic Beauty and Natural Monuments’.

(Duty of the Government and Local Governments)

Article 3

The Government and local governments shall, recognizing that cultural property is indispensable to the correct understanding of the history and culture of Japan and that it forms a foundation for cultural development in the future, sincerely endeavor to achieve the purpose of the present law so that the preservation thereof may be properly secured.

(Attitude of People and Owners)

Article 4

1. The general people shall faithfully cooperate with such measures taken by the Government and local governments to achieve the purpose of the present law.
2. An owner of cultural property and other persons concerned therewith, being conscious that cultural property is a valuable national asset, shall preserve it with good care for the public and endeavor to promote its cultural utilization, such as by opening it to public viewing.
3. The Government and local governments shall respect the ownership and other property rights of the persons concerned in the enforcement of the present law.

Chapter VII Historic Sites, Places of Scenic Beauty and Natural Monuments

(Designation)

Article 109

1. The Minister of Education, Culture, Sports, Science and Technology may designate an important one among monuments as ‘Historic Site’, ‘Place of Scenic Beauty’ or ‘Natural Monument’ (hereinafter collectively referred to as “Historic Sites, Places of Scenic Beauty and Natural Monuments”).
2. The Minister of Education, Culture, Sports, Science and Technology may designate particularly important ones among ‘Historic Sites, Places of Scenic Beauty or Natural Monuments’ designated under the provisions of the preceding paragraph, as ‘Special Historic Site’, ‘Special Place of Scenic Beauty’, or ‘Special Natural Monument’ (hereinafter collectively referred to as ”Special Historic Sites, Places of Scenic Beauty and Natural Monuments”).
3. The designation under the preceding two paragraphs shall be announced in the Official Gazette, and an owner and an occupant by title of such ‘Special Historic Sites, Places of Scenic Beauty and Natural Monuments’ or such ‘Historic Sites, Places of Scenic Beauty and Natural Monuments’ shall be informed thereof.
4. Where there are too many addressees to be individually informed under the provisions of the preceding paragraph, the Minister of Education, Culture, Sports, Science and Technology may, instead of informing them as prescribed in the same paragraph, put up a notice of matters to be informed on a notice board in an office or any other similar facility in a city (including special wards; hereinafter the same applies), town, or village where such ‘Special Historic Sites, Places of Scenic Beauty or Natural

Monuments' or such 'Historic Sites, Places of Scenic Beauty and Natural Monuments' are located. In this case the information document prescribed in the preceding paragraph shall be deemed to have reached those addressees after two weeks have passed since the day on which the notice was first exhibited.

5. Designation under the provisions of paragraph 1 or paragraph 2 shall come into effect as from the day of announcement in the Official Gazette under the provisions of paragraph 3. However, for an owner or an occupant by title of 'Special Historic Sites, Places of Scenic Beauty and Natural Monuments' or of 'Historic Sites, Places of Scenic Beauty and Natural Monuments', it shall come into effect as from the time when the information document under the provisions of paragraph 3 has reached him or when it is deemed to have reached him under the provisions of the preceding paragraph.
6. Where the Minister of Education, Culture, Sports, Science and Technology designates a historic site, a place of scenic beauty or a natural monument, he shall consult the Minister of the Environment if such monuments to be designated possess a high value for the protection of the natural environment.

(Interim Designation)

Article 110

1. Prior to designation under the provisions of the preceding Article, paragraph 1, if a board of education within To-Do-Fu-Ken (prefectures) recognizes an imminent necessity, it may make an interim designation of 'Historic Sites, Places of Scenic Beauty and Natural Monuments'.
2. Where the board of education within To-Do-Fu-Ken (prefectures) has made an interim designation under the provisions of the preceding paragraph, it shall report the fact to the Minister of Education, Culture, Sports, Science and Technology without delay.
3. The provisions of the preceding Article, paragraphs 3 to 5 inclusive, shall apply *mutatis mutandis* to an interim designation under the provisions of paragraph 1.

(Respect for Ownership, etc. and Coordination with Other Public Interests)

Article 111

1. In making a designation under the provisions of Article 109, paragraph 1 or paragraph 2, or an interim designation under the provisions of the preceding Article, paragraph 1, the Minister of Education, Culture, Sports, Science and Technology or a board of education within To-Do-Fu-Ken (prefectures) shall, in particular, respect ownership, mining rights and other property rights of the parties concerned, and at the same time pay due attention to coordination with land development and other public interests.
2. Where the Minister of Education, Culture, Sports, Science and Technology deems it necessary, he may express his opinions to the Minister of the Environment on the protection and maintenance of natural environment that relates to Places of Scenic Beauty or Natural Monuments. Where the Commissioner for the Cultural Affairs expresses his opinion in that case, he shall do so through the Minister of Education, Culture, Sports, Science and Technology.
3. Where the Minister of the Environment deems it necessary, he may express his opinions on the preservation or utilization of Places of Scenic Beauty or Natural Monuments of a high value from the viewpoint of the protection of the natural environment to the Minister of Education, Culture, Sports, Science and Technology, or to the Commissioner for Cultural Affairs through the Minister of Education, Culture, Sports, Science and Technology.

(Annulment of Designation)

Article 112

1. Where 'Special Historic Sites, Places of Scenic Beauty and Natural Monuments', or 'Historic Sites, Places of Scenic Beauty and Natural Monuments' have lost there value as such, or where there is any other special reason, the Minister of Education, Culture, Sports, Science and Technology or a board of education within To-Do-Fu-Ken (prefectures) may annul the designation or interim designation thereof.
2. Where designation under the provisions of Article 109, paragraph 1, has been done for 'Historic Sites, Places of Scenic Beauty and Natural Monuments' for which an interim designation had been done under the provisions of Article 110, paragraph 1, or where no designation under the same provision has been done within two years as from the day when such an interim designation had been done, such an interim designation shall become null and void.
3. Where the Minister of Education, Culture, Sports, Science and Technology deems it inappropriate, he may annual any interim designation under the provisions of Article 110, paragraph 1.
4. The provisions of Article 109, paragraphs 3 to 5 inclusive, shall apply *mutatis mutandis* to the annulment of designation or interim designation under the provisions of paragraph 1 or of the preceding paragraph.

(Management and Restoration by a Managerial Body)

Article 113

1. Where an owner of 'Historic Sites, Places of Scenic Beauty, and Natural Monuments' does not exist or is not traceable, or where it is apparently recognizable that the management by its responsible manager appointed by an owner or under the provisions of Article 109, paragraph 2, is extremely difficult or inappropriate, the Commissioner for Cultural Affairs may appoint an appropriate local government or any other juridical person and charge it with the management and restoration necessary for the preservation of the said 'Historic Sites, Places of Scenic Beauty and Natural Monuments' (including the management and restoration of such facilities, equipment and other objects under the ownership or management of the owner of the said 'Historic Sites, Places of Scenic Beauty and Natural Monuments', as are necessary for the preservation thereof)
2. In order to make an appointment under the provisions of the preceding paragraph, the Commissioner for Cultural Affairs shall obtain the consent of a local government or any other juridical person to be appointed in advance.
3. The appointment under the provisions of paragraph 1 shall be announced in the Official Gazette, and an owner and an occupant by title of the said 'Historic Sites, Places of Scenic Beauty and Natural Monuments' as well as a local government or other juridical person to be appointed shall be informed thereof.
4. The provisions of Article 109, paragraphs 4 and 5, shall apply *mutatis mutandis* to appointment under the provisions of paragraph 1.

Article 114

1. Where the reasons prescribed in the preceding Article, paragraph 1, have become obsolete or where there is any other special reason, the Commissioner for Cultural Affairs may annul the appointment of

a managerial body.

2. The provisions of the preceding Article, paragraph 3, and Article 109, paragraphs 4 and 5, shall apply *mutatis mutandis* to annulment under the provisions of the preceding paragraph.

Article 115

1. A local government and any other juridical person appointed under the provisions of Article 113, paragraph 1 (hereinafter referred to as ”a managerial body” in the present Chapter and Chapter XII) shall set up signs, explanation boards, boundary indicators, fences and other facilities necessary for the management of ‘Historic Sites, Places of Scenic Beauty and Natural Monuments’ according to the standards set by a MEXT ordinance.
2. Where there has been any change in the name, block number, category or acreage of land within the designated area of ‘Historic Sites, Places of Scenic Beauty and Natural Monuments’, a managerial body shall notify the Commissioner for Cultural Affairs to that effect in accordance with the stipulations of a MEXT ordinance.
3. Where a managerial body implements restoration, it shall hear opinions of an owner (except where the owner is not traceable) and an occupant by title of ‘Historic Sites, Places of Scenic Beauty and Natural Monuments’ in advance on the method and time of restoration.
4. An owner or an occupant of ‘Historic Sites, Places of Scenic Beauty and Natural Monuments’ shall not refuse, impede, or evade the management, restoration, or measures necessary for such management or restoration implemented by a managerial body without justifiable reasons.

Article 116

1. A managerial body shall bear the expenses required for the management and restoration implemented by itself, unless otherwise prescribed by the present law.
2. Notwithstanding the provisions of the preceding paragraph, an owner may bear part of the expenses required for the management or restoration upon agreement between a managerial body and an owner, within the limit of profits that the latter enjoys as a result of management or restoration implemented by the former.
3. A managerial body may collect admission fees from visitors to ‘Historic Sites, Places of Scenic Beauty and Natural Monuments’ during its term of management.

Article 117

1. A managerial body shall compensate a person who has suffered loss caused by the manager or restoration it implemented, for ordinary damages incidental thereto.
2. The amount of indemnity under the preceding paragraph shall be determined by a managerial body (or if a managerial body is a local government, the board of education within such a local government).
3. The provisions of Article 41, paragraph 3, shall apply *mutatis mutandis* to the amount of indemnity under the provisions of the preceding paragraph.
4. A managerial body shall be a defendant in a lawsuit under the provisions of Article 41, paragraph 3, when applied *mutatis mutandis* in the preceding paragraph.

Article 118

The provisions of Article 30, Article 31, paragraph 1, and Article 33 shall apply *mutatis mutndis* to the management implemented by a managerial body; the provisions of Articles 35 and 47 to the management and restoration implemented by a managerial body; the provisions of Article 56, paragraph 3, to cases where a managerial body has been appointed, or where such appointment has been annulled.

(Management and Restoration by an Owner)

Article 119

1. Except where a managerial body has been appointed, the owner of ' Historic Sites, Places of Scenic Beauty and Natural Monuments' shall be responsible for the management and restoration thereof.
2. An owner in charge of the management of 'Historic Sites, Places of Scenic Beauty and Natural Monuments' under the provisions of the preceding paragraph may appoint an appropriate person to be responsible on his behalf for the management of the said 'Historic Sites, Places of Scenic Beauty and Natural Monuments' in specific circumstances (hereinafter referred to as "a responsible manager" in the present Chapter and Chapter XII). The provisions of Article 31, paragraph 3 shall apply *mutatis mutandis* in this case.

Article 120

The provisions of Article 30, Article 31, paragraph 1, Article 32, Article 33 and Article 115, paragraphs 1 and 2 (paragraph 2 is not applicable if a managerial body has been appointed) shall apply *mutatis mutandis* to management by an owner; the provisions of Article 35 and 47 to management and restoration by an owner; the provisions of Article 56, paragraph 1, to the succession to rights and obligations upon a change in ownership; the provisions of Article 30, Article 31, paragraph 1, Article 32, paragraph 3, Article 33, Article 47, paragraph 4 and Article 115, paragraph 2 to management by a responsible manager.

(Order or Advice on Management)

Article 121

1. Where the Commissioner for Cultural Affairs concludes that 'Historic Sites, Places of Scenic Beauty and Natural Monuments' is in danger of destruction, damage, decay or theft because of inappropriate management, he may (i) order a managerial body, an owner or a responsible manager thereof to improve its management methods, to install facilities for preservation and to take any other measure necessary for proper management thereof, or (ii) often them appropriate advice.
2. The provisions of Article 36, paragraphs 2 and 3, shall apply *mutatis mutandis* to cases under the preceding paragraph.

(Order or Advice on Restoration)

Article 122

1. Where 'Special Historic Sites, Places of Scenic Beauty and Natural Monuments' is damaged or in a state of decay and the Commissioner for Cultural Affairs deems it necessary for its preservation, he may give any necessary order or advice on its restoration to a managerial body or owner thereof.
2. Where 'Historic Sites, Places of Scenic Beauty and Natural Monuments' other than 'Special Historic Sites, Places of Scenic Beauty and Natural Monuments' is damaged or in a state of decay and the Commissioner for Cultural Affairs deems it necessary for its preservation, he may give necessary advice on its restoration to a managerial body or to an owner thereof.
3. The provisions of Article 37, paragraphs 3 and 4, shall apply *mutatis mutandis* to cases under the preceding two paragraphs.

(Implementation of Restoration, etc. of Special Historic Sites, Places of Scenic Beauty or Natural

Monuments by the Commissioner for Cultural Affairs)

Article 123

1. The Commissioner for Cultural Affairs may himself implement the restoration of 'Special Historic Sites, Places of Scenic Beauty and Natural Monuments' or take measures to prevent its destruction, damage, decay or theft, in either of the following cases:

(1) where a managerial body, an owner or a responsible manager does not observe the orders given under the provisions of the preceding two Articles;

(2) where 'Special Historic Sites, Places of Scenic Beauty and Natural Monuments' is damaged or in a state of decay, or in danger of destruction, damage, decay or theft, and where The Commissioner for Cultural Affairs deems it inappropriate to have a managerial body, an owner or a responsible manager thereof restore or take measures to prevent its destruction, damage, decay or theft.

2. The provisions of Article 38, paragraph 2, and Articles 39 to 41 inclusive, shall apply *mutatis mutants* to the cases under preceding paragraph.

(Reimbursement for Alienation of 'Historic Sites, Places of Scenic Beauty and Natural Monuments' for Which a Subsidy, etc. Has Been Granted)

Article 124

The provisions of Article 42 shall apply *mutatis mutandis* to 'Historic Sites, Places of Scenic Beauty and Natural Monuments' for which a subsidy has been granted by the State for restoration or measures to prevent its destruction, damage, decay or theft under the provisions of Article 35, paragraph 1 when applied *mutatis mutants* in Article 118 and Article 120, or for which all or part of the expenses were owed under the provisions of Article 36, paragraph 2, when applied *mutatis mutants* by Article 121, paragraph 2, under Article 37, paragraph 3, when applied *mutatis mutants* in Article 122, paragraph 3, or under Article 40, paragraph 1, when applied *mutatis mutants* in the preceding Article, paragraph 2.

(Restriction upon Alteration of the Status Quo and Order of Restitutio in Integrum)

Article 125

1. Where any person intends to take action to alter the status quo of 'Historic Sites, Places of Scenic Beauty and Natural Monuments' or any action that affects its preservation, he must obtain the permission of the Commissioner for Cultural Affairs. However, the present provision does not apply where such act of altering the status quo is merely a measure for maintaining the *status quo* of an entity or an emergency measure necessary for the prevention of extraordinary disasters; or where the influence of any act that may affect its preservation is insignificant.
2. The extent of a measure to maintain the status quo provided for in the proviso to the preceding paragraph shall be stipulated by the MEXT ordinance.
3. The provisions of Article 43, paragraph 3 shall apply *mutatis mutandis* to the delivery of permission prescribed in paragraph 1, while that of Article 43, paragraph 4, shall apply to a person who has obtained such permission under paragraph 1.
4. The provisions of Article 111, paragraph 1, shall apply *mutatis mutandis* to final actions under the provisions of paragraph 1.
5. The State shall compensate a person who has suffered loss caused by the fact that he failed to obtain permission under paragraph 1 or that the permission was subject to conditions under Article 43,

paragraph 3, when applied *mutatis mutandis* in paragraph 3, for ordinary damages incidental thereto.

6. The provisions of Article 41, paragraphs 2 to 4 inclusive, shall apply *mutatis mutandis* to cases under the preceding paragraph.
7. Where any person has done anything to alter the status quo or to affect the preservation of 'Historic Sites, Places of Scenic Beauty and Natural Monuments' without obtaining permission under the provisions of paragraph 1 or without observing the conditions of permission under Article 43, paragraph 3, when applied *mutatis mutandis* in paragraph 3, the Commissioner for Cultural Affairs may order him to restore it to its original state. In this case the Commissioner for Cultural Affairs may give necessary instructions for such recovery.

(Informing the Administrative Agency Concerned)

Article 126

Regarding an act for which a permission should be obtained under the provisions of the preceding Article, paragraph 1, and the conduct subject to other permission, authorization, or any other final action, depending on a cabinet order under the provisions of other laws or orders, the administrative agency with competence for a final action under such other laws or orders, or a person to whom such competence has been entrusted, shall inform the Commissioner for Cultural Affairs (or a board of education within To- Do- Fu-Ken (prefectures) or a city if Article 184, paragraph 1, provides that a board of education within To-Do-Fu-Ken (prefectures) or a city shall exercise competence for permission under the provisions of the preceding Article, paragraph 1) to that effect in accordance with what the cabinet order prescribed where it takes such a final action.

(Notification of Restoration)

Article 127

1. Where 'Historic Sites, Places of Scenic Beauty and Natural Monuments' is to be restored, its managerial body or owner shall notify the Commissioner for Cultural Affairs thereof at least thirty days prior to the commencement date of such restoration, in accordance with the stipulations of a MEXT ordinance. However, the present provision does not apply to cases where permission is to be obtained under the provisions of Article 125, paragraph 1 and to other cases stipulated by a MEXT ordinance.
2. Where the Commissioner for Cultural Affairs deems it necessary for the protection of 'Historic Sites, Places of Scenic Beauty and Natural Monuments', he may give technical guidance and advice on the restoration of the 'Historic Sites, Places of Scenic Beauty and Natural Monument' for which notification is filed under the preceding paragraph.

(Integrity of Surroundings)

Article 128

1. Where the Commissioner for Cultural Affairs deems it necessary for the preservation of 'Historic Sites, Places of Scenic Beauty and Natural Monuments', he may restrict or prohibit certain acts within a delimitated area or order the installation of any necessary facilities in such area.
2. The State shall compensate a person who has suffered loss caused by the final action under the preceding paragraph, for ordinary damages incidental thereto.

3. The provisions of Article 125, paragraph 7 shall apply *mutatis mutandis* to a person who has contravened the restriction or prohibitions under paragraph 1, while the provisions of Article 4l, paragraphs 2 to 4 inclusive, shall apply to cases under the preceding paragraph.

(Subsidy for a Managerial Body to Buy)

Article 129

1. Where a local government or other juridical person that is a managerial body deems it necessary to buy the land, buildings or other fixtures to the land involved in the designation as 'Historic Sites, Places of Scenic Beauty and Natural Monuments' for the preservation of a designated entity that is under its management, the State may grant a subsidy to cover part of the expenses required to buy the same.
2. The provisions of Article 35, paragraphs 2 and 3, and Article 42 shall apply *mutatis mutandis* to cases under the preceding paragraph.

(Investigation for Preservation)

Article 130

Where the Commissioner for Cultural Affairs deems it necessary, he may ask a managerial body, an owner or a responsible manager to file a report (i) on the status quo of 'Historic Sites, Places of Scenic Beauty and Natural Monuments', or (ii) on the conditions of its management, of its restoration, or of the integrity of its surroundings.

Article 131

1. In any of the following cases, when the Commissioner for Cultural Affairs is still unable to confirm the condition of 'Historic Sites, Places of Scenic Beauty and Natural Monuments' notwithstanding the report filed under the preceding Article, and where there appears to be no alternative way for the confirmation thereof, he may appoint a person who is in charge of the investigation and have him enter upon the land where the 'Historic Sites, Places of Scenic Beauty and Natural Monuments' is located or its adjoining area, investigate on the spot the status quo or the conditions of its management, of its restoration, or of the integrity of its surroundings, excavate the land, remove obstacles, or take any other measures necessary for such investigation. However, he shall not oblige him to take such measures as may result in considerable damage to the owner or the occupant or any other parties with an interested such land:

(1) where application has been filed for approval of alteration of the status quo or of any action to affect the preservation of 'Historic Sites, Places of Scenic Beauty and Natural Monuments';

(2) where 'Historic Sites, Places of Scenic Beauty and Natural Monuments' is damaged in a state of decay;

(3) where 'Historic Sites, Places of Scenic Beauty and Natural Monuments' is in danger of destruction, damage, decay or theft;

(4) where special circumstances necessitate re-investigating of the value of 'Special Historic Sites, Places of Scenic Beauty and Natural Monuments' or of 'Historic Sites, Places of Scenic Beauty and Natural Monuments' as such.

2. The State shall compensate a person who has suffered loss caused by the investigation or measures under the provisions of the preceding paragraph, for ordinary damages incidental thereto.
3. The provisions of Article 55, paragraph 2, shall apply *mutatis mutandis* to cases of entering upon the

land for investigation under the provisions of paragraph 1, and those of Article 41, paragraphs 2 to 4 inclusive, to cases under the preceding paragraph.

(Registered Monuments)

Article 132

1. From among monuments (expect those designated by a local government under the provisions of Article 182, paragraph 2) other than 'Historic Sites, Places of Scenic Beauty or Natural Monuments' (including those of interim designation by a board of education within To-Do-Fu-Ken (prefectures) under the provisions of Article 110, paragraph 1), the Minister of Education, Cultural, Sports, Science and Technology may, in view of the value as cultural property, register in the Cultural, Sports, Science and Technology may, in view of the value as cultural property, register in the Cultural Property Registry those monuments for which it is especially necessary to take preservation and utilization measures.
2. Article 57, paragraph 2 to 3 inclusive, Article 109, paragraph 3 to 5 inclusive, and Article 111, paragraph 1, shall apply *mutatis mutandis* to registration under the preceding paragraph.

Article 133

The provisions of Article 59, paragraph 1 to 5 inclusive, Article 64, Article 68, Article 111, paragraph 2 and paragraph 3, and Article 113 to Article 120 inclusive, shall apply *mutatis mutandis* to monuments registered under the provisions of the preceding paragraph (hereinafter referred to as "registered monuments").In these cases, "in cases where … has been designated as Important Cultural Property under the provisions of Article 27, paragraph 1" described in Article 59, paragraph 1, shall be read as "where … has been designated as Historical Sites, Places of Scenic Beauty or Natural Monuments under the provisions of Article 109, paragraph 1(including an interim designation by a board of education within To-Do-Fu-Ken (prefectures) under the provisions of Article 110, paragraph 1)";"an owner … shall be informed thereof "described in the same Article, paragraph 4 shall be read as "an owner and an occupant by title … shall be informed thereof. However, in cases where there are too many addressees to be individually informed, the Minister of Education, Culture, Sports, Science and Technology may, instead of thus informing them, put up a notice of matters to be informed on a notice board in an office or any other similar facility in a city, town, or village where such registered monument is located. In this case the information shall be deemed to have reached those addressees when two weeks have passed since the day when the notice was first exhibited" ;"the provisions of the preceding Article, paragraph 2 shall apply *mutatis mutandis* to the annulment of registration" described in the same Article, paragraph 5, shall be read as "annulments shall come into effect as from the day of its announcement in the Official Gazette under the provisions of the preceding paragraph. However, it shall come into effect for an owner or an occupant by title of the said Registered Monument as form the time when the information under the provisions of the preceding paragraph has reached or is deemed to have reached them" ;"where it is apparently recognizable that … is inappropriate" described in Article 113, paragraph 1, shall be read as "where the local government concerned reports to the effect that it is apparent that … is inappropriate, the Commissioner for Cultural shall hear the opinion of the local government concerned";"Article 30 and Article 31, paragraph 1" described in Article 118 and Article 120" shall be read as "Article 31, paragraph 1," and "shall apply *mutatis mutandis* to" shall be read as "shall apply *mutatis mutandis* to … In this case, 'under … as well as those MEXT ordinances and instructions of the Commissioner for Cultural Affairs as issued thereunder' described in Article 31, paragraph 1, shall be read as 'under … as well as those MEXT ordinances as issued

thereunder'";"the provisions of Articles 35 and 47 to … ; the provisions of Article 56, paragraph 3, to cases where a managerial body has been appointed or where such appointment has been annulled." described in Article 118 shall be read as "Article 47, paragraph 4";"the provisions of Article 35 and 47 to … ; the provisions of Article 56, paragraph 1, to the succession to rights and obligations upon a change in ownership" described in Article 120,shall be read as "Article 47, paragraph 4."

Chapter XI Consultation with the Council for Cultural Affairs

Article 153

1. The Minister of Education, Culture, Sports, Science and Technology shall consult the Council for Cultural Affairs about the following matters in advance:

(1) designation as 'National Treasure' or 'Important Cultural Property', and annulment of such designation;

(2) registration of an object of 'Registered Tangible Cultural Property', and annulment of such registration (except annulment of registration under the provisions of Article 59, paragraph 1 or 2);

(3) designation of a element as 'Important Intangible Cultural Property, and annulment of such designation;

(4) recognition of bearer or a bearing body of an element of 'Important Intangible Cultural Property', and annulment of such recognition;

(5) designation of an object as 'Important Tangible Folk Cultural Property' or an element as 'Important Intangible Folk Cultural Property', and annulment of such designation;

(6) registration of an object of Registered 'Tangible Folk Cultural Property', and annulment of such registration (except annulment of registration under the provisions of Article 59, paragraph 1 or 2, when applied *mutatis mutandis* in Article 90, paragraph 3);

(7) designation of 'Special Historic Sites, Places of Scenic Beauty and Natural Monuments', or 'Historic Sites, Places of Scenic Beauty and Natural Monuments', and annulment of such designation;

(8) interim designation of an entity as 'Historic Sites, Places of Scenic Beauty and Natural Monuments' and annulment of such an interim designation;

(9) registration of a registered monument, and annulment of that registration (except annulment of registration under the provisions of Article 59, paragraph 1 or 2, when applied *mutatis mutandis* in Article 133);

(10) selection of 'Important Cultural Landscape', and annulment of such selection;

(11) selection of an 'Important Preserved District for a Group of Traditional Buildings', and annulment of such selection.

(12) selection of a preservation technique, and annulment of such selection;

(13) recognition of a bearer or preserving body of a preservation technique, and annulment of such recognition.

2. The Commissioner for Cultural Affairs shall consult the Council for Cultural Affairs about the following matters in advance:

(1) orders on the management of an object of 'Important Cultural Property' or the repairs of 'National Treasure';

(2) repairs of 'National Treasure' or taking measures to prevent its destruction, damage or theft, by the Commissioner for Cultural Affairs;

(3) permission for the alteration of the status quo of or for any action that affects the preservation of an object of 'Important Cultural Property';
(4) orders on the restriction, prohibition or necessary facilities for the integrity of the surroundings of an object of 'Important Cultural Property';
(5) buying of an object of 'Important Cultural Property' by the State;
(6) choosing from among elements of 'Intangible Cultural Property' other than 'Important Intangible Cultural Property', the record of which the Commissioner for Cultural Affairs shall produce or subsidize;
(7) orders on the management of an object of 'Important Tangible Folk Cultural Property';
(8) buying an object of 'Important Tangible Folk Cultural Property';
(9) choosing from among elements of 'Intangible Folk Cultural Property' other than 'Important Intangible Folk Cultural Property', the record of which the Commissioner for Cultural Affairs shall produce or subsidize;
(10) extension of the terms of orders on the suspension or prohibition of such action as to alter the status quo of remains;
(11) implementation of excavation by the Commissioner for Cultural Affairs in order to investigate Treasure Trove;
(12) orders on the management of 'Historic Sites, Places of Scenic Beauty and Natural Monuments', or on restoration of 'Special Historic Sites, Places of Scenic Beauty and Natural Monuments';
(13) implementation by the Commissioner for Cultural Affairs of the restoration or measures to prevent destruction, damage, decay or theft of 'Special Historic Sites, Places of Scenic Beauty and Natural Monuments';
(14) permission for the alteration of the status quo of or for any action that affects the preservation of 'Historic Sites, Places of Scenic Beauty and Natural Monuments';
(15) orders on the restriction, prohibition or necessary facilities for the integrity of the surroundings of 'Historic Sites, Places of Scenic Beauty and Natural Monuments';
(16) orders on the *restitution in integrum* where permission for alteration of the status quo of or for any act that affects the preservation of 'Historic Sites, Places of Scenic Beauty and Natural Monuments' is not obtained or conditions of such permission are not observed, or where a restriction or prohibition for the integrity of surroundings of 'Historic Sites, Places of Scenic Beauty and Natural Monuments' is violated;
(17) orders on the maintenance of 'Important Cultural Landscape';
(18) proposals for the establishment, revision or annulment of a cabinet order under Article 184, paragraph 1 (limited to matters related to the administrative tasks listed in the same Article, paragraph 2, Item(2)).

Chapter XIII Penal Rules

Article 193

Any person who has, in contravention of the provisions of Article 44, exported an object of 'Important Cultural Property' without obtaining permission from the Commissioner for Cultural Affairs shall be

subject to imprisonment with or without labor for a term not exceeding five years or to a fine not exceeding one million yen.

Article 194

Any person who has, in contravention of the provisions of Article 82, exported an object of 'Important Tangible Folk Cultural Property' without obtaining permission from the Commissioner for Cultural Affairs shall be subject to imprisonment with or without labor for a term not exceeding three years or to a fine not exceeding five hundred thousand yen.

Article 195

1. Any person who has damaged, discarded or concealed an object of 'Important Cultural Property' shall be subject to imprisonment with or without labor for a term not exceeding five years or to a fine not exceeding three hundred thousand yen.
2. Where the person prescribed in the preceding paragraph happens to be the owner of the said object of 'Important Cultural Property', he shall be subject to imprisonment with or without labor for a term not exceeding two years or to a fine not exceeding two hundred thousand yen, or a minor fine.

Article 196

1. Any person who has altered the status quo of 'Historic Sites, Places of Scenic Beauty and Natural Monuments', or committed an action that affects its preservation and has then destroyed, damaged or caused it to deteriorate shall be subject to imprisonment with or without labor for a term not exceeding five years or to a fine not exceeding three hundred thousand yen.
2. Where the person prescribed in the preceding paragraph happens to be the owner of the said entity of 'Historic Sites, Places of Scenic Beauty and Natural Monuments', he shall be subject to imprisonment with or without labor for a term not exceeding two years or to a fine not exceeding two hundred thousand yen, or a minor fine.

Article 197

Any person who falls under either of the following Items shall be subject to a fine not exceeding two hundred thousand yen:

(1) any person who has, in contravention of the provisions of Article 43 or Article 125, altered the status quo of or committed an act that affects the preservation of an object of 'Important Cultural Property' or 'Historic Sites, Places of Scenic Beauty and Natural Monuments' without obtaining permission or without complying with the conditions of such permission; has failed to comply with an order on the suspension of any act to alter the status quo or to affect the preservation thereof;

(2) any person who has, in contravention of the provisions of Article 96, paragraph 2, failed to comply with an order on the suspension or prohibition of any act resulting in the alteration of the status quo.

Article 198

Any person who falls under either of the following Items shall be subject to a find not exceeding ten thousand yen;

(1) any person who has, in contravention of the provisions of Article 32 *bis*, paragraph 5 applied *mutatis mutandis* in Article 39, paragraph 3 (including cases where this paragraph applied *mutatis mutandis* in Article 186, paragraph 2), refused or interfered with implementing repairs or taking measures to prevent destruction, damage or theft of 'National Treasure';

(2) any person who has, in contravention of the provisions of Article 32 *bis*, paragraph 5 applied *mutatis*

mutandis in Article 39, paragraph 3, which is applied *mutatis mutandis* in Article 98, paragraph 3 (including cases where this paragraph is applied *mutatis mutandis* in Article 186, paragraph 2), refused or interfered with the implementation of an excavation;

(3) any person who has, in contravention of the provisions of Article 32 *bis*, paragraph 5 applied *mutatis mutandis* in Article 39, paragraph 3, which is applied *mutatis mutandis* in Article 123, paragraph 2 (including cases where this paragraph is applied *mutatis mutandis* in Article 186, paragraph 2), refused or interfered with implementing restoration or taking measures to prevent the destruction, damage, decay or theft of 'Special Historic Sites, Places of Scenic Beauty and Natural Monuments'.

Article 199

Where a representative of a juridical person, or an proxy, a servant or any other employee of a juridical or natural person has committed any of the offenses prescribed in Article 193 to the preceding Articles inclusive, regarding the services or property management of the juridical or natural person, such an offender shall be punished while the juridical or natural person shall be fined.

Article 200

Where a person in charge of the implementation of the management, repairs or restoration of an object of 'Important Cultural Property', an object of 'Important Tangible Folk Cultural Property' or 'Historic Sites, Places of Scenic Beauty and Natural Monuments' prescribed in Article 39, paragraph 1 (including cases where this paragraph is applied *mutatis mutandis* in Article 47, paragraph 3 (including cases where the latter is applied *mutatis mutandis* in Article 83), Article 123, paragraph 2, Article 186, paragraph 2 or Article 187, paragraph 2), Article 49 (including cases where this paragraph is applied *mutatis mutandis* in Article 85) or Article 185, paragraph 2, has resulted in the destruction, damage or deterioration of an object of 'Important Cultural Property', an object of 'Important Tangible Folk Cultural Property' or 'Historic Sites, Places of Scenic Beauty and Natural Monuments' through negligence or serious dereliction of duty, he shall be subject to a minor fine not exceeding three hundred thousand yen.

Article 201

Any person who falls under either of the following Items shall be subject to a fine not exceeding three hundred thousand yen:

(1) any person who has failed to comply with, without justifiable reason, an order of the Commissioner for Cultural Affairs on the repairs of 'National Treasure' or on the management of an object of 'Important Cultural Property' or 'Important Tangible Folk Cultural Property' prescribed in Article 36, paragraph 1 (including cases where this paragraph is applied *mutatis mutandis* in Article 83 and Article 172, paragraph 5) or Article 37, paragraph 1;

(2) any person who has failed to comply with, without justifiable reason, an order of the Commissioner for Cultural Affairs on the restoration of 'Special Historic Sites, Places of Scenic Beauty and Natural Monuments' or on the management of 'Historic Sites, Places of Scenic Beauty and Natural Monuments' prescribed in Article 121, paragraph 1 (including cases where this paragraph is applied mutatis mutandis in Article 172, paragraph 5) or Article 122, paragraph 1;

(3) any person who has failed to comply with, without justifiable reason, an order of the Commissioner for Cultural Affairs on taking such measures as related to a recommendation regarding the management of an Important Landscape as prescribed in Article 137, paragraph 2.

Article 202

Any person who falls under either of the following Items shall be subject to a fine not exceeding one

hundred thousand yen:

(1) any person who has failed to comply with, without justifiable reasons, an order on the restriction, prohibitions or facilities prescribed in Article 45, paragraph 1;

(2) any person who, in contravention of the provisions of Article 46 (including cases where this Article is applied *mutatis mutandis* in Article 83), failed to make an offer to the Commissioner for Cultural Affairs regarding a sale to the State; transferred an object of 'Important Cultural Property' or 'Important Tangible Folk Cultural Property' to any other party than the State within the period prescribed in Article 46, paragraph 5 (including cases where this paragraph is applied *mutatis mutandis* in Article 83) after making such offer; has made a false statement on an offer of sales under the provisions of Article 46, paragraph 1 (including cases where this paragraph applies *mutatis mutandis* under Article 83);

(3) any person who has, in contravention of the provisions of Article 48, paragraph 4 (including cases where this paragraph is applied *mutatis mutandis* in Article 51, paragraph 3 (including cases where the latter paragraph is applied *mutatis mutandis* under Article 85) and Article 85), failed to display or open to public viewing, or has, in contravention of the provisions of Article 51, paragraph 5 (including cases where this paragraph is applied *mutatis mutandis* in Article 51 bis (including cases where this Article is applied *mutatis mutandis* in Article 85) , Article 84 paragraph 2 and Article 85), failed to obey the order for suspension or discontinuance of such public viewing;

(4) any person who has, in contravention of the provisions of Article 53, paragraphs 1, 3, or 4, opened an object of 'Important Cultural Property' to public viewing, without obtaining permission or failing to comply with the conditions of such permission, or failed to comply with an order on the suspension of public viewing;

(5) any person who has, in contravention of the provisions of Article 54 (including cases where this Article is applied *mutatis mutandis* in Article 86 and Article 172, paragraph 5), Article 55, Article 68 (including cases where the latter Article is applied *mutatis mutandis* in Article 90, paragraph 3 and Article 133) or Article 130 (including cases where this Article is applied *mutatis mutandis* in Article 172, paragraph 5), Article 131 or Article 140, failed to submit a report or submitted a false report, or has refused, interfered with or evaded a responsible officials' on-site investigation or the implementation of measures necessary for such investigation;

(6) any person who has, in contravention of the provisions of Article 92, paragraph 2, failed to comply with an order the prohibition, suspension or discontinuance of an excavation;

(7) any person who has, without justifiable reason, failed to comply with an order on the restriction, prohibitions or facilities prescribed in Article 128, paragraph 1.

Article 203

Any person who falls under either of the following Items shall be subject to a fine not exceeding fifty thousand yen:

(1) Any person who has, in contravention of the provisions of Article 28, paragraph 5, Article 29, paragraph 4 (including cases where this paragraph is applied *mutatis mutandis* in Article 79, paragraph 2), Article 56, paragraph 2 (including cases where this paragraph is applied *mutatis mutandis* in Article 86), Article 59, paragraph 6 or Article 69 (including cases where these paragraphs are applied *mutatis mutandis* in Article 90, paragraph 3) failed to return a certificate of designation as 'Important Cultural Property' or 'Important Tangible Folk Cultural Property' or a certificate of registration of an object of Registered 'Tangible Folk Cultural Property' to the Minister of Education, Culture, Sports, Science and

Technology or to a new owner of the said object;

(2) any person who has, in contravention of the provisions of Article 31, paragraph 3 (including cases where this paragraph is applied *mutatis mutandis* in Article 60, paragraph 4 (including cases where this paragraph is applied *mutatis mutandis* in Article 90, paragraph 3), Article 80, Article 119, paragraph 2 (including cases where this paragraph is applied *mutatis mutandis* in Article 133), Article 32 (including cases where this Article is applied *mutatis mutandis* in Article 60, paragraph 4 (including cases where this is applied *mutatis mutandis* in Article 90, paragraph 3), Article 80 and Article 120 (including cases where this is applied *mutatis mutandis* in Article 133)), Article 33 (including cases where this Article is applied *mutatis mutandis* in Article 80, Article 118 and Article 120 (including cases where these provisions are applied *mutatis mutandis* in Article 133) Article 172, paragraph 5), Article 34 (including cases where this Article is applied *mutatis mutandis* in Article 80 and Article 172, paragraph 5), Article 43 bis, paragraph 1, Article 61 and Article 62 (including cases where these Articles are applied *mutatis mutandis* in Article 90, paragraph 3), Article 64, paragraph 1 (including cases where this paragraph is applied *mutatis mutandis* in Article 90, paragraph 3 and Article 133), Article 65, paragraph 1 (including cases where this paragraph is applied *mutatis mutandis* in Article 90, paragraph 3), Article 73, Article 81, paragraph 1, Article 84, paragraph 1 except for the proviso, Article 92, paragraph 1, Article 96, paragraph 1, Article 115, paragraph 2 (including cases where this paragraph is applied *mutatis mutandis* in Article 120, Article 133 and Article 172, paragraph 5), Article 127, paragraph 1, Article 136, or Article 139, paragraph 1, failed to submit a report or a false report;

(3) any person who has, in contravention of the provisions of Article 32 bis, paragraph 5 (including cases where this paragraph is applied mutatis mutandis in Article 83), Article 115, paragraph 4, Article 63, paragraph 2 (including cases where these paragraphs are applied mutatis mutandis in Article 90, paragraph 3) and Article 80), or Article 115, paragraph 4 (including cases where this paragraph is applied mutatis mutandis in Article 133), refused, interfered with or evaded the implementation of management, repairs or restoration, or measures necessary for these actions.

3-9 The Ordinance to Protect Endangered Wild Fauna and Flora of Kagoshima Prefecture

(Ordinance No.11, March 25, 2003)

The Ordinance to Protect Endangered Wild Fauna and Flora of Kagoshima Prefecture are herein promulgated.

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Chapter I General Provisions

(Purpose)

Article 1
In view of the fact that the wild fauna and flora of Kagoshima Prefecture are not only essential elements of the ecosystem but that they also serve to enrich the lives of the residents, the objective of this Ordinance is to safeguard the natural environment by ensuring the protection of indigenous fauna and flora. As well, the aim is to preserve the natural environment and cultural livelihood of the residents for current and future generations.

(Definitions)

Article 2
Paragraph 1
The term "endangered wild fauna and flora" as used in this Ordinance means any wild plants and animals to which the following applies:

(i) Wild fauna or flora whose number of individual organisms is notably small to a level that would be detrimental to the survival of said species (if any species have subspecies or varieties, the same shall apply hereinafter);

(ii) Wild fauna or flora whose number of individual organisms is decreasing notably;

(iii) Wild fauna or flora whose major habitats or breeding grounds are disappearing;

(iv) Wild fauna or flora whose habitats or breeding grounds suffer from notable environmental deterioration;

(v) In addition to those cases listed in the preceding points, any wild fauna or flora in which there are other circumstances detrimental to the survival of said species.

Paragraph 2
"Designated endangered wild fauna or flora" as used in this Ordinance means any endangered wild fauna and flora which live, breed, or develop in this prefecture, and are designated by the governor under the provision of Article 9, paragraph 1 (excluding the wild fauna or flora of nationally endangered species as noted in the Act on the Conservation of Endangered Species of Wild Fauna and Flora (Act No. 75, 1992) Article 4, paragraph 3, and designated as urgent species under the same Act, Article 5, paragraph 1).

Paragraph 3
"Specified endangered fauna or flora" mentioned in this Ordinance means designated endangered fauna or flora as regulated in Article 9, Section 2, by the governor.

Paragraph 4
"Prefectural residents, etc." as used in this Ordinance means those who reside in this prefecture, as well as business people, travelers, and visitors within this prefecture.

(Responsibilities of the Prefecture)

Article 3
Paragraph 1
The prefecture shall, at all times, monitor the status of wild fauna and flora, as well as formulate and implement basic and comprehensive measures for the protection of endangered wild fauna and flora.

Paragraph 2

The prefecture shall take suitable measures to deepen the understanding of prefectural residents, etc., about the necessity of protection of wild fauna and flora.

(Responsibilities of Prefectural Residents, etc.)

Article 4

Prefectural residents, etc., shall endeavor to contribute to the protection of endangered wild fauna and flora of this prefecture by assisting and cooperating, etc., with the measures implemented by the prefecture under the provision of the preceding Article, paragraph 1.

(Request to and Support from Municipalities)

Article 5

Paragraph 1

The prefecture requests the cooperation of all municipalities in formulating and implementing measures for the protection of endangered wild fauna and flora, as well as the municipalities' implementation of all measures that the prefecture imposes under the provision of Article 3, paragraph 1.

Paragraph 2

The prefecture shall contribute to provide of information and any other necessary cooperation about the municipalities' implementation of measure for the protection of endangered wild fauna and flora.

(Respect for Property Rights, etc)

Article 6

When applying this Ordinance, respect is to be shown for the ownership and property rights of persons concerned, consideration is to be given to preserving the stability of prefectural residents' lives as well as the maintenance and promotion of their welfare, and attention is to be paid to the conservation of prefectural land and other considerations of the public good.

(Consideration of Regional Development Measures, etc.)

Article 7

When the prefecture formulates and implements measures for community development and enhancement, etc., the effect that this development may have on the environments, breeding grounds, and habitats of individual endangered wild fauna and flora must first be considered. Suitable measures are to be taken to preserve the natural environments of these species.

(Guidelines for the Protection of Endangered Species of Wild Fauna and Flora)

Article 8

Paragraph 1

The governor shall draft guidelines for the protection of endangered wild fauna and flora (hereinafter referred to as "guidelines" in this Article).

Paragraph 2

The guidelines shall provide for the following:

(i) A basic plan for the protection of endangered wild fauna and flora;
(ii) The basic criteria for the selection of designated endangered wild fauna and flora or specified endangered wild fauna and flora;
(iii) The basic criteria for the treatment of individual organisms designated as endangered wild fauna

and flora (including eggs and seeds; the same shall apply hereinafter);

(iv) Basic criteria concerning protection of the habitats and breeding grounds of individual organisms designated as endangered wild fauna and flora;

(v) Other important matters concerning the protection of endangered wild fauna and flora in addition to what is listed in the preceding items.

Paragraph 3

The governor shall seek the opinions of the Kagoshima Prefecture Environment Council (hereinafter referred to as the "Council" in this Ordinance) prior to setting forth guidelines for the protection of endangered wild fauna and flora.

Paragraph 4

When the governor establishes guidelines, public proclamation of those guidelines is to be made without delay.

Paragraph 5

As changing circumstances require, the governor may revise the guidelines.

Paragraph 6

The provisions of paragraphs 3 and 4 shall apply, *mutatis mutandis*, to the amendment of guidelines under the provisions of the preceding paragraph.

Paragraph 7

Any projects or policies for the protection of endangered wild fauna and flora based on the provisions of this Ordinance are to be in harmony with the prefectural guidelines on the protection of endangered wild fauna and flora.

(The Designation of "Designated" and "Specified" Endangered Wild Fauna and Flora)

Article 9

Paragraph 1

The governor may designate which species of wild fauna and flora living or breeding in the prefecture are to be recognized as endangered wild fauna and flora.

Paragraph 2

The governor may designate "designated endangered wild fauna and flora" that are able to be bred or reproduced commercially as "specified endangered wild fauna and flora."

Paragraph 3

Prior to making a designation under the provision of the preceding paragraph 2, (hereinafter referred to as the "designation" in this Article), the governor shall seek the opinions of the Council.

Paragraph 4

The governor is to give public notice before any designations are assigned.

Paragraph 5

When notice is given, under the provision of the preceding paragraph, interested parties may submit written arguments within 14 days following said announcement.

Paragraph 6

When written arguments have been submitted per the preceding paragraph, the governor is to hold a public hearing to necessarily gather differing views on the designation in question.

Paragraph 7

When the governor intends to make a designation, its purpose as well as the species name of the fauna and flora are to be specified.

Paragraph 8

Once public notification is given, per the preceding paragraph, the designation shall take effect.

Paragraph 9

When a change in environmental conditions or breeding grounds of an individual designated species of endangered wild fauna and flora no longer necessitates the continuance of the designation, the governor shall repeal the designation.

Paragraph 10

The provisions of paragraph 3 to 8 shall apply, *mutatis mutandis*, to the cancellation of a designation under the provision of the preceding paragraph.

Chapter II Regulations on the Treatment of Individual Organisms

Section 1 Obligations, etc., of Owners or Possessors of Individual Organisms

Article 10

Paragraph 1

Owners or possessors of individual organisms of those species specified as endangered wild fauna and flora shall recognize the gravity of their protection and shall endeavor to give them appropriate care and treatment.

Paragraph 2

When the governor deems it necessary for safeguarding, the governor is entitled to give advice or guidance to owners and/or possessors of individual organisms of those species specified as endangered wild fauna and flora concerning the treatment and care of said organisms.

Section 2 Prohibitions on the Taking of Individual Organisms, etc.

(Prohibitions on Taking, etc.)

Article 11

Paragraph 1

No person shall capture, collect, kill, or harm (hereinafter collectively referred to as "take") a living individual organism of any species of endangered wild fauna and flora. However, this shall not apply in the following cases:

(i) when a person obtains the permission set forth in paragraph 1 of the following Article and engages in the taking to which said permission pertains;

(ii) in unavoidable situations, such as the protection of human life from bodily harm or death.

Paragraph 2

No person shall possess, transfer, or receive any individual organism of endangered wild fauna or flora which is taken in violation of the provisions of the previous Article (including possession of any products made from an individual organism that has been regulated under this Article).

(Permission for Taking, etc.)

Article 12

Paragraph 1

A person who intends to take a living individual organism of any designated species of endangered wild fauna and flora, etc., for the purpose of academic research, breeding, propagation, or for any other purpose as specified by the regulations, shall first obtain permission from the governor.

Paragraph 2

To obtain permission as set forth in the preceding paragraph, a person shall make application to the governor according to prefectural regulations.

Paragraph 3

When any of the following grounds exist in regard to taking, to which applications per the preceding paragraph pertain, the governor shall not give the permission granted in paragraph 1:

(i) the purpose of the taking does not conform to any of the purposes prescribed in paragraph 1;

(ii) the taking poses a risk of impeding the protection of endangered wild fauna and flora;

(iii) when it is determined that the person engaged in the taking does not possess suitable facilities for the raising or cultivation of said individual organism(s), or is in some way found to be unable to appropriately care for the individual organism(s).

Paragraph 4

When granting permission under paragraph 1, conditions may be attached by the governor when deemed necessary for the protection of said species of endangered wild fauna and flora.

Paragraph 5

When the governor grants permission under paragraph 1, the governor shall issue a permit as provided by prefectural regulations.

Paragraph 6

Any recipient of permission, per paragraph 1, who is considered a juridical entity, or a person for whom unavoidable reasons require that someone else engage in the taking for him, may (as provided by prefectural regulations), apply for an operator certificate. This certificate allows the subordinate bearer to engage in the taking granted to the recipient of permission.

Paragraph 7

In the event that a certificate of permission granted under the terms of paragraphs 1 or 5 is lost or destroyed, application may be made to the governor for reissue.

Paragraph 8

Certificates of permission, granted under paragraphs 1, 5, or 6, must be carried when engaging in any taking.

Paragraph 9

Any organisms taken, per permission granted, must be housed, cultivated, and/or cared for in a manner appropriate to its species, in accordance with prefectural regulations.

(Measures to be Taken Against a Person Permitted to Engage in Taking, etc.)

Article 13

Paragraph 1

When violations of this Article necessitate (re paragraphs 1, 9, 4 and their conditions), the governor shall give orders to improve the breeding, cultivation, and/or care of endangered wild fauna and flora.

Paragraph 2

When violations of this Ordinance (by recipients of permission under paragraph 1 of the preceding Article) are deemed by the governor to impair the protection of endangered wild fauna and flora, the governor may rescind the permission.

(Collection of Reports and On-Site Inspections)

Article 14

Paragraph 1

The governor may, to the extent necessary to enforce this Ordinance, request recipients of permission (re Article 12) to report on the condition and wellbeing of the taken organism(s) in their care. Prefectural officials may be ordered by the governor to inspect the care facilities of the taken endangered wild fauna and flora, the organism itself, as well as any relevant documents, and to question persons concerned.

Paragraph 2

Any official who carries out an on-site inspection under the provisions of the preceding paragraph shall carry an identification card and present it to persons concerned.

Paragraph 3

The authority under the provisions of paragraph 1 shall not be interpreted as extending to criminal investigations.

Section 3 Regulation of Designated Businesses

(Notification of Designated Businesses)

Article 15

Paragraph 1

A person who intends to engage in a business that involves the transfer of any individual organism(s) of designated endangered wild fauna and flora (hereinafter referred to as a "designated business") shall notify the governor of the following matters in advance:

(i) their full name and address, and in the case of a juridical entity, the full name of their representative;

(ii) the name and location of the company responsible for the transfer of the individual organism(s) of designated endangered wild fauna and flora;

(iii) the name of the designated endangered species of wild fauna or flora subject to transfer;

(iv) in addition to those listed in the preceding three items, relevant matters specified in the prefectural regulations.

Paragraph 2

Those who have provided notification under the provisions of the preceding paragraph shall, in the event of any change in matters provided in their report, or in the event of the termination of their business relevant to the endangered species, notify the governor within thirty days from the day of such change or termination.

Paragraph 3

When the governor receives notification under preceding paragraph 2, he shall acknowledge it by giving public notice of the matter, as specified by regulations.

(Interim Measures)

Article 16
When a species is newly designated as endangered wild fauna and flora, regardless of the provisions of the preceding Article, a person who engages in a designated business that involves the transfer of individual organism(s) of designated endangered wild fauna and flora must notify the governor, in compliance with the points set forth in the preceding Article, paragraph 1. Accordingly, the person who gives notification to the governor under the preceding Article (15) shall be regarded as the person who gave notice per the preceding Article, paragraph 1.

(Compliance Requirements for Persons Engaged in a Designated Business)

Article 17
Paragraph 1
After providing notification, in accordance with Article 15, paragraph 1, of transfer of individual organism(s) of any endangered wild fauna or flora by a designated business (including persons or entities regarded as having made notification per the latter part of the preceding Article, hereinafter the same in this Article, the next Article, as well as Article 19, paragraph 1), those engaged in said business shall confirm the name and address of the transferor, and if the transferor is a juridical entity, the name of the representative thereof, as well as request the following information:

(i) whether the individual organism is a bred or propagated individual organism, or a captured or collected individual organism;

(ii) if the individual organism is a bred or propagated individual organism, the name and address of the person who bred or propagated the individual organism, and in the case of a juridical entity, the name of the representative thereof;

(iii) if the individual organism is a captured or collected individual organism, the place where the individual organism was captured or collected and the name and address of the person who captured or collected the individual organism.

Paragraph 2
A person who engages in a designated business activity, after providing notification under the provisions of Article 15, paragraph 1, shall enter the matters confirmed or inquired about pursuant to the provisions of the preceding paragraph, and other matters concerning the transfer of the individual organism of the designated endangered wild fauna or flora, in a document, and preserve said document.

(Instructions for Persons Engaged in a Designated Business)

Article 18
Paragraph 1
When a person engaged in a designated business, that has provided notification under the provisions of Article 15, paragraph 1, subsequently violates the provisions of paragraphs 1 or 2 of the preceding Article, the governor may give instructions to the violator in order to ensure compliance with said provisions for the safeguarding of endangered wild fauna and flora.

Paragraph 2
When a person engaged in a designated business, that has provided notification under the provisions of Article 15, paragraph 1, subsequently violates the instructions given under the preceding paragraph, the governor may order the violator to suspend all or part of the transfer operations related to organism(s) of designated endangered wild fauna or flora, if the governor deems that the violation will impair the protection of said organism(s). The duration, as determined by the governor, is not to exceed three months.

(Report Collection and On-site Inspections)

Article 19
Paragraph 1

The governor may, to the extent necessary for the enforcement of the provisions of this Section, request that a person engaged in a designated business activity (after providing notification per Article 15, paragraph 1) report on said business activity, or allow prefectural officials to enter the facility used to carry out said business to inspect documents and/or other articles, and to allow those officials to question persons concerned.

Paragraph 2

An official carrying out an on-site inspection under the provisions of the preceding paragraph shall carry an identification card and present it to persons concerned.

Paragraph 3

The authority under the provisions of paragraph 1 shall not be interpreted as extending to criminal investigations.

Chapter III Regulations for Protection of Habitats, etc.

(Designation of Natural Habitat Protection Areas)

Article 20
Paragraph 1

After considering the distribution, ecological needs, as well as other matters related to the habitats and growth of designated endangered wild fauna or flora, as the governor deems necessary for the protection of any such organisms and their habitats, the governor may designate the habitat of the individual organisms of said species and the area that needs to be protected together with said habitat, as a natural habitat protection area (hereinafter referred to as "protected area").

Paragraph 2

Designation under the provisions of the preceding paragraph (hereinafter referred to as "designation" in this Article) shall be made by specifying the area, the designated endangered wild fauna and flora to which the designation pertains, and guidelines on protection of the area designated.

Paragraph 3

The governor shall consult with the Council and the heads of relevant municipalities prior to making any designation.

Paragraph 4

The governor shall provide public notice prior to making a designation. This notice shall include the boundaries of the area to be designated, the designated endangered wild fauna and flora to which the designation pertains, and a draft of the guidelines for the protection of the area to be designated (referred to as the "designation plan" in the following paragraph and paragraph 6). This notice shall be made available for public inspection for 14 days from the date of issuance (as provided for by prefectural regulations).

Paragraph 5

When notice is given, under the provision of the preceding paragraph, any resident and/or interested party in the area to be designated may submit written arguments within 14 days following said announcement.

Paragraph 6

When written arguments have been submitted per the preceding paragraph, or when the governor

deems it necessary, the governor shall hold a public hearing to gather differing views on the designation in question.

Paragraph 7

When the governor makes a designation, the governor shall issue public notice of it, including the area to be designated, the endangered wild fauna and flora to which the designation pertains, and guidelines on the protection of the designated area.

Paragraph 8

The designation shall take effect once public notice under the provisions of the preceding paragraph has been given.

Paragraph 9

When any change in environmental conditions, habitats, or breeding grounds of an individual designated species of endangered wild fauna and flora no longer necessitates the continuance of the designation, the governor shall repeal the designation at his discretion.

Paragraph 10

The provisions of paragraphs 3, 7, and 8 shall apply, *mutatis mutandis*, to the cancellation of the designation under the provisions of the preceding paragraph. In this case, "it, including the area to be designated, the endangered wild fauna and flora to which the designation pertains, and guidelines on the protection of the designated area," in paragraph 7 shall be replaced with, "it, and the area for which the designation is to be cancelled," and the passage, "public notice under the provisions of the preceding paragraph," in paragraph 8 shall be replaced with, "public notice under the provisions of the preceding paragraph as applied, *mutatis mutandis*, pursuant to paragraph 10."

(Regulations of Natural Habitat Protection Areas)

Article 21

Paragraph 1

Without the permission of the governor, the following shall not be carried out within a managed area [with regard to item (viii), within one kilometer of the lake, pond, or wetland prescribed in said item], [with regard to items (x) through (xiv), limited to those carried out within the area and period of time designated by the governor for each area]:

(i) construction, renovation, or expansion of a building or any other structure;

(ii) development of residential land, cultivation of land, or otherwise changing the characteristics of the land (including the beds of bodies of water);

(iii) excavation of minerals or quarrying of soil and/or stone;

(iv) reclamation of land from a body of water by landfill or drainage;

(v) raising or lowering the water level or water volume of a river, lake, pond, etc.;

(vi) felling trees and/or bamboo;

(vii) taking an individual organism of wild fauna or flora, or other thing designated under the provision of the preceding Article, paragraph 2 (hereinafter referred to as "guideline" in this Article) as required for the habitation or growth of any designated endangered wild fauna or flora;

(viii) installing drainage facilitates that would discharge sewage or waste water into any lake, pond, or wetland within the managed area designated in the guideline, or into any body of water or waterway

that flows into said lake, pond, or wetland;

(ix) using a motor vehicle, horse, motorboat, or landing an aircraft within any area designated in the guideline, other than on roads, open spaces set aside for public use, rice fields or other cultivated land, pastures, or residential land;

(x) taking any organism of wild fauna or flora (per Article 7), including, but not limited to, those designated in the guideline under the provision of item (vii);

(xi) release, cultivation, or sowing seeds of any organism of designated endangered wild fauna or flora that would pose a risk of impeding the habitation or growth of other organisms designated in the guideline;

(xii) disseminating any substance designated in the guideline as posing a risk of impeding the habitation or growth of organisms of designated endangered wild fauna or flora;

(xiii) engaging in controlled burning or making of open fires;

(xiv) observing an individual organism of designated endangered wild fauna or flora by any method specified in the guideline as posing a risk of impeding the habitation or growth of organisms of designated endangered wild fauna or flora.

Paragraph 2

A person who intends to obtain the permission set forth in the preceding paragraph shall apply to the governor, per the prefectural regulations.

Paragraph 3

If an act pertaining to the application set forth in the preceding paragraph does not conform to the guidelines, the governor may refuse to grant the permission set forth in paragraph 1.

Paragraph 4

When granting permission under paragraph 1, conditions may be attached by the governor when deemed necessary for the protection of any species of designated endangered wild fauna and flora.

Paragraph 5

A person who had already started to engage in any of the acts listed in the items under paragraph 1, when it is decided that said act is to be regulated pursuant to the provisions of said paragraph, may continue to engage in said act notwithstanding the provisions of said paragraph, if he/she notifies the governor of the matters specified by the provisions within three months of the decision on such regulation.

Paragraph 6

The provisions of paragraph 1 shall not apply to the following acts:

(i) an act as a necessary emergency measure in response to an extraordinary disaster;

(ii) an ordinary act of management or a simple act regarded as posing no risk of impeding the protection of designated endangered wild fauna or flora under the regulations;

(iii) felling trees and bamboo by methods, and within the limits, designated by the governor in the guidelines for each protected area.

Paragraph 7

A person who has carried out an act set forth in item (i) of the preceding point, which falls under any

of the items under paragraph 1, shall notify the governor to that effect within fourteen days of the act.

(Order to Take Measures, etc.)

Article 22
Paragraph 1

Should the governor deem it necessary for the protection of designated endangered wild fauna or flora, the governor may instruct any person who violates the terms of the preceding Article, paragraph 1, within a protected area, by indicating the methods needed to implement this Act.

Paragraph 2

When a person who has, in violation of the provisions of the preceding Article, paragraph 1, or the conditions attached pursuant to the provisions of the preceding Article, paragraph 4, impaired the protection of the habitat of organisms of designated endangered wild fauna or flora, if the governor deems it necessary for the protection of designated endangered wild fauna or flora, the governor may order the restoration of the original conditions and/or order other necessary measures to protect the habitat of organisms of designated wild fauna or flora, to be carried out by the violator within a reasonable time limit as specified by the governor.

(Collection of Reports and Onsite Inspections)

Article 23
Paragraph 1

To the extent necessary to enforce this Ordinance, the governor may request a person who has engaged in any of the acts listed under Article 21, paragraph 1, within a protected area, to report on the implementation status of said act or any other necessary matters.

Paragraph 2

To the extent necessary for the enforcement of this Ordinance, the governor may have prefectural officials enter land within a protected area that is owned or possessed by a person prescribed in the preceding paragraph. These officials may inspect the implementation status of the act engaged in, question persons concerned, and/or investigate the effects of said act on the protection of designated endangered wild fauna and flora.

Paragraph 3

An official carrying out an on-site inspection or survey, under the provisions of the preceding paragraph, shall carry an identification card and present it to persons concerned.

Paragraph 4

The authority under the provisions of paragraph 1 and 2 shall not be interpreted as extending to criminal investigations.

(Field Survey)

Article 24
Paragraph 1

The governor may have prefectural officials enter a person’s land to the extent necessary, to conduct field surveys in order to make designations under the provision of Article 20, paragraph 1.

Paragraph 2

When the governor intends to have officials enter land under the provision of the preceding paragraph, the governor shall notify the owner or possessor of the land in advance and give said owner opportunity to express his/her opinions.

Paragraph 3

An official who enters land pursuant to the provisions of paragraph 1 shall carry an identification card and present it to persons concerned.

Paragraph 4

No owner or possessor of land shall refuse or obstruct entry under the provisions of paragraph 1, unless justifiable grounds exist.

(Compensation for Losses)

Article 25

When a person has incurred losses due to the inability to obtain the permission set forth in Article 21, paragraph 1, or due to the attachment of conditions (pursuant to the provisions of the same Article, paragraph 4), the prefecture shall compensate the person for the losses that would normally be incurred in such a case.

Chapter IV Miscellaneous Provisions

(Habitats and/or Growth Status Surveys)

Article 26

The governor shall survey the status of the habitats and growth of, and other necessarily matters pertaining to, individual organisms of wild fauna and flora, and use the results for the revision or repeal of any regulations issued under this Ordinance, designations made under this Ordinance, or the cancellation thereof, and other purposes to ensure the proper application of this Ordinance.

(Endangered Species Protection Promoters)

Article 27

Paragraph 1

The governor may appoint endangered species protection promoters to educate the public on the need to preserve the natural environment for the conservation, breeding, and growth of endangered wild fauna and flora. These promoters are also to survey the status of said fauna and flora, and provide the public with necessary advice for the protection of endangered wild fauna and flora.

Paragraph 2

Necessary matters concerning endangered species protection promoters are to be established by regulations.

(Cooperation with Local and National Public Entities)

Article 28

The prefecture shall endeavor to cooperate with local and national public entities to formulate, implement, and promote policies for the protection of endangered wild fauna and flora.

(Promotion of the Prefectural Residents' Activities)

Article 29

The prefecture shall provide necessary advice, instruction, and/or other supportive measures to businesses, individuals, organizations, or groups who engage in volunteer activities related to the protection of endangered wild fauna and flora in alignment with the aims of this Ordinance.

(Special Provisions Concerning the Nation, etc.)

Article 30
Paragraph 1

The provisions of Article 10, paragraph 2; Article 11, paragraph 1; Article 21, paragraphs 1 and 7; Article 22, paragraph 1; and Article 23, paragraphs 1 and 2; shall not apply to activities and programs carried out by local or national public organizations.

Paragraph 2

When a local or national public organization intends to take a living organism of designated endangered wild fauna or flora, in a case other than those listed in Article 11, paragraph 1, item (ii), or when it intends to carry out an act which requires the permission set forth in Article 21, paragraph 1, except in cases specified by prefectural ordinance, it shall consult with the governor in advance and obtain the governor's consent.

Paragraph 3

When a local or national public organization carries out any of the acts listed in the items under Article 21, paragraph 1, and in which it may continue to carry out said act by having provided notification per the provisions of Article 21, paragraph 5; or when it carries out or intends to carry out an act that requires notification per the provisions of paragraph 7 of that Article (except in cases specified by prefectural ordinance), it shall notify the governor to that effect, in accordance with the rules for notification under these provisions.

(Delegation)

Article 31

Necessary matters related to the implementation of these provisions, other than those determined in this Ordinance, are to be established by regulations.

Chapter V Penal Provisions

(Penal Provisions)

Article 32

A person found guilty of any of the following points shall be punished by imprisonment with hard labor for not more than one year, or a fine of not more than five hundred thousand yen:

(i) a person who has violated the provisions of Article 11, or Article 21, paragraph 1;

(ii) a person who has violated an order under the provisions of Article 13 paragraph 1, or Article 22 paragraph 2;

Article 33

A person found guilty of any of the following points shall be punished by imprisonment with hard labor for not more than six months, or a fine of not more than three hundred thousand yen:

(i) a person who has violated any of the conditions attached to the provisions of Article 12 paragraph 4, or Article 21, paragraph 4;

(ii) a person who has violated an order under the provision of Article 18, paragraph 2.

Article 34

A person who engages in a designated business activity without providing notification under the provisions of Article 15, paragraph 1, or the preceding part of Article 16, or provides false notification, shall be

punished by a fine of not more than three hundred thousand yen.

Article 35
A person found guilty of any of the following points shall be punished by a fine of not more than two hundred thousand yen:

(i) a person who engages in taking, etc., without carrying a permit or an operator's certificate in violation of the provisions of Article 12, paragraph 8;

(ii) a person who fails to make a report (per Article 14, paragraph 1), or who makes a false report; or who refuses, obstructs, or evades an onsite inspection under the provisions of said paragraph; or who fails to make a statement, or makes a false statement, in response to a question under the provisions of said paragraph;

(iii) a person who violates the provision of Article 16, paragraph 2;

(iv) a person who fails to make a report (per Article 19, paragraph 1), or who makes a false report; or who refuses, obstructs, or evades an onsite inspection under the provisions of said paragraph; or who fails to make a statement, or makes a false statement, in response to a question under the provisions of said paragraph;

(v) a person who fails to make a report (per Article 23, paragraph 1), or who makes a false report; or who refuses, obstructs, or evades an onsite inspection or an onsite survey under the provisions of paragraph 2 of said Article; or who fails to make a statement, or makes a false statement, in response to a question under the provisions of said paragraph;

(vi) a person who refuses or obstructs entry under the provisions of Article 24, paragraph 1, in violation of the provisions of paragraph 4 of said Article.

(Joint Punishment Provision)

Article 36
When a representative person of a juridical entity, or an agent, employee, or any other person engaged by a juridical entity or individual, commits a violation set forth in any of the points from Article 32 through the preceding Article, with regard to the business of said juridical entity or individual, not only the offender but also the juridical entity or individual shall be punished by the fine prescribed in the respective Article.

Supplementary Provisions

1. This Ordinance shall come into effect on a day, to be established by ordinance, within 9 months from the day of promulgation. However, the provisions of Chapter 1 of this Ordinance have been in effect since April 1, 2003.

(This Ordinance came into effect on December 24, 2003, by provision number 81, December, 2003.)

2. When this Ordinance comes into effect, any person or entity who is at that time engaged in business involving transfer of any individual organism of designated endangered wild fauna or flora is to be regarded as a person engaged in a designated business, under the provision of Article 15, paragraph 1. The provisions of said Article shall thenceforth apply to that person or entity. In this case, “in advance” in the Article 15, paragraph 1, shall be, “within thirty days from the day of its enforcement.”

3-10 Amami-Oshima Island and Tokunoshima Island Municipal Ordinances to Protect Endangered Species of Wild Fauna and Flora

1. Municipal ordinances to protect endangered species of wild fauna and flora

All municipalities in Amami-Oshima Island and Tokunoshima Island have enacted ordinances to protect endangered species of wild fauna and flora.

Municipal ordinances to protect endangered species of wild fauna and flora

Amami-Oshima Island

Amami City Ordinance to Protect Endangered Species of Wild Fauna and Flora (Ordinance No. 116 of March 20, 2006)

Yamato Village Ordinance to Protect Endangered Species of Wild Fauna and Flora (Ordinance No. 15 of June 17, 2013)

Uken Village Ordinance to Protect Endangered Species of Wild Fauna and Flora (Ordinance No. 20 of June 18, 2013)

Setouchi Town Ordinance to Protect Endangered Species of Wild Fauna and Flora (Ordinance No. 23 of June 19, 2013)

Tatsugo Town Ordinance to Protect Endangered Species of Wild Fauna and Flora (Ordinance No. 22 of June 14, 2013)

Tokunoshima Island

Tokunoshima Town Ordinance to Protect Endangered Species of Wild Fauna and Flora (Ordinance No. 19 of June 20, 2012)

Amagi Town Ordinance to Protect Endangered Species of Wild Fauna and Flora (Ordinance No. 13 of June 19, 2012)

Isen Town Ordinance to Protect Endangered Species of Wild Fauna and Flora (Ordinance No. 13 of June 19, 2012)

2. Overview of municipal ordinances to protect endangered species of wild fauna and flora

All ordinances established by these eight municipalities designate endangered wildlife species, and impose regulations on the capture and designate protected areas to conserve the habitats. All municipalities have enacted the ordinances similar to the Amami City ordinance, a part of which is shown below.

Amami City Ordinance to Protect Endangered Species of Wild Fauna and Flora (excerpt)

Ordinance No. 116 of March 20, 2006

(Purpose)

Article 1

The purpose of this ordinance is to protect and to preserve for subsequent generations the wild fauna and flora found in Amami City, as both world treasures and important elements of the ecosystem.

(Relationship to other acts and ordinances)

Article 3

The provisions of this ordinance apply to the protection of endangered species of wild fauna and flora, except as otherwise specified by the Act on Conservation of Endangered Species of Wild Fauna and Flora (Act No. 75 of 1992), the Kagoshima Prefectural Ordinance to Protect Endangered Species of Wild Fauna and Flora (Kagoshima Prefectural Ordinance No. 11 of 2003), and other acts and ordinances.

(Designation as designated endangered species of wild fauna and flora)

Article 9

(1) The Mayor may designate endangered species of wild fauna and flora occurring within the City that he or she deems to require protection as designated endangered wildlife species.

(Prohibition of capture and other actions)

Article 10

(1) Living individuals of designated endangered wildlife species cannot be captured, collected, killed, or damaged/injured ("Capture" hereinafter); provided, however, that this shall not apply in cases in which Capture is urgently and absolutely necessary to protect human life or human safety or is permitted by the Mayor specifically for academic studies or other reasons in the public interest.

(Designation of habitats and other areas as protected areas)

Article 13

(1) The Mayor may designate the habitats of designated endangered wildlife species and areas that require protection along with such habitats as protected areas ("Protected Areas" hereinafter) if he or she deems such designation necessary to protect such fauna and flora.

(Regulations in Protected Areas)

Article 14

(1) Persons who intend to undertake any of the actions set forth below within the Protected Areas shall obtain permission from the Mayor.

(i) Constructing, reconstructing or extending structures.

(ii) Developing building site, clearing or cultivating land, or otherwise altering the shape or nature of the land (or lake, stream, or river bed).

(iii) Mining minerals or quarrying soil and stones.

(iv) Reclaiming the surface of water or reclaiming by drainage.

(v) Raising or lowering the water-level or water of volume of a river and lake, etc.

(vi) Felling trees or bamboo.

(vii) Burning fields or starting open-air fires.

(Penalties)

Article 24

Persons violating the provisions of the main clause of Article 10, paragraph 1 or of paragraph 2 of the same Article or of Article 14, paragraph 1, shall be punished by imprisonment with labor of not more than one year or fine of not more than 500,000 yen.

3-11 Pet Cat Ordinances in Amami-Oshima Island, Tokunoshima Island, Yambaru, and Iriomote Island

1. Municipal ordinances on the management of pet cats

All municipalities in Amami-Oshima Island, Tokunoshima Island, Yambaru, and Iriomote Island have enacted ordinances concerning the management of pet cats.

Municipal ordinances on the management of pet cats

Amami-Oshima Island

Amami City Ordinance on the Proper Keeping and Management of Pet Cats (Ordinance No. 16 of July 20, 2011)

Yamato Village Ordinance on the Proper Keeping and Management of Pet Cats (Ordinance No. 4-1 of June 23, 2011)

Uken Village Ordinance on the Proper Keeping and Management of Pet Cats (Ordinance No. 11 of June 24, 2014)

Setouchi Town Ordinance on the Proper Keeping and Management of Pet Cats (Ordinance No. 6 of June 17, 2011)

Tatsugo Town Ordinance on the Proper Keeping and Management of Pet Cats (Ordinance No. 10 of June 21, 2011)

Tokunoshima Island

Tokunoshima Town Ordinance on the Proper Keeping and Management of Pet Cats (Ordinance No. 43 of December 12, 2013)

Amagi Town Ordinance on the Proper Keeping and Management of Pet Cats (Ordinance No. 33 of December 12, 2013)

Isen Town Ordinance on the Proper Keeping and Management of Pet Cats (Ordinance No. 21 of December 12, 2013)

Yambaru

Kunigami Village Ordinance on Cat Welfare and Management (Ordinance No. 18 of September 24, 2004)

Ogimi Village Ordinance on Cat Welfare and Management (Ordinance No. 12 of September 27, 2004)

Higashi Village Ordinance on Cat Welfare and Management (Ordinance No. 15 of September 24, 2004)

Iriomote Island

Taketomi Town Ordinance on the Keeping of Cats (Ordinance No. 15 of June 19, 2008)

2. Overview of municipal ordinances on the management of pet cats

Intended to prevent damage to wildlife species, these ordinances oblige owners to register pet cats, require owners to keep cats indoors, and prohibit the abandonment of pet cats (table below). The ordinances established by Taketomi Town have special provisions intended to prevent the impact of domesticated cats on populations of Iriomote cats, including mandatory inspections of pet cats for infective diseases.

Table. Overview of municipal ordinances on management of pet cats

	Amami-Oshima Island and Tokunoshima Island (Ordinances of eight municipalities)	Yambaru (Ordinances of three villages)	Iriomote Island (Taketomi Town ordinance)
	Note 1	Note 2	Note 3
Purpose	● Raise awareness of the importance of animal welfare. ● Prevent the impact of feral cats or pets allowed to roam free on Amami rabbit and other wildlife populations. ● Apply these measures to improve local living environments and conserve local natural environments and ecosystems.	● Raise awareness of the importance of animal welfare. ● Maintain environmental health and conserve the natural environment.	● Maintain the health and safety of pet cats. ● Prevent nuisance behavior among pet cats and to prevent their impact on populations of the endangered Iriomote cat. ● Apply these measures to conserve living environments and to secure biodiversity in Taketomi Town.
Pet cat registration, etc.	● Obligation to register pet cats ● Requirement to implant microchips in pet cats	● Obligation to register pet cats ● Village mayoral edict to implant microchips in pet cats	● Obligation to register pet cats ✧ Obligation to implant microchips in pet cats in Iriomote Island ✧ Obligation to have pet cats in Iriomote Island inspected for specific infective diseases
Keeping indoors, etc.	● Requirement to keep pet cats indoors ● Requirement not to let pet cats roam free outside	● Requirement to keep pet cats indoors ● Requirement not to let pet cats roam free outside	● Requirement to keep pet cats indoors ✧ Requirement to spay/neuter pet cats if roaming free in Iriomote Island ✧ Prohibition on keeping 10 or more cats in Iriomote Island ✧ Regulations imposed on bringing cats infected with specific infective disease into Iriomote Island
Prohibition on feeding	● Prohibition on feeding cats other than pet cats without good reason	● Prohibition on feeding cats other than one's own without good reason	● Prohibition on feeding cats other than one's own without good reason
Prohibition on abandonment, etc.	● Obligation to keep and take care of pet cats for life; prohibition on abandoning pet cats	● Obligation to keep pet cats for life; prohibition on abandoning pet cats	● Prohibition on abandoning pet cats

	Amami-Oshima Island and Tokunoshima Island (Ordinances of eight municipalities)	Yambaru (Ordinances of three villages)	Iriomote Island (Taketomi Town ordinance)
	Note 1	Note 2	Note 3
Instructions to violators	● Mayorals instructions and orders to violators	● Mayoral instructions and recommendations to violators, and public announcement of names of violators	● Mayoral p instructions, recommendations, and orders to violators ✧ Non-criminal fines for those violating special provisions for Iriomote Island

Note 1: Ordinances enacted by the eight municipalities in Amami-Oshima Island and Tokunoshima Island are nearly identical. The exceptions include that some do not prohibit feeding.

Note 2: All villages in Yambaru (Kunigami, Ogimi, and Higashi) have identical ordinances.

Note 3: Provisions marked with a ✧ apply to Iriomote Island and the islands neighboring Iriomote Island (with special provisions for Iriomote Island).

Appendix 4*

*These documents are tentative translations for the appendices of the nomination of the property.

Plans of protection applying to the nominated property

4-1: Amami Gunto National Park (Tentative), Park Plan (Draft by the Ministry of the Environment)

4-2: Yambaru National Park, Park Plan (Excerpt)

4-3: Iriomote-Ishigaki National Park, Park Plan (Excerpt)

4-4: Regional Administration and Management Plan (The Amami-Oshima Forest Planning Area): Excerpts

4-5: Regional Administration and Management Plan (The Northern Okinawa Forest Planning Area): Excerpts

4-6: Regional Administration and Management Plan (The Miyako-Yaeyama Forest Planning Area): Excerpts

4-7: Conservation Management Plan for the Amami Islands Forest Ecosystem Reserve (Excerpts)

4-8: Conservation Management Plan for the Iriomote-jima Island Forest Ecosystem Reserve (Excerpts)

4-9: Protected Forests and Green Corridors: Outlines of Their Position among Japan's National Forests

4-10: On Designation of National Forests as Green Corridor

4-11: Revised Plan for Mt. Yuwandake National Wildlife Protection Area (Excerpt)

4-12: Designation Plan for Mt. Yuwandake National Wildlife Protection Area, Mt. Yuwandake Special Protection Zone (Excerpt)

4-13: Designation Plan for Yambaru (Ada) National Wildlife Protection Area (Excerpt)

4-14: Designation Plan for Yambaru (Ada) National Wildlife Protection Area,Yambaru (Ada) Special Protection Zone (Excerpt)

4-15: Designation Plan for Yambaru (Aha) National Wildlife Protection Area (Excerpt)

4-16: Designation Plan for Iriomote National Wildlife Protection Area (Excerpt)

4-17: Designation Plan for Iriomote National Wildlife Protection Area, Iriomote Special Protection Zone (Excerpt)

4-18: Protection and Recovery Program for the Amami Rabbit (*Pentalagus furnessi*)

4-19: Protection and Recovery Program for the Iriomote Cat (*Prionailurus bengalesis iriomotensis*)

4-20: Protection and Recovery Program for the Amami Woodcock (*Scolopax mira*)
4-21: Protection and Recovery Program for the Amami Thrush (*Zoothera dauma major*)
4-22: Protection and Recovery Program for the Okinawa Rail (*Gallirallus okinawae*)
4-23: Protection and Recovery Program for the Okinawa woodpecker (*Sapheopipo noguchii*)
4-24: Protection and Recovery Program for the Yanbaru long-armed scarab beetle (*Cheirotonus jamber*)
4-25: A 10-year Action Plan for the Amami Rabbit Protection and Recovery Program (2014 to 2024)
4-26: A 10-year Action Plan for the Amami Woodcock Protection and Recovery Program (2014 to 2024)
4-27: A 10-year Action Plan for the Amami Thrush Protection and Recovery Program (2014 to 2024)
4-28: A 10-year Action Plan for the Okinawa Rail Protection and Recovery Program (2015 to 2025)
4-29：Phase 2 Small Asian Mongoose Control Plan for Amami-Oshima Island (FY 2013 to 2022)
4-30: Phase 2 Mongoose Control Plan for the Northern Part of Okinawa Island (FY 2013 to 2022)
4-31: Cane Toad (Rhinella marina) Control Plan for the Yaeyama Region of Okinawa Prefecture
4-32: The Biodiversity Strategy and Action Plan of Kagoshima Prefecture (Excerpt)
4-33: Act on Special Measures for the Promotion and Development of the Amami Island Group (Excerpt)
4-34: Plan for the Promotion and Development of the Amami Island Group (Excerpt)
4-35: The Amami Island Group Symbiotic Society Plan (Excerpt)
4-36: Kagoshima Prefecture Tourism Promotion Basic Policy (Excerpt)
4-37: Master Plan of the Amami Island Group Sustainable Tourism
4-38: Implementation Policy of Environmental Consideration Guidelines for Public Projects on Amami-Oshima Island and Tokunoshima Island
4-39: Biodiversity Strategy of Okinawa (Excerpt)
4-40: Act on Special Measures for the Promotion and Development of Okinawa (Excerpt)
4-41: Basic Plan for 21st Century Vision of Okinawa (Okinawa Promotion Plan): Excerpt
4-42: Okinawa Prefecture Basic Plan for Tourism Promotion (Fifth Plan): Outline
4-43: Mt. Ibu Conservation and Utilization Agreement (Overview)
4-44: Nakama River Conservation and Utilization Agreement (Overview)

4-1 Amami Gunto National Park (Tentative)
Park Plan
(Draft by the Ministry of the Environment)

Ministry of the Environment

1. Basic Policy

(1) Basic policy on protection

Amami Gunto National Park comprises eight distinctive islands that feature: subtropical laurel forests with endemic and rare species; highly varied coasts with natural features such as rias, beaches, tidal flats, coastal cliffs, and waters with the northernmost coral reefs in the world; as well as raised terraces, limestone caves, karst topography; and diverse cultural landscapes that underscore people's connections to the natural environment. For the purpose of maintaining and enhancing the diversity of the natural environment and landscapes, as well as the quality of natural experiences (i.e. the level of satisfaction and sense of fulfillment that visitors gain through their experiences of nature there) by maintaining and restoring individual landscape elements, the individual landscape elements shall be protected as follows in the park as a whole.

(i) Subtropical laurel forests

The subtropical laurel forests of Amami-Oshima Island and Tokunoshima Island, which are dominated by species such as *Castanopsis sieboldii*, are home to ecosystems consisting of many endemic and rare species such as the Amami rabbit (*Pentalagus furnessi*), and the protection of these habitats is of great importance from a global perspective.

Nevertheless, on Amami-Oshima Island and Tokunoshima Island, the decline in populations of endemic and rare species due to capture, collection, and traffic accidents, as well as the negative impact on these populations due to alien species, is a major concern. Furthermore, forestry mainly for pulp and woodchips is operated on Amami-Oshima Island, and the proper balance between ecosystem conservation and the practice of forestry is an issue to be challenged.

For these reasons, and for the purpose of proactively managing the ecosystems of the subtropical laurel forests, of sustaining conditions in which: the health of the ecosystems is maintained; the endemic and rare species can live and thrive with low risk of extinction; and it is possible to perceive the richness of the ecosystems and biodiversity, the region shall be protected according to the following policies.

a. Protection of endemic and rare species of flora and fauna

・Decreases in population of endemic and rare species as a result of anthropogenic factors such as capture, collection, and traffic accidents, shall be prevented.

・The negative impact on endemic and rare species from alien species shall be eliminated or controlled.

・Habitats shall be conserved to prevent any substantial interference to the growth and development of endemic and rare species.

b. Protection and management of forests

・The old-growth forest and forest stands with endemic and rare species shall be stringently protected.

・The conservation of ecosystems shall be given thorough consideration in the practice of forestry.

・The induction and conversion (reversion) to old-growth laurel forests of broadleaved secondary forests that have been logged and forests that have been replanted with different species shall be undertaken.

c. Protection and management of rivers

・Rivers shall be protected and managed in ways that take into consideration the movement and reproduction of aquatic organisms such as the Ryukyu ayu-fish (*Plecoglossus altivelis ryukyuensis*).

・Rivers shall be protected and managed in ways that take into consideration amphibians whose habitat includes both forests and rivers.

・Rivers shall be protected and managed in ways that take into consideration the protection of rheophytes, epiphytes that require high levels of air moisture, mangroves that grow in brackish water.

d. Control of entry by people

・The possibility of entry control shall be studiedas necessary for areas that are particularly important in the biodiversity conservation, such as areas with many endemic and rare species, areas in which the quality of the natural environment or natural experiences is negatively affected due to over-visitation or concentrated visitation.

e. Scientific and accommodative protection and management

・Efforts shall be made to collect data on forests, endemic and rare species, etc., and based on such data, forest ecosystems shall be scientifically protected and managed.

・Monitoring shall be carried out on the conservation of forest ecosystems and rare species, and they shall be adaptively protected and managed based on the information obtained.

(ii) Coasts and marine areas

The coasts of the Amami Island Group have diverse natural landscapes that include beaches, tidal flats, coastal cliffs, rias, and other natural features, and are important as breeding grounds for seabirds and sea

turtles.

In addition, the marine areas feature the northernmost coral reefs in the world. They are home to fish and other marine life, and are closely connected to the lifestyles of the people on the islands. For example, the waters are the sites of customs such as *izari* (traditional fishing of small fish, octopuses, etc. carried out in the reefs during a spring tide on winter nights) and *hamaore* (the tradition of going to the beach on the third day of the third month of the old lunisolar calendar, when the tide is at its lowest point of the year, and gathering shellfish and such).

There are matters of concern for the area, including the altering of the coastal landscape due to development, and the deterioration of coral due to predation by crown-of-thorns starfish and to bleaching. For the purpose of keeping the region in a condition in which people can enjoy coastal landscapes whose natural features are well-maintained, the marine area of the coastal waters are highly clear so that people can enjoy underwater landscape whose beauty is enhanced by marine life, and resources can be used in people's lives in a sustainable manner, the region shall be protected according to the following policies.

a. Protection of the distinctive topography and natural vegetation in coastal areas

- Efforts shall be made to maintain the landscape by curbing and/or preventing alterations to topographical and other natural features of the coastal areas, especially the coastal cliffs and ria coasts.
- The alteration or decreasing of tidal flats that serve as habitats and migration grounds for diverse organisms shall be curbed and/or prevented.
- Protection and management shall be carried out in ways that take into consideration the maintenance of the continuity of natural vegetation extending from the coasts to the hinterlands.
- The negative impact on natural vegetation and endemic and rare plants from alien species shall be eliminated or controlled.

b. Protection of endemic and rare species

- Protection and management shall be carried out in ways that take into consideration the nesting of sea turtles and breeding of seabirds.
- The decrease of endemic or rare plants and of flora that makes landscapes distinctive as the result of collection (i.e. anthropogenic factors) shall be prevented.

c. Protection and restoration of marine environment

- Protection and management shall be carried out in ways that take into consideration the prevention of negative impact on the marine environment due to land-based factures, such as red clay runoff and the destruction of coastal areas.
- Efforts shall be made to protect and restore corals that serve as habitats for fish and other marine life.
- Efforts shall be made to protect those species that make up seascapes, as well as organisms that serve to purify the marine environment, that are in danger of being overfished from commercial harvesting.

(iii) Other

In addition to the above, the Park contains natural landscapes such as raised terraces, limestone caves, karst topography, as well as cultural and village landscapes that underscore people's connections to the natural environment.

For natural landscapes, protection and management shall be carried out with consideration to the natural features as well as to how people use the Park. For cultural and village landscapes, efforts shall be made to maintain landscapes that highlight the interaction between people and nature and to protect it appropriately in ways that takes into consideration the lives of residents.

Efforts shall also be made to raise awareness among residents and park visitors about the globally important natural values of the Amami Island Group, endemic and rare species, the negative impact of alien species, etc.

(2) Protective regulations plan

Because one of the characteristics of the Park is that its natural landscapes are diverse, and the features of the landscape differ from island to island, it is necessary to engage in protection in the Park in a way that suits the features of each island. For this reason, the policies for protective regulations plan shall be set for each island as follows.

(i) Amami-Oshima Island

This area features diverse landscapes, including subtropical laurel forests that are home to endemic and rare species such as the Amami rabbit, mangroves, ria coasts, the seascape of Kasari Bay, tidal flats teeming with birds and marine life, coral reefs, and coasts.

(a) For subtropical laurel forests in the south-central and northern parts of Amami-Oshima Island, where endemic and rare species grow and live, conservation of those habitats shall be carried out. For the mountainous area in the south-central part, which is the most important in terms of maintaining Amami-Oshima Island's scenic beauty and conserving biodiversity, efforts shall be made to stringently protect especially important areas.

Many of the subtropical laurel forests are secondary forests that have been logged in the past, and in certain localized spots, Japanese cedar (*Cryptomeria japonica*) and other such trees have been planted. For these forests, in addition to making efforts as necessary to restore them to more pristine subtropical laurel forests, consideration shall be given to the conservation of ecosystems and of habitats of endemic and rare species during forestry operations, such as the establishment of felling periods, zones, and methods, and the securing of reserve forests.

For areas that are especially important for conserving the scenic beauty of the south-central part of the island and for habitat conservation, adjustments will be made in terms of use, such as restricting road traffic or other measures.

(b) The unique landscape and marine life habitats of the Sumiyo mangrove forest, which is the second

largest in Japan and whose dominant species is different from mangrove forests in Okinawa, shall be stringently protected.

(c) For the ria coast of the Oshima Strait, which stretches from the main island of Amami-Oshima Island to Kakeroma Island, in addition to maintaining the scenic beauty from the overlook and sides of the roads, efforts will be made to protect part of the seascape off Kakeroma Island, which is a good coral habitat.

In addition, efforts shall be made to protect birds and endemic species on Ukejima Island, Hamiya Island, and Kazaki on Kakeroma Island.

(d) In Kasari Bay, off the northern part of Amami-Oshima Island's, efforts will be made to maintain the scenic beauty from the overlook and conserve the habitats of organisms in the Tekebutidal flats in the bay.

(e) Efforts shall be made to maintain the scenic beauty of the eastern coast of the Kasari Peninsula, Ohama, Cape Miyakozaki, and Hien Beach, which feature coral reef and fine coastline. Efforts shall also be made to protect part of the seascape off eastern coast of the Kasari Peninsula and Cape Ohama-Surikozaki, which are good coral habitats. In addition, species that aremain elements constituting the seascapes and species that serve as habitats of fish and other marine life shall be protected.

(ii) Kikai Island

This area features a distinctive terraced topography that shows how the island was formed, as well as landscapes created through the island residents' use of the land.

(a) In order to maintain the landscape as seen from the overlook and protect the forests in Hyakunodai and the surrounding areas, in addition to stringent measures to protect the terraced slopes, effort shall be made to maintain scenery that highlights origin of the surrounding islands and the lifestyles of island residents.

(b) Efforts shall be made to maintain the scenic beauty of Cape Tombi, Shitooke Coast and Araki Coast, which features a prominent view of the raised fringing reef that surrounds the island, with attention to conservation of the topography and soil cover.

(iii) Tokunoshima Island

This area features subtropical laurel forests that are home to endemic and rare species, most notably the Amami rabbit, lowland forests composed of *Ficus microcarpa*, *Machilus thunbergii*, and *Quercus glauca* var. *amamiana*, and other trees, coastal cliffs, and various coastal landscapes.

(a) For the mountainous zone of the northern and south-central part of the island, where there are subtropical laurel forests that are home to endemic and rare species, the habitats of those species shall be conserved. In particularly important areas, stringent protection measures shall be employed. Many of the subtropical laurel forests are secondary forests that have been logged in the past, and in certain localized spots, Japanese cedar and other such trees have been planted. Efforts shall be made as

necessary to restore them to more pristine subtropical laurel forests.

(b) The lowland old-growth stands composed of *Ficus microcarpa* and *Quercus glauca* var. *amamiana*, among others, on Mt. Gina, are important examples of lowland forest vegetation of this area, and hence stringent efforts shall be made to protect them. In addition, the scenic beauty of the secondary forests in the surrounding area, which consists mostly of *Pinus luchuensis* and *Castanopsis sieboldii* shall be maintained as well, as they are good places for experiencing nature.

(c) The Sakibaru Coast (Mushiroze), which features exposed granite, and the coastal cliffs of Innojofuta and Cape Inutabu offer particularly unique and spectacular landscapes, among coastlines in Tokunoshima Island. For this reason, stringent efforts shall be made to protect them.

Furthermore, efforts will be made to maintain the scenic beauties of the river mouths of the Shikaura and Agon rivers, Kinen Beach, the Aze Coast, and Cape Kanemizaki, with attention to conservation of their topography and soil cover.

(iv) Okinoerabu Island

This area features distinctive coastal landscapes, including Ryukyu limestone karst formations and coastal cliffs.

(a) The topographical characteristics and soil cover of Cape Tamina, Cape Kunigami, and the coast around Fucha, which are distinctive because of their Ryukyu limestone coastal topography, shall be protected. In addition, efforts shall be made to protect the surrounding scenic beauty as necessary.

(b) Efforts shall be made to maintain the scenic beauty of the coast from Yakomo to Otsukan, with attention to conservation of their topography and soil cover.

(c) Efforts will be made to conserve the karst formations on the side of Mt. Oyama, including the limestone caves and dolines present.

(d) Efforts will be made to conerve the forest landscape at the peak of Mt. Oyama, which has one of the few forests remaining on the island.

(v) Yoron Island

The largest characteristic of this area is the expansive lagoon that stretches out about 1 km off the island. For this reason, the scenic beauty of the entire marine area of this island shall, together with the coastlines neighboring this seascape of the lagoon, shall be protected. In addition, efforts shall be made to protect species that are main elements constituting the seascape and species that serve as habitats of fish and other marine life. Furthermore, measures shall be taken as necessary to restore coral reefs that have deteriorated due to bleaching and predation by crown-of-thorns starfish in the past.

(vi) Measures common to all of the islands

(a) The nesting and breeding of sea turtles and seabirds such as terns take place on the beaches and reefs of the coasts of Amami-Oshima Island. Protection and management shall be carried out in ways that take into consideration this nesting and breeding.

(b) For plants that are either rare or endemic to the Amami Island Group or the Nansei-Shoto Islands, or plants that are main elements constituting the landscape of the region, their decline due to collection and other factors shall be prevented.

(3) Basic policy on use

Amami Gunto National Park features subtropical laurel forests with endemic and rare species; highly varied coasts with natural features such as rias, beaches, tidal flats, coastal cliffs, and waters with the northernmost coral reefs in the world; as well as raised terraces, limestone caves, karst topography; and diverse natural and cultural landscapes that underscore people's connections to the natural environment. One of the defining characteristics of the Park is that these features differ from island to island. In addition, in this region there is a wealth of natural and cultural resources that highlight the connections between people and nature not only within this Park, but outside of it as well, and as such the region has great potential as a site for tourism.

Nevertheless, there are many issues remaining involving tourist facilities and such, and there is much work that still has to be done in the way of extracting and polishing these potential resources. Going forward, if the Park gains more recognition and if efforts to build up the capacity for receiving tourists, there is the potential for the number of visitors to increase greatly.

Given these issues, for the purpose of giving visitors a sense of satisfaction and sparking people's interest in nature and the way nature and people interact by offering them experiences of nature in the Park that make use of its regional characteristics, namely its rich natural resources and cultural resources that underscore people's ties to nature, the proper use of the Park shall be promoted according to the following policies.

(i) Promotion of use taking advantage of features of individual islands

Use of the Park in a way that utilizes the unique features of each islands shall be promoted, and community-specific experiences of nature shall be offered to visitors, such as providing the opportunity to leisurely enjoy natural environments consisting of endemic and rare species and thereby to feel the richness of biodiversity in the Park, offering glimpses into the history of the lifestyles of the local people and thereby giving visitors the chance to sense the closeness of the people to nature in the region, etc.

(ii) Cooperation with the community outside of the National Park

On each of the islands, there are points of interest that reflect what is unique about that island, regardless of whether those points are located inside or outside of the National Park. The feeling of satisfaction felt by visitors resulting from overall acts of "travelling" and "sightseeing" is not brought to an end just by "experiencing nature" in the National Park. Rather it is something felt as a complex whole, and incorporates experiences outside the National Park as well. In addition, visitors should be able to gain a higher degree of satisfaction if they are able to interact with the rich and diverse natural and cultural elements of the Amami Island Group. For these reasons, in addition to striving to offer high-quality

experiences of nature that make use of the unique features of the individual islands and to enhance visitor satisfaction inside of the National Park, the improvement of facilities and other measures shall be promoted with a view to cooperation with the community outside of the National Park.

(iii) The balance between natural environmental conservation and the sustainable development of the community

Use of the National Park can contribute to the socioeconomic development of the community by promoting local tourism. At the same time, however, overuse or concentrated use in specific areas carries with it the risk to have a negative impact on the natural environment of the Park, decrease the quality of nature experiences, and diminish sense of satisfaction on the part of visitors.

For these reason, the balance between natural environmental conservation and the sustainable development of the community shall be ensured by promoting the use of the Park on an area-by-area bases, improving visitor facilities, establishing visitation rules, etc. More specifically, this will be achieved by zoning the areas of the Park depending on the conditions of the natural environment and level of use, namely dividing it into zones in which anyone can visit at their convenience and zones which are set aside for visits by small groups or for high-quality visits to prevent the environmental pressure.

(iv) Use by community residents and consideration of local customs and traditions

In the Amami Island Group, there are still strong bonds between people and nature in their lives. For example, one can see residents visiting the beach as part of local customs, catching aquatic animals for food in reefs and rivers, etc. Residents sometimes relax at the beach while taking in the sunset, and go to forests and shores as families to relieve the fatigue of their daily professional lives. These times and experiences are important factors for residents in perceiving the richness in their lives as well as a sense of affection for their community. Furthermore, in recent years the need and demand for local environmental studies has been increasing.

The National Park and surrounding areas are also the places where community residents live. It is not uncommon to come across traditions and customs in the community that have been observed for generations, and visitors must avoid interfering with these practices.

In promoting the use of the National Park, it is necessary not only to think about use of the Park by local residents and act in ways that contribute to the maintenance and restoration of people's interactions with nature, but also for visitors to take care not to intrude upon or violate the lives, traditions, or customs of the local residents.

Main Forms of Park Use

(i) Amami-Oshima Island

Mountain climbing (Mt. Yuwandake), sea bathing (northern beaches and elsewhere), canoeing/kayaking (Sumiyo mangrove forest, Oshima Strait), forest exploration (Kinsakubaru), wildlife observation (roads in the forests), landscape exploration (Oshima Strait, Kasari Bay), humanities research (Akina Village),

leisurely drives (throughout the island), glass-bottom boat tours (Oshima Strait), diving (Kasari Bay, Oshima Strait, etc.).

(ii) Kikai Island

Coast exploration (Araki Coast), landscape exploration (Hyakunodai), humanities research (Aden Village), leisurely drives (throughout the island).

(iii) Tokunoshima Island

Mountain climbing (Mt. Amagidake), sea bathing (Aze Coast, etc.), forest exploration (Kamuiyaki Forest, etc.), wildlife observation (roads in the forests), landscape exploration (Cape Inutabu, Innojofuta), humanities research (Kamuiyaki Forest), leisurely drives (throughout the island), diving (northern coast, etc.).

(iv) Okinoerabu Island

Sea bathing (Okidomari Beach, etc.), landscape exploration (Cape Tamina, Fucha), seeing limestone caves (Shoryu Caves), leisurely drives (throughout the island).

(v) Yoron Island

Sea bathing (Oganeku Coast, etc.), kayaking (Minata Beach), leisurely drives (throughout the island), glass-bottom boat tours (Oganeku Coast).

(4) Facility plan for use

In order for visitors to be able to gain a sense of the diversity and endemism of the natural environment, including the topography and organisms of the Amami Island Group, and the traditional ties between the people and the nature, the appropriate use of each shall be promoted as follows. In addition to establishing a facility plan for use, steps shall be taken to regulate the use of the Park.

(i) Amami-Oshima Island

(a) Amami-Oshima Island is the island with the most visitors among the Amami Island Group and its available resources are broad in variety. As this area can be expected to see a major increase in the number of visitors, efforts shall be made to establish routes for ordinary visitors and improve visitor facilities. For areas that are important for conserving the natural environment, visitation will be regulated in a manner that strikes a balance between preventing negative impact on the natural environment and offering good visitation experiences.

(b) For Amami Airport and areas around the downtown Naze section, which are hubs for visitors to the Park, visitation routes centering on Amami Airport and downtown Naze shall be established. Necessary facilities for visitor use will be improved including: facilities that let visitors come into contact with the forests of Amami when they first visit and obtain information on nature itself,

cautions, and other such information; and facilities that offer information on the natural features of Amami's seas and peoples relationship to them, and let visitors enjoy snorkeling, traditional fishing and such.

(c) Overlooks shall be established for enjoying the landscapes of the northern and southern parts of the island, which are expected to be visited by ordinary visitors.

(d) For areas of subtropical laurel forest in which endemic and rare species occur and that are particularly important in terms of their conservation, roads and their use shall be managed appropriately by, for example, putting in place restrictions on road traffic and the use of personal vehicles, operating shuttle buses, etc. Other such efforts shall be taken to prevent any negative impact on the natural environment stemming from visitation, to prevent the collection of rare plants, and to prevent the traffic accidents of rare animals.

As necessary, walkways and such shall be installed that allow visitors to get a sense of the ecosystems of the subtropical laurel forests, the lifestyles of local people, and their connections with nature, while be mindful of the impact of visitors on the natural environment. Visitor facilities shall also be established that prevent and/or inhibit any negative impact on the natural environment.

(e) As necessary, establishing rules for visitation and use shall be studied with attention to matters of negative impact on the natural environment and wildlife. Those rules would apply to forest exploration, wildlife observation at night, and visiting or exploring mangrove forests, tidal flats, or other marine areas or canoeing or kayaking there.

(ii) Kikai Island

(a) In this area, which features a terraced topography that shows how the island was formed, as well as landscapes created through the island residents' use of the land, the establishement of overlooks, the utilization as walkways of old roads that connect villages to overlooks, and visitation for humanities research through exploring villages, shall be promoted.

(b) Visitor facilities shall be constructed that allow visitors to enjoy the raised coral reef fields and natural vegetation.

(iii) Tokunoshima Island

(a) For this area, in which round tours to visitation centers scattered along the coast are expected, overlooks and such shall be established at these centers.

(b) For areas of subtropical laurel forest in which endemic and rare species of occur and that are particularly important in terms of their conservation, roads and their use shall be managed appropriately byputting in place restrictions on road traffic. Other efforts shall be taken to prevent the collection of rare plants, and to prevent the traffic accidents of rare animals.

As necessary, walkways and such shall be installed that allow visitors to learn about the ecosystems of the subtropical laurel forests which are home to endemic and rare species and about the history of the area, while be mindful of the impact of visitors on the natural environment. Visitor facilities shall also

be established that prevent and/or inhibit any negative impact on the natural environment.

(c) As necessary, establishing rules for visitation that apply to exploring the forests shall be studied with attention to matters of negative impact on the natural environment and wildlife.

(iv) Okinoerabu Island

(a) For this area, in which round tours to visitation centers scattered along the coast are expected, overlooks and such shall be established at these centers.

(b) Concerning the limestone caves, which are the most notable feature of this area, walkways and other necessary facilities shall be established for ordinary visitors, while only the minimum necessary facilities will be installed for guided tours. Establishing visitation rules will be studied as necessary.

(v) Yoron Island

(a) This area offers the most outstanding seascapes in the Amami Island Group. By establishing visitor facilities on the Oganeku Coast and leading large numbers of visitors to them, the visitation pressures on other coasts shall be reduced, and other such considerations shall be taken to allow visitors to enjoy peaceful seascapes.

(b) For coastal areas other than the Oganeku Coast, only the minimum necessary visitor facilities shall be installed so that visitors can enjoy the scenic beauty of the natural coasts.

(vi) Measures common to all of the islands

(a) Efforts will be made to collect information on the natural and cultural resources of the region, and visitation programs will be developed that will allow visitors to experience the region's ecosystems and the interactions between its people and nature.

(b) Proactive effort will be made to provide visitors and the public at large with information about the region.

2. Regulation Plan

(1) Protective regulations plans and related matters

(i) Special Protection Zone

The following zones are classified as Special Protection Zones:

(Table 3: Details of Special Protection Zones)

Name(s)	Zone overview	Area (ha)
Okawa River, Kawauchi River, and Kanekuda River upper reaches	The upper reaches of the Okawa River, Kawauchi River, and Kanekuda River comprise a pristine zone of mainly old-growth laurel forests that are 80 years old or more, dominated by Castanopsis (*Castanopsis sieboldii*), and is a habitat for species endemic to Amami. Part of the area is a center of visitation to the Park. To protect endemic and rare species, efforts shall be made to stringently protect the old-growth laurel forests. For younger forests, efforts shall be made to encourage transition to older laurel forests. In addition, measures concerning use of the Park shall be taken as necessary to mitigate the impact on the natural environment.	655
Sumiyo River and Kawauchi River middle reaches	This zone stretches from the middle reaches of the Sumiyo River to the middle reaches of the Kawauchi River, and contains substantially large contiguous tracts of old-growth laurel forests that are 80 years old or more, dominated by Castanopsis. In conjunction with the mountain stream areas, it offers a pristine forest landscape. The zone forms one of the core areas of Amami-Oshima Island's south-central part, which has many rheophytes, epiphytes, and endemic animals, including the Amami rabbit (*Pentalagus furnessi*), the Ryukyu long-haired rat (*Diplothrix legata*), the Amami spiny rat (*Tokudaia osimensis*), the Amami thrush (*Zoothera dauma major*), the Otton frog (*Babina subaspera*), and the Amami Ishikawa's frog (*Odorrana splendida*). The habitats of these species shall be protected particularly stringently.	1,219
Mt. Yuwandake	This zone consists mainly of old-growth laurel forests that are 100 years old or more and wind-swept scrub forests near the mountain summit. This area contains some of the largest numbers of endemic plants and insects on Amami-Oshima Island. Together with the zone spanning the middle reaches of the Sumiyo and Kawauchi rivers, it forms a core area of the south-central part of the island. It is also a common destination for mountain climbers. This zone shall be protected particularly stringently so that conflict between protecting endemic and rare species and use of the Park.	265
Yakugachi River Middle Reaches	This zone consists mainly of relatively old laurel forests ranging from 50 to 80 years that grow from on both banks of the Yakugachi River from the lower to middle reaches. The forests form the roadside landscape along National Route 58, and endemic fauna such as the Amami thrush have been confirmed inhabiting them. Because the zone is located between the central and southern parts of the island, it is expected to serve as a corridor for wildlife. Efforts shall be made to protect the zone with attention to the maintenance of the landscape from the road and to the conservation of the habitats of wildlife.	590

Name(s)	Zone overview	Area (ha)
Sumiyo Mangrove Forest	This is a zone that has well-developed mangrove communities consisting mainly of *Kandelia obovata* located at the mouths of the Sumiyo River and Yakugachi River. The forest presents a landscape that is particularly distinctive even within the Park, and is a visitor destination for canoeing and such. The waters are rich in brackish fish in the Gobioidei, which are part of an extremely diverse ichthyofauna. The waters are also important as a habitat for juvenile Ryukyu ayu-fish (*Plecoglossus altivelis ryukyuensis*). For these reasons, efforts will be made to stringently protect the unique landscape and habitats for aquatic life.	82
Mt. Torigamine and Mt. Higo Stretch	This is an area that spans the entire area from the right bank of the Yakugachi River to Mt. Higo, Mt. Torigamine, and Mt. Kanagawadake. This zone consists mainly of relatively old laurel forests ranging from 60 to 80 years or older. Endemic animals, such as the Amami rabbit, Amami thrush, and Otton frog, have been found in this zone. It also has plants not seen in the central part of the island. Hence it is an important area for the protection of the endemism of Amami-Oshima Island, and for these reasons, efforts will be made to stringently protect it. For younger forests, efforts shall be undertaken to encourage transition to older laurel forests.	761
Northern Mt. Yuidake	This zone consists mainly of relatively old laurel forests ranging from 60 to 80 years or older, and comprises one of the few contiguous old-growth forests of any substantial size. It is home to such endemic animals as the Amami rabbit, Amami thrush, and Otton frog and as such efforts will be made to stringently protect it.	233
Mt. Amagidake and Mt. Sasontsujidake	This zone contains many old-growth laurel forests of 100 years old or older, and is a core area for the conservation of the forest areas of the northern part of Tokunoshima Island. In addition to featuring substantially large contiguous *Quercus miyagii* communities, it is important as a habitat for endemic species such as the Amami rabbit and Tokunoshima spiny rat (*Tokudaia tokunoshimensis*). Efforts shall be made to stringently protect this zone.	582
Mt. Inokawadake and Mt. Tanpatsu	This zone contains many old-growth laurel forests of 100 years old or older, and it features wind-swept scrub forests that line the ridge of Mt. Inokawadake, including its peak, as well as communities of *Quercus miyagii* at the foot of Mt. Tanpatsu. As a habitat for endemic species such as the Amami rabbit, Tokunoshima spiny rat, and others, it is a core area in the forest areas of Tokunoshima Island. As such, in addition to stringently protecting this zone, for younger forests and artificial forests, efforts shall be made to restore them and encourage transition to older laurel forests.	842
	Total	5,229

(ii) Class I Special Zone

The following zones are classified as Class I Special Zones:

(Table 5: Details of Class I Special Zones)

Name(s)	Zone overview	Area (ha)
Nagakumo Pass	This zone is centered on Amami Nature Observation Forest, and is an important habitat for the Amami rabbit, Amami jay (*Garrulus lidthi*), and Amami Ishikawa's frog in the northern part of Amami-Oshima Island. In addition, the zone is a center for observing nature and exploring scenery. As it is a habitat for endemic species and is a good place for experiencing nature, its scenic beauty shall be maintained.	39
Kinsakubaru	This zone consists mainly of relatively old laurel forests ranging from about 60 to 80 years or older. It neighbors Special Protection Zone of the Okawa River, Kawauchi River, and Kanekuda River upper reaches, it helps form excellent scenic beauty. Some areas within the zone are centers of use by Park visitors. In addition to maintaining the scenic beauty of the old-growth laurel forests, for younger forests and artificial forests, efforts shall be made to restore them and encourage transition to older laurel forests. In addition, measures concerning Park use shall be taken as necessary to mitigate the impact on the natural environment.	527
Kawauchi River upper reaches	This zone comprises secondary laurel forests with Ryukyu pine (*Pinus luchuensis*) mixed in, though there are some old forests in certain localized spots. It is important as a corridor linking the core area spanning the Sumiyo River and Kawauchi River with the upper reaches of the Okawa River, Kawauchi River, and Kanekuda River. The Amami rabbit and Amami thrush have been found inhabiting this area, hence efforts will be made to maintain the scenic beauties of the zone as both a habitat and corridor for these animals.	376
Kawauchi River basin	Located at the Kawauchi River basin and neighboring the Okawa River, Kawauchi River, and Kanekuda River upper reaches Special Protection Zone and Sumiyo River and Kawauchi River middle reaches Special Protection Zone, this zone features expanses of old-growth laurel forest. The Amami rabbit and Amami thrush are confirmed in this area. It is necessary to conserve this zone as a whole in conjunction with the neighboring Special Protection Zones. Efforts shall be made to sufficiently maintain scenic beauty of this zone as a habitat for endemic species.	156
Sumiyo River middle reaches	This zone covers the middle reaches of the Sumiyo River, and features substantially large contiguous tracts of old-growth laurel forests dominated by Castanopsis, etc. Together with the neighboring Sumiyo River-Kawauchi River middle reaches Special Protection Zone, this zone is part of the core of the south-central part of Amami-Oshima Island. This zone has rheophytes, aepiphytes, and many endemic species, including the Amami rabbit, the Ryukyu long-haired rat, the Amami spiny rat, the Amami thrush, the Otton frog, and Amami Ishikawa's frog. In addition to measures to sufficiently maintain these habitats and scenic beauty, including altering forms of park use, efforts will be made to encourage transition to of younger forests to older forests.	1,311

Name(s)	Zone overview	Area (ha)
Mt. Yuwandake foot and Kawauchi River upper reaches	This zone stretches from the foot of Mt. Yuwandake to the upper reaches of the Kawauchi River, and includes the ridge extending to Mt. Yakugachoboshidake. It consists mainly of laurel forests that are less than 50 years old and those that are 50 to 80 years or older. Endemic species are found in this zone, including the Amami rabbit, the Amami spiny rat, and the Amami thrush. Together with the neighboring Mt. Yuwandake Special Protection Zone and the Sumiyo River and Kawauchi River middle reaches Special Protection Zone, this zone forms part of the core of the south-central part of Amami-Oshima Island. It is also of extreme importance as a corridor that connects the core areas of the middle reaches of the Sumiyo River, the Mt. Yuwandake, and the middle reaches of the Yakugachi River. In addition to measures, including altering forms of park use, to sufficiently maintain the scenic beauty of the zone as wildlife habitats and as a corridor linking core areas, efforts will be made to encourage transition to of younger forests to older forests.	2,113
Gusuku and Wase	This zone comprises mainly secondary young laurel forests with Ryukyu pine mixed in, yet it is also serves as a habitat for the Amami rabbit and Amami thrush. In addition to measures to maintain the scenic beauty of the zone as habitats for endemic species, efforts shall be made to restore younger and artificial forests and encourage their transition to older laurel forests.	260
Santaro Pass	The zone around Santaro Pass is a mixture of relatively old and young laurel forests. It serves as a habitat for animals such as the Amami rabbit and the Ryukyu long-haired rat. It is often visited by people wishing to observe the animals at night. As it is a habitat for endemic species and is a good place for experiencing nature, its scenic beauty shall be maintained, and efforts shall be made to encourage the transition of younger forests to older laurel forests.	213
Yakugachi River lower reaches	This zone consists of secondary forests with *Pinus luchuensis* mixed in. It is expected to maintain the scenic beauty of the roadside and serve as a corridor that connects the central areas with the southern areas. Attention will be given to maintaining the scenic beauty of the roadside and to conserving the habitats of wildlife.	131
Kofukuji River basin	Located at the lower reaches of the Kofukuji River, a tributary of the Yakugachi River, this zone is a secondary forest stand, and is home to the Amami rabbit, the Amami spiny rat, and frog species. In addition to measures to maintain the scenic beauty of the zone as habitats for endemic species, efforts shall be made to encourage the transition of younger forests to older forests. It is also expected to serve as a corridor that connects the central areas of Amami-Oshima Island with the Mt. Torigamine stretch in the southern areas of Amami-Oshima Island.	204

Name(s)	Zone overview	Area (ha)
Mt. Torigamine-Mt. Kanengodake Stretch	This zone stretches in stepping-stone fashion from the hinterlands of the mountainous village area to the area around Mt. Kanengodake, and consists mainly of secondary forests. It also has plants not seen in the central portion of the island, and in part because it neighbors Special Protection Zones, it is a very important area for the protection of the endemism of Amami-Oshima Island. For these reasons, in tandem with the stringent protection given to the neighboring Special Protection Zones, it is important to sufficiently maintain the scenic beauty of this zone. In addition, efforts shall be made to encourage the transition of younger forests to older laurel forests.	724
Katoku	This area consists of secondary laurel forests with old-growth forests mixed in, and is a home to the Amami rabbit and frog species. In addition to measures to maintain the scenic beauty of the zone as habitats for endemic species, efforts shall be made to encourage the transition of younger forests to older forests.	108
Yakugachi River upper reaches and eastern Mt. Yuidake	This zone consists mainly of young forests with older laurel forests aged 60 to 80 years or more mixed in. It is home to endemic species such as the Amami rabbit, the Ryukyu long-haired rat, the Amami spiny rat, the Amami thrush, the Otton frog, and others, and Ryukyu ayu-fish run up the Yakugachi River, which are reasons that it is highly important for the protection of the endemism of Amami-Oshima Island. This zone is also important as a corridor that links northern Mt. Yuidake Special Protection Zone and Yakugachi River upper reaches Special Protection Zone with other areas of the south-central part of the island, and as such its scenic beauty needs to be maintained. In addition to measures to protect the remaining old-growth forests, for younger forests and artificial forests, efforts shall be made to restore them and encourage transition to older laurel forests.	1,575
Cape Tombi	This is a shore of raised coral reefs (raised fringing reefs), and is notable for its bleak coastal landscape of rocks. Natural vegetation remains in the hinterland of the coast. Efforts shall be made to maintain the scenic beauty with attention to these topographical formations and vegetation.	38
Hyakunodai	This zone covers terraced slops descending from the highest point on the island, which was formed from raised coral reef terraces. It consists of forests of *Ficus superba*, *Ficus microcarpa*, *Ficus virgate*, *Machilus thunbergii*, and others. One can command a view from this area of the terraced slopes, the farmland on the plain, settlements surrounded by windbreak forests, and the coast of raised coral reefs all at once, making it possible to gain an understanding of the topographical formation of the island and the way in people live. It is therefore one of the representative views in the Park. The scenic beauty shall be maintained with attention to these features.	190
Araki Coast	This zone is a coast of raised coral reefs (raised fringing reefs). On the coast of raised coral reefs and in the hinterland is natural coastal vegetation. It offers coastal landscapes distinctive of Kikai Island and not present on other islands in the Park. Efforts shall be made to maintain the scenic beauty with attention to these topographical formations and vegetation.	33

Name(s)	Zone overview	Area (ha)
Mushiroze	This zone features a shore of exposed granite, and offers one of the more distinctive landscapes in the Park. Efforts shall be made to maintain the scenic beauty with attention to the conservation of topographical formations and coastal vegetation.	32
Mt. Amagidake foot	Located at the foot of Mt. Amagidake, this zone is important for the conservation of the forest areas of Northern Tokushima Island, which are dominated by old laurel forests. It is home to endemic species such as the Amami rabbit and the Tokunoshima spiny rat. It is necessary to conserve this zone as a whole in conjunction with the neighboring Mt. Amagidake and Mt. Sasontsujidake Special Protection Zone. Efforts shall be made to sufficiently maintain the scenic beauty of this zone as a habitat for endemic species.	70
Mt. Nesugata	This zone is covered by relatively old laurel forests, and together with the neighboring Special Protection Zones, forms part of the distinctive landscape that extends along the ridge from Mt. Amagidake. The surrounding areas are also inhabited by the Amami rabbit. Efforts shall be made to maintain the scenic beauty with attention to the conservation of forests and the landscapes.	29
Mt. Ogusuku	This zone features a mixture of old and young laurel forests. The Amami rabbit has also been confirmed here. Efforts shall be made to maintain the scenic beauty with attention to the conservation of the habitats of endemic species.	104
Innojofuta	The sea cliffs and pedestal rocks formed by the erosion of raised Ryukyu limestone make this zone most distinctive. Efforts shall be made to maintain the scenic beauty with attention to the conservation of coastal landscapes as seen from overlooks at parking lots, walkways, etc., as well as to the conservation of coastal vegetation.	29
Mt. Inokawadake foot	Located at the foot of Mt. Inokawadake, this zone consists mainly of old-growth laurel forests. It encompasses the mountain trail entrance that leads to the peak of Mt. Inokawadake. Endemic species such as the Amami rabbit and Tokunoshima spiny rat live in this zone, and it is necessary to conserve this zone as a whole in conjunction with the neighboring Mt. Inokawadake and Mt. Tanpatsu Special Protection Zone. Efforts shall be made to sufficiently maintain the scenic beuty of this zone with attention to the conservation of the habitats of endemic species as well as the forest landscapes.	86
Mt. Inutabudake and Mikyo	This zone consists mainly of secondary laurel forests but contains old laurel forests that are 100 years old or more. In addition to *Quercus miyagii* forests, the Amami rabbit and the Ryukyu long-haired rat have been confirmed in the area. Efforts shall be made to maintain the scenic beauty of this zone with attention to the conservatin of the habitats of endemic species.	592
Cape Inutabu	The sea cliffs formed by the erosion of raised Ryukyu limestone are distinctive in this zone. It also offers a landscape of the largest of sea cliffs in the Park. Efforts shall be made to maintain the scenic beauty of this zone with attention to the conservation of the landscapes of the sea cliffs from the overlooks in Cape Inutabu and the Obaru district.	66

Name(s)	Zone overview	Area (ha)
Mt. Gina	This zone contains forests that are of academic importance, as one can see giant *Ficus microcarpa*, *Quercus glauca* var. *amamiana*, and *Machilus thunbergii* trees in the lowland Ryuku limestone rocks. As a lowland natural forest it is representative in the Park, and the importance of its conservation is high. Efforts shall be made to maintain the scenic beauty of this zone with attention to the conservation of the important lowland natural forest.	14
Cape Kunigami	This zone consists mainly of rocky shores of raised coral reefs, though the rock and beach vegetation and seascape of the moat are distinctive. The spouting phenomena seen at the raised coral coast at Fucha offer a particularly special landscape. Efforts shall be made to maintain the scenic beauty of this zone with attention to the conservation of these features.	57
Cape Tamina and Okidomari Coast	Cape Tamina features a landscape of steep sea cliffs with excellent coastal cliffs of Ryuku limestone. With its distinctive beaches underneath coastal cliffs, vegetation, and coral, the Okidomari Coast offers one of the best scenic views on Okinoerabu Island. Efforts shall be made to maintain the scenic beauty of this zone with attention to the conservation of the view of the bluffs seen from Cape Tamina and the coastal landscape of the Okidomari Coast.	23
Yoron Coast	Among the Yoron area, whose marine areas are its main feature, together with the lagoon seascapes this zone forms the core of the area's coastal landscapes. In fact, the coastal landscape here offers one of the best-known in the Park. The coastal landscapes of beach, rock reef of Ryukyu limestone, and the coastal vegetation, such as raised reef vegetation, is a rare naturallandscape, as it is isolated from the rural landscapes farther inward on the island. Efforts shall be made to maintain the scenic beauty of this zone with attention to the conservation of the natural qualities of the coast and the vegetation, as well as their continuity.	33
	Total	9,133

(iii) Class II Special Zone

The following zones are classified as Class II Special Zones:

(Table 6: Summary of Class II Special Zones)

Prefecture	Zone	Area (ha)
Kagoshima	WithinAmami City: National Forest Kagoshima District Forest Office All of Compartments 214 and 215 as well as parts of Compartments 204 and 207 Kasari Town, Amami City: Parts of Oaza Ushuku, Oaza Kasari, Oaza Kise, Oaza Sani, Oaza Suno, Oaza Sotoganeku, Oaza Tekebu, Oaza Yani, and Oaza Yo Sumiyo Town, Amami City: Parts of Oaza Ishihara, Oaza Ichi, Oaza Kamiya, Oaza Kawauchi, Oaza Gusuku, Oaza Nishinakama, Oaza Higashinakama, Oaza Mizato, Oaza Yakugachi, Oaza Yanma, and Oaza Wase Naze, Amami City: Parts of Oaza Asato, Oaza Ashikebu, Oaza Itsubu Town, Oaza Kanekucho, Oaza Koshuku, Oaza Kominato, Oaza Daikuma, Oaza Chinase, and Oaza Nishinakagachi	6,932
	Yamato Village, Oshima County: Parts of Oaza Imazato, Oaza Oganeku, Oaza Odana, Oaza Ongachi, Oaza Shidokan, Oaza Tsunagu, Oaza Toen, Oaza Naon, Oaza Yamatohama, and Oaza Yuwangama	3,693
	Within Uken Village, Oshima County: National Forest Kagoshima District Forest Office All of Compartments 226 and 227 as well as parts of Compartments 228 and 229 Uken Village, Oshima County: Parts of Oaza Ashiken, Oaza Taken and Oaza Yuwan	2,065
	Setouchi Town, Oshima County Parts of Oaza Agina, Oaza Atetsu, Oaza Aminoko, Oaza Amurogama, Oaza Ikeji, Oaza Ikenma, Oaza Oshikaku, Oaza Kachiura, Oaza Kachiyuki, Oaza Katetsu, Oaza Katoku, Oaza Kuji, Oaza Kudaton, Oaza Kutsune, Oaza Keten, Oaza Kedomi, Oaza Koshi, Oaza Konase, Oaza Koniya, Oaza Satsukawa, Oaza Saneku, Oaza Shinokawa, Oaza Shiba, Oaza Shokazu, Oaza Shodon, Oaza Seisui, Oaza Seso, Oaza Sekko, Oaza Sokaru, Oaza Takena, Oaza Tean, Oaza Doren, Oaza Nishiamuro, Oaza Nishikomi, Oaza Hyo, Oaza Miura, Oaza Yui, and Oaza Yoro	6,828
	Tatsugo Town, Oshima County: Parts of Oaza Akina, Oaza Ashitoku, Oaza Ankiyaba, Oaza Ikusato, Oaza Ura, Oaza En, Oaza Ogachi, Oaza Kado, Oaza Kuba, Oaza Sedome, and Oaza Tatsugo	2,440
	Subtotal for Amami-Oshima Island	21,958
	Within Tokunoshima Town, Oshima County: National Forest Kagoshima District Forest Office Parts of Compartments from 231 to 233, 239, 255, 256, and 259 Tokunoshima Town, Oshima County: Parts of Oaza Inokawa, Oaza Kametsu, Oaza Kametoku, Oaza Kedoku, Oaza San, Oaza Shimokushi, Oaza Shirai, Oaza Tete, Oaza Todoroki, and Oaza Boma	1,751

Prefecture	Zone	Area (ha)
Kagoshima	Within Amagi Town, Oshima County: National Forest Kagoshima District Forest Office All of Compartment 241 as well as parts of Compartments 235, 238, 242, 244, and 249 Amagi Town, Oshima County: Parts of Oaza Amagi, Oaza Okazen, Oaza Kaneku, Oaza Tobe, Oaza Nishiagina, Oaza Matsubara, and Oaza Yonama	1,132
	Within Isen Town, Oshima County: National Forest Kagoshima District Forest Office Parts of 250 and 251 Isen Town, Amami County: Parts of Oaza Agon, Oaza Asan, Oaza Isen, Oaza Itokina, Oaza Kinen, Oaza Kinoko, Oaza Saben, and Oaza Yaezao	140
	Subtotal for Tokunoshima Island	3,023
	China Town, Oshima County Parts of Oaza Otsukan, Oaza Kamishiro, Oaza Kamihirakawa, Oaza Shimojiro, Oaza Shinjo, Oaza Sumiyoshi, Oaza Serikaku, Oaza Tamina, Oaza Tokudoki, and Oaza Yakumo	237
	Subtotal for Okinoerabu Island	237
These areas include coasts, islets, and reefs extending off the land.		
Total		25,218

(**iv) Class III Special Zone**

The following zones are classified as Class III Special Zones:

(Table 8: Summary of Class III Special Zones)

Prefecture	Zone	Area (ha)
Kagoshima	WithinAmami City: National Forest Kagoshima District Forest Office All of Compartment 10 Naze, Amami City: Parts of Oaza Koshuku, Oaza Chinase, and Oaza Nesebu	469
	Yamato Village, Oshima County: Parts of Oaza Kuninao and Oaza Toen	56
	Subtotal for Amami-Oshima Island	525
	Kikai Town, Oshima County: Parts of Oaza Araki, Oaza Sadeku, Oaza Shitooke, and Oaza Nakasato	91
	Subtotal for Kikaijima Island	91
	Within Tokunoshima Town, Oshima County: National Forest Kagoshima District Forest Office Parts of Compartments 258 and 259 Tokunoshima Town, Oshima County: Parts of Oaza Kanami, Oaza San, and Oaza Tete	193
	Amagi Town, Oshima County: Parts of Oaza Otsukawa, Oaza Kaneku, and Oaza Setaki	82
	Isen Town, Oshima County: Part of Oaza Inutabu	13
	Subtotal for Tokunoshima Island	288
	China Town, Oshima County: Parts of Oaza Otsukan, Oaza Sumiyoshi, Oaza Serikaku, and Oaza Tokudoki	325
	Subtotal for Okinoerabu Island	325
	Yoron Town, Oshima County: Parts of Oaza Chabana, Oaza Nama, Oaza Furusato, and Oaza Mugiya	92
	Subtotal for Yoron Island	92
These areas include coasts, islets, and reefs extending off the land.		
Total		1,321

(ii) Ordinary Zone

The following zones are classified as Ordinary Zones:

(Table 13: List of Ordinary Zones)

Prefecture	Zone	Area (ha)
Kagoshima	Sumiyo Town, Amami City: Parts of Oaza Ishihara, Oaza Kamiya, Oaza Nishinakama, and Oaza Yakugachi.	250
	Setouchi Town, Oshima County: Parts of Oaza Katoku, Oaza Saneku, Oaza Shodon, Oaza Takena, and Oaza Doren.	84
	Tatsugo Town, Oshima County: Parts of Oaza Akina, Oaza Ankiyaba, and Oaza Ikusato.	118
	Subtotal for Amami-Oshima Island	452
	Kikai Town, Oshima County: Parts of Oaza Aden, Oaza Urahara, Oaza Oasato, Oaza Kadon, Oaza Kawamine, Oaza Keraji, Oaza Shiramizu, Oaza Takigawa, and Oaza Nishime.	623
	Subtotal for Kikaijima Island	623
	Tokunoshima Town, Oshima County: Part of Oaza Kanami	7
	Isen Town, Oshima County: Parts of Oaza Isen, Oaza Inutabu, Oaza Omonawa, Oaza Kenbuku, Oaza Kojima, Oaza Sakibaru, Oaza Nakayama, Oaza Bane, and Ozawa Furusato.	309
	Subtotal for Tokunoshima Island	316
	China Town, Oshima County: Part of Oaza Tamina.	1
	Subtotal for Okinoerabu Island	1
	Yoron Town, Oshima County: Part of Oaza Mugiya.	1
	Subtotal for Yoron Island	1
Total for land areas		1,393
Parts of sea water surface adjacent to land areas of the park		31,974
Total		33,367

iv. Breakdown of area

(i) Area by zone category and by ownership status

(Table 14: Summary of area by zone category and by ownership status)

(Island Group Overall)

Zone category		Special Zone							
Zone class		Special Protection Zones				Class I			
Ownership status		National	Public	Private	Other	National	Public	Private	Other
Kagoshima Prefecture	Area by ownership status	1,785	322	3,009	113	3,371	2,729	2,724	309
	Area by class (rate)								9,133 (21.6)
					5,229 (12.4)				
	Area by category (rate)								

Special Zone							
Class II				Class III			
National	Public	Private	Other	National	Public	Private	Other
1,718	6,082	15,972	1,446	67	284	441	529
			25,218 (59.6)				1,321 (3.1)
							35,672 (84.3)
							40,901 (96.7)

Ordinary Zone (On land)				Total (On land)			
National	Public	Private	Other	National	Public	Private	Other
95	135	243	920	7,036	9,552	22,389	3,317
			1,393 (3.3)				42,294 (100.0)

(Units are hectares and percentages)

Ordinary Zone (Marine area)*	Marine Special Zone*	Total (Marine area)
31,974	9 sites 1,125	33,099

* Marine areas are public water surfaces that are owned by the national government. Because it is not possible to list their geometric areas by prefecture and island, the figures given here represent the Amami Gunto National Park as a whole.

(Amami-Oshima Island)

Zone category		Special Zone							
Zone class		Special Protection Zone				Class I			
Ownership status		National	Public	Private	Other	National	Public	Private	Other
Kagoshima Prefecture	Area by ownership status	429	322	2,941	113	2,533	2,669	2,497	40
	Area by class (rate)								7,739 (22.4)
					3,805 (11.0)				
	Area by category (rate)								

Special Zone							
Class II				Class III			
National	Public	Private	Other	National	Public	Private	Other
821	5,642	14,275	1,220	26	194	245	60
			21,958 (63.7)				525 (1.5)
							30,222 (87.7)
							34,027 (98.7)

Ordinary Zone (On land)				Total (On land)			
National	Public	Private	Other	National	Public	Private	Other
0	1	87	364	3,809	8,828	20,045	1,797
			452 (1.3)				34,479 (100.0)

(Tokunoshima Island)

Zone category		Special Zone							
Zone class		Special Protection Zone				Class I			
Ownership status		National	Public	Private	Other	National	Public	Private	Other
Kagoshima Prefecture	Area by ownership status	1,356	0	68	0	838	51	67	64
	Area by class (rate)								1,020 (16.8)
					1,424 (23.5)				
	Area by category (rate)								

Special Zone							
Class II				Class III			
National	Public	Private	Other	National	Public	Private	Other
897	263	1,689	174	41	42	64	141
			3,023 (49.8)				288 (4.7)
							4,331 (71.3)
							5,755 (94.8)

Ordinary Zone (On land)				Total (On land)			
National	Public	Private	Other	National	Public	Private	Other
95	9	67	145	3,227	365	1,955	524
			316 (5.2)				6,071 (100.0)

3. Project Plan

(1) Facility plan

i. Protective facilities plan

Plans for protective facilities are as follows.

(Table 16: List of protective facilities)

No.	Type	Location	Development policy
1	Nature restoration facilities	Amami City, and Yamato Village, Uken Village, Setouchi Town and Tatsugo Town in Oshima County, Kagoshima Prefecture	For younger laurel forests, efforts shall be made to restore them and encourage transition to older laurel forests.
2	Nature restoration facilities	Tokunoshima Town, Amagi Town, and Isen Town, in Oshima County, Kagoshima Prefecture	For younger laurel forests, efforts shall be made to restore them and encourage transition to older laurel forests.
3	Nature restoration facilities	Yoron Town, Oshima County, Kagoshima Prefecture	Within barrier lagoons, efforts shall be made to restore coral communities.

ii. Facility plan for use

(i) Facility Complex Zone

Facility Complex Zones shall be as follows.

(Table 17: List of Facility Complex Zones)

No.	Name	Zone	Plan objectives
1	Sumiyo	Part of Oaza Nishinakama, Sumiyo Town, Amami City, Kagoshima Prefecture	This zone neighbors mangrove forests that have developed at the mouths of the Sumiyo River and Yakugachi River, and is located off National Route 58, making it a good location as a center of visitation. The facilities shall be established in an integrated manner as a center to promote the proper use of the Park, such as nature exploration of the mangrove forests and subtropical laurel forests.

Planned zones and core facilities	Development policy	Area (ha)
Sumiyo Planned Zone	To maintain the distinctive landscape of the neighboring mangrove forest and to encourage the proper use of the Park, such as nature exploration by canoeing, core facilities, including museum-like exhibits, shall be developed. At sites suited to taking in scenic views, overlook facilities, recreation areas, etc. shall be put in place, and parking lots and toilets will be established of an appropriate scale taking into account the degree of visitation, etc. In developing these facilities, in addition to ensuring harmony with the scenic beautyaround, universal design principles shall be adopted.	11.0

	National	Public	Private	Other
Total area	0.0	0.9	0.6	9.5
				11.0

(ii) Individual facility

The individual facilities are described as follows:

(Table 18: List of individual facilities)

No.	Type	Location	Development policy
1	Recreation site	Kasari Town, Amami City, Kagoshima Prefecture (Gamozaki)	Overlooks and paths will be developed for visitors to look out on Kasari Bay and Cape Kasarizaki and walk through coastal forests.
2	Recreation site	Kasari Town, Amami City, Kagoshima Prefecture (Cape Ayamaru)	Overlooks, etc. will be developed—with attention to protecting the coastal vegetation—for visitors to look out on the landscape of the fringing reef that stretches from Cape Kasarizaki to Cape Ayamaru and within moats.
3	Swimming area	Kasari Town, Amami City, Kagoshima Prefecture (Sakibaru Coast)	Toilet and shower facilities will be installed for visitors bathing at beach.
4	Recreation site	Kasari Town, Amami City, Kagoshima Prefecture (Tomori Coast)	Toilet and shower facilities and a parking lot—with attention to protecting the breeding grounds of seabirds—will be installed for visitors bathing at beach.
5	Accommodations	Kasari Town, Amami City, Kagoshima Prefecture (Tomori Coast)	For visitors to the Tomori Coast and other coasts in the northern part of Amami-Oshima Island, accommodations will be developed, with attention to sea turtle habitats.
6	Recreation site	Kasari Town, Amami City, Kagoshima Prefecture (Ose Coast)	Toilets and a parking lot will be constructed for those observing seabirds that come to the tidal flats.
7	Recreation site	Amami City, Kagoshima Prefecture (Ohama)	For the visitor facility that is closest to the downtown area, toilets, a parking lots, a rest area, etc., will be developed with attention to sea turtle habitats.
8	Campsite	Amami City, Kagoshima Prefecture (Ohama)	For visitors bathing or day-camping, a kitchen, outdoor fireplace, toilets, etc. will be developed, with attention to sea turtle habitats.
9	Exhibition facility	Amami City, Kagoshima Prefecture (Ohama)	To help visitors to the Park at Ohama gain a better understanding of natural environments, interpretation/exhibition facilities will be developed, with attention to sea turtle habitats.
10	Recreation site	Amami City, Kagoshima Prefecture (Kinsakubara)	Paths, etc., will be developed—with attention to wildlife habitats—so that visitors can get an up-close look at the natural features of subtropical laurel forests.
11	Recreation site	Yamato Village, Oshima County, Kagoshima Prefecture (Fukumotokita)	Observation deck facilities will be developed so that visitors can look out on the expanse of subtropical laurel forest.

No.	Type	Location	Development policy
12	Recreation site	Yamato Village, Oshima County, Kagoshima Prefecture (Fukumoto)	Facilities will be developed―with attention to wildlife habitats―to serve as a center for visitors to experience natural features at Mt. Yuwandake and the surrounding forests and rivers, and as facilities that allow visitors to easily interact with the forest areas of Amami.
13	Campsite	Yamato Village, Oshima County, Kagoshima Prefecture (Fukumoto)	Facilities will be developed―with attention to wildlife habitats―so that visitors can spend time relaxing in the middle of the forest.
14	Recreation site	Uken Village, Oshima County, Kagoshima Prefecture (Mt. Yuwandake)	As a starting point for climbing Mt. Yuwandake, toilets, a rest area, etc., will be developed with attention to wildlife habitats.
15	Recreation site	Setouchi Town, Oshima County, Kagoshima Prefecture (Mt. Yuidake)	An observation deck, toilets, etc., will be installed to serve as an overlook to view the Oshima Strait.
16	Recreation site	Setouchi Town, Oshima County, Kagoshima Prefecture (Mt. Kochi)	An observation deck, toilets, etc., will be installed to serve as an overlook to view the Oshima Strait.
17	Recreation site	Setouchi Town, Oshima County, Kagoshima Prefecture (Honohoshi Coast)	A parking lot, toilets, paths, etc. for visitors to the Honohoshi Coast will be installed with attention to the protection of coastal vegetation.
18	Accommodations	Setouchi Town, Oshima County, Kagoshima Prefecture (Yadori Beach)	Accommodations will be developed for Park visitors to the southern part of Amami-Oshima Island and other such areas.
19	Swimming area	Setouchi Town, Oshima County, Kagoshima Prefecture (Yadori Beach)	Toilet and shower facilities will be installed for visitors bathing.
20	Recreation site	Kakeroma Island, Setouchi - Town, Oshima County, Kagoshima Prefecture (Ankyaba)	An observation deck, toilets, etc., will be installed to serve as an overlook to view the Oshima Strait.
21	Recreation site	Kakeroma Island, Setouchi - Town, Oshima County, Kagoshima Prefecture (Cape Machamizaki)	An observation deck, toilets, etc., will be developed to serve as an overlook to view the Oshima Strait.
22	Recreation site	Tatsugo Town, Oshima County, Kagoshima Prefecture (Nagakumo Pass)	Paths, an observation deck to view the Kasari Bay, etc. will be installed with attention to wildlife habitats.

No.	Type	Location	Development policy
23	Exhibition facility	Tatsugo Town, Oshima County, Kagoshima Prefecture (Nagakumo Pass)	Facilities will be constructed where visitors can learn about the natural features of subtropical laurel forests. They can also serve as the "entranceway to the forests of Amami," providing cautions and other such information concerning forest use and visitation.
24	Recreation site	Kikai Town, Oshima County, Kagoshima Prefecture (Shitooke Beach)	Toilets and other such facilities will be installed for Park visitors to the Shitooke Beach and other coastal areas in the northern part of the island.
25	Recreation site	Kikai Town, Oshima County, Kagoshima Prefecture (Hyakunodai Park)	An observation deck, toilets, and similar facilities will be installed so that visitors can look out to see terraced slopes, farmland, settlements, and coasts of raised fringing reefs.
26	Recreation site	Kikai Town, Oshima County, Kagoshima Prefecture (ArakiCoast)	Toilets and other such facilities will be installed to serve as a midpoint rest area along the Araki Coast Road (walkway).
27	Recreation site	Kikai Town, Oshima County, Kagoshima Prefecture (Nakanishi Park)	An observation deck, toilets, a grass-covered open space, etc. will be developed so that visitors can look out to see terraced slopes, farmland, settlements, and coasts of raised fringing reefs.
28	Recreation site	Tokunoshima Town, Oshima County, Kagoshima Prefecture (Cape Kanemizaki)	An observation deck, paths, etc. will be installed so that visitors can enjoy viewing the *Cycas revoluta* communities and looking out from the northernmost point of Tokunoshima Island.
29	Recreation site	Tokunoshima Town, Oshima County, Kagoshima Prefecture (Aze Coast)	A parking lot, a grass-covered open space, paths, etc. will be developed for visitors bathing at beach or observing nature at the moats.
30	Campsite	Tokunoshima Town, Oshima County, Kagoshima Prefecture (Aze Coast)	For visitors bathing, a kitchen, outdoor fireplace, toilets, etc. will be developed.
31	Recreation site	Amagi Town, Oshima County, Kagoshima Prefecture (Mushiroze)	Paths, toilets, etc. will be installed so that visitors can look out on the coastal landscape of exposed granite.
32	Recreation site	Amagi Town, Oshima County, Kagoshima Prefecture (Innojofuta)	Paths, toilets, etc. will be installed so that touring sightseers can look out on the landscape of coastal cliffs and other coastal features.
33	Recreation site	Isen Town, Oshima County, Kagoshima Prefecture (Kobaru Coast)	Garden paths, toilets, etc. will be installed so that touring sightseers can look out on the limestone caves, coastal cliffs, and other features.
34	Recreation site	Isen Town, Oshima County, Kagoshima Prefecture (Cape Inutabu)	An observation deck, toilets and other such facilities will be installed so that touring sightseers can look out on the landscape of coastal cliffs and other coastal features.
35	Recreation site	Isen Town, Oshima County, Kagoshima Prefecture (Mt. Gina)	Paths, toilets, etc. will be installed so that visitors can observe the natural features of the forest areas of the southern part of Tokunoshima Island.

No.	Type	Location	Development policy
36	Recreation site	Isen Town, Oshima County, Kagoshima Prefecture (Kinen Beach)	A parking lot, garden paths, etc. will be developed for visitors bathing at beach or observing nature at the moats.
37	Campsite	Isen Town, Oshima County, Kagoshima Prefecture (Kinen Beach)	For visitors swimming at the beach, a kitchen, outdoor fireplace, toilets, etc. will be developed.
38	Recreation site	Wadomari Town, Oshima County, Kagoshima Prefecture (Fucha)	Paths, toilets, etc. will be created for touring sightseers.
39	Recreation site	China Town, Oshima County, Kagoshima Prefecture (Cape Tamina)	Paths, toilets, etc. will be created for touring sightseers.
40	Campsite	China Town, Oshima County, Kagoshima Prefecture (Okidomari Coast)	For visitors who wish to bathe leisurely at beach or observe nature at the moats, a kitchen, toilets, showers, open spaces, etc. will be developed.
41	Recreation site	China Town, Oshima County, Kagoshima Prefecture (Shoryudo Caves)	A parking lot and other such facilities will be developed to visitors to the limestone caves.
42	Recreation site	China Town, Oshima County, Kagoshima Prefecture (YakomoBeach)	Toilets, a gazebo, and other such facilities will be installed for touring sightseers.
43	Recreation site	Yoron Town, Oshima County, Kagoshima Prefecture (Oganeku Coast)	A parking lot, information center, etc. will be developed for visitors to the Oganeku Coast and Yurigahama Beach.
44	Campsite	Yoron Town, Oshima County, Kagoshima Prefecture (Oganeku Coast)	For visitors to the marine areas of Yoron Island, tent sites (which include simple accommodation facilities), toilets, showers, etc. will be developed.

(iii) Roads

a. Roads allowing vehicle access

The roads allowing vehicle access are described as follows:

(Table 19: List of roads (vehicle access))

No.	Name	Section	Major site on the course	Development policy
1	Cape Kasarizaki Route	From: Amami City (Boundary between Yo, Kasari Town and National Park limits), Kagoshima Prefecture To: Amami City (Cape Kasarizaki), Kagoshima Prefecture	Yo Coast	As a route that extends to Cape Kazarizaki, the northernmost point on Amami-Oshima Island, and the Yo Coast, efforts shall be made to establish, maintain, and manage this route, with attention to preserving the scenic beauty of the coastal area.
2	Ohama Beach Park Route	From: Amami City (Boundary between Naze-Ohama and National Park), Kagoshima Prefecture To: Amami City (Ohama), Kagoshima Prefecture	Ohama Beach	As a route that extends from Naze, which is an urban area, to Ohama, which is the closest center of visitation, efforts shall be made to establish, maintain, and manage this route, with attention to maintain the scenic beauty of the coastal area.
3	Kinsakubaru Route	From: Amami City (Boundary between Chinase and National Park), Kagoshima Prefecture To: Amami City (Boundary between Sato and National Park), Kagoshima Prefecture	Kinsakubaru	As a route that extends to Kinsakubaru, which is a major center of visitation to forest area, efforts shall be made to establish, maintain, and operate this route, with attention to the wildlife habitats and to the proper accommodation of rational automobile use.
4	Asato-Aminoko Route	From: Amami City (Boundary between Asato and National Park), Kagoshima Prefecture To: Amami City (Boundary between Wase, Sumiyo Town and National Park), Kagoshima Prefecture From: Amami City (Boundary between Mizato, Sumiyo Town and National Park), Kagoshima Prefecture To: Setouchi Town (Boundary between Aminoko and National Park), Oshima County, Kagoshima Prefecture	Sumiyo mangrove forest	As a route that joins the forest areas of the central and southern parts of the island, efforts shall be made to establish, maintain, and manage this route, with attention to the wildlife habitats.
5	Yuwandake-	From: Sumiyo Town		As a route that joins the Pacific

No.	Name	Section	Major site on the course	Development policy
	Shinmura Route	(National Route junction), Amami City, Kagoshima Prefecture To: Uken Village (Boundary between Yuwan and National Park), Oshima County, Kagoshima Prefecture		side with the East China Sea side, efforts shall be made to establish, maintain, and manage this route, with attention to the landscapes as seen from the shoulder of the road, and to the wildlife habitats.
6	Fukumoto Route	From: Yamato Village (Boundary between Odana and National Park), Oshima County, Kagoshima Prefecture To: Yamato Village (Fukumoto), Oshima County, Kagoshima Prefecture	Mt. Ogawadake	As a route that extends to the Amami Forestpolis, which is a center of use, efforts shall be made to establish, maintain, and manage this route, with attention to the view from the roadside, and to the wildlife habitats.
7	Odana-Yuwandake Route	From: Yamato Village (Boundary between Odana and National Park), Oshima County, Kagoshima Prefecture To: Yamato Village (Boundary between Odana and National Park), Oshima County, Kagoshima Prefecture To: Uken Village (Mt. Yuwandake trail starting point), Oshima County, Kagoshima Prefecture To: Uken Village (Boundary between Yuwan and National Park), Oshima County, Kagoshima Prefecture	Mt. Yuwandake	As a route that extends to Mt. Yuwandake, which is a center of visitation to the forest areas, efforts shall be made to establish, maintain, and manage this route, with attention to the wildlife habitats.
8	Shinokawa-Shimofuku Route	From: Setouchi Town (Prefectural Route 85 junction), Oshima County, Kagoshima Prefecture To: Setouchi Town (Boundary between Shinokawa and National Park), Oshima County, Kagoshima Prefecture		As a route that joins the forest areas of the south-central part of the island with the Oshima Strait area, efforts shall be made to establish, maintain, and manage this route, with attention to the habitats of rare species.
9	Mt. Yuidake-Mt. Kochi Route	From: Setouchi Town (Boundary between Jizo Pass and National Park), Oshima County, Kagoshima Prefecture To: Setouchi Town (Mt. Kochi), Oshima County, Kagoshima Prefecture To: Setouchi Town (Mt. Yuidake), Oshima County, Kagoshima Prefecture	Mt. Yuidake, Mt. Kochi	As a route that extends to Mt. Yuidake, which is a major overlook for the Oshima Strait, and to Mt. Kochi, efforts shall be made to establish, maintain, and manage this route, with attention to scenic view as seen from the overlook on the shoulder of the road.

No.	Name	Section	Major site on the course	Development policy
10	Amami Nature Observation Forest Route	From: Tatsugo Town (Boundary between Sedome and National Park), Oshima County, Kagoshima Prefecture To: Tatsugo Town (Amami Nature Observation Forest), Oshima County, Kagoshima Prefecture From: Tatsugo Town (Boundary between Kado and National Park limits), Oshima County, Kagoshima Prefecture To: Tatsugo Town (Boundary between Kuba and Nagakumo Pass crossroads), Oshima County, Kagoshima Prefecture	Amami Nature Observation Forest	As a route extending to Amami Nature Observation Forest, efforts shall be made to establish, maintain, and manage this route, with attention to the wildlife habitats.
11	Hyakunodai Route	From: Kikai Town (Boundary between Kawamine and National Park), Oshima County, Kagoshima Prefecture To: Kikai Town (Boundary between Takigawa and National Park), Oshima County, Kagoshima Prefecture Starting point - Kikai Town (Boundary between Keraji and National Park limits), Oshima County, Kagoshima Prefecture To: Kikai Town (Nakanishi Park Junction), Oshima County, Kagoshima Prefecture	Hyakunodai	As a route that extends to centers of visitation such as the observation deck above the terraced slopes of Hyakunodai and to areas of interest such as the "Husband-and-Wife *Ficus microcarpa*" trees, efforts shall be made to establish, maintain, and manage this route, with attention to the view from the overlook.

b. Walkways

The walkways are described as follows:

(Table 20: List of roads (walkways))

No.	Name	Section	Major site on the course	Development policy
1	Kinsakubaru Route	From: Amami City (terminus of Chinase Forest Access Road), Kagoshima Prefecture To: Amami City (Kinsakubaru), Kagoshima Prefecture	Kinsakubaru National Forest	This is a route that crosses through core areas of subtropical laurel forest in the south-central part of Amami-Oshima Island. Efforts shall be made to establish, maintain, and manage this route as a walkway in which visitors can enjoy the landscapes of subtropical laurel forests, with attention to the wildlife habitats. [Walkway Category: Nature Trail]
2	Cape Miyakozaki Route	From: Yamato Village (Boundary between Kuninao and National Park), Oshima County, Kagoshima Prefecture To: Yamato Village (Cape Miyakozaki), Oshima County, Kagoshima Prefecture		As a route that extends from Kuninao Village to Cape Miyakozaki, efforts shall be made to establish, maintain, and manage this walkway, with attention to landscapes of the dwarf bamboo fields in Cape Miyakozaki. [Walkway Category: Nature Trail]
3	Mt. Yuwandake Trail Route	From: Uken Village (start of mountain trail), Oshima County, Kagoshima Prefecture To: Uken Village (Mt. Yuwandake summit), Oshima County, Kagoshima Prefecture To: Uken Village (start of mountain trail), Oshima County, Kagoshima Prefecture	Mt. Yuwandake	As a route for climbing Mt. Yuwandake, one of the core forest areas of Amami-Oshima Island, efforts shall be made to establish, maintain, and manage this route as a walkway in which visitors can enjoy and learn about the natural features of the forest areas of Amami-Oshima Island, with attention to the protection of wildlife habitats. [Walkway Category: Mountain Trail, etc.]
4	Araki Coast Route	From: Kikai Town (Nakasato), Oshima County, Kagoshima Prefecture To: Kikai Town (Boundary between Araki Village and National Park), Oshima County, Kagoshima Prefecture	Araki Coast	As a walkway that passes through the raised coral reef fields of the Araki Coast as well as coastal hinterland vegetation, efforts shall be made to establish, maintain, and manage this route as a walkway, with attention to the protection of the coastal topography and vegetation of Kikai Island. [Walkway Category: Nature Trail]

No.	Name	Section	Major site on the course	Development policy
5	Matsubara Route	From: Amagi Town (Boundary between start of mountain trail and National Park), Oshima County, Kagoshima Prefecture To: Amagi Town (side of Mt. Amagidake), Oshima County, Kagoshima Prefecture		As a route for exploring the mountainside of Mt. Amagidake, which is one of the core forest areas of Tokunoshima Island, efforts shall be made to establish, maintain, and manage this route as a walkway in which visitors can enjoy and learn about the natural features of the forest areas of Tokunoshima Island, with attention to the protection of wildlife habitats. [Walkway Category: Mountain Trail, etc.]
6	Mikyo Route	From: Amagi Town (entrance Mikyo National Forest), Oshima County, Kagoshima Prefecture To: Amagi Town (Mikyo National Forest), Oshima County, Kagoshima Prefecture		As a route for exploring old subtropical laurel forests consisting mainly of *Quercus miyagii*, efforts shall be made to establish, maintain, and manage this route as a walkway, with attention to the protection of habitats of wildlife species. [Walkway Category: Nature Trail]

4-2 Yambaru National Park
Park Plan (Excerpt)

September 15, 2016
Ministry of the Environment

1. Basic Policy

The landscape of Yambaru National Park features a range of diverse and complex ecosystems in Japan's largest subtropical laurel forest. Reflecting the geological development process of the Ryukyu Chain, this forest is home to concentrations of many endemic species unique to this area. It features the presence of cloud forests that develop in humid highlands, river ecosystems that host rheophyte plant communities, plants specific to limestone regions, and mangrove ecosystems.

The Park Plan seeks to promote the protection and use of Yambaru National Park through protecting ecosystems that offer habitat for a wide range of rare and endemic species, contributing to the conservation of local life and cultures that have lived in harmony with and benefited from the richness of these natural environments, thereby serving as a national park to experience the rich biodiversity and endemic subtropical forest ecosystems found here.

(1) Basic policy on protection

The subtropical laurel forest is home to many rare and endemic species, including the Okinawa spiny rat (*Tokudaia muenninki*), Okinawa rail (*Gallirallus okinawae*), Okinawa woodpecker (*Sapheopipo noguchii*), Yanbaru long-armed scarab beetle (*Cheirotonus jambar*), and an orchid species *Dendrobium okinawense*. Despite the importance of protecting the ecosystems created by such flora and fauna, the forests in this region have been the site of various industrial activities over the years. For example, they have been managed as forestry resources for Okinawa from the days of the Ryukyu Kingdom. Dams have been built to provide water resources for the life and industry in Okinawa Island. The forests are also vulnerable to the consequences of alien species like the mongoose and feral cats, as well as roadkill, capturing and collection of flora and fauna, and other human activity. In addition, the Okinawa woodpecker damages crops. Within the National Park, protection and management will be crucial for maintaining the value of these ecosystems handed down to the present day, all the while carrying out adjustments and coordinated efforts with local industry.

The basic policy with regard to protection will be to ensure that important resource of wild flora and fauna continue to flourish and that no species is lost to extinction while working to coordinate forestry operations within the regenerative capacity of the forest. More specifically, the policy will be to protect old-growth

forests and forests that include stands of old-growth trees through strict protection measures; to protect the mountainous backbone in continuity as important habitats for rare and endemic species; to protect the mountain stream environments that nurture rheophyte plants, amphibians, and other wildlife species; and to ensure forestry operations mindful of these ecosystems. Additionally, efforts will seek to ensure the natural restoration and rehabilitation of laurel forests and river ecosystems wherever they are impaired by human activity, including industry and development.
Efforts will seek to control alien species that threaten the ecosystem and to minimize the adverse effects of human consequences like capture and collection as well as roadkill.

i. Regulation plan

(i) Special Zones

a. Special Protection Zones

The area comprising the environs of Mt. Ibudake and Mt. Nishimedake is home to an old growth forest composed of many large trees, an important habitat for rare and endemic species. Not just an important habitat for wildlife, Mt. Yonahadake is a region where cloud forests containing numerous species of epiphytic ferns and orchidaceous plants are found. Mt. Hedodake features a unique landscape formed by karst topography. These zones will be designated Special Protection Zones to protect their biodiversity and remarkable landscapes.

b. Class I Special Zones

Mountainous backbone provides key habitats for rare and endemic species. Mountain streams within these forests are home to rheophyte plants characteristic of tropical and subtropical areas. The zones are also egg-laying areas and habitats for endemic amphibian species. Mt. Nekumachijidake is situated in a Paleozoic limestone region featuring karst topography—home to unique plant species—while Cape Hedo features spectacular sea-cliff landscape. These zones will be designated Class I Special Zones to maintain their biodiversity and remarkable scenic beauty.

c. Class II Special Zones

These subtropical laurel forests are extensions of Special Protection Zones or Class I Special Zones and provide habitat for rare and endemic species. These zones will involve a coordination of ecosystem protective measures and forestry operations. The natural coastline in this zone is home to coastal vegetation, while the beaches provide nesting grounds for sea turtles. These zones will be designated Class II Special Zones to protect their fine scenic beauty.

d. Class III Special Zones

Lying adjacent to Class I or Class II Special Zones, these zones feature expanding forest of planted Ryukyu pine (*Pinus luchuensis*). In addition, the natural environment and mountain ranges in these zones are used for agriculture. These zones will be designated Class III Special Zones to maintain their local scenic

beauty.

(ii) Ordinary Zones

To maintain the mountain and seascapes in these zones with which the lives of local residents are intertwined and to conserve the scenery surrounding the Special Zones, these zones will be designated Ordinary Zones.

(2) Basic policy on use

Yambaru National Park features subtropical laurel forests and mountain stream landscapes, numerous rare and endemic species that inhabit these biomes, sea-cliff coastlines and beaches that provide nesting grounds for sea turtles, and karst topography. The Park also involves the lives and culture of the people in this region who have inherited these natural treasures. These resources will be managed so that, in addition to creating a National Park where many kinds of wildlife characteristic of the region can live and flourish, we can ensure wildlife diversity, rich subtropical laurel forest, and a high quality natural experience, together offering more than just nature sightseeing for ordinary visitors, all the while taking into account the potential for deterioration and damage to the natural environment and atmosphere that may result from concentration of users.

With regard to use, the national park is inhabited by many insects, amphibians, reptiles, and plants that may be adversely affected by capture and collection. To prevent the kind of damage to the natural environment that may result from unregulated use of the forest and concentration of users, rules of use, including the implementation of restricted visitor numbers and escorts of guides, will be studied based on the condition of the natural environment. Efforts will be made to promulgate thorough knowledge of forest etiquette, thereby allowing sustainable use of the forest while conserving its natural resources. Wildlife observation is one form of national park use. Consideration will be given to the potential impact of observations on wildlife and appropriate rules of use.

To protect the living and cultural resources of the region, visitors will be asked to avoid disrupting the lives, traditions, and customs of the local inhabitants.

(3) Facility plan

(i) Individual facilities

Plans will be deployed to provide the facilities needed for exploring nature in subtropical laurel forest and karst topography, viewing of coastal sea-cliffs, and observations of wildlife in the mangrove forests and tidal flats. Facilities already established in the region, including recreation areas, accommodations, and camp sites, will be included in the plans, if they contribute to use of the national park. Plans for the development and maintenance of facilities that can be used within subtropical laurel forests that provide habitats for rare and endemic species will account for potential adverse impacts on the natural environment.

(ii) Roads

The plan will contain provisions for roads allowing vehicle access to allow exploration of the National Park's landscapes, including its subtropical laurel forests, karst topography, and natural coastlines. The plan will also include walkways to allow users to observe flora and fauna and experience the richness of the forest while exploring the scenery associated with the subtropical laurel forests and karst topography. Due to the fragility of the foundation soil, which is prone to outflow and scouring, appropriate walkways will be constructed, based on due consideration of usage patterns and the state of the natural environment. Should deterioration occur, routes may be changed or walkways temporarily closed to facilitate recovery.
In the development and maintenance of roads and walkways within subtropical laurel forests that are home to both rare and endemic species, consideration will be given to measures to prevent adverse impact on the natural environment due to use of the National Park and to prevent capture and the collection of rare species and the loss of rare animals due to roadkill.

2. Regulation Plan

(1) Protective regulations plans and related matters

(i) Special Protection Zone

Among the Special Zones, the following zones are classified as Special Protection Zones:

(Table 3: Details of Special Protection Zones)

Name	Zone overview	Area (ha)
Mt. Hedodake	With a Paleozoic limestone substrate, the karst topography of the zone provides magnificent landscapes. *Psychotria manillensis-Diospyros maritima* communities, specific to limestone regions, are found in the forests. Plants specific to limestone regions develop in this zone. These elements and the landscapes of the karst topography will be protected by strict conservation measures.	56
Benoki River upper reaches	The zone includes the laurel forests that are at least 75 years old, as well as the mountain stream environment of the Benoki River upper reaches. Providing habitats for rare and endemic species, including the Okinawa woodpecker, Okinawa rail, and Okinawa Ishikawa frog (*Odorrana ishikawae*), this zone will be protected by strict conservation measures.	192
Mt. Ibudake	The laurel forests that spreads from the northwestern foothills of Mt. Ibudake (elevation 353 m) to the Fungawa River contains laurel forests at least 75 years old. Representing an important habitat for rare and endemic species, including the Okinawa woodpecker and Okinawa rail, this zone will be protected by strict conservation measures. The boundary between the zone and the Class I Special Zone on the hillside of Mt. Ibudake features *Quercus miyagii* oak trees estimated to be some 300 years old.	220
Yona River upper reaches	Home to the laurel forests at least 75 years old, this zone encompasses the Yona River upper reaches from an altitude of 200 m to 300 m. It provides habitats for rare and endemic species, including the Ryukyu long-haired rat (*Diplothrix legata*) and Ryukyu black-breasted leaf turtle (*Geoemyda japonica*). This zone will be protected by strict conservation measures. The zone will allow monitoring and academic research activities.	62
Mt. Yonahadake	With Mt. Yonahadake (elevation 503 m) , representing Okinawa Island's highest peak, the laurel forests occur on mountain sides up to altitudes of around 300 m. The zone is important habitat for many rare and endemic species, including the Okinawa woodpecker. Also found here are cloud forests featuring numerous epiphytic ferns and orchidaceous plants. In addition to being a core National Park region, this region is popular with climbers and other visitors. This zone will be protected by strict conservation measures to prevent and minimize friction between public use and to ensure the conservation of rare and endemic species.	256
Taminato-utaki Sacred Site	Featuring a basement rock of Paleozoic limestone, Sacred Site has been protected up to the present day, untouched by human activity. The vegetation in this zone is regarded as typical of a Paleozoic limestone region in Okinawa. This zone will be protected by strict conservation measures.	3
Total		789

(ii) Class I Special Zone

The following zones are classified as Class I Special Zones:

(Table 5: Details of Class I Special Zones)

Name	Zone overview	Area (ha)
Cape Hedo	This sea-cliff terrain is home to windswept vegetation. A limestone substrate featuring karst topography stretches inland from the cliffs, on the flat portions of which an expansive prairie of Korean lawn (*Zoysia pacifica*) grows. The zone offers various coastal scenic perspectives. Efforts will seek to maintain this scenic beauty while preserving the sea cliff landscapes.	31
Mountainous backbone	A mountainous region located at elevations of 250 m or higher, this zone is covered by the laurel forests. It serves as important habitat for the Okinawa spiny rat, Ryukyu long-haired rat, Okinawa woodpecker, and Okinawa rail. Rheophyte plants flourish in the mountain streams of the valleys. The zone is also home to various rare and endemic species of amphibians and reptiles, including the Okinawa Ishikawa frog, Namiye's frog (*Limnonectes namiyei*), Holst's frog (*Babina holsti*), the Ryukyu black-breasted leaf turtle, and the Anderson's crocodile newt (*Echinotriton andersoni*). With several major forestry roads running through the zone, measures will focus on conservation approaches that maintain the scenic beauty of the zone and allow continuing public use of the National Park, as well as efforts to replant and link younger and artificial forests to the older laurel forests.	3,796
Eastern zone	Lying at elevations between 100 m to 200 m, this hilly zone on the eastern slope of the mountainous backbone is covered by evergreen larurel forests of ranging between 40 and 60 years in age. The zone is home to various rare and endemic species, including the Okinawa woodpecker, Okinawa rail, Ryukyu robin (*Luscinia komadori namiyei*), and Ryukyu black-breasted leaf turtle. In addition to measures intended to maintain the scenic beauty of this zone and to preserve it as habitat for endemic species, efforts will seek to link young forests to older forests.	441
Mt. Nekumachijidake, Mt. Shioya-fuji	Featuring a karst topography, this mountainous region includes Mt. Nekumachijidake (elevation 361 m) and Mt. Shioya-fuji (elevation 318 m), both Paleozoic limestone mountains. The zone is home to many rare plants adapted to this special environment of mountaintop cloud forest, windswept areas, and special soil characteristics. Mountain trails are already established here. Plans call for maintaining the zone's scenic beauty while considering measures to conserve its valuable plant species.	149
Gesashi	Located at the mouth of the Gesashi River, this unique landscape features mangrove forests comprised of oriental mangrove (*Bruguiera gymnorhiza*), Asiatic mangrove (*Rhizophora mucronata*), and *Kandelia obovata*. Various aquatic species including fiddler crabs and barred mudskippers (*Periophthalmus argentilineatus*) can be observed here at low tide. The zone is a base from which visitors can walk along a boardwalk or venture out in kayaks to observe the flora and fauna.	11
Total		4,428

(iii) Class II Special Zone

The following zones are classified as Class II Special Zones:

(Table 6: Summary of Class II Special Zones)

Prefecture	Zone	Area (ha)
Okinawa	Kunigami Village, Kunigami County: Parts of Aza Oku, Aza Ginama, and Aza Hedo	241
	Within Kunigami Village, Kunigami County: National Forest Okinawa District Forest Office Parts of Compartment 55 – 57 Kunigami Village, Kunigami County: Parts of Aza Iji, Aza Uka, Aza Ura, Aza Oku, Aza Okuma, Aza Ginama, Aza Sate, Aza Jashiki, Aza Hama, Aza Hiji, Aza Benoki, Aza Hentona and Aza Yona Ogimi Village, Kunigami County: Parts of Aza Kijoka, Aza Janagusuku and Aza Takazato	2,318
	Kunigami Village, Kunigami County: Parts of Aza Ada	131
	Kunigami Village, Kunigami County: Parts of Aza Ada	23
	Kunigami Village, Kunigami County: Parts of Aza Aha	184
	Higashi Village, Kunigami County: Parts of Aza Takae	127
	Ogimi Village, Kunigami County: Parts of Aza Uehara, Aza Ogimi, Aza Oganeku, Aza Oshikawa, Aza Shioya, Aza Taminato, Aza Nuhha, Aza Nerome and Aza Yako	324
	Ogimi Village, Kunigami County: Parts of Aza Shirahama and Aza Miyagi	68
	Ogimi Village, Kunigami County: Parts of Aza Ogimi, Aza Oshikawa, Aza Taminato and Aza Nerome Higashi Village, Kunigami County: Parts of Aza Kawata and Aza Miyagi	80
	Ogimi Village, Kunigami County: Parts of Aza Tsuha Ogimi Village, Kunigami County: Parts of Aza Arume, Aza Gesashi and Aza Taira	558
Total		4,054

(iv) Class III Special Zone

The following zones are classified as Class III Special Zones:

(Table 8: Summary of Class III Special Zones)

Prefecture	Zone	Area (ha)
Okinawa	Kunigami Village, Kunigami County: Parts of Aza Ginama and Aza Hedo	162
	Kunigami Village, Kunigami County: Parts of Aza Oku, Aza Ginama, and Aza Hedo	496
	Within Kunigami Village, Kunigami County: National Forest Okinawa District Forest Office All of Compartment 53, and parts of Compartment 54 and 56 Kunigami Village, Kunigami County: Parts of Aza Oku and Aza Ginama	397
	Within Kunigami Village, Kunigami County: National Forest Okinawa District Forest Office All of Compartment 48 – 52 and parts of Compartment 57 Kunigami Village, Kunigami County: Parts of Aza Oku and Aza Sosu	1,000
	Kunigami Village, Kunigami County: Parts of Aza Ada and Aza Sosu	136
	Kunigami Village, Kunigami County: Parts of Aza Ada	8
	Within Kunigami Village, Kunigami County: National Forest Okinawa District Forest Office Parts of Compartment 59 – 62 Kunigami Village, Kunigami County: Parts of Aza Iji, Aza Uka, Aza Ura, Aza Oku, Aza Okuma, Aza Sate, Aza Jashiki, Aza Hama, Aza Hiji, Aza Benoki, Aza Hentona and Aza Yona Ogimi Village, Kunigami County: Parts of Aza Ogimi, Aza Kijoka, Aza Takazato and Aza Nuhha	1,114
	Ogimi Village, Kunigami County: Parts of Aza Shirahama	8
	Ogimi Village, Kunigami County: Parts of Aza Tsuha Higashi Village, Kunigami County: Parts of Aza Gesashi	24
Total		3,345

ii. Related matters

(i) Ordinary Zone

The following zones are classified as Ordinary Zones:

(Table 10: List of Ordinary Zones)

Prefecture	Zone	Area (ha)
Okinawa	Kunigami Village, Kunigami County: Parts of Aza Ada, Aza Aha, Aza Ginama, Aza Sosu, Aza Hama, Aza Hiji and Aza Hedo	887
	Ogimi Village, Kunigami County: Parts of Aza Taiho, Aza Shioya, Aza Shirahama, Aza Taminato, Aza Tsuha, Aza Miygagi and Aza Yako	85
	Higashi Village, Kunigami County: Parts of Aza Kawata, Aza Gesashi and Aza Takae	34
Total for land areas		1,006
Parts of sea water surface adjacent to land areas of the park		3,670
Total		4,676

iii. Breakdown of area

(i) Area by zone category and by ownership status

(Table 12: Summary of area by zone category and by ownership status)

Zone category		Special Zone							
Zone class		Special Protection Zones				Class I			
Ownership status		National	Public	Private	Other	National	Public	Private	Other
Okinawa Prefecture	Area by ownership status	236	482	71	0	822	3,271	280	55
	Area by class (rate)								4,428 (32)
					789 (6)				
	Area by category (rate)								

Special Zone							
Class II				Class III			
National	Public	Private	Other	National	Public	Private	Other
425	2,271	1,258	100	1,403	1,221	660	61
			4,054 (30)				3,345 (25)
							11,827 (87)
							12,616 (93)

Ordinary Zone (On land)				Total (On land)			
National	Public	Private	Other	National	Public	Private	Other
51	427	460	68	2,937	7,672	2,729	284
			1,006 (7)				13,622 (100)

Marine Special Zone	Ordinary Zone (Marine area)	Total (Marine area)
0	3,670	3,670

3. Facility Plan

(1) Protective facilities plan

The protective facilities plans are given below.

(Table 13: List of protective facilities)

No.	Type	Location	Development policy
1	Nature restoration facility	Kunigami Village, Kunigami County, Okinawa Prefecture	For young laurel forests and other forests, measures will target the restoration of and linkage to old-growth forests, as well as the revitalization of the river basin.
2	Nature restoration facility	Ogimi Village, Kunigami County, Okinawa Prefecture	For young laurel forests and other forests, measures will target the restoration of and linkage to old-growth forests, as well as the revitalization of the river basin.
3	Nature restoration facility	Higashi Village, Kunigami County, Okinawa Prefecture	For young laurel forests and other forests, measures will target the restoration of and linkage to old-growth forests, as well as the revitalization of the river basin.

(2) Facility plan for use

a. Individual facility

The individual facilities are described as follows:

(Table 14: List of individual facilities)

No.	Type	Location	Development policy
1	Recreation site	Kunigami Village, Kunigami County, Okinawa Prefecture (Hedo)	Located at Okinawa Island's northernmost tip, this cape provides visitors with views of both the East China Sea and the Pacific Ocean as well as opportunities to see humpback whales (*Megaptera novaeangliae*). Improvements will include parking spaces, toilets, and paths to make it more suitable for viewing the scenery and exploration of wildlife. Measures will target the conservation of the landscape and vegetation in the surrounding areas.
2	Recreation site	Kunigami Village, Kunigami County, Okinawa Prefecture (Uzabama)	The site will offer views of Cape Hedo and Mt. Hedodake. Improvements will include an observation platform, paths, and parking spaces.
3	Recreation site	Kunigami Village, Kunigami County, Okinawa Prefecture (Ginama)	Improvements will include parking spaces, toilets, and paths to make it more suitable for viewing the karst topography and its Paleozoic limestone substrate.
4	Exhibition facility	Kunigami Village, Kunigami County, Okinawa Prefecture (Ginama)	The facility will be developed to allow visitors to learn on the importance of the region's nature. Improvements will include exhibitions on tropical karst topography,
5	Recreation site	Kunigami Village, Kunigami County, Okinawa Prefecture (Kayauchi-banta Cliff)	Improvements will include parking spaces, toilets, and paths to make it more suitable for viewing the scenery of cliffs and reef slopes.
6	Recreation site	Kunigami Village, Kunigami County, Okinawa Prefecture	The site will be developed to allow visitors to explore remnants of older modes of life in the village landscapes of the Yambaru region, as well as

No.	Type	Location	Development policy
		(Oku)	traditional stonewalls around settlements to keep out boars.
7	Accommodation	Kunigami Village, Kunigami County, Okinawa Prefecture (Benoki)	Accommodations will be developed here for those visiting the park areas in the Yambaru region. Plans will account for the need to protect wild local flora and fauna.
8	Recreation site	Kunigami Village, Kunigami County, Okinawa Prefecture (Ada)	The site will be developed to allow nature exploration in and around the Mt. Ibudake and the environs of Ada. The site will give visitors the opportunity to observe the Okinawa rail.
9	Recreation site	Kunigami Village, Kunigami County, Okinawa Prefecture (Kochibaru)	The site will be developed to allow exploration of laurel forests and seashore. Visitors will also have the opportunity to experience charcoal making and other local cultural activities.
10	Recreation site	Kunigami Village, Kunigami County, Okinawa Prefecture (Hentona)	The site will be developed to allow visitors to observe wildlife in the midst of laurel forests and experience the richness of the Yambaru forest.
11	Recreation site	Kunigami Village, Kunigami County, Okinawa Prefecture (Aha)	The site will be developed to allow visitors to observe wild local flora and fauna and the scenery of laurel forests and experience the richness of the Yambaru forest.
12	Accommodation	Kunigami Village, Kunigami County, Okinawa Prefecture (Aha)	Accommodations will be developed here for those visiting the park areas in the Yambaru region. The surroundings will give visitors opportunities to encounter wildlife in the midst of laurel forests and experience the richness of the Yambaru forest.
13	Campsite	Kunigami Village, Kunigami County, Okinawa Prefecture (Aha)	The site will be developed here for those visiting the park areas in the Yambaru region. The surroundings will give visitors opportunities to encounter wildlife in the midst of laurel forests and experience the richness of the Yambaru forest.
14	Recreation site	Kunigami Village, Kunigami County, Okinawa Prefecture (Hiji)	The site will be developed to allow nature exploration and observations of wild birds and other species along the Hiji River and in the surrounding areas.
15	Campsite	Kunigami Village, Kunigami County, Okinawa Prefecture (Hiji)	The site will be developed to allow visitors to experience the natural riches of Yambaru in the midst of the laurel forests of the Hiji River and the surrounding areas.
16	Recreation site	Ogimi Village, Kunigami County, Okinawa Prefecture (Takazato)	The site will be developed to allow nature exploration and observations of wild birds and other species along the Takazato River and in the surrounding areas.
17	Campsite	Ogimi Village, Kunigami County, Okinawa Prefecture (Takazato)	The site will be developed to allow visitors to experience the natural riches of Yambaru in the midst of the laurel forests of the Takazato river and the surrounding areas.
18	Recreation site	Ogimi Village, Kunigami County, Okinawa Prefecture (Mutabaru)	The site will offer views of Shioya Bay. Improvements will include an observation platform and parking spaces.
19	Recreation site	Ogimi Village, Kunigami County, Okinawa Prefecture (Shioya Bay)	The site will be developed to allow nature exploration in the areas surrounding Shioya Bay

No.	Type	Location	Development policy
20	Recreation site	Ogimi Village, Kunigami County, Okinawa Prefecture (Tsuha)	The site will be developed to allow nature exploration in the areas surrounding Ta-taki Falls.
21	Recreation site	Higashi Village, Kunigami County, Okinawa Prefecture (Arakawa)	The site will be developed to allow visitors to take in views from the eastern coast and explore nature along Arakawa and in the surrounding areas.
22	Recreation site	Higashi Village, Kunigami County, Okinawa Prefecture (Fukuji)	The site will be developed to allow nature exploration and observations of laurel forests and local flora and fauna, whether on foot or by boat.
23	Recreation site	Higashi Village, Kunigami County, Okinawa Prefecture (Gesashi)	Improvements will include paths, toilets, parking spaces, and information offices. The site will give visitors opportunities to observe wildlife in the Gesashi mangrove forests and tidal flats, whether by canoe or from the boardwalks.

ii. Roads

(i) Roads allowing vehicle access

The roads allowing vehicle access are described as follows:

(Table 15: List of roads (vehicle access))

No.	Name	Section	Major site on the course	Development policy
1	Oku - Ginama route	From: Kunigami Village, Kunigami County, Okinawa Prefecture (Boundary between Oku and National Park) To: Kunigami Village, Kunigami County, Okinawa Prefecture (Boundary between Ginama and National Park)	Cape Hedo	The road will be developed and maintained as a route leading to the eastern coastline and passing through Cape Hedo, Okinawa's northernmost point, and the area surrounding Mt. Hedodake. Measures will account for the need to maintain the scenery along the route and conserve habitat for rare and endemic species.
2	Mt. Hedodake route	From: Kunigami Village, Kunigami County, Okinawa Prefecture (Ginama recreation site entrance) To: Kunigami Village, Kunigami County, Okinawa Prefecture (Ginama recreation site)	Mt. Hedodake	The road will be developed and maintained as a route leading to Ginama recreation site. Measures will account for the need to maintain the forest landscape and conserve habitat for rare species.
3	Eastern coast route	From: Kunigami Village, Kunigami County, Okinawa Prefecture (Boundary between Oku and National Park) To: Kunigami Village, Kunigami County, Okinawa Prefecture	Akasaki	The road will be developed and maintained as a route passing along the eastern coast of the Pacific side and its many natural coastlines. Measures will account for the need to maintain the coastal landscape and conserve habitat for rare

No.	Name	Section	Major site on the course	Development policy
		(Boundary between Sosu and National Park) From: Kunigami Village, Kunigami County, Okinawa Prefecture (Boundary between Ada and National Park) To: Kunigami Village, Kunigami County, Okinawa Prefecture (Boundary between Ada and National Park)		species.
4	Yambaru East-West route From: (Boundary between Yona and National Park)	From: Kunigami Village, Kunigami County, Okinawa Prefecture (Boundary between Yona and National Park) To: Kunigami Village, Kunigami County, Okinawa Prefecture (Oku Yona forest road converging point)	Mountainous backbone	The road will be developed and maintained as a route linking the east and west slopes and passing through the mountainous backbone. Measures will account for the need to maintain the forest landscape and conserve habitat for rare species.

(ii) Walkways

The walkways are described as follows:

(Table 17: List of roads (walkways))

No.	Name	Section	Major site on the course	Development policy
1	Mt. Ibudake route	From: Kunigami Village, Kunigami County, Okinawa Prefecture (Converging point for Mt. Ibudake trailhead and trail) To: Kunigami Village, Kunigami County, Okinawa Prefecture (Mt. Ibudake)	Mt. Ibudake	The route will be developed and maintained as a trail that allows visitors to explore the natural beauty and the remnants of older modes of life in the subtropical laurel forests. Measures will account for the need to maintain the forest landscape and conserve habitat for rare species. [Mountain trail]
2	Ada route	From: Kunigami Village, Kunigami County, Okinawa Prefecture (Ada-Kochibaru) To: Kunigami Village, Kunigami County, Okinawa Prefecture (Converging point for Mt. Ibudake trailhead and trail)	Ada Village	The route will be developed and maintained as a trail that allows visitors to walk along and view the beaches where sea turtles lay their eggs and the natural beauty of the subtropical laurel forests. The route will also give visitors opportunities to observe the Okinawa rail. Measures will account for the need to maintain the forest landscape and conserve habitat for rare and endemic species. [Nature trail]

No.	Name	Section	Major site on the course	Development policy
3	Mt. Yonahadake route	From: Kunigami Village, Kunigami County, Okinawa Prefecture (Mt. Yonahadake trailhead) To: Kunigami Village, Kunigami County, Okinawa Prefecture (Mt. Yonahadake)	Mt. Yonahadake	The route will be developed and maintained as an ascending trail through Mt. Yohanadake in the heart of the Yambaru region. Measures will account for the need to maintain the forest landscape, conserve habitat for rare and endemic species, and protect vegetation. [Mountain trail]
4	Aha route	From: Kunigami Village, Kunigami County, Okinawa Prefecture (Yambaru Discovery Forest) To: Kunigami Village, Kunigami County, Okinawa Prefecture (Aha village)	Yambaru Discovery Forest	The route will be developed and maintained as a trail that allows visitors to observe the subtropical laurel forests and the flora and fauna of the mountain streams. Measures will account for the need to maintain the forest landscape and conserve habitat for rare and endemic species. [Nature trail]
5	Hiji-otaki Falls route	From: Kunigami Village, Kunigami County, Okinawa Prefecture (Hiji-otaki Falls access point) To: Kunigami Village, Kunigami County, Okinawa Prefecture (Hiji-otaki Falls)	Hiji-otaki Falls	The route will be developed and maintained as a nature exploration trail leading up to Hiji-otaki Falls, allowing visitors to observe wild birds and plants of the Hiji River and the surrounding areas. Measures will account for the need to maintain the forest landscape. [Nature trail]
6	Mt. Nekumachijidake and Mt. Shioya-fuji route	From: Ogimi Village, Kunigami County, Okinawa Prefecture (Mt. Nekumachijidake trailhead) To: Ogimi Village, Kunigami County, Okinawa Prefecture (Mutabaru)	Mt. Nekumachijidake, Mt. Shioya-fuji	The route will be developed and maintained as an ascending trail through the limestone mountains of Mt. Nekumachijidake and Mt. Shioya-fuj. Measures will account for the need to conserve habitat for rare and endemic species and protect vegetation. [Mountain trail]
7	Mt. Tamatsuji route	From: Higashi Village, Kunigama County, Okinawa Prefecture (Fukuji Dam) To: Ogimi Village, Kunigama County, Okinawa Prefecture (Okuni Forest Road)	Mt. Tamachiji	The route will be developed and maintained as an ascending trail through Mt. Tamachiji. Measures will account for the need to conserve habitat for rare and endemic species and protect vegetation. [Mountain trail]

4-3 Iriomote-Ishigaki National Park
Park Plan (Excerpt)

April 15, 2016
Ministry of the Environment

1. Basic Policy

Among the Yayeyama Islands that are situated at the southernmost end of the Ryukyu Chain, Iriomote-Ishigaki National Park consists of parts of Iriomote Island and Ishigaki Island; various islands within and outside Sekisei Lagoon which lies between Iriomote Island and Ishigaki Island; and the surrounding sea area. The park is characterized by the natural landscapes that represent Japan's typical subtropical-zone, including pristine subtropical evergreen broadleaved forests, mangrove forests spreading along rivers and estuaries, and the largest coral reef in the country. The park is also characterized by cultural landscapes such as townscapes and rituals rich in the Ryukyu culture that have been nurtured on the back of the natural environment.

The theme of the park is "pristine subtropical forest and coral reef ocean." It is aimed to create a park where visitors can feel the connection with mountains, rivers and the sea comprising the ecosystems of subtropical broadleaved forests, mangroves, and coral reefs. To protect the scenic beauties and landscapes of the park as well as to promote its appropriate use, the park plan is set based on the following policies.

(1) Regulation plan

i. Protective regulations plan

(i) Special Protection Zone

The following areas are designated as Special Protection Zones to achieve strict protection as they form the nucleus of the Park's landscape and provide habitat to many endemic and rare species.

- The mountainous areas where pristine subtropical evergreen broadleaved forests of Castanopsis (*Castanopsis sieboldii*) and *Quercus miyagii* grow in large clusters including: central part of Iriomote Island centering at Mt. Gozadake and Mt. Komidake, the highest peak in Iriomote Island;; and the north-east side of Mt. Omotodake in Ishigaki Island, the highest peak in Okinawa Prefecture.

(ii) Class I Special Zone

The following areas are designated as Class I Special Zones to maintain their remarkable scenic beauties that are equivalent to Special Protection Zones with subtropical characteristics. In addition, the ecosystem of these areas that spreads uninterrupted from mountains to the sea provides habitats for rare species.

- Mountainous areas where flourishing subtropical evergreen broadleaved forests comprising of Castanopsis and *Quercus miyagii* spread continuously from the Special Protection Zone and are well conserved including: Mt. Tedo, Mt. Haterumamori, the Sakiyama Peninsula, and the southern part of Iriomote Island surrounding Mt. Haikishidake in Iriomote Island; and the north-west area of Mt. Omotodake and the eastern part of Mt. Fukai-Omotodake in Ishigaki Island.
- River zones where oriental mangrove (*Bruguiera gymnorhiza*) and *Heritiera littorali*s are distributed along the riverside including the Nakama River, the Maira River, and the Shiira River on Iriomote Island
- Wetlands and tidal flats where mangroves develop including; the estuaries of the Urauchi River and the Nakara River as well as the Funaura Bay on Iriomote Island; the estuaries of the Fukido River and the Kara River on Ishigaki Island; and Nagura Amparu, which is a site included in the List of Wetlands of International Importance under Ramsar Convention.
- Daichibanari, which is located in the north of the Hirakubo Peninsula in northern Ishigaki Island and constitutes an important part of the view from the Hirakubo Peninsula.
- Small island groups in the Kabira Bay on Ishigaki Island, one of the tourist spots representing the Yaeyama Islands
- Takanazaki in Hateruma Island, a sea cliff of Ryukyu limestone that stretches for 1 km, offering habitats to unique coastal plants.

(iii) Class II Special Zone

The following areas are designated as Class II Special Zones to promote the maintenance of their scenic beauties and the appropriate use of the areas as they provide fine scenic beauties and are actively utilized as a park.

- River zones that are actively utilized for sightseeing by boats, kayaking and “shower climbing” including: the Urauchi River, the Nakara River, the Hinai River, the Geda River, the Nishida River on Iriomote Island
- Beaches that attract many tourists with sea bathing and nature walks including: Hoshinosuna (Star-sand) Beach, Toudoumari Beach, and Ida Beach in Iriomote Island; and Kondoi Beach and Kajii Beach on Taketomi Island
- Beaches popular for snorkeling including: Yonehara Beach and Shiraho Beach in Ishigaki

Island, Nakamoto Beach on Kuroshima Island, Nishihama Beach on Hateruma Island

- Beaches that offer important egg-laying sites for sea turtles including: the east coast of the Hirakubo Peninsula, north of Ishigaki Island
- Sotopanari Island and Uchipanari Island near Iriomote Islandthat attract sea kayakers as resting spots as well as sites for historic trekking.
- Uninhabited islands surrounding Iriomote Island that are significant elements of the marine landscape including: Hatobanari Island, Akabanari Island, and Atuku-iwa Island
- Nakanougan Island, which surrounded by cliffs and serves as a significant breeding ground for seabirds.
- Mountainous areas where subtropical evergreen broadleaved forests dominated by Castanopsis occur including: the western side of Mt. Omotodake, the eastern side of Mt. Nosokodake, and the southern side of Mt. Maedake in Ishigaki Island
- Large Mange and Small Mange that are which have academic significance as uplifted seafloor landforms.

(iv) Class III Special Zone

The areas other than Special Protection Zones and Class I and II Special Zones where ordinary agriculture, forestry and fishery activities will not cause major impacts on maintenance of scenic beauty are designated as Class III Special Zones.

(v) Marine Special Zone

Some parts of the marine areas of the Sekisei Lagoon, Japan's largest coral reef, and the surrounding sea areas of Iriomote Island, Ishigaki Island, and Hateruma Island, are designated as Marine Special Zones. The designated areas offer remarkable marine landscapes comprising diverse coral reef ecosystems where coral communities grow thick. The areas also attract many divers.

Among mangrove marshes and tidal flats in brackish-water regions, the areas that offer habitat for a number of diverse and endemic benthic species, feeding grounds for wildlife such as Iriomote cats (*Prionailurus bengalensis iriomotensis*), and wildlife observation sites are considered significant and designated as Marine Special Zones. The designation aims to achieve the conservation of the marine landscapes, the general coastal landscapes consisting of the sea and land, and the marine ecosystems of the zone.

(vi) Ordinary Zone

Sekisei Lagoon and the marine areas 2 km off the coasts of Iriomote Island, Ishigaki Island and Hateruma Island that are connected to the Marine Special Zones are designated as Ordinary Zones to conserve the marine sceneries.

Village areas and the land areas adjacent to the villages, whose natural sceneries and traditional streetscapes are connected to the Special Protection Zones, will also be designated as Ordinary Zones to conserve the sceneries.

(2) Facility Plan

i. Facility plan for use

(i) Individual facilities

Regarding facilities necessary for the use of the park or the facilities that are already in use in the park, those such as recreation and camp sites will be planned taking into account the current utilization of the land areas, the feasibility of the project, and the impact of construction works on natural landscapes.

Mooring facilities will be planned for marine areas as there is a threat that the coral reefs of each Marine Special Zone may be damaged by boats anchoring for leisure activities such as diving and snorkeling. Furthermore, there is a plan to build restoration facilities for the coral reefs that face deterioration or that have already deteriorated because of the damage caused by the crown-of-thorns starfish (*Acanthaster planci*) and by coral bleaching.

(ii) Roads (vehicle access and walkways)

The following roads are incorporated into the road plan (vehicle access).

- A prefectural road that connects Shirahama and Haemi on Iriomote Island
- A prefectural road to explore the scenery of the tidal flats of Nagura Amparu and coastlines on Ishigaki Island
- A municipal road to explore the scenery of pasture and sea landscapes of the Hirakubo Peninsula on Ishigaki Island

The following footpaths are incorporated into the road plan (walkways)

- Walkways leading to Yutsun-no-taki Falls, Nara-no-taki Falls and Sangara-no-taki Falls on Iriomote Island
- Trails to climb Mt. Nosokodake and Mt. Omotodake on Ishigaki Island

(iii) Transport facilities

The following transport facilities are planned.

- Pleasure boats to explore the nature of the Urauchi River and the Nakama River on Iriomote Island
- Mooring facilities to conserve the waters adjacent to residential areas as well as the surrounding coral reef landscape on Iriomote and Ishigaki Islands

2. Regulation Plan

(1) Protective regulations plan

i. Special Zone

(i) Special Protection Zone

Among the Special Zones, the following zones are classified as Special Protection Zones:

（Table 3：Details of Special Protection Zones）

Name	Zone overview	Area (ha)
Mt. Omotodake	The area is located in the east and the north-east of Mt. Omotodake (526 m), the highest peak of the prefecture. It is characterized by thick subtropical climax forests dominated by Castanopsis (*Castanopsis sieboldii*) and *Distylium racemosum.* Ryukyu bamboo (*Pleioblastus linearis*) forests, which typically grows in a wind-swept site, can also be observed in the mountaintop area. The area is designated as a specific plant community of "Vegetation in Mt. Omotodake and Mt. Fukaiomotodake zone." The area provides habitat to flora and fauna of academic significance such as a butterfly *Ochlodes asahina* , a cicada *Platypleura albivannata*, and Yaeyama palm (*Satakentia liukiuensis*) communities, all of which are endemic to the Yaeyama Islands. This area must be strictly protected as the nucleus of the park.	557
Central Iriomote Island	The area mainly consists of headwaters of the Urauchi River and the Nakama River as well as the area centering on Mt. Komi, the highest peak of Iriomote Island (469 m), and Mt. Goza. The area provides the typical landscape of the park, with Japan's representative pristine subtropical evergreen broadleaved forests remained in a large cluster. The majority of the forest zone are covered with Castanopsis forests. The forests of *Quercus miyagii* spread along the lowland valleys while *Ficus bengutensis* and *Machilus japonica* forests occur in the valleys along the upper streams. Rare plant species *Sphenomeris gracilis* occurs in a peculiar way along mountain streams running around the headwaters of the Urauchi River. The area also provides habitat to wild flora and fauna that are endemic to the Yaeyama Islands including Iriomote Island (Iriomote cat and *Ochlodes asahinai*), and species at their northern limits (crested serpent eagle (*Spilornis cheela perplexus*) and yellow-margined box turtle (*Cuora flavomarginata*)). This area must be strictly protected as the nucleus of the park.	4,624
Total		5,181

(ii) Class I Special Zone

The following zones are classified as Class I Special Zones:

（Table 5：Details of Class I Special Zones）

Name	Zone overview	Area (ha)
Daichipanari	This is an uninhabited island around 400 m north of Hirakubozaki. Surrounded by cliffs, the island offers a breeding site for seabirds such as the roseate tern (*Sterna dougallii bangsi*) and the black-naped tern (*Sterna sumatrana*). Because it constitutes an important element of the view from Hirakubozaki, the remarkable scenic beauty must be protected.	3
Kara River	The area includes the surroundings of the Kara River on the northern Hirakubo Peninsula. Mangrove forests develop at the mouth of the river. At the middle and lower reaches of the river, powder-puff tree (*Barringtonia racemose*) form exceptionally large communities, creating a characteristic scenic beauty together with diverse benthic species. The river is designated as a Class I Special Zone to strictly protect the remarkable scenic beauty that is equivalent to a Special Protection Zone and to promote the appropriate use of the river.	16
Fukido River area	The area is one of Ishigaki Island's representative distribution areas for mangrove forests, a vegetation unique to the subtropical region. The area is selected as a specific plant community called "Mangrove forests of Fukido River." Shrimps such as *Atyoida pilipes*, *Neocaridina brevirostris*, and a crab *Ryukyumu yaeyamense* live along the river. These species are categorized as near-threatened in the Red Data Book (2006) of the Ministry of the Environment. Because the area possesses one of Ishigaki Island's best areas of mangrove forest landscape as well as significant wildlife habitat, the remarkable scenic beauty must be protected.	40
Kabirakushima Island	Being located at the mouth of Kabira Bay, the area consists of Kushima Island and Majipanari and Saipanari, rock islands made of coral reefs. Together with the surface of the inner bay that changes its color according to tidal fluctuation and climate condition, the area constitutes a valuable element of the landscape. The remarkable scenic beauty of the area must be protected.	36
Mt. Omotodake	The area includes the northern slope of the cordillera continuing from Mt. Omotodake north-westwards as well as the southern part of Mt. Fukai Omotodake. The area is adjacent to the Special Protection Zone. There develops subtropical climax forests mainly dominated by Castanopsis and *Distylium racemosum*. Ryukyu bamboo forests, which typically grows in a wind-swept site, can also be observed in the mountaintop area.. The area along the upper stream of the Arakawa River is Okinawa Prefecture's only natural habitat for Taiwan cherry *Prunus campanulata* (National Natural	521

Name	Zone overview	Area (ha)
	Monument). The area is designated as a scenic site and the remarkable scenic beauty must be protected.	
Nagura Amparu	The area is located at the mouth of the Nagura River which is facing Nagura Bay on the western coast of Ishigaki Island. The area is selected as a specific plant community called "Mangrove forests at the mouth of the Nagura River." Mangrove forests, tidal flats, beaches and coastal forests form a diverse ecosystem and serve as a stop-over habitat for migrating birds and habitat for forest birds. Therefore, in November 2005, the site was included in the Ramsar Convention list for its international importance. Because the area offers a remarkable landscape of mangrove forests and important habitat for wildlife, the remarkable scenic beauty must be protected.	128
The mouth of the Urauchi River	The area is designated as a Class I Special Zone to strictly protect its remarkable scenic beauty that is equivalent to a Special Protection Zone as well as to promote the appropriate use of the area for the following reasons. • The area, a backland of the mangrove forests at the mouth of the Urauchigawa River, is dominated by Ryukyu pine(*Pinus luchuensis*) and offers good scenic beauty. • The area includes Hoshidate Utaki where Yaeyama palm trees grow wild. It is the one of the only three Yaeyama palm communities in the world. • A fern community of *Acrostichum aureum*, endangered threatened species, constitutes the valued scenic beauty of the area.	172
Takanakomi	The area includes the southern foot of Mt. Komidake, the highest peak on Iriomote Island, towards the eastern side of the mountain as well as the cordillera continuing from Mt. Komidake towards the north west. It is designated as a Class I Special Zone to strictly protect its remarkable scenic beauty equivalent to a Special Protection Zone for the following reasons. • Good-condition evergreen broadleaved forests of *Camellia japonica* class survive in the mountain area and the forests offer habitat for a number of rare species such as Iriomote cats and crested serpent eagles. • A number of rare fish such as *Rhyacichthys aspro*, *Rhinogobius* sp.YB, and *Tetraroge niger* live in large and small rivers including major rivers such as the Omija River, the Yutsun River, the Aira River, the Shiira River and the Maira River. • Large mangrove forests mainly comprised of Asiatic mangrove (*Rhizophora mucronata*) grow around the mouth of each river. Particularly, the mouths of the Aira River, the Shiira River and the Maira River offer plant habitat for *Sonneratia alba*, too, the species that can be seen only in the eastern part of Iriomote Island.	3,506

Name	Zone overview	Area (ha)
Funaura	Within Japan, communities of Nipa palm (*Nipa fruticans*) only exist in Funaura, Iriomote Island, and on Uchibanari Island. Particularly, the community in Funaura, which is the northern limit of habitat, is designated as a specific plant community, a National Natural Monument, and a plant community protected forest for its significance for botanical geography and for its particular value. There is a concern regarding the decline of the Nipa palm community; it was revised to Critically Endangered from Vulnerable on the Red List of the Ministry of the Environment because of its very high risk of extinction in the wild. For the reasons stated above, the zone is designated as a Class I Special Zone to strictly protect the remarkable scenic beauty mainly comprising Nipa palms.	4
Central part of Iriomote Island	The area includes Mt. Tedo, Iriomote Island's second highest mountain after Mt. Komidake, and the rivers running through the mountain. In the mountain, evergreen broadleaved forests remain in a good condition while Ryukyu bamboo forests, which typically occur in a wind-swept site, can be seen in the mountaintop area. There are frequent reports about inhabitation of rare species such as Iriomote cats and crested serpent eagles in this zone, which indicates that the zone is an important habitat for them. For all the reasons stated above, the zone is designated as a Class I Special Zone to strictly protect the remarkable scenic beauty that is equivalent to a Special Protection Zone.	1,311
Hateruma Forests	The area encompasses Mt. Haterumamori in its center and the ridge lines along the upper reaches of the Nakara River and the Kuira River. The vegetation of the area consists of pristine subtropical evergreen broadleaved forests and secondary forests with Ryukyu pines. In addition, the area along the upper reaches of the Nakara River offers habitat for rare species such as a goby *Rhinogobius s*p.YB and *Stylogomphus shirozui watanabei*, an endemic dragonfly species to Iriomote Island. For all the reasons stated above, the area is designated as a Class I Special Zone to strictly protect the remarkable scenic beauty which also offers habitat to rare and endemic species as well as to promote the appropriate use of the area.	2,672
The mouth of the Nakara River	The area is located at the mouth of the Nakara River, the third longest river on Iriomote Island and one of the representative scenic sites of the park. The area consists of mangrove forests including *Asiatic mangrove*, *Oriental mangrove* and *Kandelia obovata.* The habitat information of rare wild species such as Iriomote cats and crested serpent eagles is frequently reported in this area, which indicates that the site is an important habitat for them. For all the reasons stated above, the area is designated as a Class I Special Zone to strictly protect the remarkable scenic beauty that is equivalent to a Special Protection Zone.	32

Name	Zone overview	Area (ha)
Sakiyama Peninsula	Sightings of Iriomote cats and crested serpent eagles are frequently reported in this area and recent research has revealed that the area is an important habitat for those rare species. A number of giant common gracinia (*Garcinia subelliptica*) trees contribute to create the characteristic scenic beauty of the area. Furthermore, along large and small rivers, the ecosystem is maintained in a good condition with continuity from the subtropical evergreen broadleaved forests around the headstreams to the mangrove forests and tidal flats around the mouths of the rivers. Natural scenery almost untouched by human activity remains in this area. Meanwhile, there also are some sites that gather attention as usable places recently. For all the reasons stated above, the area is designated as a Class I Special Zone to strictly protect the remarkable scenic beauty equivalent to a Special Protection Zone as well as to promote the appropriate use of the area.	2,959
Kuira River	The ecosystem of the area is maintained with continuity from the upper reaches of the Kuira River to mangrove forests and tidal flats of the mouth of the river; the natural terrain without any artificial object remains in a good condition. In addition, Mizuochitaki Falls fall into the mouth of the Pimichi River, allowing boats to directly approach the water falls. There is evidence that coal carriers and warships used to use this site to collect fresh water, which adds to the historical value of the area. Sightings of rare species such as Iriomote cats, crested serpent eagles, and Kishinoue's giant skinks (*Plestiodon kishinouyei*) are frequently reported in this area, which indicates that the area is an important habitat for them. Further, Ubu Beach and Sazare Beach in the area are egg-laying sites for green turtles (*Chelonia mydas*). The landscape of over 200 m-long steep escarpments that run down from edge lines to the coast stretches from east to west, making exclusive beach landscapes. Recently, the beaches are also used actively as resting spots for kayak tourists and divers. For all the reasons stated above, the area is designated as a Class I Special Zone to strictly protect the remarkable scenic beauty equivalent to a Special Protection Zone as well as to promote the appropriate use of the area.	1,171
Nakama River	The Nakama River is the second longest river on Iriomote Island, along which Japan’s largest mangrove forests consisting of *Asiatic mangrove*, *Kandelia obovata* and oriental mangrove. The mangrove forests along the river are designated as “ Nakama River Natural Monument Protection Zone” and as a National Natural Monument. The zone is the most popular tourist spot in Iriomote Island, being actively used by powered vessels and kayaks. In addition, a lot of sighting information of various rare species in the area has been reported. Such rare species include Iriomote cats, crested serpent eagles and yellow-margined box turtles, as well as the migrant birds such as	

Name	Zone overview	Area (ha)
	black-faced spoonbills (*Platalea minor*), black-winged stilts (*Himantopus himantopus*), and gray-faced buzzards (*Butastur indicus*). Particularly the number of sightings (including the traces) for the Iriomote cat is increasing over the past 10 years, and parent with kittenhave also been seen, which proves that the area is an important habitat for Iriomote cats. For all the reasons stated above, the zone is designated as a Class I Special Zone to strictly protect the remarkable scenic beauty equivalent to a Special Protection Zone as well as to promote the appropriate use of the area.	2,821
Takanazaki	The area is located at the south-east coast of Hateruma Island where the coastal cliff stretches about 1 km; the constant and strong sea breeze eroded the Ryukyu limestone, creating this cliff. The area constitutes dynamic and remarkable coastal landscape where rough waves surge against rock reefs and splash high in the air. The area is designated as Class I Special Zone to protect the remarkable scenic beauty.	18
Total		15,410

(iii) Class II Special Zone

The following zones are classified as Class II Special Zones.

(Table 7: Summary of Class II Special Zones)

Prefecture	Zone	Area (ha)
Okinawa	Ishigaki City: Parts of Aza Arakawa, Aza Ibaruma, Aza Ohama, Aza Kabira, Aza Sakieda, Aza Shiraho, Aza Touzato, Aza Tonoshiro, Aza Nagura, Aza Nosoko, Aza Hirakubo, Aza Fukai, and Aza Miyara	1,315
	Within Taketomi Village, Yaeyama County: National Forest Okinawa District Forest Office All of Compartments 101. 104, 107, 135, and Nakanokami Island and parts of Compartments 102, 103, 105, 106, 108, 109, 128 to 134, 136, 137, 142, 143, 145 to 147, 150 to 155, 161, 172, 173, 184-188, 193, 202, and 204 to 209 Taketomi Village, Yaeyama County: Parts of Aza Iriomote, Aza Uehara, Aza Kuroshima, Aza Kohama, Aza Komi, Aza Sakiyama, Aza Takana, Aza Taketomi, Aza Haimi, Aza Hateruma and Aza Hatoma	5,046
Total		6,361

(iv) Class III Special Zone

The following zones are classified as Class III Special Zones.

(Table 8: Summary of Class III Special Zones)

Prefecture	Zone	Area (ha)
Okinawa	Ishigaki City: Parts of Aza Ibaruma, Aza Ohama, Aza Kabira, Aza Sakieda, Aza Shiraho, Aza Touzato, Aza Tonoshiro, Aza Nagura, Aza Nosoko, Aza Hirae, Aza Hirakubo, Aza Fukai, Aza Maezato and Aza Miyara	4,385
	Within Taketomi Village, Yaeyama County: National Forest Okinawa District Forest Office All of Compartments 139 and 140 and parts of Compartments 102, 103, 132 to 134, 136 to 138, 141, 142, 188, 197, 198, 208 and 209 Taketomi Village, Yaeyama County: Parts of Aza Iriomote, Aza Uehara, Aza Kuroshima, Aza Kohama, Aza Komi, Aza Sakiyama, Aza Takana, Aza Taketomi, Aza Haimi, Aza Hateruma and Aza Hatoma	2,658
Total		7,043

ii. Marine Special Zone

The following zones are classified as Marine Special Zones.

(Table 10：List of Marine Special Zones)

No.	Name	Zone	Area (ha)
1	Taketomi Island Takidunguchi, North reef of Sekisei Lagoon, Yonara Channel	Okinawa Prefecture, Yaeyama County, Taketomi Town, Aza Kohama and Aza Taketomi adjacent area, part of the waters adjacent to Aza Komi	3,281.9
2	Taketomi Island Shimobishi	Okinawa Prefecture, Yaeyama County, Taketomi Town, Aza Taketomi adjacent area	221.0
3	Kuroshima Island Urabishi, Kyanguchi, Nakamoto Beach	Okinawa Prefecture, Yaeyama County, Taketomi Town, Aza Kuroshima adjacent area	2403.2
4	Aragusukujima Island Maibishi	Okinawa Prefecture, Yaeyama County, Taketomi Town, Aza Aragusuku adjacent area	179.7
5	Hirakubo	Okinawa Prefecture, Ishigaki-City, Aza Hirakubo adjacent area	176.9
6	Kabiraishizaki	Okinawa Prefecture, Ishigaki-City, Aza Kabira adjacent area	274.8
7	Yonehara	Okinawa Prefecture, Ishigaki-City, adjacent areas to Aza Kabira and Aza Fukai	129.7
8	Shiraho	Okinawa Prefecture, Ishigaki-City, Aza Shiraho adjacent area	311.6
9	Hirano	Okinawa Prefecture, Ishigaki-City, Aza Hirakubo adjacent area	938.0
10	Akaishi	Okinawa Prefecture, Ishigaki-City, Aza Ibaruma adjacent area	861.6
11	Tamatorizaki	Okinawa Prefecture, Ishigaki-City, Aza Ibaruma adjacent area	903.0
12	Yonehara Pukapi	Okinawa Prefecture, Ishigaki-City, adjacent areas to Aza Kabira and Aza Fukai	147.4
13	Uganzaki	Okinawa Prefecture, Ishigaki-City, Aza Sakieda adjacent area	291.9
14	Hatoma Island, Barasu Island, Unarizaki	Okinawa Prefecture, Yaeyama County, Taketomi Town, part of the waters adjacent area to Aza Uehara	1,419.1
15	Iriomote Island Shiira River mouth	Okinawa Prefecture, Yaeyama County, Taketomi Town, Aza Komi adjacent area	369.0
16	Taketomi Island Minamiokisho	Okinawa Prefecture, Yaeyama County, Taketomi Town, Aza Taketomi adjacent area	424.2
17	Iriomote Island Kanokawanakanose	Okinawa Prefecture, Yaeyama County, Taketomi Town, Aza Sakiyama adjacent area	380.6
18	Iriomote Island Nakamazaki	Okinawa Prefecture, Yaeyama County, Taketomi Town, Aza Haeminaka adjacent area	193.6

No.	Name	Zone	Area (ha)
19	Hateruma Island Nuubizakioki	Okinawa Prefecture, Yaeyama County, Taketomi Town, Aza Hateruma adjacent area	1,721.7
20	Hateruma Island Hamazakioki	Okinawa Prefecture, Yaeyama County, Taketomi Town, Aza Hateruma adjacent area	712.9
21	Iriomote Island Omija	Okinawa Prefecture, Yaeyama County, Taketomi Town, Aza Uehara adjacent area	103.0
22	Iriomote Island Yutsun	Okinawa Prefecture, Yaeyama County, Taketomi Town, adjacent areas to Aza Uehara and Aza Takana	87.2
23	Sotopanari Island	Okinawa Prefecture, Yaeyama County, Taketomi Town, Aza Iriomote adjacent area	391.0

iii. Related matters

(i) Plant, for which collecting and damaging is restricted

Collecting or damaging the following plants is restricted.

(Table 11：List of plants, for which collecting and damaging is restricted)

Family	Species
Psilotaceae	*Psilotum nudum*
Lycopodiaceae	*Lycopodium laxum*, *Lycopodium salvinioides*
Selaginellaceae	*Selaginella leptophylla*, *Selaginella moellendorffii*, *Selaginella tamariscina*
Ophioglossaceae	*Ophioglossum pendulum*
Schizaeaceae	*Schizaea dichotoma*
Hymenophyllaceae	*Cephalomanes atrovirens*, *Cephalomanes javanicum* var. *asplenioides*, *Crepidomanes bipunctatum*, *Crepidomanes kurzii*, *Crepidomanes humile*, *Crepidomanes humile*, *Crepidomanes minutum*, *Trichomanes motley*, *Trichomanes tahitense*, *Cephalomanes thysanostoma*
Pteridaceae	*Acrostichum aureu*m, *Lindsaea merrillii*, *Lindsaea lucida*, *Microlepia speluncae* var. *pubescens*, *Pteris semipinnata*, *Sphenomeris gracilis*
Plagiogyriaceae	*Plagiogyria koidzumii*
Cyatheaceae	*Cyathea hancockii*, *Sphaeropteris lepifera*, *Cyathea podophylla*, *Cyathea lepifera*
Dryopteridaceae	*Bolbitis heteroclite*, *Thelypteris truncate*, *Ctenitis eatoni* var. *iriomotensis*, *Diplazium lobatum*, *Diplazium virescens*, *Polystichum formosanum*, *Polystichum hancockii* var. *yaeyamense*, *Thelypteris castanea*
Aspleniaceae	*Asplenium loriceum*
Polypodiaceae	*Crypsinus hastatus* var. *longisquamatus*, *Grammitis dorsipila*, *Lepisorus uchiyamae*, *Loxogramme salicifolia*, *Microsorium pteropus*, *Polypodium formosanum*, *Prosaptia kanashiroi*
Vittariaceae	*Vittaria ensiformis*
Marsileaceae	*Marsilea crenata*
Dipteridaceae	*Dipteris conjugata*
Urticaceae	*Elatostema platyphyllum*
Loranthaceae	*Taxillus nigrans*
Balanophoraceae	*alanophora fungosa*, *Balanophora tobiracola*
Aristolochiaceae	*Asarum gelasinum*, *Asarum yaeyamense*, *Asarum monodoriflorum*
Rafflesiaceae	*Mitrastemon yamamotoi*
Droseraceae	*Drosera spathulata*
Crassulaceae	*Sedum formosanum*
Saxifragaceae	*Deutzia yaeyamensis*
Rosaceae	*Osteomeles anthyllidifolia*
Leguminosae	*Dalbergia candenatensis*, *Entada phaseoloides*, *Sophora tomentosa*
Violaceae	*Viola tashiroi*
Begoniaceae	*Begonia fenicis*, *Begonia formosana*
Lythraceae	*Pemphis acidula*
Melastomataceae	*Bredia yaeyamensis*
Diapensiaceae	*Shortia rotundifolia*
Pyrolaceae	*Monotropastrum humile*
Ericaceae	*Rhododendron amanoi*, *Rhododendron latoucheae* (including *Rhododendron amamiense*), *Rhododendron simsii*
Primulaceae	*Androsace umbellate*, *Lysimachia decurrens*
Plumbaginaceae	*Limonium sinense*, *Limonium wrightii*
Gentianaceae	*Centaurium japonicum*, *Nymphoides coreana*, *Swertia makinoana*
Apocynaceae	*Ecdysanthera utilis*
Rubiaceae	*Argostemma solaniflorum*, *Ophiorrhiza kuroiwai*
Convolvulaceae	*Evolvulus alsinoides* var. *decumbens*
Boraginaceae	*Argusia argentea*

Family	Species
Verbenaceae	*Callicarpa oshimensis var. iriomotensis, Vitex quinata, Vitex trifolia* var. *bicolor*
Labiatae	*Ajuga pygmaea*
Acanthaceae	*Strobilanthes glandulifer*
Gesneriaceae	*Cyrtandra yaeyamae, Titanotrichum oldhami*
Lentibulariaceae	*Utricularia bifida, Utricularia exoleta*
Myoporaceae	*Myoporum bontioides*
Compositae	*Aster taiwanensis* var. *lucens, Crossostephium chinense, Solenogyne mikadoi*
Liliaceae	*Asparagus cochinchinensis, Heloniopsis kawanoi, Lilium longiflorum, Tricyrtis formosana*
Amaryllidaceae	*Curculigo orchioides*
Burmanniaceae	*Burmannia cryptopetala, Burmannia itoana*
Gramineae	*Arundo formosana, Chikusichloa brachyanthera*
Zingiberaceae	*Alpinia flabellata*
Orchidaceae	*Anoectochilus formosanus, Anoectochilus koshunensis, Aphyllorchis Montana, Arundina graminifolia, Bulbophyllum drymoglossum, Bulbophyllum affine, Bulbophyllum macrae, Calanthe densiflora, Calanthe lyroglossa, Calanthe triplicate, Calanthe masuca, Cephalantheropsis gracilis, Corymborkis veratrifolia, Cymbidium lancifolium, Didymoplexis minor, Didymoplexis pallens, Disperis philippinensis, Epipogium roseum, Eria corneri, Eria ovata, Eria ovata* var. *retroflexa, Galeola altissima, Gastrochilus japonicus, Gastrodia nipponica, Gastrodia javanica, Geodorum densiflorum, Goodyera foliosa* var. *commelinoides, Goodyera hachijoensis* var. *matsumurana, Goodyera viridiflora* var. *ogatae, Goodyera procera, Goodyera grandis, Lecanorchis triloba, Lecanorchis flavicans, Liparis bituberculata* var. *formosana*, Lecanorchis nigricans, *Liparis bootanensis, Listera japonica, Macodes petola, Malaxis bancanoides, Malaxis latifolia, Microtis unifolia, Oberonia japonica, Oberonia anthropophora* var. *arisanensis, Anoectochilus tashiroi, Phaius mishmensis, Phaius tancarvilleae, Platanthera sonoharae, Platanthera stenoglossa, Spathoglottis plicata, Trichoglottis luchuensis, Stereosandra javanica, Thrixspermum subulatum, Tropidia calcarata, Zeuxine agyokuana, Zeuxine gracilis* var. *sakaguchii, Zeuxine strateumatica, Zeuxine temiofolia*

(ii) Animal, for which capturing etc. is restricted

Capturing, killing, wounding, or collecting or damaging of the eggs of the following animals is restricted.

(Table 12：List of animals, for which capturing etc. is restricted)

Family	Species
Cheloniidae	Loggerhead turtle (*Caretta caretta*), green turtle, hawksbill turtle (*Eretmochelys imbricata*)

(iii) Vessel Exclusion Zone

Use of vehicles, horses, powered vessels, or the landing of airplanes is restricted in the following areas.

(Table 13：List of Vessel Exclusion Zones)

Name	Zone Class	Area overview	Area(ha)
Urauchi River Basin	Class I and II Special Zone	The start of the Urauchi River is at central Iriomote Island and the river ends at the north-west of the island. The section up to 13,100m from the mouth of the river is designated as class B river. Mangrove forests dominantly comprising oriental mangrove, *Asiatic mangrove*, and *Kandelia obovata* develop along the lower and middle reaches of the river. Subtropical evergreen broadleaved forests flourish along the upper reaches, almost covering the river. Complicated shapes of respiratory roots of mangrove plants provide habitat for many fish and shellfish. The forest along the river is also an important habitat for valuable wildlife; such as birds that hunt small animals living in the forests, including crested serpent eagles; Iriomote cats, and yellow-margined box turtles. It is highly necessary to restrict the entry of powered vessels for leisure to maintain the fine scenic beauty of the zone.	53
Nakama River Basin	Class I Special Zone	The start of the Nakama River is at Mt. Goza in central Iriomote Island and the river runs eastwards to end in the south-east part of the Island. The mainstream up to 7,450 m from the Nakama Bridge at the mouth of the river is designated as class B river. From the mouth to the middle reaches of the river, the largest mangrove forest in Japan comprising of oriental mangrove and *Asiatic mangrove* develops along the riverside. Subtropical evergreen broadleaved forests flourish along the upper reaches, almost covering the river. Complicated shapes of respiratory roots of mangrove plants provide habitat for many fish and shellfish. The forest along the river is also an important habitat for valuable wildlife; such as birds that hunt small animals living in the forests including crested serpent eagles; Iriomote cats, and yellow-margined box turtles. It is highly necessary to restrict the entry of powered vessels for leisure to maintain the fine scenic beauty of the zone.	80

(v) Ordinary Zone

The following zones are classified as Ordinary Zones.

(Table 15: List of Ordinary Zones)

Prefecture	Zone	Area (ha)
Okinawa	Ishigaki City: Parts of Aza Ibaruma, Aza Ohama, Aza Kabira, Aza Sakieda, Aza Maezato and Aza Yashima	120
	Within Taketomi Village, Yaeyama County: National Forest Okinawa District Forest Office Parts of Compartments 137, 138, 141, 161, 172, 187, 193, 197, 198 and 208 Taketomi Village, Yaeyama County: All of Aza Aragusuku and parts of Aza Iriomote, Aza Uehara, Aza Kuroshima, Aza Kohama, Aza Komi, Aza Takana, Aza Taketomi, Aza Haimi, Aza Haiminaka, Aza Hateruma and Aza Hatoma	6,538
Total land area		6,658
Parts of sea surface adjacent to land areas of the park		65,574
Total		72,232

iv. Breakdown of area

The area breakdown based on zone, ownership, and municipalities is as listed below.

(Table 16: Summary of area by zone category and by ownership status)

Zone category		Special Zone							
Zone class		Special Protection Zone				Class I			
Ownership status		National	Public	Private	Other	National	Public	Private	Other
Okinawa Prefecture	Area by ownership status	4,624	557	0	0	13,644	652	242	872
	Area by class (rate)								15,410 (37.9)
					5,181 (12.7)				
	Area by category (rate)								

Special Zone							
Class II				Class III			
National	Public	Private	Other	National	Public	Private	Other
4,146	1,453	589	173	2,456	4,150	337	100
			6,361 (15.6)				7,043 (17.3)
							28,814 (70.9)
							33,995 (83.6)

Ordinary Zone (On land)				Total (On land)			
National	Public	Private	Other	National	Public	Private	Other
513	1,289	4,384	472	25,383	8,101	5,552	1,617
			6,658 (16.4)				40,653 (100.0)

Ordinary Zone (Marine area)	Marine Special Zone	Total (Marine area)
65,574	23 sites 15,923	81,497

3. Project Plan

(1) Facility plan

i. Protective facilities plan

(Table 18: List of protective facilities plan)

No.	Type	Location	Development policy
1	Nature restoration facility	Okinawa Prefecture, waters adjacent to Ishigaki-City and Taketomi Town of Yaeyama County, and the peripheries of these areas (Sekisei Lagoon)	For the conservation and restoration of the coral reef ecosystem of Sekisei Lagoon, nature restoration through actions such as rehabilitation projects for coral reef communities and necessary monitoring surveys will be implemented based on the "Overall Plan for Sekisei Lagoon Nature Restoration Project" and in coordination with terrestrial measures.
2	Nature restoration facility	Okinawa Prefecture, waters adjacent to Ishigaki-City and its periphery (Ishigaki Island)	For the conservation and restoration of the coral reef ecosystem of the sea surrounding Ishigaki Island, nature restoration through actions such as rehabilitation projects for coral reef communities and necessary monitoring surveys will be implemented based on the "Overall Plan for Sekisei Lagoon Nature Restoration Project" and in coordination with terrestrial measures.
3	Nature restoration facility	Okinawa Prefecture, waters adjacent to t Taketomi Town of Yaeyama County, and its periphery (Iriomote Island)	For the conservation and restoration of the coral reef ecosystem at the sea surrounding Iriomote Island, nature restoration through actions such as rehabilitation projects for coral reef communities and necessary monitoring surveys will be implemented based on the "Overall Plan for Sekisei Lagoon Nature Restoration Project" and in coordination with terrestrial measures.
4	Animal breeding facility	Okinawa Prefecture, Yaeyama County, Taketomi Town (Komi)	Enhance the function of Iriomote Wildlife Conservation Center, which is currently maintained as a exibition facility, by positioning the Center as a wildlife rehabilitation facility for rare wild species in the park such as Iriomote cats and crested serpent eagles.

ii. Facility plan for use

(i) Individual facility

The individual facilities are described as follows:

(Table19: List of individual facilities)

No.	Type	Location	Development policy
1	Exhibition facility	Okinawa Prefecture, Yaeyama County, Taketomi Town (the mouth of the Urauchi River)	Improvement will include an exhibition facility as a center for use in western Iriomote Island
2	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Hinaitaki Falls)	Improvement will include a recreation site to promote the pleasant and safe use of the area along the Hinai River
3	Exhibition facility	Okinawa Prefecture, Yaeyama County, Taketomi Town (Komi)	Improvement will include positioning the existing Iriomote Wildlife Conservation Center as a museum in eastern Iriomote Island
5	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Nishifunatsuki)	Improvement will include as an observatory to explore mangrove forests along the Nakama River
5	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Otomi Entrance)	Improvement will include a recreation site to observe subtropical forests
6	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Kohama Island)	Improvement will include a recreation site for a nature trip in Kohama Island
7	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Taketomi Island)	Improvement will include a recreation site for a nature trip in Taketomi Island
8	Exhibition facility	Okinawa Prefecture, Yaeyama County, Taketomi Town (Taketomi Island)	Improvement will include a visitor center focusing on introducing the natural environment and the culture of Taketomi Island and the surrounding area
9	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Kuroshima Island)	Improvement will include a recreation site for a nature trip on Nakamoto Beach and other sites on Kuroshima Island
10	Exhibition facility	Okinawa Prefecture, Yaeyama County, Taketomi Town (Kuroshima Island)	Improvement will include a visitor center focusing on introducing the natural environment and the culture of Kuroshima Island and the surrounding area
11	Exhibition facility	Okinawa Prefecture, Ishigaki-City (Ishigaki Island)	Improvement will include an exhibition facility that offers general information of the national park as well as educational opportunities to learn about the coral reef of Sekisei Lagoon and the surroundings of Iriomote Island and Ishigaki Island
12	Recreation site	Okinawa Prefecture, Ishigaki-City (Akaishi)	Improvement will include an observatory to have a view from the eastern Hirakubo Peninsula
13	Recreation site	Okinawa Prefecture, Ishigaki-City (Tamatorizaki Peninsula)	Improvement will include an observatory to have a view of the Hirakubo Peninsula and the coast of the eastern part of Ishigaki Island that continues up to Shiraho
14	Recreation	Okinawa Prefecture, Ishigaki-	Improvement will include a recreation site

No.	Type	Location	Development policy
	site	City (Sukuji)	for a nature trip on Sukuji Beach
15	Recreation site	Okinawa Prefecture, Ishigaki-City (Kabira)	Improvement will include a recreation site where visitors can observe Kabira Bay and explore the nature of the surrounding area.
16	Campsite	Okinawa Prefecture, Ishigaki-City (Yonehara)	Improvement will include a campsite for a nature trip utilizing the natural environment of Yonehara Beach.
17	Recreation site	Okinawa Prefecture, Ishigaki-City (Yonehara)	Improvement will include a recreation site for a nature trip on Yonehara Beach and around Yaeyamai palm communities.
18	Recreation site	Okinawa Prefecture, Ishigaki-City (Uganzaki)	Improvement will include an observatory to offer a view from Uganzaki.
19	Recreation site	Okinawa Prefecture, Ishigaki-City (Nagura Amparu)	Improvement will include a recreation site to explore nature including the tidal flats of Nagura Amparu and mangrove forests.
20	Recreation site	Okinawa Prefecture, Ishigaki-City (Shiraho)	Improvement will include a recreation site for a nature trip on Shiraho Beach.
21	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Hatoma)	Improvement will include a recreation site for a nature trip at Hatoma Barasu and its surrounding area.
22	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Nishihama Beach)	Improvement will include a recreation site to explore the nature of the natural coast from Nishihama Beach to Pe Beach.
23	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Takanazaki)	Improvement will include a recreation site for a nature trip at Takanazaki and the surrounding area.
24	Recreation site	Okinawa Prefecture, Ishigaki-City (Hirakubo)	Improvement will include a recreation site for a nature trip around Common Putat plant colonies along the Hirakubo River.
25	Recreation site	Okinawa Prefecture, Ishigaki-City (Kuura)	Improvement will include a recreation site for a nature trip around powder-puff tree communities along the Kira River.
26	Recreation site	Okinawa Prefecture, Ishigaki-City (Fukido River)	Improvement will include a recreation site for a nature trip around mangrove forests along the Fukido River.
27	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Sumiyoshi)	Improvement will include an observatory to view the marine landscape from Unarizaki.
28	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Utara)	Improvement will include a recreation site for a nature trip around the ruins of Utara coal mine.
29	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Urauchi)	Improvement will include a recreation site for a nature trip around the Urauchi River.
30	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Omija)	Improvement will include a recreation site for a nature trip around the mouth of the Omija River.
31	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Yutsun)	Improvement will include a recreation site for a nature trip around the mouth of the Yutsun River.
32	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town	Improvement will include a recreation site for a nature trip around the ruins of

No.	Type	Location	Development policy
		(Uchibanari Island)	Uchibanari Island coal mine.
33	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Funauki)	Improvement will include a recreation site for a nature trip around Ida-no-hama Beach.
34	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Komi)	Improvement will include a recreation site for a nature trip around *Heritiera littoralis* communities at the mouth of the Maira River.
35	Campsite	Okinawa Prefecture, Yaeyama County, Taketomi Town (Kanokawa)	Improvement will include a campsite for a nature trip utilizing the natural environment of Kanokawa.
36	Campsite	Okinawa Prefecture, Yaeyama County, Taketomi Town (Haemida)	Improvement will include a campsite for a nature trip utilizing the natural environment of Haemida.
37	Recreation site	Okinawa Prefecture, Yaeyama County, Taketomi Town (Haemida)	Improvement will include a recreation site for a nature trip around Haemida-no-hama Beach.

(ii) Roads

a. Roads allowing vehicle access

The roads allowing vehicle access are described as follows:

(Table 20：List of roads (vehicle access))

No.	Name	Section	Major site on the course	Development policy
1	Nosokodake Route	From: Okinawa Prefecture, Ishigaki-City (Nosoko, boundary with the national park) To: Okinawa Prefecture, Ishigaki-City (Inoda, boundary with the national park)	Mt. Nosokodake	Improve the road from Nosoko to Inoda via the foot of Mt. Nosokodake.
2	Yarabu Peninsula Route	From: Okinawa Prefecture, Ishigaki-City (Sakie, boundary with the national park) To: Okinawa Prefecture, Ishigaki-City (Sakie, boundary with the national park)	Uganzaki	Improve the road to explore the beaches around the Yarabu Peninsula.
3	Hirakubo, Ibaruma Routes	From: Okinawa Prefecture, Ishigaki-City (Hirakubo, boundary with the national park) To: Okinawa Prefecture, Ishigaki-City (Akaishi, boundary with the national park) From: Okinawa Prefecture, Ishigaki-City (Akaishi, boundary with the national park) To: Okinawa Prefecture, Ishigaki-City (Ibaruma, boundary with the national park)	Hirakubo Peninsula	Improve the road to explore pasture and marine landscapes of the Hirakubo Peninsula.
4	Nagura Amparu Route	From: Okinawa Prefecture, Ishigaki-City (Nagura, boundary with the national park) To: Okinawa Prefecture, Ishigaki-City (Nagura, boundary with the national park)	Nagura Amparu	Improve the road to explore the tidal flats and coastlines of Nagura Amparu.
5	Shirahama Haemi Route	From: Okinawa Prefecture, Yaeyama County, Taketomi Town (Shirahama) To: Okinawa Prefecture, Yaeyama County, Taketomi Town (Haemi)	Uehara	It is the major road connecting Shirahama in western Iriomote Island and Haemi in eastern Iriomote Island. Improve the road that goes around Iriomote Island, taking into account measures to prevent accidents with wild animals.
6	Urauchi Inaba Route	From: Okinawa Prefecture, Yaeyama County, Taketomi Town (the mouth of the Urauchi River) To: Okinawa Prefecture, Yaeyama County, Taketomi Town (the middle reaches of the Urauchi River)	Urauchi	Improve the road to explore the section starting from the mouth of the Urauchi River up to the ruins of Inaba village.

b. Walkways

The walkways are described as follows:

(Table 21：List of roads (walkways))

No.	Name	Section	Major site on the course	Development policy
1	Urauchi River-Funaura Route	From: Okinawa Prefecture, Yaeyama County, Taketomi Town (Iriomote Island Urauchi River Kampira-taki Falls, a fork in the walkway) To: Okinawa Prefecture, Yaeyama County, Taketomi Town (Iriomote Island Funaura)	Mt. Tedo Hinai-taki Falls	Improve the walkways to explore nature from Kampira-taki Falls to the Funaura Bay via Mt. Tedo and Hinai-taki Falls
2	Cross-Iriomote Island Route	From: Okinawa Prefecture, Yaeyama County, Taketomi Town (the middle reaches of the Urauchi River, Iriomote Island) To: Okinawa Prefecture, Yaeyama County, Taketomi Town (Iriomote Island Otomi, a junction with a motoring road)	Kanpiree-taki Falls	Improve the walkways to explore nature up to Kanpiree- taki Falls as well as a trail across Iriomote Island
3	Mt. Nosokodake Route	From: Okinawa Prefecture, Ishigaki-City (Nosoko, boundary with the national park) To: Okinawa Prefecture, Ishigaki-City (Mt. Nosokodake)		Improve the trail to climb Mt. Nosokodake
4	Mt. Omotodake Route	From: Okinawa Prefecture, Ishigaki-City (Hirae, boundary with the national park) To: Okinawa Prefecture Ishigaki City (Mt. Omotodake)		Improve the trail to climb Mt. Omotodake.
5	Nishida River Route	From: Okinawa Prefecture, Yaeyama County, Taketomi Town (the lower reach of the Nishida River) To: Okinawa Prefecture, Yaeyama County, Taketomi Town (the upper reach of the Nishida River)	Sangara-no-taki Falls	Improve the trail up to Sangara-no-taki Falls.
6	Yutsun Taki Falls Route	From: Okinawa Prefecture, Yaeyama County, Taketomi Town (Yutsun Bridge) To: Okinawa Prefecture, Yaeyama County, Taketomi Town (Yutsun-no-sandantaki Falls)	Yutsun-no-sandantaki Falls	Improve the trail up to Yutsun-no-sandantaki Falls
7	Nakara River Route	From: Okinawa Prefecture, Yaeyama County, Taketomi Town (the middle reaches of the Nakara River) To: Okinawa Prefecture, Yaeyama County, Taketomi Town (the upper reaches of the Nakara River)	Nara-no-taki Falls	Improve the trail up to Nara-no-taki Falls

iii. Transportation facility

The transportation facilities are described as follows:

(Table 22：List of transportation facilities)

No.	Name	Type	Section	Development policy
1	Urauchi River Route	Shipping facility	From : Okinawa Prefecture, Yaeyama County, Taketomi Town (Urauchi River) To: Okinawa Prefecture, Yaeyama County, Taketomi Town (Urauchi River)	Improvement will include a shipping facility for nature trips on the Urauchi River.
2	The mouth of Urauchi River	Mooring facility	Okinawa Prefecture, Yaeyama County, Taketomi Town (the mouth of the Urauchi River)	Improvement will include a mooring facility at the mouth of the Urauchi River.
3	Gunkan-iwa	Mooring facility	Okinawa Prefecture, Yaeyama County, Taketomi Town (Gunkan-iwa)	Improvement will include a mooring facility at Gunkan-iwa of the Urauchi River.
4	Nakama River Route	Shipping facility	From : Okinawa Prefecture, Yaeyama County, Taketomi Town (Nakama River) To : Okinawa Prefecture, Yaeyama County, Taketomi Town (Nakama River)	Improvement will include a shipping facility for a nature trip on the Nakama River.
5	The middle reaches of the Nakama River	Mooring facility	Okinawa Prefecture, Yaeyama County, Taketomi Town (the middle reach of Nakama River)	Improvement will include a mooring facility to access Nishifunatsuki recreation site (an observatory) from the Nakama River.
6	Otomi	Mooring facility	Okinawa Prefecture, Yaeyama County, Taketomi Town (Otomi)	Improvement will include a mooring facility at the mouth of the Nakama River.
7	Kabira-ishizaki	Mooring facility	Okinawa Prefecture, waters adjacent to the residential area of Ishigaki City (Kabira-ishizaki)	Improvement will include a mooring facility for vessels to explore the marine landscape at the area surrounding Kabira-ishizaki.
8	Yonehara-pukapi	Mooring facility	Okinawa Prefecture, waters adjacent to the residential area of Ishigaki City (Yonehara-pukapi)	Improvement will include a mooring facility for vessels to explore the marine landscape at Yonehara-pukapi.
9	Uganzaki	Mooring facility	Okinawa Prefecture, waters adjacent to the residential area of Ishigaki City (Uganzaki)	Improvement will include a mooring facility for vessels to explore the marine landscape at Uganzaki
10	Shiraho	Mooring facility	Okinawa Prefecture, waters adjacent to the residential area of Ishigaki City Chisaki (Shiraho)	Improvement will include a mooring facility for vessels to explore the marine landscape at Shiraho

No.	Name	Type	Section	Development policy
11	Hatoma Island Barasu	Mooring facility	Okinawa Prefecture, Yaeyama County, waters adjacent to the residential area of Taketomi Town (Hatoma Island Barasu)	Improvement will include a mooring facility for vessels to explore the marine landscape of the coral reef from Hatoma Island Barasu to Unarizaki.
12	Sotopanari Island	Mooring facility	Okinawa Prefecture, Yaeyama County, waters adjacent to the residential area of Taketomi Town (Sotopanari Island)	Improvement will include a mooring facility for vessels to explore the marine landscape at Sotopanari Island.
13	The middle reach of the Nakara River	Mooring facility	Okinawa Prefecture, Yaeyama County, Taketomi Town (the middle reaches of the Nakara River)	Improvement will include a mooring facility for vessels to explore the nature surrounding the Nakara River.
14	Iriomote Island Kanokawa Nakanose	Mooring facility	Okinawa Prefecture, Yaeyama County, waters adjacent to the residential area of Taketomi Town (Iriomote Island Kanokawa Nakase)	Improvement will include a mooring facility for vessels to explore the nature surrounding Kanokawa Bay.
15	Sekisei Lagoon, the North side	Mooring facility	Okinawa Prefecture, Yaeyama County, waters adjacent to the residential area of Taketomi Town (Sekisei Lagoon, North side)	Improvement will include a mooring facility for vessels to explore the marine landscape of the entire coral reef that stretches from the north side of Taketomi Island to Kohama Island.
16	Taketomi Island Shimobishi	Mooring facility	Okinawa Prefecture, Yaeyama County, Taketomi Town, waters adjacent to the residential area of Aza Taketomi (Taketomi Island Shimobishi)	Improvement will include a mooring facility for vessels to explore the marine landscape at Shimobishi in Taketomi Island
17	Taketomi Island Minamiokisho Reef	Mooring facility	Okinawa Prefecture, Yaeyama County, waters adjacent to the residential area of Taketomi Town (Taketomi Island Minamiokisho Reef)	Improvement will include a mooring facility for vessels to explore the marine landscape at Minamiokisho Reef in Taketomi Island.
18	Aragusujima Island Maibishi	Mooring facility	Okinawa Prefecture, Yaeyama County, waters adjacent to the residential area of Taketomi Town (Aragusujima Island Maibishi)	Improvement will include a mooring facility for vessels to explore the marine landscape at Maibishi in Aragusujima Island.
19	Kuroshima Nakamoto Beach	Mooring facility	Okinawa Prefecture, Yaeyama County, Taketomi Town (Kuroshima Nakamoto Beach)	Improvement will include a mooring facility for vessels to explore the marine landscape in Kuroshima Island.

4-4 Regional Administration and Management Plan (The Amami-oshima Forest Planning Area): Excerpts

1. Basic Matters Related to the Administration and Management of National Forests

(1) Basic Policy on Administration and Management of National Forests

This Plan has the Amami-oshima Forest Planning Area as its jurisdiction, covering 8,130 hectares of national forests, which include 209 hectares of those retired from forestry business, in the Amami Islands, a group of remote islands (Amami-oshima, Kikai-jima, Kakeroma-jima, Uke-shima, Yoro-shima, Tokuno-shima, Okinoerabu-jima, and Yoron-jima), although none of them has any national forest, other than Amami-oshima and Tokuno-shima.

(Omitted)

(A) Amami-oshima Area (Forest compartment No. 201 - No. 230)

The Area stretches from the middle through southern parts of the island, zero to 700 meters above sea level, lying in subtropical maritime climate, which keeps the district warm and rainy throughout the year, leaving there red-yellow soil that is poor in humus. Covered with thin topsoil and hit by frequent typhoons, the island is unsuitable for growing cedars and cypresses, and as a result, planted forests occupy a smaller part of the woods there, 20 percent. In physiognomy, the major part of the area is composed of natural broad-leaved trees, such as sudajii chinquapin (*Castanopsis sieboldii*), isunoki witch hazel (*Distylium racemosum*), and iju camellia (*Schima liukiuensis Nakai*), with some area of mixed forest, mainly ryukyumatsu pine (*Pinus luchuensis*). As a large part of the area is expected to serve as water source forest for people living along lower reaches of rivers running there and perform the function of water conservation, this Plan classifies it as "Water and Soil Conservation Forest" for its administration and management.

Parts of the Kamiya National Forest and a large part of the Kamiokubo National Forest located around the top of Mt. Yuwan-dake are designated as national monuments, and parts of the Kinsakubaru National Forest are classified as Reserved Forest for Health and Recreation.

As they are expected to perform the functions for preservation of natural environments, and health and culture, this Plan classifies them as "Forest for Coexistence of Human and Nature" for their administration and management.

(B) Tokuno-shima Area (Forest compartment No. 231 - No. 261)

The Area, lying 100 to 650 meters above sea level, stretches over Tokunoshima Town, Amagi Town, and Isen Town, with many foldings found in most parts, covered with thin topsoil poor in humus.

In physiognomy, the area is covered with natural forests, mainly Ryukyumatsu pine (*Pinus luchuensis*), Okinawa-urajirogashi oak (*Quercus miyagii*), and sudajii chinquapin (*Castanopsis sieboldii*).

As Mt. Hage-dake, Mt. Inokawa-dake, and areas surrounding them, designated as a Special Protection Zone in Amami Islands Quasi-National Park, are expected to perform the functions for preservation of natural environments, and health and culture, this Plan classifies them as "Forest for Coexistence of Human and Nature" for their administration and management.

As the Akahata, Isen, and Kanpuku National Forests, serving as water sources for local settlements, are expected to perform the function of water conservation, this Plan classifies them as "Water and Soil Conservation Forest" for their administration and management.

(2) Matters Related to the Administration and Management Corresponding to Functional Types

Administration and management of forests must be performed according to their functional types based on the "Policies on Forest Administration and Management" (separate volume), with attention also given to the matters stated below, in a manner relevant to site, forestry, and other conditions of individual forest stands.

When any timber is produced as a result of operations necessary to maintain and improve forests in physiognomy developed to help them perform expected functions, effort must be exerted to make the most of it. Final cutting must also be performed in a systematic manner to satisfy needs of local communities, such as evenness in the age structure of trees and efficient use of biomass, for supplying timber.

Matters related to Water and Soil Conservation Forests

Water and Soil Conservation Forests are classified into two types, Land Conservation and Water Conservation Types, to deal with them.

(A) Land Conservation Type

Forests are classified into the Land Conservation Type when they are primarily expected to perform the functions of controlling erosion and collapse of land, fall of rock, and/or other forest disasters that may cause damage to human life and/or facilities, and preserving and developing other conditions for safe and comfortable life; they must be administered and managed in an appropriate manner, with attention given to matters stated below, based on, among others, relationship in location between a forest and its conservation target, their site conditions, such as geological and geographical features, and the current state of the forest.

(a) Forest stands, when expected to control erosion and collapse of land, fall of rock, and/or other forest disasters that may cause damage to human life and/or facilities, must be grown to have deep and wide root systems, and maintain layers of fallen leaves, with moderate sunlight

pouring in, understory vegetation growing well, and facilities constructed for forest conservation and other purposes when necessary to prevent erosion and/or collapse of land, as their target for development.

(b) Stands expected to control wind, drifting sand, and other weather harms that may cause deterioration of environments must be grown to consist of types of trees with greater shielding capability, such as those of larger height, and/or higher density of lower branches, to be more resistant to various types of damage, as their target for development.

(B) Water Conservation Type

Forests are classified into the Water Conversation Type when they are primarily expected to perform the functions of supplying plenty of quality water people need for their lives; for better performing the function of water conservation, which includes drought mitigation and water quality preservation, forests there must be grown to maintain forest soil with greater capabilities of water permeability and storage, and root systems and understory vegetation developed sufficiently to resist various types of damage, as their target for development.

Area of Water and Soil Conservation Forests (in hectares)

Type	Land Conservation	Water Conservation	Total
Current Plan	2,962	3,925	6,887
Former Plan	2,963	3,927	6,890

(ii) Matters related to Forests for Coexistence of Human and Nature

Forests for Coexistence of Human and Nature are classified into two types, Nature Conservation and Forest Space Usage Types, to deal with them.

(A) Nature Conservation Type

Forests are classified into the Nature Conversation Type when they are primarily expected to perform the functions of conserving natural environments, such as maintenance of natural environments composed of primeval forest ecosystems, protection of animals and plants, and preservation of genetic resources; in principle, they must be allowed to go through natural transition while administered and managed with care paid to preservation of biodiversity, among others.

Among forests classified into the Nature Conservation Type, those composed of primeval forest ecosystems, those needed by precious wild animals and plants for their habitation, and those needed to preserve genetic resources, among others, must be selected as protected forest.

(B) Forest Space Usage Type

Forests are classified into the Forest Space Usage Type when they are primarily expected to perform the functions of providing places for sport or recreation, education and culture, relaxation, or other activities, and excellent landscape, and maintaining scenic beauty in or around urban areas; they must be administered and managed in a manner relevant to their form of use for health and cultural purposes.

Area of Forests for Coexistence of Human and Nature (in hectares)

Type	Nature Conservation		Forest Space Utilization		Total
		Protected Forest		Recreation Forest	
Current Plan	951	265	—	—	951
Former Plan	951	265	—	—	951

(Omitted)

2. Matters related to maintenance and preservation of national forests

(1) Matters related to patrol

(i) Forest conservation patrol for forest fire prevention and other purposes

Public relations and awareness raising activities for preventing fire forests, together with enhanced forest conservation patrols, must be performed to take full-scale measures for preventing fire forests.

Effort to prevent illegal dumping of waste must also be exerted through enhanced cooperation between local municipalities and other relevant organizations, Forest Conservation Patrollers, and volunteer organizations.

(Omitted)

(iii) Protection and administration of rare wild species

As the main island, Amami-oshima, is inhabited by several Nationally Endangered Species of Wild Fauna or Flora, such as Owston ooakagera woodpecker (*Dendrocopos leucotos owstoni*), ootora-tsugumi thrush (*Zoothera dauma amami*), Amami-yamashigi thrush (*Scolopax mira*), and Amami-no-kurousagi hare (*Pentalagus furnessi*), forests there must be patrolled to maintain and preserve environments of their habitats.

(Omitted)

(3) Matters related to forests that require special protection

This Planning Area is covered with many natural forests offering precious natural environments, and given that they have important roles to play in efforts to preserve biodiversity, they must be

designated as protected forest for appropriate protection and conservation, with patrol and monitoring conducted for them for facilitating appropriate preservation and administration.

(i) Protected forest (in hectares)

Type	No. of sites	Area (hectares)
Forest for Preserving Genetic Resources of Forest Trees	3	265
Total	3	265

(Omitted)

(4) Other necessary matters

In this Planning Area, as seen in the fact that most of the national forests have been designated as Reserved Forest for Water Conservation, many of the woods are critical for water conservation, and therefore, the reserved forests, as well as others, must be administered in an appropriate manner.

Efforts must also be made to rehabilitate and restore forests damaged by natural disasters or other causes, as well as grow forests where people can live side by side with wild birds and animals, and recover devastated vegetation in collaboration and cooperation with volunteer and other organizations, as part of initiatives carried out to preserve forest ecosystems.

The Area is also susceptible to typhoons and other threats of nature, which requires any project to be carried out there with full attention paid especially to conservation of water sources, prevention of forest disasters, and maintenance of landscape.

3. Matters related to the supply of forest products

(Omitted)

(2) Other necessary matters

Forest products must be supplied with great effort to achieve effectiveness and efficiency, especially to sell more of the trees cut down for thinning as timber.

Initiatives for encouraging use of more wood must also be carried out; for instance, more timber from thinning should be used for construction of wooden buildings for government agencies or other purposes, engineering works for forests, and other public works.

4. Matters concerning utilization of national forests

(1) Policy for promoting utilization of national forests

Effective and efficient use of national forests must be actively promoted in full coordination with administration and management of them, with social and economic conditions of local communities and opinions of people there taken into account, in a manner to help promote local industries and improve welfare of the people.

Given that, adjacent to national forests included in this Plan, farmland is being developed, with farm roads and other facilities under construction for it, active cooperation must be offered when they can be used in an effective manner for such local community development initiatives, with care paid to protection of natural environments and maintenance of natural landscape.

(Omitted)

5. Matters related to the forest maintenance through public participation

(1) Matters related to national participation forests

"Fureai-no-Mori" (Forest for Contact), projects to be carried out in cooperation with volunteer and other organizations under an agreement concluded with them, and other initiatives must be implemented to promote voluntary participation of people in maintenance of forests and other activities.

(Omitted)

(3) Other necessary matters

"Yuyu-no-Mori" (Forest for Play), projects to be carried out to offer regular opportunities of experience under an agreement concluded for that purpose, and other initiatives must be effectively used to make available national forests, rich in natural environment, as a place for a variety of activities for experience, and promote forest environment education.

Active efforts must also be exert to provide teachers and volunteer leaders with learning and awareness-raising opportunities and technical guidance, and offer programs and teaching materials for forest environment education.

The District Forest Offices and other relevant organizations must strive to perform the functions as a base for providing people with information on participation in maintenance and preservation of forests, counseling them, and helping them with participation.

(Omitted)

4-5 Regional Administration and Management Plan (The Northern Okinawa Forest Planning Area): Excerpts

1. Basic Matters Related to the Administration and Management of National Forests

(1) Basic Policy on Administration of National Forests

This Plan has the Northern Okinawa Forest Planning Area as its jurisdiction, covering 11,964 hectares of national forests, including six hectares of those retired from forestry business, and 4,398 hectares which are leased to Okinawa Prefecture for the purpose of establishing a basic property for the Prefecture and setting an example to the forestry industry there under Article 64, paragraph (1) of the Cabinet Ordinance on Special Measures for Application of the Laws and Regulations Related to the Ministry of Agriculture, Forestry and Fisheries in Line with Reversion of Okinawa, etc. (Cabinet Ordinance No.158 of 1972) ("Cabinet Ordinance"). The land leased under the Cabinet Ordinance to Okinawa Prefecture is administered and managed by the prefectural government as prefectural forest under its Prefectural Forest Management Plan.

Most of the remaining area, 7,566 hectares, except for the leased land under the Cabinet Ordinance, is used for the United States' Northern Training Area of Okinawa, based on the permission granted to the Okinawa Defense Bureau.

The Planning Area, lying along the mountainous backbones, composed of Mr. Nishime-dake (420 meters), Mt. Ibu-dake (354 meters), Mt. Terukubi-yama (395 meters), Mt. Iyu-dake (446 meters), and other mountains running in the middle of the northern part of the main Okinawa Island from Northeast to Southwest on one side, and faced with the Pacific Ocean on the other, forms a long, huge stretch of land.

(Omitted)

The Area is inhabited by precious wild animals, such as Noguchi-gera woodpecker (*Sapheopipo noguchii*), Yanbaru-kuina water rail (*Gallirallus okinawae*), and Yanbaru-tenaga-kogane gold beetle (*Cheirotonus jambar*), each designated by the national government as a Special Natural Monument and Nationally Endangered Species of Wild Fauna or Flora, with parts around Mt. Ibu-dake designated as Special Protection Zone of the Wildlife Sanctuary, being expected to serve for preservation and formation of natural environments, especially for protection and multiplication of these species.

Accordingly, this Plan focuses on functions national forests located in places like this are expected to serve for public benefits, such as water conservation and health and culture functions, and promotes effort to deliver open and accessible "forests for people" as well as promotes the forest environmental education, while paying attention to sustainability in forest management, measures to mitigate global warming, and preservation of biodiversity in administering and managing forests.

(Omitted)

(B) Zones not classified into any function type (Forest compartment No. 3 - No. 46)

Most of them are used for the United States' Northern Training Area of Okinawa; based on the permission granted to the Okinawa Defense Bureau, they are not classified into any function type. As the Special Action Committee on Facilities and Areas in Okinawa (SACO) decided in their final report, released in December 1996, that some of them be returned, they, together with those returned so far (497 hectares), must be administered and managed according to the purposes mentioned for each of them in the report issued by the Committee for Examination on Treatment of National Forests in Northern Okinawa.

(C) Zones leased under the Cabinet Ordinance (Forest compartment No. 47 - No. 73)

They are leased to Okinawa Prefecture under Article 64, paragraph 1 of the Cabinet Ordinance, and administered and managed by the prefectural government as prefectural forest under its Prefectural Forest Management Plan.

(Omitted)

(2) Matters Related to the Administration and Management Corresponding to Functional Types

With a view to administering and managing national forests in a manner that the functions they should perform for public benefit will be maintained and facilitated, they must be classified into the function types listed below:

(Omitted)

・ Water Conservation Type;

(Omitted)

so that they will be administered and managed to be able to fully perform the type of function each is expected to.

(Omitted)

(v) Policy for administration and management of the Water Conservation Type, and other matters related to the Type

Forests are classified into the Water Conversation Type when they are primarily expected to perform the functions of supplying plenty of quality water people need for their lives; for better performing the function of water conservation, which includes drought mitigation and water quality preservation, forests there must be grown to maintain forest soil with greater capabilities of water permeability and storage, and root systems and understory vegetation developed enough to resist various types of damage, as their target for development.

Care must also be paid to effective use of forest resources to the extent that the conditions stated above can be satisfied.

Area of Water Conservation Type

(in hectares)

Type	Water Conservation Type
Area	4,581

(Omitted)

2 Matters related to maintenance and preservation of national forests

(1) Matters related to patrol

(i) Forest conservation patrol for forest fire prevention and other purposes

To prevent damage to forests, especially forest fires, closer cooperation must be established with local municipalities and other organizations concerned for taking all possible measures to prevent forest fires by, for instance, installing signs, carrying out public relations for forest fire prevention, raising awareness of users, as well as enhancing patrol for forest conservation.

Effort to prevent illegal dumping of waste must also be exerted through enhanced cooperation between local municipalities and other relevant organizations, the Waste Management Council, Forest Conservation Patrollers, and volunteer organizations.

(Omitted)

(4) Other necessary matters

As the area is inhabited by several Nationally Endangered Species of Wild Fauna or Flora, such as the Noguchi-gera woodpecker, Yanbaru-tenaga-kogane gold beetle, and Yanbaru-kuina water rail, forests there must be actively patrolled to maintain and preserve environments of their habitats. For mountain streams and surrounding areas, which have crucial roles to play for preserving biodiversity as habitats and migration routes for wildlife and source of seeds, effort must be exerted to maintain continuity of vegetation that should naturally thrive there from the upper reaches through the lower, so that a network of ecosystems will be formed with finer meshes.

(Omitted)

3 Matters concerning utilization of national forests

(Omitted)

(3) Other necessary matters

In this Planning Area, natural forests must be used effectively with measures taken to achieve harmonization with public-benefit functions they perform, such as protection of rare wild animals and plants, preservation of rich natural environments, and conservation of water sources, as well as

arrangements made for necessary coordination with other plans for land use in this Area, among others.

5. Matters related to the forest maintenance through public participation

(1) Matters related to national participation forests

Maintenance of forests with any voluntary participation of people must be performed in an appropriate manner in cooperation with volunteer organizations and other relevant stakeholders.
(Omitted)

(3) Other necessary matters

As requested to actively make available national forests, rich in diversity and natural environment, as a place for a variety of activities for experience, "Yuyu-no-Mori" (Forest for Play) projects to be carried out to offer regular opportunities of experience under an agreement concluded for that purpose, and other initiatives must be effectively used to promote forest environment education.

The District Forest Offices and other relevant organizations must strive to perform the functions as a base for providing people with information on participate in maintenance and preservation of forests, counseling them, and helping them with participation.

4-6 Regional Administration and Management Plan (The Miyako-Yaeyama Forest Planning Area): Excerpts

1. Basic Matters Related to the Administration and Management of National Forests

(1) Basic Policy on Administration of National Forests

This Plan has the Miyako-Yaeyama Forest Planning Area as its jurisdiction, covering 25,034 hectares of national forests, including 560 hectares of those retired from forestry business, lying mostly in Iriomote-jima, Taketomi Town, the largest island among the Yaeyama Islands, which has 88 percent of the land covered with national forests. The Area is also dotted with Yonaguni-jima (Yonaguni Town), Hateruma-jima (Taketomi Town), two of the Yaeyama Islands, among others.

Iriomote-jima, the core of the Plan, has at its central part Mt. Komi-dake (470 meters), Mt. Tedo-san (442 meters), Mt. Ogura-dake (421 meters), Mt. Hateruma-mori (447 meters), Mt. Haigishi-dake (425 meters), and other mountains lying more than 400 meters above sea level, forming a gentle ridge, many of which extend wide coastal terraces into the sea, while some in the southwestern part are rimmed with cliffs dropping more than 200 meters just along the coast.

From the mountainous area, several rivers, including Urauchi-gawa River, Nakama-gawa River, and Kuira-gawa River, flow out meandering, with deep-cleft valleys lying upstream, forming terrains with a large variety of surface features, while getting wider around the mouths, as plenty of water runs through flat land.

The Area is inhabited by precious wild animals, such as iriomote-yamaneko cat (*Prionailurus bengalensis iriomotensis*) and kanmuri-washi eagle (*Spilornis cheela*), both designated by the national government as Special Natural Monuments and Nationally Endangered Species of Wild Fauna or Flora, in and around the Hoshitate and Nakamagawa Nature Reserves, and plant communities in Ubundoru of yaeyama-kashi oak (*Satakentia liukiuensis*) and those in Funaura of nippa-yashi palm *(Nypa fruticans Wurmb*), both designated by the national government as Natural Monuments. The greater part of the Area is covered with national forests; the central part of the island, together with some area surrounding it, is designated as Iriomote-jima Forest Ecosystem Reserve (20,471 hectares) as well as a Special Zone in Iriomote-Ishigaki National Park, expected to serve for preservation and formation of natural environments, especially for protection of rare wild animals and plants.

The basins of the Urauchi-gawa, Nakama-gawa River, and Hinai-gawa River, running along the largest mangrove forests in Japan, form an important part of the Iriomote-jima Forest Ecosystem Reserve, designated also as Iriomote Nature Recreation Forest, visited by an increasing number of users, which makes it critical to classify the area into several zones appropriate for maintaining their natural environments and helping them fulfill the functions for health and culture.

(Omitted)

(A) Iriomote-jima Eastern Area (Forest compartment No. 116 - No. 126 & No. 170 - No. 203)

As the basin of the Nakama-gawa River is designated as Iriomote Nature Recreation Forest (Nakama-gawa River Area) while the inland part and southern coast of the Area are designated as Iriomote-jima Forest Ecosystem Reserve, as well as Iriomote-Ishigaki National Park, both expected especially to perform the functions of preservation and formation of natural environments, with conservation and preservation of forest ecosystems and use of forests there for recreation taken into account, this Plan classifies them as "Nature Conservation Type" for their administration and management.

Districts lying from the coastline to settlements and around farmland, being expected to perform the functions of preventing forest disasters and conserving water sources, are classified as "Forest Disaster Prevention Type" and "Water Conservation Type" for their administration and management.

(B) Iriomote-jima Western Area (Forest compartment No. 101 - No. 115, No. 127 - No. 169, & No. 204 - No. 209)

As the basins of the Urauchi-gawa River and Hinai-gawa River are designated as Iriomote Nature Recreation Forest (Urauchi-gawa River and Hinai-gawa River Area) while the part around the mouth of the Urauchi-gawa River and the inland area are designated as Iriomote-jima Forest Ecosystem Reserve, and the basins of the Urauchi-gawa River and Kuira-gawa River are designated as Iriomote-Ishigaki National Park, all expected to serve for preservation and formation of natural environments, including conservation and preservation of forest ecosystems and use of forests for recreation, this Plan classifies them as "Nature Conservation Type" for their administration and management.

Districts lying from the coastline to settlements and around farmland, as well as a Long-Term Profit-Sharing Afforestation district located in the center of the Area, together with districts around it, being expected to perform the functions of preventing forest disasters and conserving water sources, are classified as "Forest Disaster Prevention Type" and "Water Conservation Type" for their administration and management.

(Omitted)

(2) Matters Related to the Administration and Management Corresponding to Functional Types

With a view to administering and managing national forests in a manner that the functions they should perform for public benefit will be maintained and facilitated, they must be classified into the function types listed below:

- Forest Disaster Prevention Type (Land Erosion and Collapse Control Area, and Weather Disaster Control Area);
- Nature Conservation Type

・ Forest Space Usage Type
・ Comfortable Environment Creation Type; and
・ Water Conservation Type;

so that they will be administered and managed to be able to fully perform the type of function each is expected to.

(Omitted)

(i) Policy for administration and management of the Forest Disaster Prevention Type, and other matters related to the Type

Forests are classified into the Forest Disaster Prevention Type when they are primarily expected to perform the functions of controlling erosion and collapse of land, fall of rock, and/or other forest disasters that may cause damage to human life and/or facilities, and other functions for developing national land infrastructure resilient to disasters; they must be administered and managed in an appropriate manner, with attention given to matters stated below, based on, among others, relationship in location between a forest and its conservation target, their site conditions, such as geological and geographical features, and the current state of the forest.

(A) Land Erosion and Collapse Control Area, and Weather Disaster Control Area

In the Land Erosion and Collapse Control, and Weather Disaster Control Areas, forests must be grown to have deep and wide root systems, and maintain layers of fallen leaves, with moderate sunlight pouring in, understory vegetation growing well, and facilities constructed for forest conservation and other purposes when necessary to prevent erosion and/or collapse of land, as their target for development.

(B) Weather Disaster Control Area

In the Weather Disaster Control Areas, forests must be grown to consist of types of trees with greater shielding capability, such as those having larger height, and/or higher density of lower branches, to be more resistant to various types of damage, as their target for development.

Area of Forest Disaster Prevention Type

(in hectares)

Type	Forest Disaster Prevention	Land Erosion and Collapse Control	Weather Disaster Control
Area	1906	1,755	151

(ii) Policy for administration and management of the Nature Conservation Type, and other matters related to the Type

Forests are classified into the Nature Conversation Type when they are primarily expected to perform the functions of conserving natural environments, such as maintenance of natural environments composed of primeval forest ecosystems, protection of animals and plants, and preservation of genetic resources; in principle, they must be left going through natural transition while administered and managed with care paid to preservation of biodiversity, among others.

Area of Nature Conservation Type

(in hectares)

Type	Nature Conservation Type	Protected forest
Area	20,682	20,476

(iii) Policy for administration and management of the Forest Space Usage Type, and other matters related to the Type

Forests are classified into the Forest Space Usage Type when they are primarily expected to perform the functions of providing places for sport or recreation, education and culture, relaxation, or other activities, and excellent landscape, and maintaining scenic beauty in or around urban areas; they must be administered and managed in a manner relevant to their form of use for health and cultural purposes.

Area of Forest Space Usage Type

(in hectares)

Type	Forest Space Usage Type	Recreation Forest
Area	1	–

(iv) Comfortable Environment Creation Type

Forests are classified into the Comfortable Environment Creation Type when they are primarily expected to perform the functions of keeping living environments good for humans, such as reducing noise and purifying air, as well as mitigating severe weather conditions by, for instance, providing trees that give shade while administered and managed in manners relevant to the functions.

Area of Comfortable Environment Creation Type

(in hectares)

Type	Comfortable Environment Creation Type
Area	–

(v) Policy for administration and management of the Water Conservation Type, and other matters related to the Type

Forests are classified into the Water Conversation Type when they are primarily expected to perform the functions of supplying plenty of quality water people need for their lives; for better performing the function of water conservation, which includes drought mitigation and water quality preservation, forests there must be grown to maintain forest soil with greater capabilities of water permeability and storage, and root systems and understory vegetation developed enough to resist various types of damage, as their target for development. Care must also be paid to effective use of forest resources to the extent that the conditions stated above can be satisfied.

Area of Water Conservation Type

(in hectares)

Type	Water Conservation Type
Area	1,885

2. Matters related to maintenance and preservation of national forests

(1) Matters related to patrol

(i) Forest conservation patrol for forest fire prevention and other purposes

Parts of the area covered by this Plan are designated as National Parks or other similar districts, with many visitors coming to forests there for recreation. Closer cooperation must be established with local municipalities and other organizations concerned for taking all possible measures to prevent forest fires by, for instance, installing signs, carrying out public relations for forest fire prevention, raising awareness of users, and conducting fire drills, as well as enhancing patrol for forest conservation.

Effort to prevent illegal dumping of waste must also be exerted through enhanced cooperation between local municipalities and other relevant organizations, Forest Conservation Patrollers, and volunteer organizations.

(Omitted)

(3) Matters related to forests that require special protection

This Planning Area is covered with many natural forests offering precious natural environments, and given that they have important roles to play in efforts to preserve biodiversity, they must be designated as protected forests for appropriate protection and conservation, with patrol and monitoring conduced for them for facilitating appropriate preservation and administration.

1) Protected forest

Type	No. of sites	Area (hectares)
Forest Ecosystem Reserve	1	20,471
Forest for Preserving Genetic Resources of Forest Life	–	–
Forest for Preserving Genetic Resources of Forest Trees	–	–
Plant Communities Protection Forest	1	4
Total	2	20,475

(Omitted)

3. Matters related to the supply of forest products

(Omitted)

(2) Other necessary matters

Forest products must be supplied with great effort to achieve effectiveness and efficiency. Use of trees cut down for thinning must be promoted through efforts made to establish more efficient and lower-cost work systems that combine line thinning and road networks and high-performance forestry machinery, so that more of the thinning timber can be sold as material. Now that lower-quality wood, which formerly had little use, turns out to be marketable as woody biomass resource, effort must also be made to enhance the stability of its supply.

Initiatives for encouraging use of more wood must also be carried out; for instance, more timber from thinning should be used for construction of wooden buildings for government agencies or other purposes, engineering works for forests, and other public works.

4. Matters concerning utilization of national forests

(1) Policy for promoting utilization of national forests

Effective and efficient use of national forests must be actively promoted in full coordination with their administration and management, with social and economic conditions of local communities and opinions of people there taken into account, in a manner to help promote local industries and improve welfare of the people.

Iriomote-shima Island, the central part of this Planning Area, has 88 percent of its territory covered by national forests, and the district cannot be developed without making the best of the national forests. They must be used, therefore, in an effective manner to improve the structure of agriculture and forestry and develop farm and other public roads, among others, as part of efforts to promote local industries.

Recreation Forest

Type	No. of sites	Area (hectares)
Nature Recreation Forest	3	2,052
Nature Observation & Education Forest	–	–
Landscape Forest	–	–
Sports Forest	–	–
Outdoor Sports Area	–	–
Sight-seeing Forest	–	–
Total	3	2,052

(2) Detailed method of utilization of national forests

When any road or other land for public use or public work is offered for effective use of national forests, it must be leased or transferred. When any water forests are developed, the system of profit sharing forests must be actively applied.

(3) Other necessary matters

In this Planning Area, effective use of forests must be promoted with measures taken to achieve harmonization with public-benefit functions they perform, such as protection of rare wild animals and plants, and preservation of rich natural environments, as well as arrangements made for necessary coordination with other plans for land use, among others.

Recreation Forests must be developed to be attractive fields for promoting effective use.

5. Matters related to the construction of forest roads based on the Agreement for the Maintenance and Enhancement of Public Benefit Functions, and other matters related to the maintenance and preservation of private forests where it is considered to be appropriate to regard them as an integral part of national forests for maintenance and preservation

(1) Basic matters related to conclusion of an agreement for the Maintenance and Enhancement of Public Benefit Functions

Some of the private forests lying adjacent to, or between, national forests are left uncared-for by owners, as they are too small in size and isolated or scattered in unfavorable locations; in some cases, earth and sand flowing out of such private forests have harmful impact on functions national forests should perform for public benefit, such as national land conservation, or exotic trees that have grown too thick in private forests make operations less effective when carried out to wipe out the type of plants from national forests around them.

For such private forests, the system of Agreement for the Maintenance and Enhancement of Public Benefit Functions must be used in an effective manner, so that, as an effective and appropriate way to maintain and enhance functions national forests should perform for public benefits, construction of forest and forestry work roads designed to integrate forest operations, as well as effective use of the road networks, and work to wipe out exotic trees from national forests in a region, when needed to preserve biodiversity there, among others, can all be carried out together with that for private forests around them in an integrated manner to help the private forests also maintain and enhance functions they should perform for public benefit, as well.

(Omitted)

6. Matters related to the forest maintenance through public participation

(1) Matters related to national participation forests

"Fureai-no-Mori" (Forest for Contact) projects to be carried out in cooperation with volunteer and other organizations under an agreement concluded with them, and other initiatives must be implemented to promote voluntary participation of people in maintenance of forests and other activities.

(Omitted)

(3) Other necessary matters

"Yuyu-no-Mori" (Forest for Play) projects to be carried out to offer regular opportunities of experience under an agreement concluded for that purpose, and other initiatives must be effectively used to make available national forests, rich in natural environment, as a place for a variety of activities for experience, and promote forest environment education.

Active efforts must also be exert to provide teachers and volunteer leaders with learning and awareness-raising opportunities and technical guidance, and offer programs and teaching materials for forest environment education.

The District Forest Offices and other relevant organizations must strive to perform the functions as a base for providing people with information on participate in maintenance and preservation of forests, counseling them, and helping them with participation.

(Omitted)

4-7 Conservation Management Plan for the Amami Islands Forest Ecosystem Reserve (Excerpts)

Introduction

Many wild ecosystems and precious wildlife habitats still remain in national forests. As part of national forestry business, these precious forests are designated as protected forests and managed in accordance with the changes in the natural environment and also in accordance with the intention for the designation, and as necessary, vegetation restoration measures are implemented or protective fences are installed in order to appropriately conserve and manage the precious natural environment.

The Amami Islands, lying in a subtropical maritime climate, have a huge annual precipitation of 2,000 to 3,000 millimeters on average. In the islands, with poor water-retaining capacity, forests cover 66 percent of the total area, serving very effectively in the water conservation and forest disaster prevention functions. National forests there, covering six percent of Amami-oshima Island and about 15 percent of Tokuno-shima Island in total area, are composed of subtropical evergreen broad-leaved trees, such as suda (ita)-jii chinquapin (*Castanopsis sieboldii*), iju camellia (*Schima liukiuensis Nakai*), isunoki witch hazel (*Distylium racemosum*), and Okinawa-urajirogashi oak (*Quercus miyagii*). Dotted with forests quite similar to primeval woods in terms of the combination of species found in the entire plant community there and quite valuable from the scientific standpoint, Kinsakubaru, Kamiya, Hatsuno, and Northern and Central Tokuno-shima Island were designated in March 2013 as a Forest Ecosystem Reserve after deliberation by the Amami Islands Forest Ecosystem Reserve Designation Committee, so that they would be conserved and preserved in an appropriate manner.

The Amami Islands belong to the Ryukyu Islands, which were recognized in 2003 by the Review Committee on Candidate Natural Sites for Nomination to the World Heritage List of Japan as one of the regions that are highly likely to satisfy criteria for registration and conditions of integrity set by the World Heritage Convention, as they have unique geological history in their relation with the continent, and hold a great diversity, especially in indigenous semitropical forest and coral reef ecosystems, offer wonderful scenery both on the land and in the sea, and are inhabited by endangered species. At a meeting held in January 2013, the Inter-Ministerial/Agency Co-ordination Committee for World Natural Heritage decided to enter "Amami-Ryukyu" in the World Heritage Tentative List of Japan as natural heritage. With a view to having the area carried on the World Natural Heritage Tentative List, the Science Committee for the Amami-Okinawa World Natural Heritage Candidate was set up in May 2013, and at the third meeting in December 2013, they selected four districts, Amami-oshima, Tokuno-shima, Northern Okinawa-to, and Iriomote-jima, as candidates for World Natural Heritage sites. With this, parties concerned are expected to address challenges that must be solved to get Amami-oshima and Tokuno-shima qualified for registration as a World Natural Heritage site.

For this area, it is feared that human activities and other factors may deteriorate natural environments, and coordination between conservation and usage must be facilitated with consensus built between stakeholders based on scientific grounds.
Against backdrops as stated above, this Conservation Management Plan has been prepared based on deliberation of the Conservation Management Review Committee as comprehensive guidance for implementing a series of initiatives in a systematic manner, making clear how national forests in the Amami Islands should be conserved and managed, with their distinctive features taken into consideration.

2. Basic Matters Related to Conservation and Management

The Amami Islands Forest Ecosystem Reserves have been designated, as a part of national forest conservation and management activities, for the purpose of bequeathing their unique forest ecosystems. These designated reserves are divided into "Preservation Zones" and "Conservation and Utilization Zones." In Preservation Zones, forests must be left with no work done for them by humans, except for operations essential for conservation and rehabilitation. Conservation and Utilization Zones must serve as the buffer for Preservation Zones. The total area of Preservation Zones is 2,253 hectares, and the total area of Conservation and Utilization Zones is 2,567 hectares.

(1) Preservation Zones

(ⅰ) Forest management

In Preservation Zones, forest ecosystems must be preserved in a rigorous manner, and in principle left with no work done for them by humans, going through natural transition.

Note, however, the following actions can be taken notwithstanding the description above, when needed to maintain forest ecosystems:

(A) Actions that are approved as being necessary for academic research, or other public welfare reasons, such as monitoring and use of biological genetic resources;
(B) The following actions that are carried out as emergency measures:
  (a) Extinction of forest fires, etc.; and
  (b) Implementation of restoration measures after disasters such as large-scale forest collapse and mudslides;
(C) Installation of signs and other similar objects;
(D) Actions recognized based on scientific knowledge as necessary to conserve and/or restore indigenous biodiversity and forest ecosystems (Ex.: Actions carried out to lead artificial forests lying scattered in a Preservation Zone into becoming natural forests there)
(E) Other actions that conform to relevant laws and ordinances

In addition, to rigorously preserve forest ecosystems, surveillance systems must be developed, while building cooperation with stakeholders.

(ⅱ) Forest use

Preservation Zones may be used for acts regarded as necessary for public benefit reasons, such as academic research related to ecology investigation and use of biological genetic resources.

(2) Conservation and Utilization Zone

(ⅰ) Forest management

Conservation and Utilization Zones must have roles to play as buffers to prevent any change in external environments from giving direct impact on forest ecosystems in a Preservation Zone.

In any forest in the Conservation and Utilization Zones, no forest operation should be performed for the purpose of timber production, provided, however, that cedar stands that should be conserved and managed in an integrated manner to preserve natural forests may undergo operations for growing multi-storied forests, among others, so that they will be transformed into natural forests in the future.

Note, however, the following actions can be taken notwithstanding the description above:

(A) The same forest management procedures as applied to Preservation Zones;
(B) Environmental education activities inside a forest that are approved as necessary;
(C) Conservation works and other ancillary works that are necessary for national land conservation; and
(D) Logging and removal of dead or damaged trees;

(ⅱ) Forest use

Conservation and Utilization Zones must in principle be used in the same manner as Preservation Zones, while they may be used for educational purposes in a manner relevant to their natural conditions to the extent that the purpose of their designation as Conservation of Utilization Zone may not be compromised. Facilities needed for such use may also be constructed or installed there.

(3) Other national forests

Specific Animal Habitat Protected Forests and other national forests lying adjacent to the Amami Islands Forest Ecosystem Reserve must be administered and managed with full attention paid to conservation and management of the Reserve, with the greatest possible effort exerted to conserve indigenous wildlife species and other natural conditions.

(4) Forests along mountain streams

The Islands, despite their relatively small water catchment areas, have mountain stream areas with riversides that are regularly inundated with frequent rains. Quite humid at all times there, indigenous and rare dwarf plant groups, such as kobano-amami-fuyuichigo strawberry (*Rubus amamianus var. minor Hatus*), amami-sumire violet (*Viola amamiana*), amami-katabami oxalis (*Oxalis exilis A.Cunn*), are specifically distributed and differentiated in those mountain stream areas. High humidity environment is always maintained in these areas, so that trees are covered with mosses, lichens, orchids, and vine plants in

high density. Along mountain streams, therefore, Preservation, and Conservation and Utilization Zones, as well as other national forests must all be administered with special care.

(5) Approach to Forest Conservation and Management, and Important Matters

The forest ecosystems in the Amami Islands cannot be protected without cooperation with people living there, tourists and other users of the forests, and agencies concerned, among others. Based on the approach to forest management and forest use as described above in (1) through (4), they must be administered in an adaptive manner through work for driving away alien species and regular monitoring to keep impact of human activities to the lowest possible level. With the long-term target set as turning the Islands into a place with rich forest ecosystems that foster biodiversity, which should include endemic species and other rare wildlife, policy measures necessary and relevant to features of each island must be implemented with cooperation with agencies concerned and other stakeholders.

Below are examples of issues that monitoring surveys and other operations should especially focus on:

(ⅰ) Survey of forests and vegetation, etc. (tree census, vegetation survey, fixed-point photo shooting, etc.);
(ⅱ) Survey of habitation of wildlife (rare and/or endemic species, such as Amami-no-kurousagi hare, etc.);
(ⅲ) Survey of alien species (survey of state of invasion, evaluation of impact on rare species, prioritization between countermeasures);
(ⅳ) Survey of actual use (No. of users, ways of use, places used, etc.);
(ⅴ) Survey of weather, etc. (temperature, humidity, etc.);

3. Specific Matters Related to Conservation and Management

(1) Common Approaches to Management and Usage for the Islands, and Important Matters

Amami-oshima and Tokuno-shima are inhabited by many precious wildlife species, such as Amami-no-kurousagi hare, designated by the national government as Nationally Endangered Species of Wild Fauna or Flora and Special Natural Monuments, and Amami-togenezumi spiny rat (Tokudaia osimensis) and Tokuno-shima spiny rat (Tokudaia osimensis), both designated as Natural Monuments.

For some of the wildlife, it is feared that habitat conditions are deteriorating with illegal digging of rare orchids or other plants, poaching for insects, invasion into forests of goats, dogs, and cats that have gone wild (feral goats, dogs, and cats), and alien species, and traffic accidents that claim lives of Amami-no-kurousagi hares, frogs, and other animals prowling on the ground. It is also feared that in Kinsakubaru and some other areas, increased tourists and concentrated visits may end up with forest ecosystems being overused, and consequently deteriorated.

To preserve precious forest ecosystems in Amami-oshima and Tokuno-shima, work must be done in cooperation with organizations concerned to limit impact of human activities on them to the lowest possible

level by performing regular monitoring of impact of alien species and utilization, so that any findings will be evaluated and reviewed to implement necessary measures ("adaptive administration"). For other important issues, such as eradication of exotic animals, appropriate husbandry of reared animals, and countermeasures against illegal digging and poaching of rare orchids and insects, cooperation must be built between relevant administrative agencies, landowners, and residents to carry out enhanced surveillance, monitoring of rare species, and other appropriate solutions under the prefectural ordinance for protection of rare species or other regulations.

Around the tops of Mt. Yuwan-dake, Mt. Amagi-dake, and Mt. Inokawa-dake lies vegetation similar to the mist forest, serving as important habitat for rare plants. As these environments may be sensitive to climate change, shifts in vegetation and weather conditions must be monitored over years to take measures for adaptation when necessary.

When used for tourism, areas that expect a large number of visitors must be surveyed to recognize current conditions for preventing excessive use from giving damage to precious natural environments, and taking necessary measures in cooperation with agencies concerned and other stakeholders.

Specific measures must be planned and implemented based on the policy of the Conservation Management Plan, in coordination with agencies concerned.

(2) Points to Note on Management and Use in Individual Islands

(ⅰ) Amami-oshima

In Amami-oshima, the Forest Ecosystem Reserve is composed of three small stretches of land, Kinsakubaru, Kamiya, and Hatsuno, separated between them and surrounded by private forests. They are relatively easy to access from urban areas, with forest roads running through each of them down the middle. That leads to worries about excessive use of the Reserve for tourism that may burden natural environments there, and illegal digging and/or poaching of rare species, such as orchids and other plants, and insects. To address these potential problems, effort must be exerted to enhance monitoring surveys and surveillance activities in cooperation with agencies concerned, and conduct public relations and awareness raising activities for local people and other stakeholders. Artificial forests of cedar and stands of Ryukyu-matsu pine must be surveyed to recognize the state of vegetation transition and take appropriate measures when necessary.

(ⅱ) Tokuno-shima

In Tokuno-shima, the Forest Ecosystem Reserve is composed of two stretches of land, Northern and Middle Tokuno-shima, separated between them and surrounded by private forests, with sugar cane fields and other sites lying close to them at some parts. Both have forest roads going through them, but vastness of the stretches leaves some parts less accessible or conspicuous. The forests are inhabited by many endemic and rare species, such as Amamino-kurousagi hare, and it is feared that illegal digging and poaching of rare species, illegal dumping, and other acts may give harmful impact on the forest ecosystems. To address these potential problems, effort must be exerted to enhance monitoring surveys and surveillance activities

in cooperation with agencies concerned, and conduct public relations and awareness raising activities for local people and other stakeholders.

4. Specific Challenges for Forest Conservation and Management

(1) Issues Related to Management

(ⅰ) Protection of Rare and Endemic Species

For Amami-oshima and Tokuno-shima, what is important is measures to address illegal digging of rare orchids or other plants, poaching for insects, invasion into forests of goats, dogs, and cats that have gone wild (feral goats, dogs, and cats), and alien species, and traffic accidents that claim lives of Amami-no-kurousagi hares, frogs, and other animals prowling on the ground. For that purpose, effort must be exerted to conserve and manage forest environments, so that rare and endemic species will continue living and growing there, and patrol and monitoring surveys must be conducted to recognize habitat conditions and the current state of forests, and measures must be taken for protection and conservation when necessary. As measures to prevent illegal digging and poaching, a legal framework of regulation has been built with local ordinances with a view to enhanced deterrent. Further effort must be taken for raising awareness of compliance, facilitating detection and reporting of illegal acts, and enhancing the setup for surveillance and crackdown in cooperation with agencies concerned and other stakeholders.

(ⅱ) Measures to control alien species

In Amami-oshima and Tokuno-shima, several exotic plants (trees and bamboos) - shinaabura-giri paulownia (*Vernicia cordata*), sennenboku palm (*Cordyline fruticosa*), futomomo myrtle (*Myrtaceae*), kusunoki camphor tree (*Cinnamomum camphora*), and horaichiku bamboo *(Bambusa multiplex*) — are identified. Many alien herbs are also identified there, and some of them - America-hamaguruma creeping-oxeyes (*phagneticola trilobata*), ookinkei-giku tickseed (*Coreopsis lanceolata*), botan-ukikusa water lettuce (*Pistia stratiotes*), and hotei-aoi water hyacinth (*Eichhornia crassipes*) - are designated as Specified or Monitored Foreign Organisms. Among introduced animals identified there are fuiri mongoose (*Herpestes auropunctatus*), inoshishi wild boar (*Sus scrofa*), feral goat, dog, and cat, suppon soft-shelled turtle (*Pelodiscus sinensis*), ushi-gaeru frog (*Rana catesbeiana*), and haiirogoke-gumo widow spider (*Latrodectus geometricus*).

In the Forest Ecosystem Reserve, most of the alien plants have so far invaded only into gaps or other places altered by humans, such as those along forest roads, with only a few having taken hold inside forests. Measures to control alien species must be implemented with a view to reducing their impact on native species. For that purpose, surveillance must be conducted in cooperation with agencies concerned to keep watch on further invasion into natural environments. For species that have already come and settled, measures to eradicate them, or to control in some other way, must be carried out according to the order of priority set between them based on their impact on natural environments and ecosystem services.

Eradication or any other solution must be carried out with a well-defined, realistic target set for it, while reviews must also be performed along the process to verify its effectiveness. Care must also be paid to the possibility that eradication of a specific alien species might cause increases of others.

To prevent people from bringing any alien species into the Forest Ecosystem Reserve or other places in the course of their activities, intentionally or by accident, public relations and awareness raising activities must also be performed in cooperation with agencies concerned.

(iii) Treatment of artificial cedar forests

The Amami Islands Forest Ecosystem Reserve has about 130 hectors of artificial cedar forests lying in it. To restore them into natural vegetation, forest management, which should also include maintenance of habitat environments for rare wildlife, must be implement for the Reserve, which, for that purpose, must be divided into, for instance, areas shown below, with locations of the forests, composition of trees species, geographic distribution of rare wildlife, expected time frame needed for restoration, and other relevant factors taken into account in a comprehensive manner:

(A) Area of forests that should be restored through forest operations; and

(B) Area of forests that should be left going through natural transition;

Specific ways of restoration must in principle be picked out among methods that make the best of the potential nature itself has for restoration, instead of artificial sowing or planting. When restoration is difficult to achieve in such a manner, some appropriate measures must be considered to facilitate restoration.

A restoration method adopted for each area must be reviewed in model districts for that purpose by examining transition of vegetation after operations, habitation of endangered species, and other conditions. For the review, experts must be consulted.

(iv) Measures to control pests

Pine weevils, which harm Ryukyu-matsu pine trees, must be eradicated, or trees damaged by the insect must be cut down, or other necessary measures must be taken to prevent damage from further spreading and/or damaged trees from helping cause other disasters. Once such steps are completed, damaged sites must be left going through natural transition, while monitoring surveys or other inspections must be carried out for places inhabited by rare species which it is feared have been impacted by the damage or those conspicuously invaded by alien species as a result of the damage, to take additional measures for them when necessary. Monitoring surveys or other inspections must also be carried out on damage caused by other pests, such as kashino-nagakikuimushi wood borer (*Platypus quercivorus*) to take action when necessary.

(v) Conservation of water resources

The Amami Islands, despite frequent typhoons passing through and a large amount of precipitation, are poor in water-retaining capacity, which makes the Forest Ecosystem Reserve all the more important for functions it has to perform in water conservation and forest disaster prevention. Islands characteristically

give the highest priority to conservation of water resources, and for Amami as well, forests lying around rivers must be included in initiatives to be carried out for that purpose.

(2) Issues Related to Usage

The Amami Islands Forest Ecosystem Reserve is used for many activities, including recreation, environmental education, commerce, research and survey, and regional development and succession of tradition. Impact of the usage on indigenous ecosystems there must be mitigated with measures that should be adopted and implemented in cooperation with agencies concerned to keep a good balance between usage and protection. Especially great care must be paid when the Reserve is used for environmental education, research and survey, and regional development and succession of tradition, among others, to avoid any harmful impact on rare wildlife species or forest ecosystems.

(ⅰ) Usage by ordinary people

From the viewpoint of mitigating impact on natural environments and securing safety, tourists and other ordinary people coming there to climb a mountain or for any other purpose must use designated pathways only, which must be a public road or other land under the control of an identified administrator, with lease or other necessary procedures completed for that purpose.

(ⅱ) Usage for research and survey

Researchers and any other people who would like to enter a forest there for research or survey must file an Application for Entrance into National Forests and other necessary documents for permission before going there, and once allowed to, they must in principle go on pathways only up to the destination, and conduct research and survey according to conditions with which the permission has been granted.

(ⅲ) Usage for forest environment education

Those who would like to enter a forest there for forest environment education must file an Application for Entrance into National Forests and other necessary documents for permission before going there, and once allowed to doing so, they must go on pathways only. In Conservation and Utilization Zones, however, they may use routes other than pathways, only when circumstances compel it, according to conditions for the permission. (In Preservation Zones, they are not allowed to go out of pathways.)

(ⅳ) Usage for regional development and succession of tradition

Entrance into forests for regional development and succession of tradition, including hunting, is allowed in principle only when they are located in a Conservation and Utilization Zone, and those allowed to enter must, despite no specific route designated for them, act according to conditions with which the permission has been granted.

Those entering a forest for hunting or other similar purposes must file a Forest Entrance Notification, and carry a Receipt for it in their vehicle or in other appropriate manners. Those who would like to enter a forest for regional development and succession of tradition other than hunting must file an Application for

Entrance into National Forests and other necessary documents for permission, and may go there only when successfully permitted to.

(ⅴ) Entrance into forests in case of emergency

No restriction is placed on routes used to enter forests in case of emergency, such as searching for victims of an accident.

(ⅵ) Others

Bonfires are prohibited in the entire area of the Forest Ecosystem Reserve. However, stoves or other burners that use no naked flame on the ground may be used only in places with no surface vegetation or fallen leaves piled on the ground, and therefore there is no fear of a forest fire occurring.

5. Promotion Systems

(1) Review Committee

Issues related to implementation or review of the Conservation Management Plan for the Amami Islands Forest Ecosystem Reserve must be deliberated by the Review Committee for Conservation Management of the Amami Islands Forest Ecosystem Reserve, set up according to the Guidelines for the Establishment of the Review Committee for Conservation Management of the Amami Islands Forest Ecosystem Reserve.

(2) Monitoring Survey and Patrol

For conservation of forest ecosystems, monitoring surveys, patrols, and other necessary activities must be conducted in a systematic manner. Plans for monitoring surveys and other activities, and their findings, must be reviewed by panels of experts or other relevant persons, so that conservation and management will be performed in an appropriate manner. Monitoring surveys and other activities must be conducted in cooperation with agencies concerned, research organizations, and volunteers, among others, and/or in other productive ways, and data and information obtained there must be shared and stored in an appropriate manner to keep them available into the future.

Among other tasks that must also be performed in cooperation with agencies concerned and other stakeholders are patrol for examining the state of habitation of Amamino-kurousagi hares and other rare wildlife species, maintenance and improvement of their habitat environments, and patrol for preventing illegal digging of rare species.

(3) Public Relations and Awareness Raising

For collecting and managing a range of data, and making available outlines of survey results, achievements of initiatives, and other information for ordinary people to raise their awareness, work must be performed, as part of public relation, to install sings and markings, issue PR magazines, carry the information on websites, and provide forest environment education or other opportunities in cooperation with agencies concerned and other stakeholders.

Information about locations of rare species must be managed in an appropriate manner for preventing illegal digging and/or poaching by, for instance, keeping it secret in principle.

(4) Cooperation with Agencies Concerned, Volunteers, and Other Stakeholders

Conservation and management of the Forest Ecosystem Reserve requires cooperation with government agencies concerned, research institutions, local organizations, and other stakeholders as an essential element. Closer cooperation must be developed with them, and volunteers must also be offered opportunities to play active roles in, for instance, patrols to guard wildlife species.

Cooperation must be offered to the Council for Promotion of Ecotourism in the Amami Islands in their effort to build and promote an Eco-tour Guide Qualification System they are preparing.

(5) Alignment with the World Heritage Conservation and Management Plan

Now that Amami-oshima and Tokuno-shima are listed as a World Natural Heritage candidate site, measures for conservation and management of the islands are being considered. They must be implemented in coordination with this Plan, as well as the Convention on Biological Diversity (Aichi Targets), the Montreal Process, and other international frameworks, and in cooperation with agencies concerned.

6. Others

(1) Continuity to be secured between forest ecosystems

In the Amami Islands, national forests are each small in size, lying scattered, and one of the challenges to be addressed for the islands is securing continuity between forest ecosystems there. For that purpose, coordination must be promoted between national forests in Preservation Zones and private forests lying adjacent to them in forest conservation management. Specific Animal Habitat Protected Forests surrounded by private forests which turn out to have been managed at a level similar to that of Forest Ecosystem Reserves must be designated as Forest Ecosystem Reserves after prescribed procedures for designation have been completed.

4-8 Conservation Management Plan for the Iriomote-jima Island Forest Ecosystem Reserve (Excerpts)

Introduction

Many wild ecosystems and precious wildlife habitats still remain in national forests. As part of national forestry business, these precious forests are designated as protected forests and managed in accordance with the changes in the natural environment and also in accordance with the intention for the designation. When necessary, vegetation restoration measures are implemented or protective fences are installed in order to appropriately conserve and manage the precious natural environment.

Iriomote-jima Island is covered by national forests in some 90 percent of its surface, and they are composed mainly of mangroves, as well as sudajii chinquapin (*Castanopsis sieboldii*), Okinawa-urajirogashi oak (*Quercus miyagii*), and tabunoki camphor tree (*Machilus thunbergii*), vegetation of continental relict: temperate zone plants, and tropical plants growing side by side. Dotted with forests quite similar to primeval woods in terms of the combination of species found in the entire plant community there and quite valuable from the scientific standpoint, the Urauchi-gawa River basin (excluding Long-Term Profit-Sharing Afforestation districts and farmland, etc.) and the Nakama-gawa River basin, as well as the northern precipice zone stretching from around Mt. Komi-dake to Urauchi, and an area surrounding Haimi Beach were designated in March 1991 as a Forest Ecosystem Reserve after deliberation by the Reserve Designation Committee. Some 20 years after the designation, secondary forests, with no or little work done for them by humans, have also grown out of the Reserve. People living on the island traditionally hunt wild boars and collect wild vegetables in national forests there as part of their livelihood. In recent years, areas lying along the Urauchi-gawa and Nakama-gawa Rivers, both flowing through the Ecosystem Reservation, and other smaller rivers running out of the Reserve, are visited for eco-tours. With these changes seen in conditions of the Island, the Iriomote-jima Island Forest Ecosystem Reserve Designation Committee was set up in January 2009, and met several times to deliberate what should be done not only to conserve primeval natural forests but also to pay good attention to securing integrated management of protected forests on small islands. As a result, the existing Forest Ecosystem Reserve was extended in area in 2012 and 2015. The two extensions were intended to maintain and conserve primeval natural forests, and woods rich in natural features, as well as habitats for rare species, which cover almost all the national forests in the island, except Long-Term Profit-Sharing Afforestation districts and farmland, etc., as Forest Ecosystem Reserve in good balance achieved with wild boar hunting and wild vegetable collection by local people, forest environment education, and use for forest recreation, which should be conserved and managed.

Iriomote-jima Island belongs to the Ryukyu Islands, which were recognized in 2003 by the Review Committee on Candidate Natural Sites for Nomination to the World Heritage List of Japan as one of the regions that are highly likely to satisfy criteria for registration and conditions of integrity set by the World Heritage Convention, as they have unique geological history in their relation with the continent, and hold a

great diversity of especially indigenous semitropical forest and coral reef ecosystems, as well as offer wonderful scenery both on the land and in the sea, and are inhabited by endangered species. In December 2013, the Science Committee for the Amami-Okinawa World Natural Heritage Candidate decided to recommend four islands (areas), which include Iriomote-jima, as candidate sites. Parties concerned are expected to address challenges that must be solved for their registration. For this area, it is feared that human activities and other factors may give impact on ecosystems there, and coordination between conservation and usage must be facilitated with consensus built among stakeholders based on scientific grounds.

Against backdrops as stated above, the Conservation Management Plan for the Iriomote-jima Island Forest Ecosystem Reserve has been prepared based on the deliberation of the Review Committee for Conservation Management of the Iriomote-jima Island Forest Ecosystem Reserve as comprehensive guidance for implementing a series of initiatives in a systematic manner, making clear how national forests in Iriomote-jima Island should be conserved and managed, with their distinctive features taken into consideration.

2. Basic Matters Related to Conservation and Management

The Iriomote-jima Island Forest Ecosystem Reserves have been designated, as a part of national forest conservation and management activities, for the purpose of bequeathing their unique forest ecosystems. These designated reserves are divided into "Preservation Zones" and "Conservation and Utilization Zones." In Preservation Zones, forests must be left with no work done for them by humans, except for operations essential for conservation and rehabilitation. Conservation and Utilization Zones must be the buffer for Preservation Zones. The Forest Ecosystem Reserves stretch over 22,367 hectors, of which Preservation Zones and Conservation and Utilization Zones cover 9,999 hectors and 12,368 hectors, respectively.

(1) Approach to Forest Conservation and Management, and Important Matters

The forest ecosystems on Iriomote-jima Island cannot be handed down to posterity without understanding of, and cooperation with, people living there, tourists and other users of the forests, and agencies concerned, among others. Based on approaches to management and usage stated below in sections 2, 3, and 4, work must be done to limit impact of human activities on them to the lowest possible level by performing regular monitoring of impact of alien species and utilization, so that any findings will be evaluated and reviewed to implement necessary measures ("adaptive administration"). Environmental education must also be promoted to help people better understand how precious forest ecosystems are.

The long-term target must be set as turning the Island into a place where forest ecosystems will be sustainable into the future with great biodiversity, which should include endemic species and other rare wildlife. For that purpose, measures that are necessary and relevant to each site must be implemented in cooperation with agencies concerned and other stakeholders.

(2) Preservation Zones

(ⅰ) Forest management

In Preservation Zones, forest ecosystems must be preserved in a rigorous manner, and in principle left with no work done for them by humans, going through natural transition.

Note, however, the following actions can be taken notwithstanding the description above, when needed to maintain forest ecosystems:

(A) Monitoring and other research and survey
(B) The following actions that are carried out as emergency measures for extraordinary disasters:
  (a) Extinction of forest fires, etc.; and
  (b) Implementation of restoration measures after disasters such as large-scale forest collapse and mudslides;
(C) Installation of signs and other similar objects;
(D) Actions recognized based on scientific knowledge as necessary to conserve and/or restore indigenous biodiversity and forest ecosystems
(E) Other actions that conform to relevant laws and ordinances

(ⅱ) Forest use

Preservation Zones may be used only for activities listed below:

(A) Actions that are approved as being necessary for public welfare reasons, such as those performed in relation to usage of biological genetic resources for academic research;
(B) Usage, maintenance, and repair of existing pathways, etc.; and
(C) Installation of signs and other similar objects for actions mentioned in (A) and (B);

(3) Conservation and Utilization Zone

(ⅰ) Forest management

Conservation and Utilization Zones must have roles to play as buffer to prevent any change in external environments from giving direct impact on forests in a Preservation Zone.

In any forest in the Conservation and Utilization Zones, no forest operation should be performed for the purpose of timber production, Artificial forests must be treated, so that they will be transformed into natural forests in the future.

Note, however, the following actions can be taken notwithstanding the description above:
(A) The same forest management procedures as applied to Preservation Zones;
(B) Logging and removal of dead or damaged trees;

(ⅱ) Forest use

Conservation and Utilization Zones may be used only for acts listed below:

(A) The same acts for use as those allowed in Preservation Zones;

(B) The following acts, when performed to the degree that they avoid going against the purpose of designation as Conservation and Utilization Zone;

  (a) Forest environment education, and forest recreation;

  (b) Construction of roads, buildings, and other facilities needed for acts mentioned in (a); and

  (c) Wild boar hunting and wild vegetable collection performed by local people;

(4) Other national forests

Other national forests lying adjacent to the Iriomote-jima Island Forest Ecosystem Reserve must be administered and managed with full attention paid to conservation and management of the Reserve, with the greatest possible effort exerted to conserve indigenous wildlife species and other natural conditions. For Long-Term Profit-Sharing Afforestation districts managed under contracts (Forest Compartment No. 132 - No. 134, and No. 139 - No. 142), coordination must be secured with contracting parties through careful communication with them, so that they will be managed and operated with full attention paid to conservation and management of the Forest Ecosystem Reserve.

3. Specific Matters Related to Conservation and Management

(1) Issues Related to Management

(ⅰ) Issues Related to Rare and Endemic Spices

Iriomote-jima Island is inhabited by many precious wildlife species, such as Iriomote-yamaneko wildcat (*Prionailurus bengalensis iriomotensis*), designated by the national government as a Nationally Endangered Species of Wild Fauna or Flora and Special Natural Monument.

For some of the wildlife, it is feared that habitat conditions are deteriorating with illegal digging of rare plants, and traffic accidents of animals, among others.

For such rare and endemic spices, measures stated below must be taken.

(A) For plants

For rare and endemic species, patrol and monitoring surveys must be conducted to recognize conditions of their habitats, and take measures for protection and conservation when necessary.

To prevent illegal digging of rare and endemic species, surveillance activities and other measures must be performed in cooperation with agencies concerned.

(B) For animals

For Iriomote-yamaneko wildcat and other rare and endemic species, patrol and monitoring surveys must be conducted to recognize conditions of their habitats, and take forest maintenance and other measures for improving and/or recovering the habitats, when necessary, in cooperation with agencies concerned.

(C) Treatment of the former Heimi Forest for Preserving Genetic Resources of Forest Trees

The former Heimi Forest for Preserving Genetic Resources of Forest Trees was designated as protected forest in fiscal 1992 to preserve genetic resources of Ryukyu-matsu pine (*Pinus luchuensis*) there, before being delisted in fiscal 2012 and consolidated into the Iriomote-jima Island Forest Ecosystem Reserve.

In the district, according to the purpose set when it was designated as protected forest, adan screw pines (*Pandanus odoratissimus*) and broad-leaved trees, among others, have been cut down to preserve Ryuku-matsu pines and their habitats, with Ryukyu-matsu stands kept in relatively good conditions.

Forest operations must be continued in the region as far as they are necessary to preserve genetic resources of Ryukyu-matsu.

(ⅱ) Issues Related to Alien Species

(A) Principles for Measures to Control Alien Species in the Iriomote-jima Island Forest Ecosystem Reserve

To protect forest ecosystems on Iriomote-jima Island, measures must be taken to mitigate impact on them from invasion of new alien species that threaten habitat environments of native ones, replacement of the latter with exotic species that have invaded so far, and crossing between them, among others. For that purpose, introduction of new species or individuals must be prevented in cooperation with agencies concerned, with continued surveillance of invasion into natural environments from outside the Island. Any alien species detected at an earlier stage of invasion must be eradicated, or controlled with other measures. For those which have already taken hold, their impact on natural environments and/or ecosystem services must be evaluated to fix an order of priority between possible measures that should be taken.

Eradication or any other solution must be carried out with a well-defined, realistic target set for it, while reviews must also be performed along the process to verify their effectiveness. Care must also be paid to the possibility that eradication of a specific alien species might cause increases of others.

To prevent people from bringing any alien species into the Forest Ecosystem Reserve or other places in the course of their activities, on purpose or by accident, public relations and awareness raising activities must also be performed in cooperation with agencies concerned.

(B) Alien plants identified on Iriomote-jima Island

Among alien plants that have been identified so far on the island are sousiju acacia (*Acacia confusa Merr*), America hamaguruma daisy (*Sphagneticola trilobata*), sendangusa Spanish needles (*Bidens*), ginnemu leadtree (*Leucaena leucocephala*), shurogayatsuri papyrus (*Cyperus alternifolius L.*), tokusabamokumaou sheoak (*Casuarina equisetifolia*), and tsuruhiyodori bitter vine (*Mikania micrantha*).

Most of the alien plant species that have been found there grow only in and around places developed by humans, such as roads, sites prepared for development, and abandoned farmland, and only a few have

invaded into natural environments. Invasion of tokusabamokumaou sheoaks, ginnemu leadtrees, and America hamaguruma daisies into some parts of the Forest Ecosystem Reserve has been confirmed.

(C) Alien animals identified on Iriomote-jima Island

Forest areas are inhabited by inobuta boars (cross between wild and domestic boars) and feral cats. In rivers, kadayashi mosquitofish (*Gambusia affinis*), guppy (*Poecilia reticulata*), tilapia, and carp (*Cyprinus carpio*) are identified. Among species detected in and around paddy fields and settlements are sukumiringogai applesnail (*Pomacea canaliculata*) and Africa-maimai snail (*Achatina fulica*). For o-hikigaeru toad (*Rhinella marina*) and shiro-agogaeru toad (*Polypedates leucomystax*), which have both settled on Ishigaki-jima Island, there is a great risk that they may be brought to Iriomote-jima Island when they happen to lie in materials delivered to the island. Focusing on prevention of their introduction from outside, patrols have been conducted over a broad area of the island. However, in 2015, introduction of shiro-agogaeru toads was confirmed. To prevent their reproduction and settlement on the island, early-stage actions have got started quickly. Shiro-agogaeru toads spawn in the same places as Yaeyama-aogaeru toads (*Rhacophorus owstoni*), a source of worry about possible competition between them.

(2) Issues Related to Usage

The Iriomote-jima Island Forest Ecosystem Reserve is used for a range of activities, such as recreation, environment education, commerce, and research and survey, and it is feared that in some areas, such as those along the Hinai-gawa River, increased tourists and concentrated visits may end up with forest ecosystems being overused, and consequently deteriorated. Some measures must be introduced to mitigate impact of use of the forests on their ecosystems, and a good balance must be established between usage and protection in cooperation with agencies concerned to maintain and recover the forest ecosystems.

(ⅰ) Pathways and other facilities offered to ordinary people for their usage

(A) Preservation Zones

(a) Mountain trails, etc.

Ordinary people, including climbers and local residents, may only use roads and other facilities under the control of an identified administrator, with lease or other necessary procedures completed for that purpose. For safety reasons, ordinary climbers or other users should desirably be escorted by a person with a certain level of expertise on conservation of the Iriomote-jima Island Forest Ecosystem Reserve, such as a nature guide.

In principle, no tent may be set up in the Reserve. This may not apply, however, in case of emergency. For safety of users and necessity for search operations, public relations efforts must be made to offer information about sites that are relatively safe and easy to search, and therefore can serve as evacuation spots in case of emergency.

(b) Other areas

The other areas may not be used by ordinary people, in principle.

(B) Conservation and Utilization Zone

(a) Mountain trails, etc.

Ordinary people, including climbers and local residents, may use roads and other facilities under the control of an identified administrator, with lease or other necessary procedures completed for that purpose, as well as existing routes that have been used local residents or others only when the following conditions are satisfied:

- That the route falls under neither of the two below:
  (i) A site where it is feared that rare species may be impacted by any usage; or
  (ii) A site with danger of collapse or any similar risk.

For safety reasons, ordinary climbers or other users should desirably be escorted by a person with a certain level of expertise on conservation of the Iriomote-jima Island forest ecosystems, such as a nature guide.

In principle, tents must be set up only in designated sites. This may not apply, however, in case of emergency.

(b) Other areas

Ordinary climbers or other users entering the Iriomote-jima Island Forest Ecosystem Reserve, in principle, must be escorted by a person with a certain level of expertise on conservation of the Reserve, such as a nature guide.

Local residents may hunt wild boars, collect wild vegetables, and conduct other acts needed for succession of traditional culture and promotion of local industry. However, rare species designated as Nationally Endangered Species of Wild Fauna or Flora or Natural Monument must not be collected.

(ⅱ) Usage for research and survey

Researchers or other people who would like to enter a forest for research and survey purposes must file an Application for Research of Protected Forests for permission, and may go there only when successfully permitted to. In principle, they must walk on pathways to reach a destination. Research must be conducted according to terms and conditions of the permission, with care paid to avoid any harmful impact on forest ecosystems there.

(ⅲ) Public Relations for Usage Rules

Public relations must be conducted in an effective manner to help users recognize locations of Preservation Zones and Conservation and Utilization Zones in the Forest Ecosystem Reserve, and rules for using them in cooperation with agencies concerned. As part of the effort for public relations, location maps and other necessary facilities must be installed, for instance, along crossing roads.

(ⅳ) Others

Bonfires are prohibited in the entire area of the Forest Ecosystem Reserve. However, only in places with no understory vegetation, including tent or evacuation sites, burners, including lanterns and heaters, that use no naked flame may be used, with care paid to danger of forest fire.

4. Promotion Systems

(1) Review Committee

Issues related to implementation or review of the Conservation Management Plan for the Iriomote-jima Island Forest Ecosystem Reserve must be deliberated by the Review Committee for Conservation Management of the Iriomte-jima Island Forest Ecosystem Reserve, set up according to the Guidelines for the Establishment of the Review Committee for Conservation Management of the Iriomote-jima Island Forest Ecosystem Reserve.

(2) Monitoring Survey, etc.

For conservation of forest ecosystems, monitoring surveys, and other necessary activities must be conducted in a systematic manner. Plans for monitoring surveys and other activities, and findings of them, must be reviewed by panels of experts or other relevant meetings, so that conservation and management will be performed in an appropriate manner. Effort must be exerted to make information on findings of monitoring surveys or other activities widely available. Monitoring surveys and other activities must be conducted in an effective manner in cooperation with agencies concerned and volunteers, among others.

Below are examples of issues that monitoring surveys and other operations should especially focus on:

(ⅰ) Survey of forests and vegetation (stands and vegetation survey, etc.);
(ⅱ) Survey of habitation of wildlife (rare and/or endemic species, such as Iriomote-yamaneko wildcat, etc.);
(ⅲ) Survey of alien species (survey of state of habitation, evaluation of impact on rare species, prioritization between countermeasures, etc.);
(ⅳ) Survey of actual use (No. of users, ways of use, places used, impact on vegetation, etc.);

Among other tasks that must also be performed in cooperation with agencies concerned and other stakeholders are patrol for examining the state of habitation of Iriomote-yamaneko wildcat and other rare wildlife species, and patrol for preventing illegal digging or collecting of rare species.

(3) Public Relations and Awareness Raising

For collecting and managing a range of information on forest ecosystems in Iriomote-jima Island, and making it publicly available, when necessary, or disseminating it among people for raising their awareness, work must be performed to install signs and markings, issue PR magazines, and carry the information on websites, among others, in cooperation with agencies concerned and other stakeholders. For public

relations, arrangements must be made to render contact points easier to find and help users readily access to a variety of new information.

(4) Cooperation with Agencies Concerned, and Other Stakeholders

Closer cooperation must be developed with NPOs and other stakeholders, and volunteers must also be offered opportunities to play active roles in, for instance, patrols to guard wildlife species.

(5) Alignment with the World Heritage Conservation and Management Plan

Now that Iriomote-jima Island is listed as World Natural Heritage candidate site, measures for conservation and management of the islands are being considered. They must be implemented in coordination with this Plan and in cooperation with agencies concerned. This Plan must be reviewed and modified when necessary, based on administration policy for World Natural Heritage and conditions of the Reserve.

4-9 Protected Forests and Green Corridors: Outlines of Their Position among Japan's National Forests

1. Japan's National Forests: Outline

Japan, a land of 37.79 million hectares, has forests of 25.08 million hectares, covering about two-thirds of the national land area, ranking one of the most-forested countries in the world. Forestry Agency administers and manages 7.58 million hectares of national forests, or about 20% of total national territory (37.79 million hectares), and about 30% of the entire forest area (25.08 million hectares). Broad areas of the national forests are located around mountainous backbones and reservoir areas, and have important functions to perform for public benefit, such as soil loss prevention and watershed conservation. National forests also deliver a great diversity of ecosystems, both planted forests and primeval forests serving as habitats for a wide variety of wildlife, including rare species. Ecosystems formed in national forests, which serve in different forms, including satoyama (managed forests around human settlements), riparian forests, coastal forests, interact with other ecosystems, such as farmland, rivers, and the sea. As a core of the ecosystem network covering the entire national land, national forests hold a key position for conserving biodiversity there.

2. "Protected forests" and "Green corridors" among national forests

(i) Protected forest

For National Forest Management, parts of national forests that are precious as a core for biodiversity, such as primeval forests and habitats for rare wildlife, are designated as "protected forests."

As of April 2015, 855 sites, covering an area of 968,000 hectares, or 13 percent of the national forests, are designated as protected forests. In the World Natural Heritage sites located in Japan, Shiretoko, Shirakami-Sanchi, Ogasawara Islands, and Yakushima, almost the entire land surface, or 95 percent, is covered by national forests, most of which are designated as "Forest Ecosystem Reserve" a category of protected forests. Forest Ecosystem Reserve is recognized as a guarantee to preserve the value of World Natural Heritage sites into the future.

(ii) Green corridor

A "green corridor" is a network of areas set up around protected forests to secure the wildlife passageways connecting their habitats for promoting interaction between populations and conservating the diversity of species and genes. In green corridors, great care to environments of habitats for wildlife is to be paid. For instance, to secure raptors' better feeding and habitat environments, clearing open operations are conducted to dense forests, and/or deliberately reserve broad-leaved trees growing in artificial forests.

As of April 2015, 24 green corridors have been set up, covering an area of 583,000 hectares, eight percent of the entire national forest.

(iii) Protection and administration of protected forests and green corridors

For protected forests and green corridors, matters concerning policy for their protection and administration, designation, and modification are decided in reference to opinions provided by the

Committee for Administration of Protected Forests, a council of experts on the forests, the forestry industry, and the natural environment. Monitoring surveys are also conducted for protected forests and green corridors to observe and understand changes in the state of forest ecosystems and wildlife there, and capture useful data to review protection and administration policy and/or area coverage.

3. Protected forest system: Its history and revise

(i) History from inauguration to the present

The protected forest system was set up in 1915 with a notification issued by the Director General of the Mountains and Forests Bureau, the Ministry of Agriculture and Commerce, "On the Establishment of Protected Forest." It was an epoch-making initiative at that time as, in addition to protection forests, etc. having restrictions by law, the system required the government, the operator of national forest management, to work to protect forests valuable for scientific research, maintenance of scenic beauty, conservation of alpine plants, and other purposes. Most of the protected forests designated within 20 to 30 years after 1915, the year the system was set up, have also been designated as natural parks or natural monuments, systems that were set up later. The system of protected forest could be called a harbinger of protection area initiatives Japan has adopted so far. With growing interest in protection of the natural environment in the years that followed, and a policy turnaround made in 1973 for maintaining and enhancing functions national forests should perform for public benefit, the area of protected forests grew to 140,000 hectares in 1975. In 1989, some modifications were made to the system of protected forests, with the concept of "zone category" adopted as a tool for protection and administration, connecting to popularize the zoning idea of protected areas. The "Forest Ecosystem Reserve," one of the new zone categories introduced at that time, is also recognized as a mechanism working to preserve the value of the World Natural Heritage sites and UNESCO Biosphere Reserves into the future. Almost the entire land area of the World Natural Heritage sites in Japan, Shiretoko, Shirakami-Sanchi, Ogasawara Islands, and Yakushima, has been designated as protected forest.

As of April 2015, 855 sites covering an area of 968,000 hectares are designated as protected forests.

As seen above, the system of protected forest has gone through several modifications for adapting to the times to clarify which part of the forests should be developed and which should be protected. It has been serving as a model of forest management that enables forest management and conservation to go together, one of the successes it has achieved so far.

(ii) Revise of the protected forest system

The protected forest system has so far greatly served to protect primeval natural forests and precious wildlife. With growing interest of people in biodiversity and an accumulation of scientific knowledge built up through research, both remarkable in recent years, the Expert Council on the Protected Forest System and Other Initiatives, set up in June 2014, met several times by February 2015 to review and sort out issues concerning, among others, designation of protected forests, and challenges to address for protection and administration. The protected forest system was revised in September 2015 based on a report provided by the council.

As part of the revise, several new zone categories and biodiversity conservation methodologies, such as "restoration," were designated with arrangements to develop simpler and more efficient administration.

The categories of protected forests have been replaced by a more concise and effective classification, focusing on sustainability of forest ecosystems and populations there. The existing seven categories have been restructured to three: “Forest Ecosystem Reserve,” primeval natural forests representative of climates or forest zones observed in Japan; “Biocenosis Protection Forest,” for forests with an endemic biological community; and “Rare Population Protection Forest,” for forests necessary for inhabitation of rare wildlife.

New methodologies were adopted for treatment of protected forests in line with advancement of scientific knowledge on conservation of biodiversity. For Biocenosis Protection Forests, “restoration” has been admitted. For forests that have lost the ability of self-sustained rehabilitation, long-term forest operation is implemented according to opinions provided by experts based on their scientific knowledge to lead them to grow to be biocenoses composed basically of their potential natural vegetation. For Rare Population Protection Forests, when a specific population to be protected needs a group of other populations (meta-population) for its survival, and their habitats are located as enclaves around a core forest, they can be included as part of the protected forest for preserving and administering them all in an integrated manner. When any disturbance, such as temporary appearance of bare area, needs to take place through the process of transition, necessary forest operations can be conducted to create such environments.

The scheme for administration of protected forests has been made more efficient by consolidating several existing committees into the Committee for Administration of Protected Forests, a unified organization set up for each of the Regional Forest Offices, with subcommittees to be formed under it, when needed. Greater effectiveness and efficiency has been achieved in the monitoring of protected forests by allowing different intervals to be set between surveys, depending on their own conditions.

Seven categories of protected forests used before the reform, including “specific topography protected forest” and “hometown forest,” will be reorganized in a few years, based on opinions of experts.

Under the new scheme, the Forestry Agency will continue working to conserve biodiversity of national forests, and striving especially to reform the way of conducting monitoring surveys of national forests, and get the protected forests registered with international databases, with the aim of making the Agency’s effort better understood by the people and recognized by the international community through endeavoring to protect and administer protected forests in an appropriate manner.

Reform of the Protected Forest System: Key Points

Purpose: To review and reform the existing system of protected forests for adapting to sophistication of scientific knowledge on conservation of biodiversity and methodologies for administration of protected areas, and rebuild an easier-to understand and more efficient administration system that pays attention to conservation of biodiversity.

1. Restructured classification of protected forests

Total: 851 sites; 968 (in 1,000 hectares)

Simplified & Efficient administration system

Forest Ecosystem Reserve (655)	Forest Ecosystem Reserve
Forest Bio-genetic Resources Preservation Forest (75)	Biocenosis Protection Forest
Forest Tree Genetic Resources Preservation Forest (9)	Rare Population Protection Forest
Plant Community Protected Forest (161)	
Specific Animal Habitat Protected Forest (23)	
Specific Topography Protected Forest (37)	Use of other systems and care in operations to be considered
Hometown forest (4)	

Solid: Basic transition
Dotted: Transition based on current characteristics of protected forests

2. Restructured administration scheme

(1) Reorganization of committees: Existing committees consolidated, replaced by an integrated one

YY Forest Ecosystem Reserve Designation Committee
ZZ Committee for Designation as Forest Bio-genetic Resources Preservation Forest
WW Green Corridor Designation Committee
XX Monitoring Committee
VV Rare Species Committee

→ **UU Regional Forest Office Committee for Administration of Protected Forests**

*** Sub-committees etc. to be set up when necessary.**

(2) Modification in intervals between monitoring surveys

All protected forests are monitored every five years, in principle.

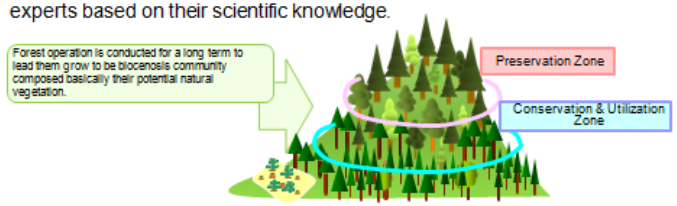
→ **The interval is set at <5 / 5 / 10 years depending of conditions of the protected forest.**

Sophistication of biodiversity conservation methods

3. Introduction of restoration

(Biocenosis Protection Forest)

For forests that have lost the ability of self-sustained rehabilitation, forest operation is conducted for a long term according to opinions offered by experts based on their scientific knowledge.



4. Introduction of wildlife conservation & administration methods (Rare Population Protection Forest)

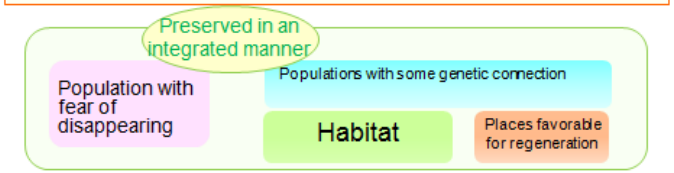
(1) Human interventions for creating habitats, etc.

When any disturbances, such as temporary appearance of bare area, needs to take place through the process of transition for sustainable inhabitation of population, necessary forest operations may be conducted to create such environments.

Photos:
Based on deliberation by the Administration Committee, stands lying adjacent to a habitat are cut down to create lighting environments more favorable for regeneration and multiplication.

(2) Conservation of a group of populations (meta-population) needed for the wildlife to survive

To protect a population that may disappear, other populations with some genetic connection and their habitats found around it are included in the same protected forest for protecting them all in an integrated manner.



4-10 On Designation of National Forests as Green Corridor

March 22, 2000 Rin/Ya/Kei No. 10 of 2000
Issued by the Director-General of the Forestry Agency to the Director-Generals of the Regional Forest Offices, and the Director-Generals of the Regional Forest Branch Offices

Last Revised on: November 9, 2015 by Rin/Koku/Kei No. 53 of 2015

The Basic Plan for Administration and Management of National Forests, established as of December 25, 1998 to transform the policy for administration and management of national forests into that designed to help maintain and facilitate functions they have for public benefits, states that as one of the measures to protect and conserve forest ecosystems in national forests over a broad range in an effective manner, Green Corridors were to be established.

Now that the Guidelines for Establishment of Green Corridors, shown in the accompanying sheets, have been produced to start working to establish Green Corridors.

(Accompanying Sheets)

The Guidelines for Establishment of Green Corridors

Section 1 Purpose

The national forests, shared possessions of people, mostly lie around mountainous backbones, maintaining rich forest ecosystems that offer excellent landscape, and habitats for precious wildlife. National forests with these features are designated as several types of protected forests, such as Forest Ecosystem Reserve, which is composed of primeval forest ecosystems, to maintain natural environments, protect animals and plants, and preserve genetic resources, among others, as part of efforts to protect and preserve national forests with excellent natural environments.

In recent years, meanwhile, need has arisen to carry out new initiatives, including further promotion of sustainability in management of forests in line with the Declaration of Forest Principle, among others, and preservation of biodiversity based mainly on the National Biodiversity Strategy of Japan.

To deal with such developments by establishing Green Corridors in national forests to secure passageways for wildlife, expand their habitats, and encourage them to interact between themselves as part of effort to protect forest ecosystems over a broader range in a more effective manner, these Guidelines have been produced to specify criteria for designation as Green Corridor, policy for treatment, and procedures for designation, among others.

Section 2 Policy for designation

1. Criteria for designation

Green Corridors are to be selected among national forests all around Japan, taking fully into account functions they each should have to perform for regions they are located in, and the state of land around them, after examining significance and urgency from the standpoint of forest ecosystems protection, and considering each of the following items:

(1) That, given that protected forests have already been established for protection of wildlife, preservation of genetic resources, and other purposes, Green Corridors are to be selected, in principle, in a manner that they will link existing protected forests together, and that they will have a size and a form considered to be appropriate for forest ecosystems that should be protected and conserved;

(2) That a Green Corridor, after a candidate location and its area is roughly determined based on distribution of wild animals and plants and locations of protected forests around it to consider where the Corridor should run, taking into consideration geographic conditions favorable for movements of wild animals, among others, is to be established as a set of forest sub-compartments demarcated by mountain ridges, streams, or other distinctive geographical lines;

(3) That the width and length of a Green Corridor are to be determined, taking into account the distribution of habitats for wild animals, their behavioral characteristics, and characteristics of plants in fertilization and seed dispersal, among others; and

(4) That when a Green Corridor to be established falls under either of the following items, expansion of existing protected forests or establishment of new protected forests are to be considered, if necessary:

(A) That the Corridor would fail to have an enough width to avoid edge effect (affect given to internal habitat caused by exposing most peripheral part of fragmented habitats directly to completely different external environments); or

(B) That the Corridor is feared to fail to ensure its function properly caused by long distance between protected forests it should link or no existing protected forests it should link, without any protected forest established for it.

2. Policy for treatment

(1) To enable forests designated as Green Corridors to perform functions for wildlife with migration, resting, and feeding, among others, they are to be maintained and improved as stated in the following items:

(A) When the forests are in suitable conditions to function as Green Corridors, the current state is to be maintained in an appropriate manner; and

(B) When the forests need to be improved as other conditions stated in (A), their under-story vegetation is to be developed and prevented denudation, depending on the state of the vegetation, with forest operations conducted to prevent any extreme unevenness in the distribution of conifers and broad-leaved trees over the entire Green Corridor, and instead facilitate diversity in tree type, age, and crown, among others.

(2) As part of administration of Green Corridors, patrols are to be carried out to protect precious wildlife, and public relations and awareness raising activities are to be conducted, together with efforts that are to make them as a place for forest environmental education and for other purposes.

(3) Facilities are to be installed or constructed when they are necessary for observation, flood control, or other appropriate purposes, with care paid to prevent them from giving any harmful impact on habitat environments of wildlife there.

(4) For Green Corridors, monitoring (regular observation and recording) are to be conducted to recognize actual movements of wildlife there, and impact that forest operations may give to them, among others.

Findings of the monitoring are to be reflected by designation as Green Corridors and treatment, and relevant departments of prefectural governments, universities, and research institutions are to be provided with the data and information.

Section 3 Procedures for designation

1. Procedures for designation

(1) The Director-General of the Regional Forest Office is to, when intending to establish a Green Corridor, previously collect data of the site to be designated and conduct necessary surveys on target wildlife for the Corridor, among other issues, to prepare, based on them, (Draft) Policy for Green Corridor Establishment ("Establishment Policy (Draft)"), which is to contain:

(A) Location and area of the Green Corridor;

(B) Issues related to its maintenance and improvement;

(C) Issues related to its administration;

(D) Issues related to its monitoring; and

(E) Other points to note;

(2) The Director-General of the Regional Forest Office is to, when intending to establish a Green Corridor, consult the Committee for Administration of Protected Forests, which is stipulated in "On Reform of the Protected Forest System" (Notification of the Director-General of the Forestry Agency issued on September 28, 2015; Rin/Ya/Kei No. 49 of 2015) or a subcommittee set up under it (collectively "Committees") on the Establishment Policy (Draft). When a Green Corridor to be established stretches over jurisdictions of two or more Regional Forest Offices, the related Regional Forest Offices are to maintain good communication between them to demarcate and treat the Corridor in an integrated manner by securing opportunities to exchange opinions between the Committees of the related Regional Forest Offices or making other appropriate arrangements.

(3) The Director-General of the Regional Forest Office is to consult related agencies before establishing a Green Corridor, if necessary.

(4) The Director-General of the Regional Forest Office is to consult the Committees on the Establishment Policy (Draft), and make coordination between the related Regional Forest Offices , when necessary, to finalize the Establishment Policy, and have it reflected by the Regional Administration and Management Plan and the National Forests Operation Plan, based on which a Green Corridor is established.

2. Modification of the area, and other issues

(1) The Director-General of the Regional Forest Office is to modify the area of an existing Green Corridor, or abolish its designation when it falls under either of the following items:

(A) That findings of monitoring or other surveys indicate need to modify the area or take other measures; or

(B) That the Green Corridor turns out to be hard to maintain for public benefit or other compelling reasons.

(2) For any Green Corridor, modification of the area or abolition of its designation is to follow the procedures stated above in 1-(2) through (4), in principle.

Section 4 Points to note

In addition to what has been stated above, training and other arrangements for persons in charge must be made to develop their abilities and help them treat Green Corridors in manners appropriate for the purposes of establishment of the Corridors.

In designating national forests with private forests lying scattered between them as Green Corridors, or treating such Corridors, effort is to also be made to ask prefectural and municipal governments and owners of the forests for understanding and cooperation for establishment of the Corridors will be fulfilled.

4-11 Revised Plan for Mt. Yuwandake National Wildlife Protection Area (Excerpt)

November 1, 2005
The Ministry of the Environment

1. Guidelines

(1) Name of the National Wildlife Protection Area

Mt. Yuwandake National Wildlife Protection Area

(2) Area comprising the National Wildlife Protection Area

As shown in the figure 5-1-3 in the nomination documents

(3) Duration as the National Wildlife Protection Area

From November 1, 2005 to October 31, 2025 (20 years)

(4) Guidelines concerning protection in the National Wildlife Protection Area

(i) Designation category for the National Wildlife Protection Area

Habitat for threatened wildlife

(ii) Purpose for designation as the National Wildlife Protection Area

Amami-Oshima Island lies 300 km south of Sata Cape, Kagoshima Prefecture. Measuring 719 km^2 in area, Amami-Oshima Island is, after Okinawa Island, the second largest of the Nansei Islands. The Mt. Yuwandake Wildlife Protection Area lies in a central mountainous area at altitudes of 230 m to 694 m, centering on Mt. Yuwandake, the island's highest peak. The central mountainous area is dominated by evergreen broad-leaved forest, including *Castanopsis sieboldii*, *Quercus miyagii*, *Machilus thunbergii*, and *Distylium racemosum*. The island is known to have been isolated from the continent relatively early, some 1 million to 1.5 million years ago.

Reflecting the island's natural environment and geological history, several birds listed in the *Threatened Wildlife of Japan - Red Data Book 2nd ed. - Volume 2, Aves* (edited by the Ministry of the Environment) have been confirmed to live here, including the Amami thrush (*Zoothera dauma major*; CR), the Amami woodcock (*Scolopax mira*; EN), the white-backed woodpecker (*Dendrocopos leucotos owstoni*; EN), the

Japanese pygmy woodpecker (*Dendrocopos kizuki amamii*; VU), the ashy minivet (*Pericrocotus divaricatus*; VU), the Ryukyu robin (*Luscinia komadori*; VU), and the Amami jay (*Garrulus lidthi*; VU). Mammals included in the *Threatened Wildlife of Japan - Red Data Book 2nd ed. - Volume 1, Mammalia* (edited by the Ministry of the Environment) have also been confirmed to live on the island, including the Yanbaru whiskered bat (*Myotis yanbarensis*; CR), the Amami rabbit (*Pentalagus furnessi*; EN), the Ryukyu long-haired rat (*Diplothrix legata*; EN), and the Ryukyu tube-nosed bat (*Murina ryukyuana*; EN).

This area serves as habitat and feeding grounds for various wildlife species, including the threatened species. For this reason, it is recognized as a protected area for threatened wildlife habitat and designated a National Wildlife Protection Area, as defined under Article 28 (1) of the Wildlife Protection and Proper Hunting Act, for the purpose of protecting threatened wildlife species.

Management policies

- Gather information on the status of wildlife in the area concerned, based on bird and mammal monitoring surveys.
- Prevent the population impact of road kills through on-site patrols and coordinated action with local governments, relevant organizations, and local residents, including efforts to raise public awareness.

2. Reason for update

The current population and distribution status of species including the Amami rabbit, Amami woodcock, Amami thrush, white-backed woodpecker, Amami jay, and Ryukyu robin merit continuing protection. (All are National Endangered Species, as defined under the Act on Conservation of Endangered Species of Wild Fauna and Flora.)

3. The land (by land-use) and water surface area of the National Wildlife Protection Area

Total area: 320 ha

Breakdown

A. Breakdown according to land-use type

Forest: 318 ha

Agricultural land: 2 ha Amami Forest Polis

Water surface: - ha

Other: - ha

4-12 Designation Plan for Mt. Yuwandake National Wildlife Protection Area, Mt. Yuwandake Special Protection Zone (Excerpt)

November 1, 2005
The Ministry of the Environment

1. Guidelines

(1) Name of the Special Protection Zone

Mt. Yuwandake Special Protection Zone

(2) Area comprising the Special Protection Zone

As shown in the figure 5-1-3 in the nomination documents

(3) Duration as the Special Protection Zone

From November 1, 2005 to October 31, 2025 (20 years)

(4) Guidelines concerning protection in the Special Protection Zone

(i) Designation category for the Special Protection Zone

Habitat for threatened wildlife

(ii) Purpose for designation as a Special Protection Zone

Amami-Oshima Island lies 300 km south of Sata Cape, Kagoshima Prefecture. Measuring 719 km^2 in area, Amami-Oshima Island is, after Okinawa Island, the second largest of the Nansei Islands. The Mt. Yuwandake Wildlife Protection Area lies in a central mountainous area at altitudes of 230 m to 694 m, centering on Mt. Yuwandake, the island's highest peak. The central mountainous area is dominated by evergreen broad-leaved forest, including *Castanopsis sieboldii*, *Quercus miyagii*, *Machilus thunbergii*, and *Distylium racemosum*. The island is known to have been isolated from the continent relatively early, some 1 million to 1.5 million years ago.

Reflecting the island's natural environment and geological history, several birds listed in the *Threatened Wildlife of Japan - Red Data Book 2nd ed. - Volume 2, Aves* (edited by the Ministry of the Environment) have been confirmed to live here, including the Amami thrush (*Zoothera dauma major*; CR), the Amami woodcock (*Scolopax mira*; EN), the white-backed woodpecker (*Dendrocopos leucotos owstoni*; EN), the

Japanese pygmy woodpecker (*Dendrocopos kizuki amamii*; VU), the ashy minivet (*Pericrocotus divaricatus*; VU), the Ryukyu robin (*Luscinia komadori*; VU), and the Amami jay (*Garrulus lidthi*; VU). Mammals included in the *Threatened Wildlife of Japan - Red Data Book 2nd ed. - Volume 1, Mammalia* (edited by the Ministry of the Environment) have also been confirmed to live on the island, including the Yanbaru whiskered bat (*Myotis yanbarensis*; CR), the Amami rabbit (*Pentalagus furnessi*; EN), the Ryukyu long-haired rat (*Diplothrix legata*; EN), and the Ryukyu tube-nosed bat (*Murina ryukyuana*; EN).

In the Mt. Yuwandake Wildlife Protection Area, forests ranging from altitudes of 430 m to 694 m in the central mountainous area, centering on Mt. Yuwandake, offer the most crucial breeding and foraging grounds on Amami-Oshima Island for the Yanbaru whiskered bat and Ryukyu tube-nosed bat. The former species was recorded as a new species in 1998. Recognized as a particularly important area within the Mt.Yuwandake Wildlife Protection Area, this area is designated a Special Protection Zone, as defined under Article 29 (1) of the Wildlife Protection and Proper Hunting Act, for the purpose of protecting the habitats of the threatened wildlife species that occur here.

Management policies

- Maintain current habitat conditions to allow mountain streams and forests to continue serving as resting, feeding, and breeding grounds for threatened wildlife species.
- Take coordinated action to maintain and build roads in the area and to repair forest trails in joint efforts with local governments and relevant organizations to demonstrate due consideration for the conservation of natural habitats.

2. The land (by land-use) and water surface area of the Special Protection Zone

Total area: 103 ha

Breakdown

A. Breakdown according to land-use type

Forest: 103 ha

Agricultural land: - ha

Water surface: - ha

Other: - ha

4-13 Designation Plan for Yambaru (Ada) National Wildlife Protection Area (Excerpt)

November 1, 2009
The Ministry of the Environment

1. Outlines of the National Wildlife Protection Area

(1) Name of the National Wildlife Protection Area

Yambaru (Ada) National Wildlife Protection Area

(2) Area comprising the National Wildlife Protection Area

As shown in the figure 5-1-8 in the nomination documents

(3) Duration as the National Wildlife Protection Area

From November 1, 2009 to October 31, 2029 (20 years)

(4) Designation category for the National Wildlife Protection Area

Habitat for threatened wildlife

(5) Purpose for designation as the National Wildlife Protection Area

Located in Ada Ward, Kunigami Village, Kunigami County, Okinawa Prefecture in the northern part of Okinawa Island, this area consists of a National Forest centering on Mt. Ibudake (elevation 353 m) 2.5 km northwest of a community in Ada Ward; a village forest; and land stretching to the eastern shore, including the communities.

Most of this area is covered by subtropical broad-leaved forest, primarily *Castanopsis sieboldii*. The slope of Mt. Ibudake halfway to the peak features a *Quercus miyagii* tree estimated to be 300 years in age.

Reflecting such natural environment, this region is home to various rare birds that are National Endangered Species, as defined under the Act on Conservation of Endangered Species of Wild Fauna and Flora (Act No. 75 of 1992), and listed on the Red List prepared by the Ministry of the Environment, including the Okinawa woodpecker (*Sapheopipo noguchii*; CR), the Okinawa rail (*Gallirallus okinawae*; CR), and the Ryukyu robin (*Luscinia komadori namiyei*; EN). This area is also home to several rare mammals, including the Okinawa least horseshoe bat (*Rhinolophus pumilus pumilus*; EN) and the Ryukyu long-haired rat (*Diplothrix legata*; EN).

As for the Okinawa rail, its occurrence is confirmed within and around the communities.

As such, the area is an important habitat for threatened wildlife species, including the Okinawa rail, and is designated a National Wildlife Protection Area, as defined under Article 28 (1) of the Wildlife Protection and Proper Hunting Act (Act No. 88 of 2002), for the purpose of protecting threatened wildlife species that occur here.

2. Guidelines concerning protection in the National Wildlife Protection Area

(1) Protection and management policies

(i) Gather information on the status of wildlife in the area concerned, based on bird and mammal monitoring surveys and on-site patrols.

(ii) Prevent inadvertent human activities that may threaten wildlife habitats and adverse effects of scattered waste that may impact bird species, through on-site patrols and coordinated action with relevant local governments, NPOs, and local residents, including public awareness activities.

(iii) Implement activities to control the Javan mongoose and other alien species that pose a threat to the survival of native species.

(2) The objectives of the conservation program

Concerns in the Yambaru (Ada) Wildlife Protection Area include rising rates of road kill incidents and emerging threats to the Okinawa rail and other species due to the presence of alien species such as the Javan mongoose, feral dogs, and feral cats.

The objectives of the program are to appropriately manage habitat environment, as well as to maintain and improve habitat for threatened wildlife species, including the Okinawa rail, for the continuing survival of such species.

(3) Areas covered by conservation program

Entire Yambaru (Ada) Wildlife Protection Area

(4) Description of the conservation program

The Ministry of the Environment will undertake necessary operations to maintain and restore natural habitats for the threatened wildlife species in this area, and consolidate the facilities required to implement these activities. These activities include installing facilities to prevent intrusion of the animals that may pose a threat to the protection of wildlife habitat. The Ministry will also monitor the status of the threatened wildlife species and evaluate progress toward the program objectives at periodic intervals.

The local government of Kunigami Village will implement, including maintaining and managing protective shelters for the Okinawa rail and public awareness campaigns targeting local residents, based on plans for "*The Home of the Okinawa Rail*" initiative, whose purpose is to ensure the harmonious coexistence of the Okinawa rail and local residents.

(5) Overview of environmental changes

Through predation and competition for habitats, alien species introduced to northern areas of Okinawa Island have significantly impacted native species in recent years.

Not found here in the 1960s when the area was first designated as the Ibudake Wildlife Protection Area by Okinawa Prefecture, the Javan mongoose has now been reported in this area and is degrading the habitat environment.

(6) Change in wildlife status

No significant changes have been observed in the status of the Okinawa rail in this Wildlife Protection Area. However, the range of the Okinawa rail has gradually shrunk towards the north as populations of Javan mongoose encroach upon its range. When first discovered in the 1980s, the Okinawa rail occurred close to the area from Shioya Bay in Ogimi Village to Taira in Higashi Village. In recent years, the southernmost limit of its range appears to have retreated north, closer to this Wildlife Protection Area, from the boundary of Kunigami Village and Ogimi Village to Takae in Higashi Village.

Reports indicate the Javan mongoose is now present within the Wildlife Protection Area itself, indicating habitat decline for the Okinawa rail.

Mortality due to road kills has been another major issue in recent years in the north of Okinawa Island, including in this Wildlife Protection Area.

3. The land (by land-use) and water surface area of the National Wildlife Protection Area

Total area: 1,279 ha

Breakdown

A. Breakdown according to land-use type

Forest: 932 ha
Agricultural land: 63 ha
Water surface: - ha
Other: 284 ha

4-14 Designation Plan for Yambaru (Ada) National Wildlife Protection Area, Yambaru (Ada) Special Protection Zone (Excerpt)

November 1, 2009
The Ministry of the Environment

1. Outlines of the Special Protection Zone

(1) Name of the Special Protection Zone

Yambaru (Ada) Special Protection Zone

(2) Area comprising the Special Protection Zone

As shown in the figure 5-1-8 in the nomination documents

(3) Duration as the Special Protection Zone

From November 1, 2009 to October 31, 2029 (20 years)

(4) Designation category for the Special Protection Zone

Habitat for threatened wildlife

(5) Purpose for designation as the Special Protection Zone

Located 2.5 km northwest of the town of Ada Ward, Kunigami Village, Kunigami County, Okinawa Prefecture, this area includes Mt. Ibudake (elevation 353 m) to the southeast and abuts the Fungawa River to the west. It approaches the Gaji-Sate Forest Road to the north, the Kunigami Village forest to the east, and the trailhead for the Mt. Ibudake mountain trail to the south. Virtually the entire area is covered by forest composed of *Castanopsis sieboldii*. The slope of Mt. Ibudake halfway to the peak features a *Quercus miyagii* tree estimated to be 300 years in age.

Reflecting such natural environment, this region is home to various rare birds that are National Endangered Species, as defined under the Act on Conservation of Endangered Species of Wild Fauna and Flora (Act No. 75 of 1992), and listed on the Red List prepared by the Ministry of the Environment, including the Okinawa woodpecker (*Sapheopipo noguchii*; CR), the Okinawa rail (*Gallirallus okinawae*; CR), and the Ryukyu robin (*Luscinia komadori namiyei*; EN). This area is also home to several rare mammals, including

the Okinawa least horseshoe bat (*Rhinolophus pumilus pumilus* ;EN) and the Ryukyu long-haired rat (*Diplothrix legata*; EN).

As such, the area is an important habitat for threatened wildlife species, including the Okinawa rail, and is designated a Special Protection Zone, as defined under Article 28 (1) of the Wildlife Protection and Proper Hunting Act (Act No. 88 of 2002), for the purpose of protecting threatened wildlife species that occur here.

Offering ideal habitat for the Okinawa woodpecker and Okinawa rail, within the Yambaru (Ada) Wildlife Protection Area, this area is recognized particularly important for protection, and designated a Special Protection Zone as defined under Article 29 (1) of the Wildlife Protection and Proper Hunting Act, for the purpose of protecting threatened wildlife species that occur here.

2. Guidelines concerning protection in the Special Protection Zone

(1) Protection and management policies

(i) Gather information on the status of wildlife in the area concerned, based on bird and mammal monitoring surveys and on-site patrols.

(ii) Prevent inadvertent human activities that may threaten wildlife habitats and adverse effects of scattered waste that may impact bird species, through on-site patrols and coordinated action with relevant local governments, NPOs, and local residents, including public awareness activities.

(iii) Implement activities to control the Javan mongoose and other alien species that pose a threat to the survival of native species.

(2) The objectives of the conservation program

Concerns in the Yambaru (Ada) Wildlife Protection Area include rising rates of road kill incidents and emerging threats to the Okinawa rail and other species due to the presence of alien species such as the Javan mongoose, feral dogs, and feral cats.

The objectives of the program are to appropriately manage habitat environment, as well as to maintain and improve habitat for threatened wildlife species, including the Okinawa rail, for the continuing survival of such species.

(3) Areas covered by conservation program

Entire Yambaru (Ada) Special Protection Zone

(4) Description of the conservation program

The Ministry of the Environment will undertake necessary operations to maintain and restore natural habitats for the threatened wildlife species in this area, and consolidate the facilities required to implement these activities. These activities include installing facilities to prevent intrusion of the animals that may pose a threat to the protection of wildlife habitat. The Ministry will also monitor the status of the threatened wildlife species and evaluate progress toward the program objectives at periodic intervals.

The local government of Kunigami Village will implement, including maintaining and managing protective shelters for the Okinawa rail and public awareness campaigns targeting local residents, based on plans for "*The Home of the Okinawa Rail*" initiative, whose purpose is to ensure the harmonious coexistence of the Okinawa rail and local residents.

(5) Overview of environmental changes

Through predation and competition for habitats, alien species introduced to northern areas of Okinawa Island have significantly impacted native species in recent years.

Not found here in the 1960s when the area was first designated as the Ibudake Wildlife Protection Area by Okinawa Prefecture, the Javan mongoose has now been reported in this area and is degrading the habitat environment.

(6) Change in wildlife status

No significant changes have been observed in the status of the Okinawa rail in this Wildlife Protection Area. However, the range of the Okinawa rail has gradually shrunk towards the north as populations of Javan mongoose encroach upon its range. When first discovered in the 1980s, the Okinawa rail occurred close to the area from Shioya Bay in Ogimi Village to Taira in Higashi Village. In recent years, the southernmost limit of its range appears to have retreated north, closer to this Wildlife Protection Area, from the boundary of Kunigami Village and Ogimi Village to Takae in Higashi Village.

Reports indicate the Javan mongoose is now present within the Wildlife Protection Area itself, indicating habitat decline for the Okinawa rail.

Mortality due to road kills has been another major issue in recent years in the north of Okinawa Island, including in this Wildlife Protection Area.

3. The land (by land-use) and water surface area of the Special Protection Zone

Total area: 220 ha

Breakdown

A. Breakdown according to land-use type

Forest: 220 ha

Agricultural land: - ha

Water surface: - ha

Other: - ha

4-15 Designation Plan for Yambaru (Aha) National Wildlife Protection Area (Excerpt)

November 1, 2009
The Ministry of the Environment

1. Outlines of the National Wildlife Protection Area

(1) Name of the National Wildlife Protection Area

Yambaru (Aha) National Wildlife Protection Area

(2) Area comprising the National Wildlife Protection Area

As shown in the figure 5-1-8 in the nomination documents

(3) Duration as the National Wildlife Protection Area

From November 1, 2009 to October 31, 2029 (20 years)

(4) Designation category for the National Wildlife Protection Area

Habitat for threatened wildlife

(5) Purpose for designation as the National Wildlife Protection Area

This site is located in Aha Ward, Kunigami Village, Kunigami County, Okinawa Prefecture, in the northern part of Okinawa Island, north of the central portion of the reservoir impounded by Aha Dam. The Aha River runs along the west, while the Fungawa River runs along the east. The area is covered by subtropical evergreen broad-leaved forest consisting mainly of *Castanopsis sieboldii*.

Reflecting such natural environment, this region is home to various rare birds that are National Endangered Species, as defined under the Act on Conservation of Endangered Species of Wild Fauna and Flora (Act No. 75 of 1992), and listed on the Red List prepared by the Ministry of the Environment, including the Okinawa woodpecker (*Sapheopipo noguchii*; CR), the Okinawa rail (*Gallirallus okinawae*; CR), and the Ryukyu robin (*Luscinia komadori namiyei*; EN).

This area is also home to several rare mammals, including the Okinawa least horseshoe bat (*Rhinolophus pumilus pumilus*; EN) and the Ryukyu wild boar (*Sus scrofa riukiuanus* ; EN).

As such, the area is an important habitat for threatened wildlife species and is designated a National Wildlife Protection Area, as defined under Article 28 (1) of the Wildlife Protection and Proper Hunting Act (Act No. 88 of 2002), for the purpose of protecting threatened wildlife species that occur here.

2. Guidelines concerning protection in the National Wildlife Protection Area

(1) Protection and management policies

(i) Gather information on the status of wildlife in the area concerned, based on bird and mammal monitoring surveys and on-site patrols.

(ii) Prevent inadvertent human activities that may threaten wildlife habitats and adverse effects of scattered waste that may threaten bird species, through on-site patrols and coordinated action with relevant local governments, NPOs, and local residents, including public awareness activities.

(iii) Implement activities to control the Javan mongoose and other alien species that pose a threat to the survival of native species.

3. The land (by land-use) and water surface area of the National Wildlife Protection Area

Total area: 465 ha

Breakdown

A. Breakdown according to land-use type

Forest: 407 ha

Agricultural land: 18 ha

Water surface: 37 ha

Other: 3 ha

4-16 Designation Plan for Iriomote National Wildlife Protection Area (Excerpt)

November 1, 2011
The Ministry of the Environment

1. Outlines of the National Wildlife Protection Area

(1) Name of the National Wildlife Protection Area

Iriomote National Wildlife Protection Area

(2) Area comprising the National Wildlife Protection Area

As shown in the figure 5-1-12 in the nomination documents

(3) Duration as the National Wildlife Protection Area

From November 1, 2011 to October 31, 2031(20 years)

(4) Designation category for the National Wildlife Protection Area

Habitat for threatened wildlife

(5) Purpose for designation as the National Wildlife Protection Area

Located on Iriomote Island in the western portion of Yaeyama Islands, this area consists of land stretching from the south shore to the central part of the island, including Mt. Komidake (elevation 469.5 m), Mt. Tedo (elevation 441.2 m), and Mt. Gozadake (elevation 420.4 m), the highest peaks in Okinawa Prefecture; part of the Sakiyama Peninsula; and the northwest portion of the island.

The regions stretching from the center of the island to the south shore and part of the Sakiyama Peninsula are covered by pristine large subtropical evergreen broad-leaved forest, dominated by *Castanopsis sieboldii* and *Quercus miyagii*. A portion of the island's northwest lies abuts the estuary of the Urauchi River, where a large mangrove forest develops.

Reflecting such natural environment, various parts of the island are home to rare species that are National Endangered Species as defined under the Act on Conservation of Endangered Species of Wild Fauna and Flora (Act No. 75 of 1992) and listed on the Red List prepared by the Ministry of the Environment,

including the Iriomote cat (*Prionailurus bengalensis iriomotensis*; CR), the crested serpent eagle (*Spilornis cheela perplexus*; CR), and the emerald dove (*Chalcophaps indica yamashinai*; EN).
This is a crucial habitat for various threatened wildlife species, including the Iriomote cat, and is designated a Wildlife Protection Area as defined under Article 28 (1) of the Wildlife Protection and Proper Hunting Act (Act No. 88 of 2002).

2. Guidelines concerning protection in the National Wildlife Protection Area

(1) Protection and management policies

(i) Appropriately manage as a protected area for threatened wildlife species habitat to protect threatened species such as Iriomote cat.

(ii) Gather information on the status of wildlife in the area concerned, based on bird and mammal monitoring surveys and on-site patrols.

(iii) Prevent activities that may threaten wildlife habitats and impact of scattered waste that may impact bird species, through on-site patrols and coordinated action with local governments, NPOs, and relevant local residents, including public awareness activities.

3. The land (by land-use) and water surface area of the National Wildlife Protection Area

Total area: 10,218 ha

Breakdown

A. Breakdown according to land-use type

Forest: 10,218 ha
Agricultural land: - ha
Water surface: - ha
Other: - ha

4-17 Designation Plan for Iriomote National Wildlife Protection Area, Iriomote Special Protection Zone (Excerpt)

November 1, 2011
The Ministry of the Environment

1. Outlines of the Special Protection Zone

(1) Name of the Special Protection Zone

Iriomote Special Protection Zone

(2) Area comprising the Special Protection Zone

As shown in the figure 5-1-17 in the nomination documents

(3) Duration as the Special Protection Zone

From November 1, 2011 to October 31, 2031(20 years)

(4) Designation category for the Special Protection Zone

Habitat for threatened wildlife

(5) Purpose for designation as the Special Protection Zone

Located on Iriomote Island in the western portion of Yaeyama Islands, this area consists of land stretching from the south shore to the central part of the island, including Mt. Komidake (elevation 469.5 m), Mt. Tedo (elevation 441.2 m), and Mt. Gozadake (elevation 420.4 m), the highest peaks in Okinawa Prefecture; part of the Sakiyama Peninsula; and the northwest portion of the island.

The regions stretching from the center of the island to the south shore and part of the Sakiyama Peninsula are covered by pristine large subtropical evergreen broad-leaved forest, dominated by *Castanopsis sieboldii* and *Quercus miyagii*. A portion of the island's northwest lies abuts the estuary of the Urauchi River, where a large mangrove forest develops.

Reflecting such natural environment, various parts of the island are home to rare species that are National Endangered Species as defined under the Act on Conservation of Endangered Species of Wild Fauna and Flora (Act No. 75 of 1992) and listed on the Red List prepared by the Ministry of the Environment,

including the Iriomote cat (*Prionailurus bengalensis iriomotensis*; CR), the crested serpent eagle (*Spilornis cheela perplexus*; CR), and the emerald dove (*Chalcophaps indica yamashinai*; EN).
Past surveys have confirmed particularly frequent occurrence of Iriomote cats and a bountiful supply of prey species in this area, indicating that the area harbors a good feeding ground and habitat for the species.

This is a crucial habitat for various threatened wildlife species, including the Iriomote cat, and is designated a Wildlife Protection Area as defined under Article 28 (1) of the Wildlife Protection and Proper Hunting Act (Act No. 88 of 2002).

2. Guidelines concerning protection in the Special Protection Zone

(1) Protection and management policies

(i) Appropriately manage as a protected area for threatened wildlife species habitat to protect threatened species such as Iriomote cat.

(ii) Gather information on the status of wildlife in the area concerned, based on bird and mammal monitoring surveys and on-site patrols.

(iii) Prevent activities that may threaten wildlife habitats and impact of scattered waste that may impact bird species, through on-site patrols and coordinated action with local governments, NPOs, and relevant local residents, including public awareness activities.

3. The land (by land-use) and water surface area of the Special Protection Zone

Total area: 9,999 ha

Breakdown

A. Breakdown according to land-use type

Forest: 9,999 ha
Agricultural land: - ha
Water surface: - ha
Other: - ha

4-18 Protection and Recovery Program for the Amami Rabbit (*Pentalagus furnessi*)

November 19, 2004
Ministry of Education, Culture, Sports, Science and Technology
Ministry of Agriculture, Forestry and Fisheries
Ministry of the Environment

I. Objectives of the Program

The Amami rabbit (*Pentalagus furnessi*) is a monospecific species endemic to Japan and found only on Amami-Oshima Island and Tokunoshima Island. This species digs burrows mainly on slopes in virgin forest, and feeds near adjacent streams and secondary forests where the herbaceous plants, which that make up its diet, are abundant.

In the first half of the 1990s, the total population of the Amami rabbit was estimated to be 2,600 to 6,200 on Amami-Oshima Island and 120 to 290 on Tokunoshima Island. However, deforestation accompanying development and the invasion of alien species have contributed to a decrease in areas suitable for its habitation and reduced its distributional range on both islands. As of 2003, estimates put populations at 2,000 to 4,800 on Amami-Oshima Island and around 200 on Tokunoshima Island. Increasingly, the habitats on these islands tend to be fragmented, and certain geographically isolated populations are present in low densities. The risk of local extinction in these habitats is considered to be significant.

The objectives of this program is to ensure the stable survival of the rabbit in a natural state by clarifying the status of the species; maintaining and improving the environments necessary for the species; mitigating and removing factors that pose threats to the species; and exploring measures to recover wild populations, including reintroducing captive-bred animals.

II. Program Areas

The distribution areas of this species on Amami-Oshima Island and Tokunoshima Island in Kagoshima Prefecture (including past habitats), as well as captive breeding areas described in Item 3 of Section III below.

III. Overview of the Program

1. Understanding the status of the species and accumulation of knowledge on ecology and other matters

The following surveys will be undertaken to appropriately and effectively implement the program, and to investigate emergency countermeasures in the event of alarming changes. These surveys will gather information on the status and trends of this species and accumulate knowledge on the ecology of the species and other aspects.

(1) Surveying and monitoring the status of the species

The program will include fecal pellet surveys to estimate density and to monitor distributions. It will also collect and organize information on the status of the populations, including reports of sightings.

(2) Clarifying the biological characteristics

The program will collect and organize knowledge on the species already available. Using trail cameras and radio telemetry, the program will also seek to gather more information on the home range of individual animals, typical home environments, breeding status, and feeding habits.

(3) Monitoring habitats

The program will monitor the state of habitat invasion and predation by species likely to disturb the populations of this species, including mongooses, feral dogs, and feral cats, as well as disturbances attributable to viruses and other diseases and disease vectors, including black rats and domestic rabbits.

The program will monitor and collect information on anthropogenic changes in habitats, including deforestation and road construction.

(4) Understanding suitable environments and potential threats

The program will analyze the results of surveys (1), (2), and (3) above to understand environmental factors that are suitable for the species or potentially affect the species. It will also seek to geographically elucidate the relationship between these environmental factors and the status of the species.

2. Habitat maintenance and improvement

The stable survival of this species in its natural state will require a balanced combination of virgin forest, streams, and secondary forest. Human activity and predation by alien species, such as the mongoose, threaten the survival of this species, although the actual extent of the damage to date is not completely understood. For this reason, the program will implement the following measures based on the knowledge acquired through Item 1 above.

(1) Clarifying the distribution of alien species and investigating countermeasures

The program seeks to clarify the distribution of alien species and their impacts on this species. It will also investigate countermeasures, including efforts to eliminate these species, and implement the appropriate measures. The program incorporates measures to improve the management of domestic animals such as cats and dogs (including hunting dogs).

(2) Habitat maintenance and improvement

Based on knowledge provided by experts, particularly experts in the ecology of this species, the program will seek to maintain and improve suitable habitats and breeding conditions for this species; expand these habitats by ensuring the continuity of fragmented habitats; and investigate other effective measures to address the degradation of the natural habitat and declining populations.

3. Captive breeding, etc.

The total population of this species is currently in decline. Some geographically isolated populations are critically endangered at the local level. In these cases, simply strengthening protective measures in natural habitats may be insufficient to recover wild populations. For this reason, based on knowledge provided by experts, particularly in the ecology of this species, the program will seek to establish techniques for captive breeding and to recover wild populations through reintroduction. These efforts will rely on individual animals rescued from injury or disease, or captured in the field and transported to the appropriate facilities.

The necessary individuals will be captured with due care to minimize impacts on wild populations. When using captive-bred individuals for species reintroduction, the program will account for genetic diversity issues to prevent the adverse effects of inbreeding.

When reintroducing individuals, the program will take special note of the irreversible effects on the survival of the wild population, including any changes in behavior attributable to captive breeding and infections by pathogens carried by reintroduced individual animals. Before these efforts, drawing on the knowledge of experts in the ecology or other aspects of this species, the program will thoroughly assess the need for reintroduction, along with various other issues, including methods, effects, and follow-up monitoring. At the same time, to optimize its actions, the program will seek to build consensus among the concerned parties.

4. Measures for effective promotion of the program

(1) Promotion of education and awareness-raising activities

To achieve effective progress with the program, understanding and cooperation is crucial on the parts of the national government, relevant local governments, parties carrying out various business activities, and the citizens including local residents. The program will promote public awareness on the need for protecting the species and the progress of the program. It will help foster better understanding and cooperation in

protecting the species, as well as to facilitate the development of voluntary conservation activities of the community,

(2) Patrol, etc. of the habitat

To prevent actions leading to the adverse effects on the species survival, whether due to indiscreet entry into the habitat, anthropogenic changes in the habitat, release of alien species, or other actions, the program will monitor the species' habitats and surrounding areas, collect information, and take appropriate countermeasures.

(3) Consideration for business activities

The knowledge, which is gained through Items 1 and 2 of Section III, will be used when business activities are conducted in the habitats of this species and surrounding areas to ensure that sufficient consideration be given to the conditions required for its continuing survival.

(4) Cooperation to achieve effective progress with the program

When implementing the program, efforts will seek to facilitate cooperation and collaboration among the national government, relevant local governments, experts in the ecology or other aspects of this species, local residents and landowners in the species' habitats and adjacent areas.

4-19 Protection and Recovery Program for the Iriomote Cat

(*Prionailurus bengalesis iriomotensis*)

July 17, 1995
Environment Agency
Ministry of Agriculture, Forestry and Fisheries

I. Objectives of the Program

The Iriomote cat (*Prionailurus bengalensis iriomotensis*) is a feline species found only on Iriomote Island in Okinawa Prefecture. The total population of this species is estimated to be about 100 in this habitat, mainly in the lowland areas of the island. This species was confirmed to represent a new species relatively recently, in 1967*. Subsequent surveys do not suggest precipitous population declines.

However, given the restricted range and small population, many factors may affect the steady survival of the current wild population. These factors include the progressive shrinking and fragmentation of the natural habitat in the lowland areas critical to its survival, frequent roadkills, and the risks of introduction and outbreak of contagious disease.

The objectives of this program is to ensure the stable survival of the cat in a natural state by monitoring and gathering information on the status of the species; maintaining and improving the environmental conditions necessary for the species; and mitigating and removing factors that pose threats to the species.

II. Program areas

Mainly on Iriomote Island (Okinawa Prefecture)

III. Overview of the Program

1. Understanding the species status and monitoring

The following surveys will be undertaken to appropriately and effectively implement the program, based on regular observations of the species status.

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* The Iriomote cat was formerly treated as a distinct species. However, it is now considered to be a subspecies of *Prionailurus bengalensis.*

(1) Ascertaining current distribution on the island

Given the scarcity of information on current distribution and the difficulty of gaining access to much of the species habitat, including inland areas, the south coast, and Sakiyama Peninsula, the program will seek to gather more specific information on species distribution, especially in the preceding areas, using trail cameras and field trace assessments. The program will also seek to continuously gather information on distribution changes on the island.

(2) Monitoring the status of the species

The program will monitor and accumulate information on the status of this species, including data on the number of individuals, home range, breeding, migration, and dispersal. The survey plots will be set based on what is known about the distribution of the species. Tools such as trail cameras and radio tracking will be used to identify individual animals and to continuously track and monitor individual animals. Emergency surveys and other countermeasures will be implemented in the event of alarming changes in the population.

(3) Gathering information on the health of individual animals

The program will also assess the health of individual animals through pathological and parasite examinations (animals dead, rescued, or captured for study) to monitor the introduction and outbreak of contagious diseases. Should these studies identify a pathogen or contagious disease that potentially threatens the survival of this species, plans call for implementing emergency surveys and other countermeasures.

To accumulate additional biological data, dead animals will be collected and preserved appropriately, where possible. In addition to pathological and parasite examinations, the survey will collect and analyze information to shed light on the genetic diversity of this species.

2. Habitat maintenance and improvement

The stable survival of this species in its natural state will require efforts to maintain the health of the entire ecosystem, including various prey animals and the food chain, in which this species is the apex predator.

For this reason, efforts will seek to preserve favorable conditions in areas where environmental conditions suit the species. In areas where changes in land use or agricultural management have degraded species habitat and affected maintenance of the population, efforts will seek to restore or improve habitat conditions, according to the degree of degradation, to render them suitable for feeding, resting, and breeding, as well as migration, dispersal, and contact between individual animals.

The following specific measures will be undertaken based on the current species range and habitat:

(1) In areas that feature ideal conditions for this species, and where good living conditions are observed, efforts will focus on maintaining and/or improving the habitat as necessary. These regions stretch from the coastal areas and estuaries to lowland areas comprised of a complex stream and valley topography. In these regions, efforts will seek to preserve or restore the continuity of the natural habitat, which tends to feature diverse plant species in lowland forest environments: mangroves and powder-puff trees (*Barringtonia racemosa*); wetlands including rice paddy fields; hinterland forests of subtropical Castanopsis and oak forests, etc.; and an abundant supply of prey animals, including the white-breasted waterhen (*Amaurornis phoenicurus*), Kishinoue's giant skink (*Plestiodon kishinouyei*), and frogs.

(2) In regions where the species occurs in habitat already degraded but still required to maintain the population on the island from the standpoint of the expansion of suitable habitats and the migration and dispersal of individual animals, efforts will focus on improving or restoring habitat. Based on natural and social conditions, wetlands will be improved where appropriate, and vegetation unsuitable for species habitat remediated. Such areas include abandoned cropland covered with Chinese silver grass (*Miscanthus sinensis*) and Cogongrass (*Imperata cylindrica*) and abandoned grassland for grass sampling and grazing. Additionally, in open spaces such as farmland falling within the habitat range, efforts will focus on maintaining and cultivating forests along rivers and between farm plots to ensure the routes needed by this species for migration, dispersal, and contact between individuals.

These program activities will account for the ecological characteristics of this species and the effects of various activities on biological communities of this and other species. These activities will proceed based on a long-term vision, with assessments of current methods and corresponding readjustments. In the process, the program will seek to establish local frameworks for cooperation.

Where land is used or business activities conducted within the species habitat and surrounding areas, the program will seek to ensure the conditions needed for the survival of this species, including important feeding grounds and migration routes.

3. Semi-wild breeding

Due to the cat’s solitary habits and extensive range in forests, little is known about breeding habits or requirements in the wild. Improving on this understanding poses major challenges. Progressive shrinking or subdivision of habitat and range, and the introduction and outbreak of contagious disease may affect the sound reproduction of this species.

To better understand breeding habits and to establish captive breeding techniques, the program will conduct studies involving semi-wild captive breeding in an outdoor rearing facility based on the natural environment and located within the species habitat on the island.

Here, animals will be collected by capturing wild specimens or by interning rescued sick and injured animals. The field individuals will be captured with a focus on minimizing the effects on current wild population; for example, by avoiding capturing residents of breeding age.

To prepare for sudden declines in the wild population due to the introduction and outbreak of a contagious disease, the program will also assess the necessity of maintaining and expanding captive population.

4. Other

(1)Measures to prevent roadkill incidents

To minimize road kill incidents, the program will collect reports of sightings on or along roads. In areas where road kills are estimated to be relatively common, the program will implement measures in partnership with relevant organizations, including efforts to improve facilities and install warning signs for motorists.

(2) Rescue and rehabilitation of sick and injured individuals

The program will prepare and enhance systems for the rescue and rehabilitation of sick and injured individuals. Individual animals that recover to a stage that would allow them to survive in the wild will be, in principle, returned to their natural habitat. At the same time, recovered individuals will be assessed for suitability if the semi-wild captive breeding program described in Item 3 above is in need of animals.

(3) Measures to prevent predation on poultry

To minimize predation by this species on chickens and aigamo ducks and species dependence on anthropogenic food sources, which may disturb the mode of life of this species, the program will investigate measures to prevent these incidents and implement appropriate countermeasures: for example, installing invasion prevention fences.

(4) Patrol of the habitats

Habitats will be monitored to safeguard against adverse effects on the conditions required for species survival and reproduction.

(5) Preventing the impacts of alien species

The program will monitor the invasive status and impacts of feral dogs, feral cats, and other invasive species that may compete against the species or pass on infectious disease. It will also investigate various preventive measures, including comprehensive management of domestic animals and their removal from wild habitats. These countermeasures will be implemented as necessary.

Since domestic cats are an especially likely source of infection and disease, the program will examine the domestic cats found on the island at periodic intervals to identify the presence of contagious pathogens and

implement appropriate countermeasures if these examinations confirm the presence of such a pathogen or the onset of a contagious disease threatening the survival of this species.

(6) Promotion of education and awareness-raising activities

To achieve effective progress with the program, understanding and cooperation is crucial on the parts of the parties carrying out various business activities, relevant administrative organs, and the citizens including local residents. The program will promote public awareness on the status of the species, the need for protection, and the progress of the protection and recovery program. These activities will help foster better understanding and cooperation in protecting the species. The awareness-raising activities are expected to take place at public facilities in relevant areas so as to facilitate the development of voluntary conservation activities of the community.

(7) Consolidation of collaboration for effective promotion of the program

When implementing the program, efforts will seek to facilitate cooperation and collaboration among the national government, local governments of Okinawa Prefecture and Taketomi Town at all levels, experts with expertise on biology, ecology or other aspects of this species, as well as local residents in the species' habitats and adjacent areas.

4-20 Protection and Recovery Program for the Amami Woodcock (*Scolopax mira*)

August 31, 1999
Environment Agency
Ministry of Agriculture, Forestry and Fisheries

I. Objectives of the Program

The Amami woodcock (*Scolopax mira*), a bird in the Scolopacidae family, is found in parts of the Nansei Islands. The species inhabits forests dominated by *Castanopsis sieboldii* and other species, but degradation of suitable environments and other factors have reduced both the distributional range and overall population of this species.

The objectives of this program is to ensure the stable survival of the bird in a natural state by clarifying and monitoring the status of the species; maintaining and improving the environments necessary for the species; and mitigating and removing factors that pose threats to the species.

II. Program Areas

The distribution areas of this species in the Amami Island Group, Kagoshima Prefecture, and in Okinawa Prefecture

III. Overview of the Program

1. Understanding the species status and monitoring, etc.

The following surveys will be undertaken to appropriately and effectively implement the program.

(1) Understanding the species status and monitoring

Based on automobile-based route censuses and other surveys undertaken in the range of this species during breeding season and non-breeding season, the program will continuously gather information on the status and trends of this species, including its distribution and breeding status. The program will also collect and organize reports of sightings.

(2) Clarifying the biological characteristics

Using banding, radio tracking, and other identification/tracking methods, the program will gather information on characteristics of the species' biology, including migration of individual birds, actual

dispersion status, and behavior and home range during breeding and non-breeding season. The program will also conduct research to elucidate breeding status based on fecal analysis, feeding habits, and the structure of ecosystems in which this species occurs, including current predation status.

(3) Understanding suitable environments and potential threats

The results gained in (1) and (2) above will be used to clarify suitable environments for this species. Surveys will be implemented to better understand the factors that pose potential threats to the current population and countermeasures to remove those impacts.

2. Habitat maintenance and improvement

The stable survival of this species in its natural state will require efforts to maintain the health of the entire ecosystem, including the forests that serve as the species' crucial breeding sites.

Based on the results of Item 1 above, the program will explore effective countermeasures against degradation of the habitats and population declines, thereby maintaining and improving environments suitable for the habitat and breeding.

When land use or business activity on species habitat arises, the program will seek to ensure the environmental conditions needed for the survival of the species.

3. Captive breeding

Species conservation will focus on the maintenance and growth of wild populations in their habitats. However, to safeguard against precipitous declines in the wild populations, the program will explore the possibility of captive breeding.

4. Patrol, etc. of the habitat

To prevent human interactions that may adversely affect the populations, including illegal hunting and indiscreet entry into the habitats, the program will establish a patrolling system in the species habitats.

5. Promotion of education and awareness-raising activities

To achieve effective progress with the program, understanding and cooperation is crucial on the part of the parties carrying out various business activities, relevant administrative organs, and citizens including community residents. The program will promote public awareness on the species status, the need for protection, and the progress of the protection and recovery program. These activities will help foster better understanding and cooperation in protecting the species. The program will also seek to facilitate the development of voluntary conservation activities of the community through efforts such as fostering a deeper understanding of the species in the concerned area.

To minimize population losses due to road kills, the program will investigate accident prevention measures in partnership with relevant organizations, including installing warning signs for motorists.

6. Consolidation of collaboration for effective promotion of the program

When implementing the program, efforts will seek to facilitate cooperation and collaboration among the national government, Kagoshima Prefecture, Okinawa Prefecture and relevant municipalities, experts in ecology or other aspects of this species, and local residents.

4-21 Protection and Recovery Program for the the Amami Thrush

(*Zoothera dauma major*)

August 31, 1999
Environment Agency
Ministry of Agriculture, Forestry and Fisheries

I. Objectives of the Program

Occurring only on Amami-Oshima Island and Kakeroma Island, the Amami thrush (*Zoothera dauma major*) is the largest of the Japanese thrushes. This species mainly inhabits mature or old growth laurel forests featuring closed canopies and sheltered from the wind.
Degradation of suitable environments and other factors have dramatically reduced both the distributional range and overall population of this species.

The objectives of this program is to ensure the stable survival of the bird in a natural state by clarifying and monitoring the status of the species; maintaining and improving the environments necessary for the species; and mitigating and removing factors that pose threats to the species.

II. Program Areas

The distribution areas of this species in the Amami Island Group in Kagoshima Prefecture.

III. Overview of the Program

1. Understanding the species status and monitoring, etc.

The following surveys will be undertaken to appropriately and effectively implement the program.

(1) Understanding the species status and monitoring

Using fixed-point observations, route censuses, and other techniques to track the birdsong during the breeding season, the program will continuously gather information on the status and trends of this species. The program will also collect and organize reports of sightings.

(2) Clarifying the biological characteristics

The program will also consider tracking methods, whether involving banding or other identification methods, to gather information on behavior and home ranges of individual birds.

Sick or injured individuals that recover after rescue but are poorly suited for return to their original habitats will be used for captive behavioral observations to deepen understanding of physiology and ecology of the species.

(3) Understanding suitable environments and potential threats

The results gained in (1) and (2) above will be used to clarify suitable environments for this species. Surveys will be implemented to better understand the factors that pose potential threats to the current population and their impacts.

2. Habitat maintenance and improvement

The stable survival of this species in its natural state will require efforts to maintain the health of the entire ecosystem, including preserving the laurel forests with a closed canopy that provide shelter from wind. Based on the results of Item 1 above, the program will explore effective countermeasures against degradation of the habitats and population declines, thereby maintaining and improving environments suitable for the habitat and breeding.

When land use or business activity on species habitat arises, the program will seek to ensure the environmental conditions needed for the survival of the species.

3. Captive breeding

Species conservation will focus on the maintenance and growth of wild populations in their habitats. However, to safeguard against precipitous declines in the wild populations, the program will explore the possibility of captive breeding.

4. Patrol, etc. of the habitat

To prevent human interactions that may adversely affect the populations, including illegal hunting and indiscreet entry into the habitats, the program will establish a patrolling system in the species habitats.

5. Promotion of education and awareness-raising activities

To achieve effective progress with the program, understanding and cooperation is crucial on the part of the parties carrying out various business activities, relevant administrative organs, and citizens including community residents. The program will promote public awareness on the species status, the need for protection, and the progress of the protection and recovery program. These activities will help foster better understanding and cooperation in protecting the species. The program will also seek to facilitate the development of voluntary conservation activities of the community through efforts such as fostering a deeper understanding of the species in the concerned area.

6. Consolidation of collaboration for effective promotion of the program

When implementing the program, efforts will seek to facilitate cooperation and collaboration among the national government, Kagoshima Prefecture and relevant municipalities, experts in ecology or other aspects of this species, and local residents.

4-22 Protection and Recovery Program for the Okinawa Rail

(*Gallirallus okinawae*)

November 19, 2004
Ministry of Education, Culture, Sports, Science and Technology
Ministry of Agriculture, Forestry and Fisheries
Ministry of Land, Infrastructure, Transport and Tourism
Ministry of the Environment

I. Objectives of the Program

The Okinawa rail (*Gallirallus okinawae*) is a bird in the family Rallidae, first described as a new species in 1981. It is found only in the northern part of Okinawa Island. Current threats to its survival include predation by feral cats; rapid shrinking of the species range, likely due to the mongoose invasion; shrinking habitat due to land development; death or injury caused by motor vehicles; and adverse effects associated with improvident human interactions with the species, whether for observations or photographing of individuals.

The objectives of this program is to ensure the stable survival of the bird in a natural state by clarifying the status of the species; maintaining and improving the environments necessary for the species; mitigating and removing factors that pose threats to the species; establishing artificial breeding techniques to safeguard against rapid declines in wild population; and exploring methods for reintroducing captive-bred animals.

II. Program areas

Okinawa Island in Okinawa Prefecture and captive breeding areas described in Item 3 of Section III below.

III. Overview of the Program

1. Understanding the status of the species

The following surveys will be undertaken to appropriately and effectively implement the program and to gather information on the species and its current situation.

(1) Surveying and monitoring the status of the species

The program will conduct surveys and undertake regular monitoring to gather information on the status of the population, including distributional range and habitat density.

In addition, the program will gather information from local residents on Okinawa rail and on alien and other species that prey on the rail, including reports of sightings, with animals categorized as dead or alive. It will gather information on the status of the species, actual incidents involving death or injury of this species, particularly due to contact with motor vehicles, and the invasion status of alien species.

(2) Ascertaining ecology

Much about this species remains unknown, including its basic ecology. The program will implement surveys to gather basic facts essential for this program, including feeding habits; foraging behavior; migration of the individuals; population dispersal; behavior during breeding and non-breeding seasons; and home range.

The program will also analyze DNA from samples acquired from individual animals found in the past and present ranges to better understand current diversity levels and changes in genetic diversity.

(3) Understanding suitable environments

Based on the results of the surveys described in (1) and (2) above, the program will gather information on suitable environments for this species, with the object of maintaining wild population. It will also investigate the relationship between this species and the surrounding ecosystem.

2. Habitat maintenance and improvement

The stable survival of this species in its natural state will require efforts to maintain the health of the entire ecosystem, including the trees it uses as roosts and animals that make up its diet.
Based on the knowledge acquired in Item 1 above, the program will take the following actions to explore effective countermeasures against the degradation of the habitats and population declines, thereby maintaining and improving environments suitable for the habitat and breeding.

When land use or development on species habitat arises, the program will seek to ensure the environmental conditions needed for the survival of the species.

(1) Preventing the impacts of alien and other species

The program will monitor the invasion status and impacts of feral cats, mongoose, and other alien species that pose major threat to the species, whether through predation or competition for food resources. This includes the jungle crow (*Corvus macrorhynchos*), whose effects on the species are also of concern. These alien and other species will be eliminated from native habitats and adjacent areas.

The program will also entail other measures, including appropriately managing domestic animals to prevent the introduction or dispersion of feral cats and other species into species habitat.

(2) Patrol, etc. of the habitat

To prevent human interactions that may adversely affect the population and their breeding, including indiscreet entry into the habitats, the program will establish a patrolling system and install notices in the species habitats.

(3) Countermeasures to prevent accidents

To prevent death or injury of individual animals due to motor vehicles and fatal accidents involving young falling into roadside ditches, the program will gather information, including reports of sightings on and around roadways. In areas where these accidents are likely to occur, the program will take measures in cooperation with relevant organizations, including improving road structures (for example, installing side ditches that do not endanger small animals); weeding to improve visibility; and installing signs urging motorists to proceed with caution.

The months of the year in which breeding and brooding occur require special attention, since such accidents are especially common during this period.

3. Captive breeding and reintroducing individuals

Studies show the distribution of this species has declined, likely due to alien species. Based on the likelihood that the population is in rapid decline, the program will prepare the systems and facilities needed to captive-breed individual animals and implement captive breeding in order to establish effective captive breeding techniques, gather information on ecology of animals observed in captivity, and maintain stable population.

In addition, the program will explore the reintroduction into the wild of individual animals following captive breeding efforts if necessary. In captive-breeding and reintroduction efforts, the program will monitor various factors capable of affecting the survival of captive-bred and wild populations, including potential changes in behavior attributable to captive breeding and the potential infections of contagious pathogens among captive-bred animals as well as infections from captive-bred populations to wild populations. With these considerations, it will establish appropriate captive breeding and reintroduction methods.

4. Promotion of education and awareness-raising activities

To achieve effective progress with the program, understanding and cooperation is crucial on the part of the parties carrying out various business activities, the national government, relevant local governments, and citizens including local residents and tourists. The program will promote public awareness on the species status, the need for protection, the necessity of eliminating and preventing alien species, and the progress of

the protection and recovery program. The program will provide education programs at schools to foster better understanding and cooperation in protecting the species.
With the cooperation of experts in ecology of this species, and local parties participating in activities to protect this species, the program will facilitate the development of voluntary conservation activities of the community through efforts such as fostering a deeper understanding of the species in the program area.

5. Consolidation of collaboration for effective promotion of the program

When implementing the program, efforts will seek to facilitate cooperation and collaboration among the national government, relevant local governments in ecology of this species, parties participating in activities to protect this species, and local residents.

4-23 Protection and Recovery Program for the Okinawa woodpecker (*Sapheopipo noguchii*)

July 28, 1998
Environment Agency
Ministry of Agriculture, Forestry and Fisheries

I. Objectives of the Program

The Okinawa woodpecker (*Sapheopipo noguchii*) is a monospecific species of medium-sized woodpecker occurring only in the northern part of Okinawa Island. This species lives in forest dominated by *Castanopsis sieboldii* and other species but degradation of suitable environments and other factors have reduced both the distributional range and overall population of this species.

The objectives of this program is to ensure the stable survival of the bird in a natural state by clarifying and monitoring the status of the species; maintaining and improving the environments necessary for the species; and mitigating and removing factors that pose threats to the species.

II. Program Area

The distribution area of this species in the northern part of Okinawa Prefecture

III. Overview of the Program

1. Understanding the species status and monitoring

The following surveys will be undertaken to appropriately and effectively implement the program.

(1) Understanding the species status and monitoring

Through surveys of the distribution of nesting trees and breeding status, the program will continuously gather information on the status and trends of this species.

(2) Clarifying the biological characteristics

Using marking, radio tracking, and other identification/tracking methods, the program will gather information on migration of individual animals, population dispersal, behavior during breeding and non-breeding seasons, and home range.

The program will also conduct research to better understand feeding habits and other aspects of the ecosystems in which this species occurs.

(3) Understanding suitable environments and potential threats

The results gained in (1) and (2) above will be used to clarify suitable environments for this species. Surveys will be implemented to better understand the factors that pose potential threats to the current population and their impact.

2. Habitat maintenance and improvement

The stable survival of this species in its natural state will require efforts to maintain the health of the overall ecosystem, including the large-diameter *Castanopsis sieboldii* trees used for nesting and plants and animals used for forage.

Based on the results of Item 1 above, the program will explore effective countermeasures against degradation of the habitats and population declines, thereby maintaining and improving habitat and breeding conditions.

When land use or business activity on species habitat arises, the program will seek to ensure the environmental conditions needed for the survival of the species.

3. Captive breeding

Species conservation will focus on the maintenance and growth of wild population in their habitats. However, to safeguard against precipitous declines in the wild population, the program will explore the possibility of captive breeding and will seek to establish captive breeding techniques.

4. Patrol, etc. of the habitat

To prevent human interactions that may adversely affect the population including indiscreet entry into the habitats, the program will establish a patrolling system in the species habitats.

5. Promotion of education and awareness-raising activities

To achieve effective progress with the program, understanding and cooperation is crucial on the part of the parties carrying out various business activities, relevant administrative organs, and citizens including community residents. The program will promote public awareness on the species status, the need for protection, and the progress of the protection and recovery program. These activities will help foster better understanding and cooperation in protecting the species. The program will also seek to facilitate the development of voluntary conservation activities of the community through efforts such as fostering a deeper understanding of the species in the concerned area.

6. Consolidation of collaboration for effective promotion of the program

When implementing the program, efforts will seek to facilitate cooperation and collaboration among the national government, local governments of Okinawa Prefecture and relevant municipalities, experts in ecology or other aspects of this species, and local residents.

4-24 Protection and Recovery Program for the Yanbaru long-armed scarab beetle (*Cheirotonus jambar*)

April 3, 1997
Ministry of Education, Science and Culture
Ministry of Agriculture, Forestry and Fisheries
Environment Agency

I. Objectives of the Program

The largest Japanese beetle, the Yanbaru long-armed scarab beetle (*Cheirotonus jambar*), was described as a new species in 1984. Occurring in the northern part of Okinawa Island, this species is found in forests that feature large trees, such as *Castanopsis sieboldii*, with hollows that serve as living space for eggs and larvae. Degradation of suitable environments and other factors have reduced the distributional range of this species. In addition, illegal collection and the destruction of breeding environments by maniac amateur collectors have raised concerns, with incidents of illegal collection confirmed to occur even today. Very few confirmed sightings have been recorded in recent years.

The objectives of this of the program is to ensure the stable survival of the beetle in a natural state by clarifying and monitoring the status of the species; maintaining and improving the environments necessary for the species; and establishing captive breeding techniques and implementing captive breeding programs.

II. Program Area

The distribution area of this species in the northern part of Okinawa Prefecture.

III. Overview of the Program

1. Understanding the species status and monitoring

To ensure appropriate and effective implementation of the protection and recovery program for this species, surveys will continuously monitor the status of the species, including recent fluctuations in population and breeding status, as well as habitat conditions. The program will also accumulate any other pertinent information. In the event of alarming changes in the species status or habitat, countermeasures will be implemented as needed to preserve this species, including research to clarify the cause of the problem.

The program will also involve research and studies to better understand the biological characteristics of the species and the structure of the ecosystems in which this species occurs, and to gather information on the current status of various factors that pose potential threats to the current population and their impacts.

2. Habitat maintenance and improvement

The stable survival of this species in its natural state will require efforts to maintain the health of the entire ecosystem, including large specimens of *Castanopsis sieboldii* and *Quercus miyagii*, which provide the hollows needed for egg-laying and larva growth.

In particular, the tree hollows required for habitat appears to be in decline. Based on the results of Item 1 above, the program will explore effective methods for filling hollows with humic substances, and creating and setting artificial hollows based on a due consideration of the ecological characteristics of this species, thereby maintaining and improving suitable environments for habitat and breeding.

When land use or business activity on species habitat arises, the program will seek to ensure the environmental conditions needed for the survival of the species.

3. Captive breeding and reintroduction

Species conservation will focus on the maintenance and growth of wild population in their habitats. However, given the very low numbers of the current population confirmed, an aggressive captive breeding program may be required. For this reason, the program will also seek to establish captive breeding techniques and to proceed with captive breeding programs based on the techniques established.

If deemed necessary, the program will seek to strengthen current population by reintroducing individual beetles over the current range of the species by the appropriate method. If so, special care will be taken to avoid genetic disturbances that may threaten the survival of existing wild population.

4. Preventing illegal collection

Habitats will be patrolled to prevent illegal collection, a major threat to the species survival.

5. Promotion of education and awareness-raising activities

To achieve effective progress with the program, understanding and cooperation is crucial on the part of the parties carrying out various business activities, relevant administrative organs, and citizens including community residents. The program will promote public awareness on the species status, the need for protection, and the progress of the protection and recovery program. These activities will help foster better understanding and cooperation in protecting the species. The program will also seek to facilitate the development of voluntary conservation activities of the community through efforts such as fostering a deeper understanding of the species in the concerned area.

6. Consolidation of collaboration for effective promotion of the program

When implementing the program, efforts will seek to facilitate cooperation and collaboration among the national government, Okinawa Prefecture and relevant municipalities, experts in ecology or other aspects of this species, and local residents.

4-25 A 10-year Action Plan for the Amami Rabbit Protection and Recovery Program

(2014 to 2024)

December 2014
Naha Nature Conservation Office
Ministry of the Environment

I. Background

1. Scientific classification and ecology

The Amami rabbit (*Pentalagus furnessi*) is a monospecific species endemically distributed only on Amami-Oshima and Tokunoshima Islands. The species is estimated to have diverged from a group of the Leporidae family in the Middle Miocene (roughly 10 million years ago) (F. Yamada et al. 2002, Matthee 2004); since that time, it has evolved a unique lifestyle while maintaining its primitive morphology. Amami-Oshima and Tokunoshima Islands were separated from the continent by the early Pleistocene of the Quaternary Period (roughly 2 million to 1.7 million years ago), and the rabbit is consequently a relict endemic species for which there are no known related species living in nearby continental areas.
The species digs its burrows mostly in the slopes of primeval forests and uses neighboring mountain streams, secondary forests, and other places with ample herbaceous plants as feeding grounds. The rabbit produces one young per birth, most likely from around September to February and from around March to June (2006 to 2013 Ministry of the Environment survey). Population size of the species is estimated to be somewhere between 2,000 and 4,800 individuals on Amami-Oshima Island and around 200 individuals on Tokunoshima Island (Sugimura and Yamada 2004); the population is considered to be in a serious situation, especially on Tokunoshima Island.

2. Legal position, etc.

Act on Conservation of Endangered Species of Wild Fauna and Flora

- Designated as a National Endangered Species in 2004
- A plan for the species' Protection and Recovery Program was drawn up in 2004.

Wildlife Protection and Proper Hunting Act

・Part of the species' habitat was designated the Mt. Yuwandake National Wildlife Protection Area in 1965.

Act on Protection of Cultural Properties

・Designated a Special National Natural Monument in 1963

・Part of the species' habitat was designated the Kamiya–Yuwandake Natural Monument in 1968

Other

・Listed as Endangered (EN) on the IUCN Red List of Threatened Species (2013)

・Listed as Endangered (EN) on the 4th version of the Red List of Japan (2012)

3. Present results of the Protection and Recovery Program (Attachment; omitted)

(1) Understanding the status of the species and accumulation of knowledge on ecology and other matters

Fecal pellets along mountain streams on Amami-Oshima Island and Tokunoshima Island have been surveyed since FY 2005.

On Amami-Oshima Island, the species seems to be in a recovery trend in recent years as a result of, for example, a mongoose control program that began in FY 2000. On the other hand, on Tokunoshima Island, no feces have been found along some mountain streams for several years, suggesting that the rabbit's existence there is declining (Attachment Figure 1; omitted).

Information on the existence of the species, obtained from monitoring surveys using trail cameras and other means was compiled and the area of distribution of the species was clarified (Attachment Figure 2; omitted).

Information on such characteristics as the species' home range, use of the environment, and genetic characteristics is now understood owing to a wide range of research by researchers and others.

The state of invasion of the species' habitat by small Indian mongooses (*Herpestes auropunctatus*), feral cats (*Felis catus*), feral dogs (*Canis familiaris*), and black rats (*Rattus rattus*) was confirmed. Predation of the rabbits by small Indian mongooses, feral cats, and feral dogs was confirmed through analyses of feces and stomach contents and from the results of the trail camera surveys (Attachment Figure 3; omitted).

Invasion of the species' habitat by domestic rabbits has not been confirmed.

Dead individuals of the species found on forest roads and in other places were collected and analyzed to determine the causes of death. The results showed that, among those cases in which the cause of death could be determined, the number one cause was collisions with motor vehicles, followed by predation by feral cats and feral dogs (Attachment Figure 4; omitted).

(2) Habitat maintenance and improvement

With the aim of maintaining and improving environments suited for the habitation and breeding of the species, data on important areas were extracted and the area to be designated a protection area (National Park) was examined on the basis of such factors as the status of the species and expert opinion. The work needed for the designation was then undertaken.
The distribution status of the small Indian mongooses, feral cats, and feral dogs confirmed to be preying on the species was grasped and measures aimed to eliminate these predators were taken.
With the aim of promoting appropriate keeping of pet dogs and cats, a microchipping support project (from FY 2008 onwards) and a variety of education and awareness-raising activities were implemented with the collaboration of relevant organizations.

(3) Captive breeding, etc.

Information needed for rearing the species has been accumulated through the care of sick or injured individuals.

(4) Measures for effective promotion of the program (education and awareness-raising activities and collaboration with relevant organizations)

Upon the launch of a roadkill-prevention campaign in FY 2009, accident prevention signs were placed at the locations of frequent wildlife collisions with motor vehicles and in other locations where it was deemed necessary. Since then, roadkill numbers have been declining (Attachment Figure 5; omitted).
Education and awareness-raising activities regarding such factors as the species' status, the need for its protection, and the current state of implementation of the Protection and Recovery Program have been promoted through the distribution of pamphlets and other means.
The area including the rabbit's habitat has been routinely monitored and information collected with the collaboration of local concerned parties, national and local public organizations, and many others.

4. Points of concern in relation to protection of the species

A workshop on the Amami Rare Species Protection and Recovery Program was held with the participation of representatives from such organizations as universities, research institutes, administrative bodies, and NPOs on August 9 and 10, 2013. At this workshop, the Protection and Recovery Program that has been implemented since FY 2005 was reviewed and points of future concern in relation to protection of the species were identified. The points identified are summarized as follows:

(1) Understanding the status of the species and accumulating of knowledge on ecology and other matters

The target population size for the species has not been specified.
A population size estimation method needs to be established and implemented.
Further elucidation of behavioral and breeding ecology is necessary.

Genetic investigation of, and research into, for example, genetic diversity and phylogenetic relationships is needed.

(2) Habitat maintenance and improvement

Important areas have not been identified on the basis of an understanding of suitable environmental conditions for the species, nor are such areas assured of protection.

The negative impacts of human activities such as development and of small Indian mongooses, feral cats, etc. must be understood; elimination or mitigation measures for these impacts need to be implemented.

The species' habitat is fragmented in some parts of Amami-Oshima and Tokunoshima Islands.

The factors causing a decline in the species' population on Tokunoshima Island have not been elucidated.

(3) Captive breeding, etc.

There is no rescue system for sick or injured individuals.

The measures for those individuals that cannot be returned to the wild need to be clarified.

(4) Measures for effective promotion of the program (education and awareness-raising activities and collaboration with relevant organizations)

Coordination with a wide range of research done by relevant organizations is necessary.

Collaboration with local governments and others needs to be strengthened, and roles and responsibilities need to be assigned accordingly.

In any developments, careful consideration must be given to Amami rabbits through prior information sharing.

Rules need to be created for observing Amami rabbits in ecotourism, etc.

Education and awareness-raising activities are needed regarding preventing damage by feral dogs and cats and roadkill.

5. Background leading to the creation of the Action Plan

More than 10 years have passed since the launch of the Protection and Recovery Program. Through this program, results have been achieved in a wide range of areas. These include improved understanding of the status and biological characteristics of the species; understanding of the environmental factors, such as small Indian mongooses, that may place pressure on the population; implementation of roadkill-prevention measures; and promotion of education and awareness-raising activities. One of the most important outcomes of the program has been the accumulation of knowledge on, for example, the status and biological characteristics of the species. Information on both of these factors is elemental to planning for species conservation and has been collected through the cooperation and collaboration of researchers and many others. Furthermore, on Amami-Oshima Island, as a result of the mongoose control program, the population size and the distribution area of the species are in a recovery trend.

However, as summarized above in “4. Points of concern in relation to protection of the species,” to succeed in maintaining a stable population of the species some of these points of concern still require attention. Included in the National Biodiversity Strategy of Japan 2012–2020 is National Target C-2: “Increase the number of threatened species whose status on the Red List of Japan has been changed to a lower category of threat.” In addition, with the ultimate aim of having “Amami-Oshima, Tokunoshima, the northern part of Okinawa Island, and Iriomote Island” inscribed on the Natural World Heritage List, Japan decided to add this property to the Tentative World Heritage List at the end of January 2013 and submitted the documents required to the UNESCO World Heritage Centre in February. Amami-Oshima and Tokunoshima Islands are candidate sites as part of the nomination of this property for inscription on the Natural World Heritage List. The Amami rabbit provides indispensable proof of the Outstanding Universal Value of these sites. To be able to meet the target set in the National Biodiversity Strategy of Japan 2012–2020, as well as to have these sites inscribed on the Natural World Heritage List, and to ensure and strengthen their protection, the Protection and Recovery Program must be implemented in such a way that the intended results can be more effectively achieved.

In light of the above, a decision was made to draw up a 10-year plan (from 2014 to 2024) titled “ A 10-year Action Plan for the Amami Rabbit Protection and Recovery Program (hereinafter referred to as “the Action Plan”).

II. Objectives of the Action Plan

The objectives of the Action Plan are the elimination or mitigation of factors that cause species decline, including alien species, roadkills, and development; expansion of the distribution areas and population size of the species on Amami-Oshima and Tokunoshima Islands; and ranking in a category lower than Vulnerable (VU), or removal of ranking, on the Red List of Japan by the end of March 2024.

III. Action period

December 1, 2014 to March 31, 2024

IV. Details of activities needed to achieve the Action Plan objectives, and their expected results and indicators

1. Understanding the status of the species and accumulation of knowledge on ecology and other matters

Target 1: Along with continuation of the present monitoring survey, new survey methods will be established so that information on the species, including status, ecology, and genetics, will be more effectively collected and accumulated and then used to assess the population size, etc. Factors causing the reduction in population size of the species, and the extent of their impact, will be clarified.

Activity 1

Activity 1-1: Understand the status and ecology of the species through continued implementation of the present monitoring survey and through the establishment and introduction of a more effective survey method.

Activity 1-1-1: Continue the fecal pellet counts along mountain streams and the monitoring survey using trail cameras and other means to accumulate information on the status and ecology of the species
From FY 2014 to 2023: Accumulate information on the species status through continued implementation of the monitoring survey.

Activity 1-1-2: Reevaluate past monitoring results; revise the survey method, including the survey content, period, and route; and conduct more accurate and effective monitoring.
From FY 2014 to 2015: Evaluate the monitoring results and revise the survey method.
From FY 2016 onwards: Conduct the survey by using the new survey method.

Activity 1-1-3: Examine whether or not new survey techniques such as GPS tracking and digital sound recording need to be introduced to obtain detailed information on the species' home range, habitat use, etc.; introduce viable survey methods; and collect new ecological data.
From FY 2014 to 2015: Study the survey techniques.
From FY 2016 onwards: Introduce and implement new survey methods.

Activity 1-1-4: Set a target population size for the species, examine and develop a more accurate and efficient population-size estimation method, and assess the population size of the species.
From FY 2014 to 2015: Set a target population size for the species and examine and develop a population-size estimation method.
From FY 2016 onwards: Assess the population size of the species by using the new population-size estimation method.

Activity 1-1-5: Use tissues sampled from dead and rescued individuals to determine the genetic diversity and phylogenetic relationships of the species, assess the health of the population, set the unit of conservation on the basis of phylogenetic relationships, determine the causes of death, and so on.
FY 2014: Establish a framework for tissue sampling, preservation, and genetic analysis.
From FY 2015 to 2018: Gain an understanding of the genetic diversity and phylogenetic relationships of the species.

Activity 1-2: Investigate the primary negative factors and the seriousness of their negative effects on the existence of the species on Tokunoshima Island, where reduction in the species' population size is especially of concern.
From FY 2014 to 2016: Conduct the above-described investigation and elucidate the negative factors.

Result 1

Result 1-1-a: Reports and academic papers are published on the status, ecology, and genetics of the species and on the factors causing the decline in population.

Result 1-1-b: Survey methods are improved or newly introduced to determine the status of the species with greater accuracy; survey reports are produced by using these methods.

Result 1-2: Reports are published on the factors placing pressure on the species' existence and the seriousness of these factors on Tokunoshima Island.

Results indicator 1: The number of reports and academic papers published in relation to Result 1

Effect 1

Effect 1: Accumulated knowledge on the status, ecology, genetics, etc. of the species is utilized in conservation measures.

Effect indicator 1: The type of conservation measures and the number of cases in which data and results based on Result 1 are used.

2. Habitat maintenance and improvement

Target 2-1: Important areas with environmental conditions suitable for the species will be maintained, with adequate protection and management. Especially on Tokunoshima Island, the distribution area and population size of the species will be increased through the implementation of measures that aim to, for example, expand the otherwise small buffer zone surrounding the mountain areas. In addition, the issue of whether or not to connect habitats fragmented by roads, farms, etc. with a corridor will be examined as necessary.

Activity 2-1

Activity 2-1-1: Designate habitat with conditions suitable for the species as a National Park and maintain the species' living environment through adequate protection and management of the wildlife protection area and National Park.

Activity 2-1-1-1: Designate, as far as possible, habitat with suitable conditions for the species as a National Park Special Protection Zone or a Class I Special ZoneClass I Special Zone; designate the rest of the species' habitat as National Park so that the species can be adequately protected and managed.
From FY 2014 onwards: Implement the work required for National Park designation.

Activity 2-1-1-2: Regulate development plans and activities that may have an impact on the species' living environment through proper enforcement of the Natural Parks Act and other legislation.

From FY 2014 onwards: Properly enforce the Wildlife Protection , Control and Proper Management Act and the Natural Parks Act (after the designation as a National Park).

Activity 2-1-2: Especially on Tokunoshima Island, expand the buffer zone by, for example, promoting forest restoration of abandoned fields and other land areas surrounding the mountain areas and creating feeding grounds for the species in coordination and collaboration with relevant organizations.

Activity 2-1-2-1: By considering their usability as habitat for the species, from among the areas that surround the mountain areas, extract those that are suitable as buffer zones (e.g. abandoned fields). Then, discuss methods that can be used to restore the areas as habitat and create feeding grounds for the species in coordination and collaboration with relevant organizations.
From FY 2015 to 2016: Extract candidate buffer zone areas and examine methods of forest restoration and creation of feeding grounds for the species.

Activity 2-1-2-2: In coordination and collaboration with relevant organizations, restore the areas extracted as buffer zones as the species' habitat and create feeding grounds for the species.
From FY 2017 onwards: Restore forests and create feeding grounds for the species.

Activity 2-1-3: In relation to the creation of a corridor that connects the fragmented habitat, review the need for corridor creation from genetic and ecological perspectives. If a corridor is judged necessary, study the location, size, structure, etc. of the corridor in coordination with the relevant organizations, local governments, land owners, and other concerned parties.*
From FY 2015 to 2017: Accumulate the genetic and ecological knowledge needed to examine the need for corridor creation.
From FY 2017 to 2018: Discuss the need for corridor creation.
* If corridor is judged necessary, draw up a creation plan and include it within the scope of this Action Plan.

Result 2-1
Result 2-1-1-1: The National Park designation plan designates the habitat as a National Park.
Results indicator 2-1-1-1: The percentage of habitat designated as a National Park

Result 2-1-1-2: Development plans and activities that have negative impacts on the species' survival are regulated on the basis of the National Park designation plan.
Results indicator 2-1-1-2: The number of adequate prior adjustments, authorizations, and law enforcement cases processed in relation to development plans and activities that could have an impact on the species' survival, as determined by examination of the National Park designation plan

Result 2-1-2: A method of extracting areas that can be used to expand the buffer zone is developed; these areas are extracted by using this method and the buffer zone is expanded.

Results indicator 2-1-2: The size of the buffer zone.

Result 2-1-3: Genetic and ecological data related to the creation of a corridor are accumulated and a decision is made on the need for its creation. If creation of a corridor is considered necessary, review meetings are held to discuss its location, size, structure, etc. and the drawing-up of a plan. A corridor creation plan is drawn up.

Results indicator 2-1-3: Data on corridor creation; the decision of the review meeting on the need for corridor creation; and a corridor creation plan (if it is decided that a corridor is necessary)

Effect 2-1

Effect 2-1-1: The size of the species' habitat and population within the confines of the area designated as a National Park is maintained or increased.

Effects indicator 2-1-1: The species' habitat size and population density and the size of the population inside the National Park.

Effect 2-1-2: The size of species' habitat and population are increased as a result of expansion of the buffer zone. Recognition of the importance of a buffer zone in maintaining and increasing the species' population size is improved among relevant organizations, local governments, and concerned parties through discussions and work on expansion of the buffer zone and leads to inclusion of the expansion of buffer zones in the policy.

Effects indicator 2-1-2: The size of the buffer zone and the size of the species' habitat and population inside the buffer zone.

Effect 2-1-3: Recognition of the importance of a corridor in maintaining and increasing the species' population size is improved among relevant organizations, local governments, and concerned parties through discussions on corridor creation. If corridor creation is judged necessary, it is accordingly adopted in the relevant organizations' and local governments' policies.

Effects indicator 2-1-3: The level of recognition of the importance of a corridor and the incorporation of corridor creation in the policy (if corridor construction is judged necessary).

Target 2-2: Elimination of alien species and other factors reducing the population of the species will increase the species' population size and its area of distribution.

Activity 2-2

Activity 2-2: Eliminate, or implement mitigation measures against, alien species such as small Indian mongooses and feral cats so as to increase the species' population size and expand its area of distribution.

Activity 2-2-1: As scheduled in the Phase 2 Small Asian Mongoose Control Plan for Amami-Oshima Island, completely eliminate small Indian mongooses by FY 2022.

From FY 2014 to 2022: Completely eliminate small Indian mongooses.

Activity 2-2-2: Draw up a policy for the capture and handling of feral cats in coordination with local governments, veterinary medical associations, and concerned bodies. Capture feral cats in accordance with this policy and reduce their population size.

FY2014: Discuss and decide on a feral cat capture and handling policy.

From FY 2015 onwards: Implement capture of feral cats in accordance with the policy.

Result 2-2

Result 2-2-1: Completely eliminate small Indian mongooses.

Results indicator 2-2-1: The population size, relative density, and distribution area of small Indian mongooses.

Result 2-2-2: The policy to capture feral cats is decided on, and capture is implemented in accordance with the policy. The population size of feral cats is reduced.

Results indicator 2-2-2: The policy to capture feral cats, the number of feral cats captured, and the capture effort.

Effect 2-2

Effect 2-2-1: Complete elimination of small Indian mongooses results in an increase in the population density and population size of Amami rabbits.

Effects indicator 2-2-1: The population density and population size of Amami rabbits in areas where the density of small Indian mongooses has been reduced or where small Indian mongooses have been completely eliminated.

Effect 2-2-2: Elimination of feral cats results in an increase in the population density and population size of Amami rabbits.

Effects indicator 2-2-2: The population density and population size of Amami rabbits in areas where the population size of feral cats has been reduced.

3. Captive breeding, etc.

Target 3: A rescue system for sick or injured individuals will be constructed. Discussions will be held on a system for rearing those individuals that may never be returned to the wild, and on the policy for collecting ecological, physiological, and pathological information by using reared individuals. Discussions will also be held on the policy for education and awareness-raising activities using live exhibitions and on the policy for captive breeding.

Activity 3

Activity 3-1: In cooperation with relevant organizations, local governments, veterinary medical associations, and concerned bodies, discuss and decide on a policy for the rescue of sick or injured individuals and their return to the wild, and construct a rescue and return system accordingly.

From FY 2014 to 2015: Discuss and decide on a policy for the rescue and return to the wild of sick or injured individuals and construct a rescue system accordingly.

From FY 2016 onwards: Implement the rescue and return to the wild of sick or injured individuals in accordance with the policy.

Activity 3-2: Discuss a policy (and whether it is needed) for the collection of ecological, physiological, and pathological information from reared individuals; education and awareness-raising activities using live exhibitions; and captive breeding, in coordination with relevant organizations, local governments, and concerned parties.

From FY 2014 to 2015: Discuss the policy for the collection of ecological, physiological, and pathological information from reared individuals and education and awareness-raising activities using live exhibitions.

FY 2016: Discuss practical plans on the purpose and mechanism of rearing, construction of facilities, etc. in accordance with the policy document on utilization of reared individuals.

Note: The Action Plan for FY 2017 onward will be discussed later in accordance with the policy document on utilization of reared individuals and the rearing plan.

Result 3

Result 3-1: A policy that lays out, among other things, the rescue system and the criteria for the sick or injured individual’s return to the wild is decided on, and rescue is implemented in accordance with this policy.

Results indicator 3-1: A policy document on the rescue and return to the wild of sick or injured individuals; a rescue system; actual results of the rescue and return to the wild of sick or injured individuals; the amount of pathological data; the number of reports and papers published on the rescue and return to the wild of sick or injured individuals; and the number of reports and papers published on pathological data.

Result 3-2: Decisions on the policy for the collection of ecological, physiological, and pathological information from reared individuals; for education and awareness-raising activities using live exhibitions; and for captive breeding.

Results indicator 3-2: A policy document on utilization of reared individuals.

Effect 3

Effect 3-1: The survival rate of rescued individuals and the rate of their return to the wild are increased owing to fast and adequate rescue of sick or injured individuals. Pathological data are also accumulated and used.

Effects indicator 3-1: The survival rate and rate of return to the wild of rescued individuals.

Effect 3-2: A rearing plan, including a plan for the construction of a rearing system and facility, is drawn up with the collaboration of relevant organizations in accordance with the policy document on utilization of reared individuals.

Effects indicator 3-2: Development of a rearing plan in accordance with the policy to utilize reared individuals.

4. Measures for effective promotion of the program

Target 4-1: Education and awareness-raising activities aimed at conservation of the species will be promoted so that not only will local residents' and others' understanding of the measures aimed at mitigating pressure factors (such as damage due to feral cats and dogs and roadkill) be increased, but also their understanding of conservation as a whole will be increased.

Activity 4-1

Activity 4-1-1: Deepen local residents' and tourists' understanding of conservation of the species by implementing a campaign against the damage wrought by feral cats and dogs and another campaign on the roadkill prevention; setting up a website; creating and distributing pamphlets; and carrying out education and awareness-raising activities via press releases aimed at mass media.

From FY 2014 onwards: Implement a roadkill-prevention campaign every year, set up and update a website, and create and distribute pamphlets.

Activity 4-1-2: Conduct a questionnaire survey every five years targeting local residents and tourists to measure the level of their understanding of the conservation of the species.

FY 2015, 2018, and 2023: Conduct the questionnaire survey.

Result 4-1

Result 4-1: The roadkill prevention campaigns are launched, a website is created and updated, pamphlets are created and distributed, and questionnaire surveys are conducted.

Results indicator 4-1: The number of times the campaign is launched; the website interpretation and the number of times it is updated; the number of pamphlets issued; the number of times the questionnaire survey is conducted; and the number of questionnaires collected.

Effect 4-1

Effect 4-1: The number of roadkills is reduced, damage due to feral cats and dogs is lessened, and the level of awareness and understanding among local residents and tourists regarding the factors pressuring the survival of the species, and the conservation of the species, is increased.

Effects indicator 4-1: The number of roadkills; the number of cases of feral cat or dog attack; the level of awareness and understanding of pressure factors and conservation; the number of times covered by newspapers, television, etc.; and the results of the questionnaire survey on levels of awareness and understanding of conservation.

Target 4-2: Collaboration among relevant organizations and bodies, local governments, and concerned parties will be strengthened so that conservation measures for the species can be effectively promoted.

Activity 4-2

Activity 4-2: Through relevant meetings such as review committee meetings on the Amami Rabbit Protection and Recovery Program, and through coordination meetings and other ad hoc meetings held as needed, share and consolidate a wide range of survey results held by, and information on protection measures taken by, relevant organizations and bodies, local governments, and concerned parties, to strengthen collaboration on conservation measures and also to strengthen the consideration that needs to be given to conservation of the species in connection to development plans, etc.

From FY 2014 onwards: Hold review meetings and other necessary meetings such as coordination meetings; consolidate data such as those on habitat distribution that are held by concerned parties, convert them to GIS, publish them, and share survey and other reports.

Result 4-2

Result 4-2: Information on survey results, protection measures, development plans and other matters is shared and review, coordination, and other meetings aimed at collaboration are held. Data on distribution, etc. are consolidated and converted to GIS and reports on the survey results are shared.

Results indicator 4-2: The number of review and coordination meetings held; the amount of GIS and other data consolidated; and the number of shared reports of survey results.

Effect 4-2

Effect 4-2: The number of cases in which development plans and others are revised out of consideration to the species is increased. The number of protection measures implemented through the collaboration of relevant organizations and bodies is increased. The use of data such as GIS and survey results by relevant organizations and bodies and by others is increased.

Effects indicator 4-2: The number of development plans and other plans revised out of consideration for the species; the number of protection measures implemented through the collaboration of relevant organizations and bodies; and the amounts of information on the species status and GIS data shared.

Target 4-3: In addition to annual reporting on the progress of the Action Plan at the Protection and Recovery Program review committee meeting, the state of progress of the Action Plan will be evaluated every five years and the Action Plan will be revised accordingly.

Activity 4-3

Activity 4-3-1: Annually report the implementation results of the Action Plan for the Amami Rabbit Protection and Recovery Program at the Protection and Recovery Program review committee meeting; seek the review committee members' advice on points that need to be improved and on other matters; and make the improvements needed for more effective and efficient implementation of the program.

Activity 4-3-2: In FY 2018, comprehensively evaluate the state of the progress of the Action Plan on the basis of the results and the effect indicators, and revise the Action Plan if necessary. In the final fiscal year, FY 2023, similarly evaluate the level of target achievement of the program's 10-year Action Plan and draw up a new 10-year plan.

Result 4-3

Result 4-3-1: The implementation results are reported annually at the Protection and Recovery Program review committee meeting, and implementation of the program is appropriately improved as advised by the committee members.

Results indicator 4-3-1: Annual holding of the review committee meeting and the improvements made to the program in response to the committee members' advice.

Result 4-3-2: The progress of the program's Action Plan is evaluated comprehensively on the basis of the results and the effect indicators; the Action Plan is revised; and a new Action Plan is drawn up.

Results indicator 4-3-2: Results of progress evaluatin of the Action Plan on the basis of the results and the effect indicators; revisions made to the Action Plan; and formulation of a new Action Plan.

Effect 4-3

Effect 4-3-1: The program is implemented with increased effectiveness and efficiency.

Effects indicator 4-3-1: Improvement of the results and the effect indicators in the case of those activities that have been improved.

Effect 4-3-2: The level of target achievement of the Action Plan is comprehensively evaluated according to each result and effect indicator; revisions deemed necessary from the perspective of effectiveness and efficiency are made to the Action Plan; and a new Action Plan is drawn up.

Effects indicator 4-3-2: Improvement of the results and the effect indicators, and improvement of the level of target achievement of the Action Plan.

V. Activity implementation schedule (thickness of the arrow indicates the activity's level of importance)

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
1-1-1: Fecal pellet counts and monitoring by using trail cameras	➡	➡	➡	➡	➡	➡	➡	➡	➡	➡
1-1-2: Reevaluation of past survey results and revision of the survey method	➡	➡	Examine the method to be introduced							
1-1-3: Collection of new ecological information	→	→								
1-1-4: Population size estimation and assessment of the species status	Establish a new data-collection system ➡	➡	➡	➡	➡	Assessment ➡	➡	➡	➡	➡
1-1-5: Study using dead individuals	Establish a new data-collection system →	→	→	→	→					
1-2: Surveys to identify species population-reduction factors (on Tokunoshima Island)	➡	➡	➡							
2-1-1-1: Work toward designation as a National Park	- - →									
2-1-1-2: Enforcement of regulations	→	→	→	→	→	→	→	→	→	→
2-1-2: Extraction of buffer zones, examination of methods, and expansion of buffer zones	Extraction and examination ➡	➡	→	→	Expansion of the buffer zone →	→	→	→	→	
2-1-3: Discussions on corridor creation		➡	➡	➡	➡					
2-2-1: Elimination of small Indian mongooses	➡	➡	➡	➡	➡	➡	➡	➡	➡	
2-2-2: Measures against feral cats	Deciding on a policy ➡	➡	➡	Implementation of capture in accordance with the policy ➡	➡	➡	➡	➡	➡	➡
3-1: Construction of a rescue system for sick or injured individuals	Deciding on a policy ➡	➡	→	Rescue in accordance with the policy →	→	→	→	→	→	→
3-2: Policy discussions on collection of information from reared individuals; live	→	→	→							

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
exhibition; and captive breeding										
4-1-1: Education and awareness-raising activities	Website creation	updating								
		Pamphlet creation					Pamphlet creation			
	Other education and awareness-raising activities									
4-1-2: Questionnaire survey										
4-2: Consolidation of various survey and other results from relevant organizations and others, and strengthening of collaboration										
4-3-1: Holding of Protection and Recovery Program review committee meetings										
4-3-2: Evaluation and revision of the Action Plan										

VI. Reference

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4-26 A 10-year Action Plan for the Amami Woodcock Protection and Recovery Program (2014 to 2024)

December 2014
Naha Nature Conservation Office
Ministry of the Environment

I. Background

1. Scientific classification and ecology

The Amami woodcock (*Scolopax mira*) is a wading bird in the family Scolopacidae that is distributed on some of the islands of the Nansei Islands. The species inhabits forests dominated by *Castanopsis sieboldii* and other species, but for reasons that include the deterioration of suitable habitat its population size and habitat are now limited. A decent-sized population is living and breeding on Amami-Oshima, Kakeroma, and Tokunoshima Islands. The species has also been observed on Kikai, Ukejima, Yoron and Okinawa Islands, but breeding has not been confirmed there. The total size of the population is estimated to be in the range of 3,500 to 15,000 individuals (BirdLife International, 2012).

2. Legal position, etc.

Act on Conservation of Endangered Species of Wild Fauna and Flora

- Designated as a National Endangered Species in 1993
- A plan for the species' Protection and Recovery Program was drawn up in 1999.

Wildlife Protection and Proper Hunting Act

- Part of the species' habitat was designated the Mt. Yuwandake National Wildlife Protection Area in 1965

Act on Protection of Cultural Properties

- Part of the species' habitat was designated the Kamiya–Yuwandake Natural Monument in 1968

Other

- Listed as Vulnerable (VU) on the IUCN Red List of Threatened Species (2012)

・Listed as Vulnerable (VU) on the 4th version of the Red List of Japan (2012)

3. Present results of the Protection and Recovery Program (Attachment; omitted)

(1) Understanding the species' status, monitoring, etc.

Nighttime route censuses are conducted (from FY 2000 onwards) from a car during the breeding and rearing seasons on Amami-Oshima, Kakeroma, and Tokunoshima Islands (Attachment Figures 1 and 2; omitted attachment).

The species' behavior, home range, and so on are studied on Amami-Oshima Island through surveys that use bands to identify individuals, radio-tracking, trail cameras, and other methods (from FY 2001 onwards).

The relationship between forest physiognomy and environmental factors that make up suitable habitat for the species has been clarified. Analysis of the species' use of the environment during the breeding season has confirmed the use of a wide range of environments, from farm land to forests.

To determine the status of the species on Kakeroma and Tokunoshima Islands, monitoring surveys using trail cameras are being conducted on the two islands (on Kakeroma Island from FY 2013 onwards, and on Tokunoshima Island from FY 2012 onwards).

(2) Habitat maintenance and improvement

With the aim of maintaining and improving the environment suited for habitation and breeding of the species, discussions aimed at designating such areas as a protection area (National Park) were held on the basis of the species' status, expert opinion, and so on.

(3) Captive breeding

Information needed to rear the species has been accumulated through the care of sick or injured individuals.

(4) Patrol, etc. of the habitat

The areas including the species' habitats have been routinely monitored and information collected by local concerned parties, national and local public organizations, and others.

(5) Promotion of education and awareness-raising activities

Education and awareness-raising activities on the species' status, the need for protection, the current state of implementation of the Protection and Recovery Program, and so on have been promoted.

(6) Consolidation of collaboration for effective promotion of the program

Various entities have been collaboratively and effectively implementing the program in a wide range of situations through numerous surveys, research, and education and awareness-raising activities.

4. Points of concern in relation to protection of the species

A workshop on the Protection and Recovery Program of the rare species in Amami was held with the participation of representatives from such organizations as universities, research institutes, administrative bodies, and NPOs on August 9 and 10, 2013. In this workshop, the Protection and Recovery Program that has been implemented since FY 2005 was reviewed and points of future concern in relation to protection of the species were identified. The identified points are summarized as follows:

(1) Understanding the status of the species, monitoring, etc.

Past monitoring results must be reassessed and the survey method needs to be revised for the future.
The factors causing the recent decline of the species have not been elucidated.
A target population size for the species has not been specified.

(2) Habitat maintenance and improvement

Important areas with suitable environmental conditions for the species are not assured of protection.
The negative impacts of human activities and alien species are not understood, and measures to eliminate or mitigate these impacts have not been taken.

(3) Captive breeding

The need for creating facilities that accept sick or injured individuals so as to collect pathological and other data, the need for conservation outside the species' habitat in rearing and exhibition facilities, and the need for behavioral observation, etc. have not been examined.

(4) Patrol, etc. of the habitat

Collaboration with relevant organizations, local residents, and others needs to be strengthened so that the habitat can be continuously monitored and information shared.

(5) Promotion of education and awareness-raising activities

Local residents' levels of awareness are low; this is an indication of a lack of education and awareness-raising activities.
Trends that support active and autonomous efforts by the local community need to be generated.

(6) Consolidation of collaboration for effective promotion of the program

The roles and responsibilities of relevant organizations are not specified.
Sharing of information on various survey results held by relevant organizations and collaboration with the local community are necessary.
Information on development plans needs to be shared with local governments and businesses.

5. Background leading to creation of the Action Plan

More than 10 years have passed since the launch of the Protection and Recovery Program. Through this program, results have been achieved in a wide range of areas. These include improved understanding of the status and biological characteristics of the species; understanding of environmental factors, such as small Indian mongooses, that may place pressure on the population; the implementation of roadkill-prevention measures; and the promotion of education and awareness-raising activities. One of the most important outcomes of the program has been the accumulation of knowledge on, for example, the status and biological characteristics of the species. Information on both of these factors is elemental to planning for species conservation and has been collected through the cooperation and collaboration of researchers and many others. Furthermore, on Amami-Oshima Island, as a result of the mongoose control program, the population size and distribution area of the species are in a recovery trend.

However, as summarized above in "4. Points of concern in relation to protection of the species," to succeed in maintaining a stable population of the species some of these points of concern still require attention. Included in the National Biodiversity Strategy of Japan 2012–2020 is National Target C-2: "Increase the number of threatened species whose status on the Red List of Japan has been changed to a lower category of threat." In addition, with the ultimate aim of having "Amami-Oshima, Tokunoshima, the northern part of Okinawa Island, and Iriomote Island" inscribed on the Natural World Heritage List, Japan decided to add this property to the Tentative World Heritage List at the end of January 2013 and submitted the documents required to the UNESCO World Heritage Centre in February. Amami-Oshima and Tokunoshima Islands are candidate sites as part of the nomination of this property for inscription on the Natural World Heritage List. The Amami woodcock provides indispensable proof of the Outstanding Universal Value of these sites. To be able to meet the target set in the National Biodiversity Strategy of Japan 2012–2020, as well as to have these sites inscribed on the Natural World Heritage List, and to ensure and strengthen their protection, the Protection and Recovery Program must be implemented in such a way that the intended results can be more effectively achieved.

In light of the above, the decision was made to draw up a 10-year plan (from 2014 to 2024) titled " A 10-year Action Plan for the Amami Woodcock Protection and Recovery Program" (hereinafter referred to as "the Action Plan").

II. Objectives of the Action Plan

The objectives of the Action Plan are elimination or mitigation of factors that cause species decline, including alien species, roadkills, and development; expansion of the distribution areas and population size of the species on Amami-Oshima and Tokunoshima Islands; and removal by the end of March 2024 from the Red List of Japan as a species for which there is fear of extinction (i.e. Threatened Species).

III. Action period

December 1, 2014 to March 31, 2024

IV. Details of the activities needed to achieve the Action Plan objectives, and their expected results and indicators

1. Understanding the species' status and monitoring, etc.

Target 1: Along with continuation of the present monitoring survey, new survey methods will be established so that information on the species, including status, ecology, and genetics, will be more effectively collected and accumulated and then used to assess population size etc.

Activity 1

Activity 1: Understand the status and ecology of the species through continued implementation of the present monitoring survey and through the establishment and introduction of a more effective survey method.

Activity 1-1: Continue to monitor the status of the nesting grounds and the changes over the years in population distribution and size to accumulate information on the species' status and ecology.
From FY 2014 to 2023: Accumulate information on the species status through continued implementation of the monitoring survey.
Note: From FY 2017 onwards, conduct the survey by using the revised method (see Activity 1-2).

Activity 1-2: Reevaluate past monitoring results; study the improvements that can be made to the monitoring survey method in connection with the population size estimation method that is to be examined in Activity 1-4; and conduct more effective monitoring by taking the survey system and other factors into consideration.
From FY 2014 to 2016: Evaluate the monitoring results and revise the survey method.

Activity 1-3: Use tissues sampled from captured and other individuals to determine the genetic diversity and phylogenetic relationships of the species; assess the health of the population; set units of conservation based on phylogenetic relationships; determine the causes of death; and so on.
From FY 2014 to 2023: Establish a framework for tissue sampling, preservation, and genetic analysis.

Activity 1-4: Set a target population size for the species; examine and develop a more accurate and efficient population-size estimation method; and assess the population size of the species.
From FY 2014 to 2016: Set a target population size for the species and examine and develop a population-size estimation method.
From FY 2017 onwards: Assess the population size of the species by using the new population-size estimation method.

Result 1

Result 1-a: Reports and academic papers are published on the status, ecology, and genetics of the species.
Result 1-b: Survey methods are improved or newly introduced to determine the status of the species with greater accuracy; survey reports are produced by using these methods.

Effect 1
Effect 1: Accumulated knowledge on the status, ecology, genetics, etc. of the species is utilized in conservation measures.

Effects indicator 1: The type of conservation measures and the number of cases in which data and results based on Result 1 are used.

2. Habitat maintenance and improvement

Target 2: Important areas with suitable environmental conditions for the species will be maintained, with adequate protection and management. The species' population will be increased, and the distribution area expanded, by the promotion of measures aimed at eliminating, mitigating, etc. the factors causing population reduction (e.g. the presence of alien species).

Activity 2
Activity 2-1: Designate habitat with conditions suitable for the species as National Park, and maintain the species' living environment through adequate protection and management of the wildlife protection area and National Park.

Activity 2-1-1: Designate, as far as possible, habitat with suitable conditions for the species as a National Park sSpecial Protection Zone or a Class I Special Zone; designate the rest of the species' habitat as National Park so that the species can be adequately protected and managed.
From FY 2014 onwards: Implement the work required for National Park designation.

Activity 2-1-2: Regulate development plans and activities that may have an impact on the species' living environment through proper implementation of the Natural Parks Act and other legislation.
From FY 2014 onwards: Properly enforce the Wildlife Protection, Control, and Hunting Management Act and the Natural Parks Act (after the designation as a National Park).

Activity 2-2: Eliminate, or implement mitigation measures against, alien species such as small Indian mongooses and feral cats so as to increase the species' population size and expand its area of distribution.

Activity 2-2-1: As scheduled in the Second Amami-Oshima Island Small Indian Mongoose Control Implementation Plan, completely eliminate small Indian mongooses by FY 2022.
From FY 2014 to 2022: Completely eliminate small Indian mongooses.

Activity 2-2-2: Draw up a policy for the capture and handling of feral cats in coordination with local governments, veterinary medical associations, and concerned bodies. Capture feral cats in accordance with this policy and reduce their population size.

FY2014: Discuss and decide on a feral cat capture and handling policy.

From FY 2015 onwards: Implement capture of feral cats in accordance with the policy.

Result 2

Result 2-1-1: The National Park designation plan designates the habitat as National Park.

Results indicator 2-1-1: The percentage of the habitat designated as National Park.

Result 2-1-2: Development plans and activities that have negative impacts on the species' survival are regulated in accordance with the National Park designation plan.

Results indicator 2-1-2: The number of adequate prior adjustments, authorizations, and law enforcement cases processed in relation to development plans and activities that could have an impact on the species' survival, as determined by examination of the National Park designation plan.

Result 2-2-1: Small Indian mongooses are completely eliminated.

Results indicator 2-2-1: The population size, relative density, and distribution area of small Indian mongooses

Result 2-2-2: The policy to capture feral cats is decided on, and capture is implemented in accordance with the policy.

Results indicator 2-2-2: The policy to capture feral cats, the number of feral cats captured, and the capture effort.

Effect 2

Effect 2-1-1: The size of the species' habitat and population within the confines of the area designated as National Park is maintained or increased.

Effects indicator 2-1-1: The size of the species' habitat, the population density, and the size of the population inside the National Park.

Effect 2-2-1: Complete elimination of small Indian mongooses results in an increase in the population density and population size of Amami woodcocks.

Effects indicator 2-2-1: The population density and population size of Amami woodcocks in areas where the density of small Indian mongooses has been reduced or where small Indian mongooses have been completely eliminated.

Effect 2-2-2: The population of feral cats is reduced, and the population size or population density of Amami woodcocks is increased in areas where the population of feral cats has been decreased.

Effects indicator 2-2-2: The population density and population size of Amami woodcocks in areas where feral cats have been eliminated.

3. Captive breeding

Target 3: A rescue system for sick or injured individuals will be constructed. Discussions will be held on a system for rearing those individuals that may never be returned to the wild and on the policy for collecting ecological, physiological, and pathological information by using reared individuals. Discussions will also be held on the policy for education and awareness-raising activities.

Activity 3

Activity 3: In cooperation with relevant organizations, local governments, veterinary medical associations, and concerned bodies, discuss and decide on a policy for the rescue of sick or injured individuals and their return to the wild, and construct a rescue and return system accordingly. Also, at the same time, discuss the manner in which those individuals that are difficult to return to the wild should be handled.

From FY 2014 to 2015: Discuss and decide on a policy for the rescue and return to the wild of sick or injured individuals.

From FY 2016 onwards: Implement the rescue and return to the wild of sick or injured individuals in accordance with the policy and system.

Result 3

Result 3: A policy that lays out, among other things, the rescue system and the criteria for the sick or injured individual’s return to the wild is decided on; the rescue system is constructed; and rescue is implemented in accordance with this policy and system.

Results indicator 3: A policy document on the rescue and return to the wild of sick or injured individuals; an organizational chart of the rescue system; actual results of the rescue and return to the wild of sick or injured individuals; the amount of pathological data; the number of reports and papers published on the rescue and return to the wild of sick or injured individuals; and the number of reports and papers published on pathological data.

Effect 3

Effect 3: The survival rate of rescued individuals and the rate of their return to the wild are increased owing to fast and adequate rescue of sick or injured individuals. Pathological data are also accumulated and utilized.

Effects indicator 3: The survival rate and the rate of return to the wild of rescued individuals.

4. Patrol, etc. of the habitat

Target 4: The habitat will be continuously patrolled and information shared among various local entities.

Activity 4

Activity 4: Various local entities continuously partol the habitat (from FY 2014 to 2023).

Result 4

Result 4: Sighting information is accumulated and shared among concerned parties.

Results indicator 4: The number of patrols performed and the number of entities that participated.

Effect 4

Effect 4: Actions that may have a negative impact on maintaining the population (e.g. unintentional intrusion of humans into the species' nesting grounds) are prevented.

Effects indicator 4: The number of cases in which activities are revised after certain instructions.

5. Promotion of education and awareness-raising activities

Target 5: Education and awareness-raising activities aimed at conservation of the species will be promoted so that local residents' and others' understanding of the need for conservation will increase.

Activity 5

Activity 5-1: Deepen local residents' and tourists' understanding of the need for conservation of this species by carrying out education and awareness-raising activities via setting up a website; creating and distributing pamphlets; press releases aimed at the mass media; and conducting volunteer participatory surveys.

From FY 2014 onwards: Set up (FY 2014) and update (FY 2015 onwards) a website; create and distribute pamphlets (between FY 2015 and 2017 and again between FY 2020 and 2022); and discuss and conduct volunteer participatory surveys (discussions to take place between FY 2015 and 2016 and trial surveys to be conducted sometime after FY 2017).

Activity 5-2: Conduct a questionnaire survey every five years targeting local residents and tourists to measure the level of their understanding of the conservation of the species.

FY 2015, 2018, and 2023: Conduct the questionnaire survey.

Result 5

Result 5: The website is created, pamphlets are created and distributed, and volunteer participatory surveys and questionnaire surveys are conducted.

Results indicator 5: The website interpretation and the number of times it is updated; the number of pamphlets issued; the number of times the volunteer participatory survey is conducted; the number of

volunteer participants; the number of times the questionnaire survey is conducted; and the number of questionnaires collected.

Effect 5

Effect 5: Levels of awareness and understanding among local residents and tourists in regard to conservation of the species are increased.

Effects indicator 5: The results of the questionnaire survey on the level of awareness and understanding of the need for conservation.

6. Consolidation of collaboration for effective promotion of the program

Target 6-1: Collaboration among relevant organizations and bodies, local governments, and concerned parties will be strengthened so that conservation measures for the species can be effectively promoted.

Activity 6-1

Activity 6-1: Through relevant meetings such as review committee meetings on the Amami Woodcock Protection and Recovery Program, and through coordination meetings and other ad hoc meetings held as needed, share and consolidate a wide range of survey results held by, and information on protection measures taken by, relevant organizations and bodies, local governments, and concerned parties, to strengthen collaboration on conservation measures and also to strengthen the consideration that needs to be given to conservation of the species in connection to development plans, etc.

From FY 2014 onwards: Hold annual review meetings and other necessary meetings such as coordination meetings; consolidate data such as those on habitat distribution held by concerned parties, convert them to GIS, and publish them; and share survey and other reports.

Result 6-1

Result 6-1: Information on survey results, protection measures, development plans, and other matters is shared and review, coordination, and other meetings aimed at collaboration are held. Data on distribution, etc. are consolidated and converted to GIS and reports on survey results are shared.

Results indicator 6-1: The number of review and coordination meetings held; the amount of GIS and other data consolidated; and the number of shared reports of survey results.

Effect 6-1

Effect 6-1: The number of cases in which development plans and others are revised out of consideration to the species is increased. The number of protection measures implemented through the collaboration of relevant organizations and bodies is increased. The use of data such as GIS and survey results by relevant organizations and bodies and by others is increased.

Effects indicator 6-1: The number of development plans and other plans revised out of consideration for the species; the number of protection measures implemented through the collaboration of relevant organizations and bodies; and the amounts of information on the species status and GIS data shared.

Target 6-2: In addition to annual reporting on the progress of the Action Plan at the Protection and Recovery Program review committee meeting, the state of progress of the Action Plan will be evaluated every five years and the Action Plan will be revised accordingly.

Activity 6-2

Activity 6-2-1: Annually report the implementation results of the Action Plan for the Amami Woodcock Protection and Recovery Program at the Protection and Recovery Program review committee meeting; seek the review committee members' advice on points that need to be improved and on other matters; and make the improvements needed for more effective and efficient implementation of the program.

Activity 6-2-2: In FY 2018, comprehensively evaluate the state of progress of the Action Plan on the basis of the results and effect indicators, and revise the Action Plan if necessary. In the final fiscal year, FY 2023, similarly evaluate the level of target achievement of the program's 10-year Action Plan and draw up a new 10-year plan.

Result 6-2

Result 6-2-1: The Protection and Recovery Program review committee meetings are held; the implementation results are reported; and appropriate improvements are made to the program in response to the committee members' advice.

Results indicator 6-2-1: Annual holding of the review committee meeting and the improvements made to the program in response to the committee members' advice.

Result 6-2-2: The progress of the program's Action Plan is evaluated on the basis of the results and effect indicators; the Action Plan is revised accordingly; and a new Action Plan is formulated.

Results indicator 6-2-2: Progress evaluation results, revisions made to the Action Plan, and formulation of a new Action Plan.

Effect 6-2

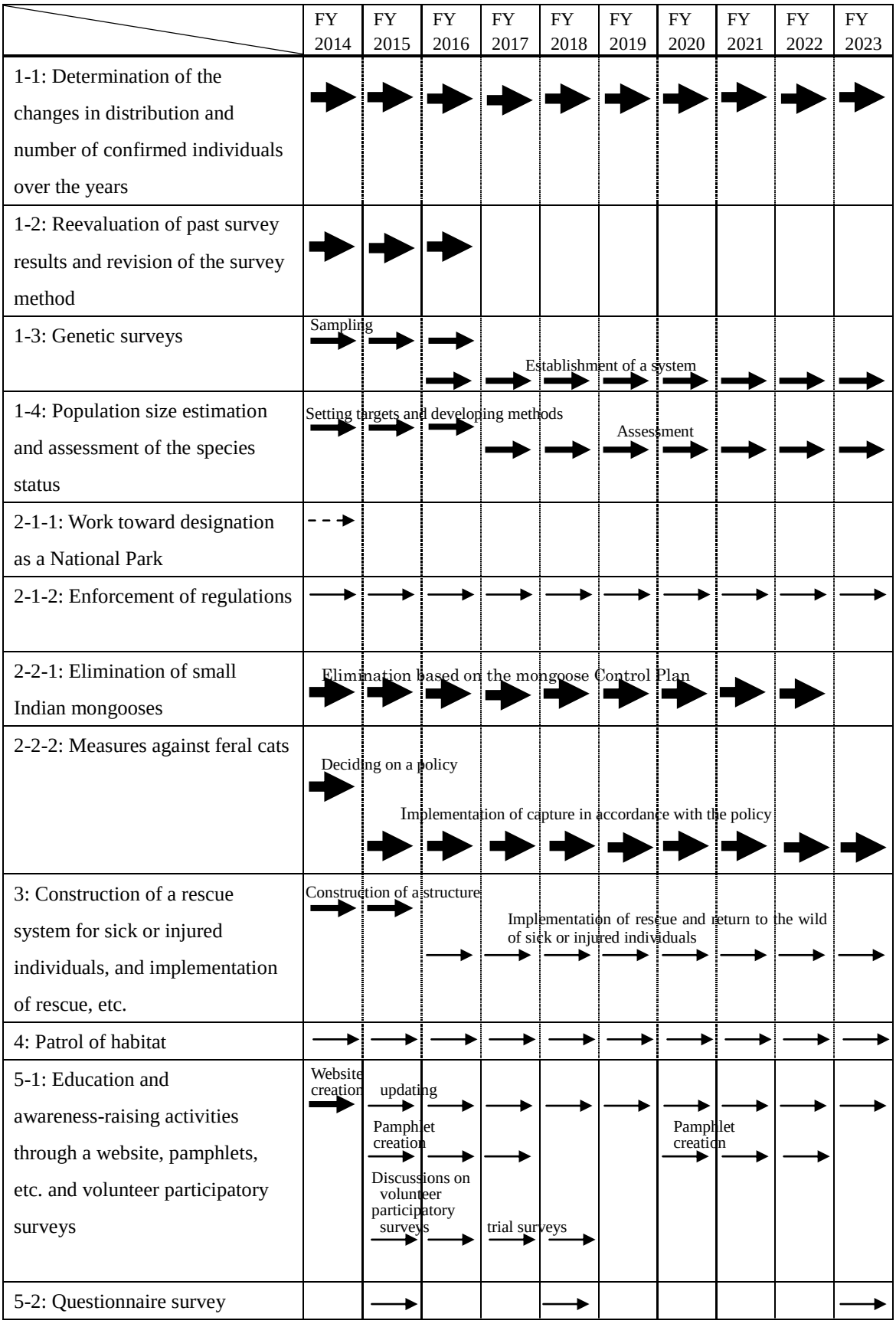
Effect 6-2-1: The program is implemented with increased effectiveness and efficiency.

Effects indicator 6-2-1: Improvement of the results and effect indicators for those activities that have been improved.

Effect 6-2-2: The level of target achievement of the Action Plan is comprehensively evaluated according to each result and effect indicator; revisions deemed necessary from the perspective of effectiveness and efficiency are made to the Action Plan; and a new Action Plan is drawn up.

Effects indicator 6-2-2: Improvement of the results and effect indicators, and improvement of the level of target achievement of the Action Plan.

V. Activity implementation schedule (thickness of the arrow indicates the activity's level of importance)



	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
6-1: Consolidation of various survey and other results from relevant organizations and others, and strengthening of collaboration	→	→	→	→	→	→	→	→	→	→
6-2-1: Holding of Protection and Recovery Program review committee meetings	→	→	→	→	→	→	→	→	→	→
6-2-2:Evaluation and revision of the Action Plan					➡					➡

VI. References

BirdLife International (2012*) Scolopax mira.* The IUCN Red List of Threatened Species. Version 2014.2. <www.iucnredlist.org>. Accessed on 27 August 2015.

4-27 A 10-year Action Plan for the Amami Thrush Protection and Recovery Program

(2014 to 2024)

December 2014
Naha Nature Conservation Office
Ministry of the Environment

I. Background

1. Scientific classification and ecology

The Amami thrush (*Zoothera dauma major*) is an endemic subspecies that breeds only on Amami-Oshima Island. Its total length is roughly 30 cm and its wing length is between 159 and 171 mm (n = 27). Its upper parts are a dull buff or olive and covered in a spotty pattern created by the feathers, which are black at the tip but white around the shaft. It has light under parts with dense crescent-shaped spots and has 12 blackish tail feathers. [Its subspecies, White's thrush (*Zoothera dauma aurea*), has 14 tail feathers.] Its main habitat is a mature evergreen forest with a damp floor. In the breeding season, a short time before sunrise, the birds sing all together, with a unique voice. According to a survey counts made of singing birds during the breeding season since 1999, the number of singing individuals at this time of year is around 500 (Amami Ornithologists' Club 2013). In recent years the area of the thrush's distribution has been expanding, and with this expansion an increase in population has been observed. The population size of the species as of FY 2012 was estimated to range from about 800 to 2000 individuals (Naha Nature Conservation Office, Ministry of the Environment 2014).

2. Legal position, etc.

Act on Conservation of Endangered Species of Wild Fauna and Flora

Designated as a National Endangered Species in 1993

A plan for the species' Protection and Recovery Program was drawn up in 1999

Wildlife Protection, Control and Hunting Management Act

Part of the species' habitat was designated the Mt. Yuwandake National Wildlife Protection Area in 1965

Act on Protection of Cultural Properties

Designated a National Natural Monument in 1971

Part of the species' habitat was designated the Kamiya–Yuwandake Natural Monument in 1968

Other

Listed as Vulnerable (VU) on the 4th version of the Red List of Japan (2012)

3. Present results of the Protection and Recovery Program (Attachment; omitted)

(1) Understanding the species' status and monitoring, etc.

Trends in status of the species have been monitored through general simultaneous surveys of singing birds at multiple locations during the breeding season. In recent years, the presence of increasingly more singing birds has been confirmed (Attachment Figure 1; omitted), and an expansion in the bird's area of distribution (Attachment Figures 2 and 3: omitted) has also been suggested.

Information on breeding has been collected through a search for the species' nesting grounds, observation of its breeding activities, and so on.

Identification bands were used to identify individual birds, and each bird's behavior, home range, etc. was determined.

Environmental factors (e.g. forest age, altitude, size of the broad-leaved forest) that may have influenced the size of the species' population were identified and the species' population size was estimated (Attachment Figure 4; omitted) from the results of the general simultaneous survey of singing birds and data on such items as topography and vegetation maps.

(2) Habitat maintenance and improvement

With the aim of maintaining and improving environments suited for habitation and breeding of the species, discussions aimed at designating such areas as a protection area (National Park) were held on the basis of such factors as the species' status and expert opinions, and so on.

(3) Patrol, etc. of the habitat

The area including the habitat of the species has been routinely monitored and information collected by local concerned parties, national and local public organizations, and others.

(4) Promotion of education and awareness-raising activities

Education and awareness-raising activities on the species' status, the need for protection, the current state of implementation of the Protection and Recovery Program, and so on have been promoted through pamphlet distribution and other means.

(6) Consolidation of collaboration for effective promotion of the program

Various entities have been collaboratively and effectively implementing the program in a wide range of situations through numerous surveys, research, and education and awareness-raising activities.

4. Points of concern in relation to protection of the species

A workshop on the Protection and Recovery Program of the Amami rare species was held with the participation of representatives from such organizations as universities, research institutes, administrative bodies, and NPOs on August 9 and 10, 2013. In this workshop, the Protection and Recovery Program that has been implemented since FY 2005 was reviewed and points of future concern in relation to protection of the species were identified. The identified points are summarized as follows:

(1) Understanding the status of the species and monitoring, etc.

Surveys that best correspond to the intended purpose of, for example, understanding the species' distribution area and population size have not been conducted, and the survey methods used have not been standardized.

Past results of the singing bird surveys need to be reassessed.

The accuracy of the population estimation needs to be improved by incorporating an additional measure of efficiency.

Breeding status needs to be determined so as to assess population health.

Genetic investigations of, for example, genetic diversity and phylogenetic relationships are necessary.

(2) Habitat maintenance and improvement

Important areas with suitable environmental conditions for the species are not assured of protection.

The negative impacts of human activities and alien species are not understood, and measures to eliminate or mitigate these impacts have not been taken.

Development activities need to be regulated in consideration of the breeding grounds and breeding season.

(3) Captive breeding, etc.

The need for creating facilities that accept sick or injured individuals so as to collect pathological and other data, the need for conservation outside the species' habitat in rearing and exhibition facilities, and the need for behavioral observation, etc. have not been examined.

(4) Promotion of education and awareness-raising activities

Local residents' levels of awareness are low; this is an indication of a lack of education and awareness-raising activities.

(5) Consolidation of collaboration for effective promotion of the program

Sharing of information on various survey results held by relevant organizations and collaboration with the local community are necessary.

Information on development plans needs to be shared through the collaboration of local governments and businesses.
The roles and responsibilities of relevant organizations are not specified.

5. Background leading to the creation of the Action Plan

More than 10 years have passed since the launch of the Protection and Recovery Program. Through this program, results have been achieved in a wide range of areas. These include improved understanding of the status and biological characteristics of the species and of environmental factors such as deforestation that may place pressure on the population. One of the most important outcomes of the program has been the accumulation of knowledge on, the status and biological characteristics of the species. Information on both of these factors is elemental to planning for species conservation and has been collected through the cooperation and collaboration of researchers and many others. Furthermore, on Amami-Oshima Island, as a result of the mongoose control program, the population size and distribution area of the species are in a recovery trend.

However, as summarized above in "4. Points of concern in relation to protection of the species," to succeed in maintaining a stable population of the species some of these points of concern still require attention. Included in the National Biodiversity Strategy of Japan 2012-2020 is National Target C-2: "Increase the number of threatened species whose status on the Red List of Japan has been changed to a lower category of threat." In addition, with the ultimate aim of having "Amami-Oshima, Tokunoshima, the northern part of Okinawa Island, and Iriomote Island" inscribed on the Natural World Heritage List, Japan decided to add this property to the Tentative World Heritage List at the end of January 2013 and submitted the documents required to the UNESCO World Heritage Centre in February. Amami-Oshima and Tokunoshima Islands are candidate sites as part of the nomination of this property for inscription on the Natural World Heritage List. The Amami thrush provides indispensable proof of the Outstanding Universal Value of these sites. To be able to meet the target set in the National Biodiversity Strategy of Japan 2012–2020, as well as to have these sites inscribed on the Natural World Heritage List, and to ensure and strengthen their protection, the Protection and Recovery Program must be implemented in such a way that the intended results can be more effectively achieved.

In light of the above, a decision was made to draw up a 10-year plan (from 2014 to 2024) titled " A 10-year Action Plan for the Amami Thrush Protection and Recovery Program" (hereinafter referred to as "the Action Plan").

II. Objectives of the Action Plan

The objectives of the Action Plan are the elimination or mitigation of factors that cause species decline, including alien species, roadkills, and development; expansion of the distribution area and population size

of the species; and removal by the end of March 2024 from the Red List of Japan as a species for which there is fear of extinction (i.e. Threatened Species).

III. Action period

December 1, 2014 to March 31, 2024

IV. Details of activities needed to achieve the Action Plan objectives, and their expected results, and indicators

1. Understanding the species' status and monitoring, etc.

Target 1: Along with continuation of the present monitoring survey, new survey methods will be established so that information on the species, including status, ecology, and genetics, will be more effectively collected and accumulated and then used to assess population size, etc.

Activity 1

Activity 1: Understand the status and ecology of the species through continued implementation of the present monitoring survey and through the establishment and introduction of a more effective survey method.

Activity 1-1: Continue to monitor the breeding activity and the changes over the years in the distribution and number of singing birds to accumulate information on the status and ecology of the species.
From FY 2014 to 2023: Accumulate information on the species status through continued implementation of the monitoring survey.

Activity 1-2: Reevaluate past monitoring results and improvements that can be made to the monitoring survey method in connection with the population size estimation method that is to be examined in Activity 1-4; and conduct more effective monitoring by taking the survey system and other factors into consideration.
From FY 2014 to 2016: Evaluate the monitoring results and revise the survey method.

Activity 1-3: Use tissues sampled from captured and other individuals to determine the genetic diversity and phylogenetic relationships of the species; collect pathological information; assess the health of the population; set units of conservation based on the phylogenetic relationships; determine the causes of death; and so on.
From FY 2014 to 2016: Establish a framework for tissue sampling, preservation, and genetic and pathological analyses.
From FY 2017 onwards: Assess the health of the population and determine the causes of death.

Activity 1-4: Set a target population size for the species, examine and develop a more accurate and efficient population-size estimation method, and assess the population size of the species.
From FY 2014 to 2016: Set a target population size for the species and examine and develop a population-size estimation method.
From FY 2017 onwards: Assess the population size of the species by using the new population-size estimation method.

Result 1
Result 1-a: Reports (annually) and academic papers are published on the status, ecology, and genetics of the species.
Result 1-b: Survey methods are improved or newly introduced to determine the status of the species with greater accuracy; survey reports are produced by using these methods.
Results indicator 1: The number of reports and academic papers published in relation to Result 1.

Effect 1
Effect 1: Accumulated knowledge on the status, ecology, genetics, etc. of the species is utilized in conservation measures.
Effects indicator 1: The type of conservation measures and the number of cases in which data and results based on Result 1 are used.

2. Habitat maintenance and improvement
Target 2: Important areas with environmental conditions suitable for the species will be maintained, with adequate protection and management. The species' population will be increased, and the distribution area expanded, as a result of an understanding of the actions that may have an impact on the species' living environment and the regulations and other measures implemented against these actions.

Activity 2
Activity 2: Designate habitat with suitable conditions for the species as a National Park, and maintain the species' living environment through adequate protection and management of the wildlife protection area and National Park.

Activity 2-1: Designate, as far as possible, habitat with suitable conditions for the species as a National Park Special Protection Zone or class I Special Zone; designate the rest of the species' habitat as National Park so that the species can be adequately protected and managed.
From FY 2014 onwards: Implement the work required for National Park designation.

Activity 2-2: Regulate development plans and activities that may have an impact on the species' living environment through proper enforcement of the Natural Parks Act and other legislation.

From FY 2014 onwards: Properly enforce the Wildlife Protection, Control and Hunting Management Act and the Natural Parks Act (after the designation as a National Park).

Result 2

Result 2-1: The National Park designation plan designates the habitat as a National Park.

Results indicator 2-1: The percentage of the habitat designated as a National Park

Result 2-2: Development plans and activities that have a negative impact on the species' survival are regulated in accordance with the National Park designation plan.

Results indicator 2-2: The number of adequate prior adjustments, authorizations, and law enforcement cases processed in relation to development plans and activities that could have an impact on the species' survival, as determined by examination of National Park designation plan.

Effect 2

Effect 2: The size of the species' habitat and population within the confines of the area designated as National Park is maintained or increased.

Effects indicator 2: The size of the species' habitat, the population density, and the size of the population inside the National Park.

3. Captive breeding, etc.

Target 3: A rescue system for sick or injured individuals will be constructed. Discussions will be held on a system for rearing those individuals that may never be returned to the wild, and on the policy for collecting ecological, physiological, and pathological information by using reared individuals. Discussions will also be held on the policy for education and awareness-raising activities.

Activity 3

Activity 3: In cooperation with relevant organizations, local governments, veterinary medical associations, and concerned bodies, discuss and decide on a policy for the rescue of sick or injured individuals and their return to the wild, and construct a rescue and return system accordingly. Also, at the same time, discuss the manner in which those individuals that are difficult to return to the wild should be handled in terms of collecting ecological, physiological, and pathological information and in terms of education and awareness-raising activities.

From FY 2014 to 2015: Discuss and decide on a policy for the rescue and return to the wild of sick or injured individuals.

From FY 2016 onwards: Implement the rescue and return to the wild of sick or injured individuals in accordance with the policy and system.

Result 3

Result 3: A policy that lays out, among other things, the rescue system and the criteria for the sick or injured individual's return to the wild is decided on; the rescue system is constructed; and rescue is implemented in accordance with this policy and system.

Results indicator 3: A policy document on the rescue and return to the wild of sick or injured individuals; an organizational chart of the rescue system; actual results of the rescue and return to the wild of sick or injured individuals; the amount of pathological data; the number of reports and papers published on the rescue and return to the wild of sick or injured individuals; and the number of reports and papers published on pathological data.

Effect 3

Effect 3: The number of surviving individuals and the number of individuals returned to the wild are increased owing to fast and adequate rescue of sick or injured individuals. Pathological data are also accumulated and utilized.

Effects indicator 3: The number of rescued individuals that survive and the number of those that are returned to the wild.

4. Patrol, etc. of the habitat

Target 4: The habitat will be continuously patrolled and information shared among various local entities.

Activity 4

Activity 4: Various local entities continuously patrol the habitat (from FY 2014 to 2023).

Result 4

Result 4: Sighting information is accumulated and shared among concerned parties.

Results indicator 4: The number of patrols performed and the number of entities that participated.

Effect 4

Effect 4: Actions that may have a negative impact on maintaining the population (e.g. unintentional intrusions of humans into the species' nesting ground) are prevented.

Effects indicator 4: The number of cases in which actions are revised after certain instructions.

5. Promotion of education and awareness-raising activities

Target 5: Education and awareness-raising activities aimed at conservation of the species will be promoted so that local residents' and others' understanding of conservation will be increased.

Activity 5

Activity 5-1: Deepen local residents' and tourists' understanding of the need for the conservation of this species by carrying out education and awareness-raising activities via setting up a website; creating and

distributing pamphlets; press releases aimed at the mass media; and conducting volunteer participatory surveys.

From FY 2014 onwards: Set up (FY 2014) and update (FY 2015 onwards) a website; create and distribute pamphlets (once between FY 2015 and 2017 and again between FY 2020 and 2022); and discuss and conduct volunteer participatory surveys (discussions to take place between FY 2015 and 2016 and trial surveys to be conducted sometime after FY 2017).

Activity 5-2: Conduct a questionnaire survey every five years targeting local residents and tourists to measure the level of their understanding of the conservation of the species.

FY 2015, 2018, and 2023: Conduct the questionnaire survey.

Result 5

Result 5: The website is created, pamphlets are created and distributed, and volunteer participatory surveys and questionnaire surveys are conducted.

Results indicator 5: The website interpretation and the number of times it is updated; the number of pamphlets issued; the number of times the volunteer participatory survey is conducted; the number of volunteer participants; the number of times the questionnaire survey is conducted; and the number of questionnaires collected.

Effect 5

Effect 5: Levels of awareness and understanding among local residents and tourists in regard to conservation of the species are increased.

Effects indicator 5: Levels of awareness and understanding regarding conservation; the number of times covered by newspapers, television, etc.; and the results of the questionnaire survey on the level of awareness and understanding of the need for conservation.

6. Consolidation of collaboration for effective promotion of the program

Target 6-1: Collaboration among relevant organizations and bodies, local governments, and concerned parties will be strengthened so that conservation measures for the species can be effectively promoted.

Activity 6-1

Activity 6-1: Through relevant meetings such as review committee meetings on the Amami Thrush Protection and Recovery Program, and through coordination meetings and other ad hoc meetings held as needed, share and consolidate a wide range of survey results held by, and information on protection measures taken by, relevant organizations and bodies, local governments, and concerned parties, to strengthen collaboration on conservation measures and also to strengthen the consideration that needs to be given to conservation of the species in connection to development plans, etc.

From FY 2014 onwards: Hold annual review meetings and other necessary meetings; consolidate data such as those on habitat distribution held by concerned parties, convert them to GIS, and publish them; and share survey and other reports.

Result 6-1

Result 6-1: Information on survey results, protection measures, development plans, and other matters is shared and review, coordination, and other meetings aimed at collaboration are held. Data on distribution, etc. are consolidated and converted to GIS and reports on survey results are shared.

Results indicator 6-1: The number of review and coordination meetings held; the amount of GIS and other data consolidated; and the number of shared reports of survey results.

Effect 6-1

Effect 6-1: The number of cases in which development plans and others are revised out of consideration to the species is increased. The number of protection measures implemented through the collaboration of relevant organizations and bodies is increased. The use of data such as GIS and survey results by relevant organizations and bodies and by others is increased.

Effects indicator 6-1: The number of development plans and other plans revised out of consideration for the species; the number of protection measures implemented through the collaboration of relevant organizations and bodies; and the amounts of information on the species status and GIS data shared.

Target 6-2: In addition to annual reporting on the progress of the Action Plan at the Protection and Recovery Program review committee meeting, the state of progress of the Action Plan will be evaluated every five years and the Action Plan will be revised accordingly.

Activity 6-2

Activity 6-2-1: Annually report the implementation results of the Action Plan for the Amami Thrush Protection and Recovery Program at the Protection and Recovery Program review committee meeting; seek the review committee members' advice on the points that need to be improved and on other matters; and make the improvements needed for more effective and efficient implementation of the program.

Activity 6-2-2: In FY 2018, comprehensively evaluate the state of progress of the Action Plan on the basis of the results and the effect indicators, and revise the Action Plan if necessary. In the final fiscal year, FY 2023, similarly evaluate the level of target achievement of the program's 10-year Action Plan and draw up a new 10-year plan.

Result 6-2

Result 6-2-1: The Protection and Recovery Program review committee meetings are held, the implementation results are reported, and appropriate improvements are made to the program in response to the committee members' advice.

Results indicator 6-2-1: Annual holding of the review committee meeting and the improvements made to the program in response to the committee members' advice.

Result 6-2-2: The progress of the program's Action Plan is evaluated on the basis of the results and the effect indicators; the Action Plan is revised accordingly; and a new Action Plan is formulated.

Results indicator 6-2-2: Progress evaluation results, revisions made to the Action Plan, and formulation of a new Action Plan.

Effect 6-2

Effect 6-2-1: The program is implemented with increased effectiveness and efficiency.

Effects indicator 6-2-1: Improvement of the results and effect indicators for those activities that have been improved.

Effect 6-2-2: The level of target achievement of the Action Plan is comprehensively evaluated according to each result and effect indicator; revisions deemed necessary from the perspective of effectiveness and efficiency are made to the Action Plan; and a new Action Plan is drawn up.

Effects indicator 6-2-2: Improvement of the result and the effect indicators, and improvement of the level of target achievement of the Action Plan.

V. Activity implementation schedule (thickness of the arrow indicates the activity's level of importance)

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
1-1: Determination of the changes in distribution and number of singing birds over the years, and monitoring of breeding activities	➡	➡	➡	➡	➡	➡	➡	➡	➡	➡
1-2: Reevaluation of past survey results and revision of the survey method	➡	➡	➡							
1-3: Genetic and pathological surveys	Sampling and establishment of a system →				Assessment of health of the population and identification of causes of death →					
1-4: Population size estimation and assessment of the species status	Setting a target and developing methods ➡					Assessment ➡				
2-1: Work toward designation as a National Park	- - →									
2-2: Enforcement of regulations	→	→	→	→	→	→	→	→	→	→
3: Construction of a rescue system for sick or injured individuals, and implementation of rescue, etc.	Construction of a system ➡				Implementation of rescue and return to the wild of sick or injured individuals →					
4: Patrol of habitat	→	→	→	→	→	→	→	→	→	→
5-1: Education and awareness-raising activities through a website, pamphlets, etc., and volunteer participatory surveys	Website creation ➡	updating →					Pamphlet creation →			
		Pamphlet creation →						Pamphlet creation →		
		Discussions on volunteer participatory surveys →		Trial surveys →						
5-2: Questionnaire survey		→			→					→
6-1: Consolidation of various survey and other results from relevant organizations and others, and strengthening of collaboration	→	→	→	→	→	→	→	→	→	→

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
6-2-1: Holding of Protection and Recovery Program review committee meetings	→	→	→	→	→	→	→	→	→	→
6-2-2: Evaluation and revision of the Action Plan					➡					➡

VI. References

Amami Ornithologists' Club (2013) The 20th 2013 Amami Thrush Survey Research Report, p. 3.

Naha Nature Conservation Office, Ministry of the Environment (2014) 2013 Reference Material for the Amami Endangered Species Protection and Recovery Discussion Meeting, Reference 5-1, p. 5.

4-28 A 10-year Action Plan for the Okinawa Rail Protection and Recovery Program

(2015 to 2025)

December 2015
Naha Nature Conservation Office
Ministry of the Environment

I. Species

Okinawa rail (Gallirallus okinawae)

II. Scientific classification and ecology

The Okinawa rail (*Gallirallus okinawae*, or *Hypotaenidia okinawae* according to some sources) is an endemic species that lives only in the northern part of Okinawa Island (in the so-called Yambaru area). It was designated as a new species in 1981 (Yamashina and Mano, 1981) and is the only flightless bird species in Japan. It is thought that an ancestral species that flew from somewhere in the south to Okinawa Island several tens of thousands of years ago gradually adapted to ground dwelling and evolved into the present Okinawa rail. This was likely possible because Okinawa Island had no native carnivores that were powerful predators; moreover, a diversity of organisms existed in the subtropical evergreen broad-leaved forest, providing an abundance of small ground-dwelling animals that the rail could feed on. These conditions thus enabled the species to flourish despite its inability to fly (Ozaki, 2005).

In modern times 32 flightless rail species have been identified globally. The bulk of these are found on islands, and many are endemic species or endemic subspecies of these islands. Thirteen of the species have been classified as extinct since the 17th century. Even though 19 species remain extant, one of them is classified as extinct in the wild and 13 are classified as threatened. The causes of this situation include hunting, environmental destruction, introduction of alien species, and other impacts of human origin (Ozaki, 2005).

The Okinawa rail inhabits the forest floors of evergreen broad-leaved forests, as well as nearby grasslands. The breeding season is from March to June, and it nests on the ground. The clutch size is four or five. Although the species is omnivorous, it feeds mainly on small animals such as insects, crustaceans, and

amphibians. In 1985, the population size of the species was estimated at roughly 1,800 individuals. However, by around 2000, because of a reduction in the abundance of habitat with conditions suitable for the species, as well as the impacts of predation by such animals as small Indian mongooses (*Herpestes auropunctatus*; a designated Specified Invasive Alien Species under the Act on the Prevention of Adverse Ecological Impacts caused by Specified Invasive Alien Species), dogs, and cats, this number was estimated to have decreased to fewer than 1,000 individuals. Since this discovery, efforts have been made to control small Indian mongooses, and as a result the population size and area of distribution have been in a recovery trend. In 2013, the population size was estimated at roughly 1,500 individuals.

III. Legal position, etc.

Act on Conservation of Endangered Species of Wild Fauna and Flora

Designated as a National Endangered Species in 1993

A plan for the species' Protection and Recovery Program was drawn up in 2004.

Wildlife Protection, Control and Hunting Management Act

Part of the species' habitat was designated as Mt. Yambaru (Ada) National Wildlife Protection Area in 2009.

Part of the species' habitat was designated as Mt. Yambaru (Aha) National Wildlife Protection Area in 2009.

Part of the species' habitat was designated as Mt. Nishimedake Prefectural Wildlife Protection Area in 1967.

Part of the species' habitat was designated as Mt. Yonahadake Prefectural Wildlife Protection Area in 1967.

Part of the species' habitat was designated as Sate Prefectural Wildlife Protection Area in 1967.

Act on Protection of Cultural Properties

Part of the species' habitat was designated as Mt. Yonahadake Natural Monument Protection Area in 1972

Designated a National Natural Monument in 1982

Other

Listed as Endangered (EN) on the IUCN Red List of Threatened Species (2013)

Listed as Critically Endangered (CR) on the 4th version of the Red List of Japan (2012)

IV. Reasons for creation of the Action Plan

More than 10 years have passed since the launch of the Protection and Recovery Program, and results have been achieved in a wide range of areas. These include improved understanding of the status and biological

characteristics of the species; understanding of the environmental factors (such as small Indian mongooses) that may place pressure on the population; implementation of roadkill-prevention measures; and promotion of education and awareness-raising activities. One of the most important outcomes of the program has been the accumulation of knowledge on, for example, the status and biological characteristics of the species. Information on both of these factors is elemental to planning for species conservation and has been collected through the cooperation and collaboration of researchers and many others. Furthermore, on the northern part of Okinawa Island, as a result of the mongoose control program, the population size and the distribution area of the species are in a recovery trend (Attachment 1for more information; omitted) However, to succeed in maintaining a stable population of the species, some points of concern still require attention.

In addition, included in the National Biodiversity Strategy of Japan 2012–2020 is National Target C-2: "Increase the number of threatened species whose status on the Red List of Japan has been changed to a lower category of threat." Furthermore, the northern part of Okinawa Island is a candidate site as part of the nomination of the "Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island" for inscription on the Natural World Heritage List. The Okinawa rail provides indispensable proof of the Outstanding Universal Value of this region. To be able to meet the target set in the National Biodiversity Strategy of Japan 2012–2020, as well as to have these sites inscribed on the Natural World Heritage List, and to ensure and strengthen their protection, the Protection and Recovery Program must be implemented in such a way that the intended results can be more effectively achieved.

In light of the above, a decision was made to draw up a 10-year plan (from 2015 to 2025) titled "A 10-year Action Plan for the Okinawa Rail Protection and Recovery Program" (hereinafter referred to as "the Action Plan").

V. Objectives of the Action Plan

The objectives of the Action Plan are the elimination or mitigation of factors that cause species decline, including alien species, roadkill, and development; expansion of the distribution areas and population size of the species in the northern part of Okinawa Island; recovery of the distribution area and population size of the species to the 1985 level; and ranking of the species in a category lower than Endangered (EN) on the Red List of Japan by the end of March 2025. In addition to these, the Action Plan aims to establish techniques for rearing, captive breeding, return to the wild, and reinforcement or reintroduction of the species in the wild. Such measures would give the species resilience in the future should the wild population again be dramatically reduced through, for example, the deterioration of environmental conditions or the spread of infectious disease.

By the end of FY 2019 (the midpoint of the Action Plan), the species is to be settled in the area north of the Shioya-Fukuji Dam (the "S-F" line) in the southern Yambaru area (Ogimi and Higashi Villages).

VI. Action period

December 1, 2015 to March 31, 2025

VII. Secondary objectives and details of activities to be implemented in relation to the Action Plan

Secondary objectives and details of the relevant activities to be implemented to achieve the objectives of the Action Plan effectively are defined below.

1. Investigation and monitoring of the species' status

Target 1: Along with continued implementation of the present monitoring survey to determine the status of the species, improvements will be made to enhance the accuracy of population size estimations. New survey methods needed to elucidate the ecology of the species—information that is essential for its conservation—will be established. This will ensure that ecological and genetic information is collected and accumulated more effectively and then used to assess population size, etc. Moreover, the factors reducing the species' population size and the extent of their impact will be clarified.

Activity 1

Activity 1-1: Along with continuation of the present call-playback survey to monitor the species' population, reevaluate past survey results and make the necessary improvements to the survey method and the population size estimation method.

Activity 1-1-1: Monitor the status of the species through continuous implementation of the present call-playback survey.
From FY 2015 to 2017: Accumulate information on the existence of the species through continued implementation of the monitoring survey.
From FY 2018 to 2024: Reflect the results of reevaluation (Activity 1-1-2 below) of the survey method and continue implementing the monitoring survey.

Activity 1-1-2: To improve the accuracy of the call-playback survey and the population-size estimation method, reevaluate the response rate, response distance, etc. of the call playback. Then reflect the reevaluation results in the survey method and analysis used to estimate population size.
From FY 2015 to 2017: Reevaluate the survey method and reflect the reevaluation results in the monitoring survey method.

Activity 1-2: Elucidate the unknown ecology of the species in the wild and in captivity—for example, its population structure, sociality, dispersion, and movement; genetic diversity; infectious diseases; and other

factors—by developing and introducing new survey methods and by improving the present survey methods.

Activity 1-2-1: With the cooperation of researchers and research institutes, review the present survey methods and other survey methods used to study species with similar living patterns (e.g. capture, radio-tracking, and individual identification). Then develop and introduce safe and reliable survey methods to elucidate the ecology of the species (e.g. its breeding behavior, population structure, sociality, dispersion, and movement).
From FY 2015 to 2016: Review survey methods and develop new survey methods.
From FY 2017 onwards: Introduce new survey methods and elucidate the ecology of the species.

Activity 1-2-2:
From FY 2017 to 2019: Collect data on, for example, age structure and the mortality rate for each age group through surveys based on individual identification. Use these data to elucidate the structure and dynamics of the population.

Activity 1-2-3:
From FY 2015 to 2017: Through direct observation and by analyzing the gastric contents of dead individuals, clarify the types and amounts of food eaten by the species and their seasonal fluctuations.

Activity 1-2-4:
From FY 2015 to 2017: Cooperate with research institutes such as universities, with research into the species' calls, etc.

Activity 1-2-5:
From FY 2015 to 2016: Through collaboration with research institutes, investigate the species' genetic diversity and population fragmentation in the wild.

Activity 1-2-6:
From FY 2015 to 2019: Investigate infectious diseases present among wild individuals and collect information on potential infectious diseases to identify those diseases that are feared to have a devastating impact on population maintenance. Monitor the identified infectious diseases by examining captured, rescued, or dead individuals.

Activity 1-3: Identify the environmental conditions essential for the species.

Activity 1-3-1:

From FY 2015 to 2017: On the basis of the results of the call-playback survey and other surveys, conduct a comparative analysis of biological and physical environmental factors in representative high- and low-population-density areas.

Activity 1-3-2:
From FY 2015 to 2017: Collect ecological information on the species, such as population size, breeding habits, behavior, and territory in high-population-density areas, and identify the factors contributing to maintenance of the high density of the species in the said areas.

Result 1
Result 1-1: Information on the species' estimated population size, population density, and distribution is accumulated by using a more accurate population-size estimation method.

Result 1-2: New survey methods are developed and introduced. The present survey methods are also improved. As a result, the unknown ecology of the species (such as its population structure, sociality, dispersion, movement, genetic diversity, and infectious diseases) will become clear.

Result 1-3: Factors essential for the maintenance and improvement of population density are identified through the comparative analysis of biological and physical factors among habitats with different population densities and from ecological information obtained in high-density areas.
Results indicator 1: The number of reports and academic papers published in relation to Result 1. In the case of Result 1-1, annual reports on the species' estimated population size, population density, and distribution.

Effect 1
Effect 1: Accumulated knowledge on the status of the species, such as its population size and distribution, ecological information, and genetic information, are used in conservation measures.
Effects indicator 1: The types of conservation measures and the numbers of cases in which reports based on Result 1 are utilized.

2. Habitat maintenance and improvement
Target 2: The population size of the species will recover through the maintenance of suitable habitat, the control of alien and other predatory species, and a marked reduction in the number of roadkill deaths.

Activity 2
Activity 2-1: By considering the connectivity of the species' habitat, secure habitat with conditions suitable for the species as a National Park and National Wildlife Protection Area (Special Protection Zone). At the

same time, coordinate with relevant organizations as necessary to reduce the impact of development plans and other activities that can affect the existence of the species.

Activity 2-1-1: By considering the species' population density and distribution and the connectivity of its distribution, designate suitable habitat as a National Park and National Wildlife Protection Area (Special Protection Zone).
From FY 2015 to 2016: Designation as a National Park
From FY 2017 to 2021: Designation as National Wildlife Protection Area

Activity 2-1-2:
From FY 2015 to 2024: When development plans and other activities that can affect the existence of the species are prepared, liaise beforehand with relevant organizations as necessary to reduce the impact of such plans.

Activity 2-2:
From FY 2015 to 2022: As planned in the Phase 2 Mongoose Control Plan, continue with control work aimed at complete elimination of the small Indian mongoose, a predator of the species, from the northern part of Okinawa Island by the end of FY 2022. (For details, refer to "Phase 2 Mongoose Control Plan for the Northern Part of Okinawa Island.")

Activity 2-3: Through collaboration with local governments and relevant bodies, promote appropriate keeping of pet cats and dogs; implement effective capture of stray and feral cats and dogs (hereinafter referred to as "cats and dogs"); reduce the population sizes of these cats and dogs; and adequately implement measures against these predators of the rail.

Activity 2-3-1:
From FY 2015 to 2024: Effectively capture feral cats in the species' habitat by using information on the sighting of feral cats and the results of a trail camera survey and other surveys. In addition, local government will be a key player in the effort to capture stray cats and dogs and reduce their numbers.

Activity 2-3-2:
From FY 2015 to 2019: In the area centering on Kunigami, Ogimi, and Higashi Villages, strictly implement the appropriate keeping of pet cats in accordance with the municipal ordinances of each village through education and awareness-raising activities on microchipping of pet cats, breeding restrictions, and so on.

Activity 2-3-3:

From FY 2015 to 2019: With the collaboration of Okinawa Prefecture, Kunigami, Ogimi, and Higashi Villages, and the small settlements within these three villages, strengthen community-wide efforts toward appropriate keeping of pet cats.

Activity 2-3-4:
From FY 2015 to 2024: Set up and hold a liaison conference and other meetings centered on local governments in relation to control measures for cats and dogs.

Activity 2-4: With the collaboration of local governments, to control the population size of the jungle crow (*Corvus macrorhynchos*), which preys on the species and thus affects its existence, implement measures to remove those factors that can increase the number of jungle crows.

Activity 2-4-1:
From FY 2015 to 2017: Develop an understanding of the effect of predation and other factors associated with jungle crows on the Okinawa rail.

Activity 2-4-2:
From FY 2015 to 2019: Share information with local governments that are implementing measures against harmful birds and mammals, with the aim of reducing these species' populations to appropriate sizes by implementing measures to prevent their population increase, capturing them, etc.

Activity 2-5: Investigate and analyze the causes of Okinawa rail roadkill from the human perspective and from the perspective of the rail. Reflect the findings in a wide range of prevention measures, education and awareness-raising activities, and collaborations with relevant organizations to improve the effectiveness of these efforts.

Activity 2-5-1: Collect and organize data from surveys of Okinawa rail roadkill (the frequency of appearance of the species near the road, the conditions at the time of their appearance, etc.) conducted by various organizations and then reflect the results in a variety of prevention measures. Place special emphasis on examining and understanding the status of the species and the environment in the areas where roadkills are increasing.
From FY 2015 to 2016: Implement the survey and organize data on roadkills.
From FY 2015 to 2024: Reflect the survey results in prevention measures, and implement these measures.

Activity 2-5-2:

From FY 2015 to 2016: Organize a place for residents (road users) to express and exchange their opinions so that information on the status of the species' roadkill and on roadkill prevention measures can be shared with residents. At the same time, collect opinions and ideas from the local community.

Activity 2-5-3:
From FY 2015 to 2024: With the collaboration of relevant organizations and bodies and the local community, strengthen efforts toward roadkill prevention and efforts to promote education and awareness-raising activities during the species' breeding season, when roadkills are frequent.

Result 2
Result 2-1: The habitat of the species is secured owing to designation of the habitat as a National Park and National Wildlife Protection Area (Special Protection Zone). The necessary measures are taken to reduce the impacts of development and other activities that can affect the existence of the species.

Results indicator 2-1-1: The size, boundaries and other details of the areas designated as a National Park and National Wildlife Protection Area (Special Protection Zone) in the habitat.

Results indicator 2-1-2: The numbers of developmental and other activities in the species' habitat that have been changed to lessen the impact on the species.

Result 2-2: The population size of small Indian mongooses and the area they inhabit are reduced. Small Indian mongooses are eradicated from the northern part of Okinawa Island by the end of FY 2022.

Results indicator 2-2: The number of small Indian mongooses captured, their density index, and their area of distribution. The confirmed status of small Indian mongoose eradication.

Result 2-3: The population sizes of cats and dogs and the area they inhabit are reduced. Appropriate keeping of pet cats is strictly implemented.

Results indicator 2-3-1: The number of sightings of cats and dogs, the numbers captured, and the area of distribution.

Results indicator 2-3-2: The number of registered, microchipped, sterilized, and castrated pet cats.

Result 2-4: The population of jungle crows is reduced to an appropriate size.

Results indicator 2-4: The number of jungle crows among captured harmful birds and mammals, and their area of distribution.

Result 2-5: The numbers of roadkill deaths and road injuries are reduced.

Results indicator 2-5: The numbers of roadkill deaths and road injuries.

Effect 2

Effect 2: The population size of the Okinawa rail is increased and its area of distribution is expanded.

Effects indicator 2: The population size, population density, and area of distribution of the Okinawa rail, as estimated from surveys of the species' status.

3. Captive breeding and return to the wild of bred individuals

Target 3: Techniques to support reinforcement or reintroduction of the species in the wild should the wild population again fall to critical status will be established. For this purpose, rearing and breeding techniques that take genetic diversity into account will be developed, and techniques for returning or reintroducing the species to the wild will be established. In addition, knowledge of the species' ecology will be collected from individuals being reared in captivity.

Activity 3

Activity 3-1: Implement more sound rearing management of the population being reared in captivity by taking genetic diversity and risk dispersion into account.

Activity 3-1-1:

From FY 2015 to 2016: Set a clear goal for the number of individuals that needs to be reared in captivity by taking genetic diversity into account.

Activity 3-1-2:

From FY 2015 to 2016: To prevent the potentially devastating effects of infectious diseases on the entire population being reared under captivity, obtain the understanding of the local community; examine the need for risk dispersion; and then secure the cooperation of existing rearing facilities and zoos.

Activity 3-1-3:

From FY 2017 to 2024: To secure the target population size for rearing in a safe and sound manner, distribute individuals that are to be reared in captivity among existing rearing facilities and zoos and rear them in those facilities.

Activity 3-2: Establish the techniques needed to breed the species in captivity.

Activity 3-2-1:

From FY 2015 to 2019: Establish rearing techniques and the techniques needed to breed the species in captivity.

Activity 3-2-2:

From FY 2016 to 2018: Secure the facilities needed for pairing the species.

Activity 3-2-3:
From FY 2016 to 2020: Establish rearing and breeding techniques by working together with facilities cooperating in dispersed rearing.

Activity 3-3: Establish techniques to support the return or reintroduction of individuals reared in captivity to the wild, and hold discussions on the standards for their implementation.

Activity 3-3-1:
From FY 2015 to 2018: Establish a monitoring technique that can be used to track and monitor individual birds by conducting test releases of birds in captivity and in the wild.

Activity 3-3-2:
From FY 2015 to 2018: Hold discussions on standards for the return or reintroduction of individuals bred in captivity to the wild.

Result 3
Result 3-1: A management target that takes genetic diversity into account is set for the population reared under captivity. Rearing facilities and zoos cooperating in dispersed rearing are secured, and dispersed rearing is implemented.
Results indicator 3-1: The target population size needed to maintain genetic diversity in the population reared under captivity and the actual population size of the animals reared under captivity. The number of facilities and zoos cooperating in dispersed rearing.

Result 3-2: Rearing and breeding techniques for individuals are established; the species is reared and bred stably; and these techniques are passed on to facilities and zoos cooperating in dispersed rearing.
Results indicator 3-2: The status of rearing and breeding of the species and the status of preparation of rearing and breeding manuals, etc. The status of captive breeding in facilities cooperating in dispersed rearing.

Result 3-3: Standards for the reinforcement or reintroduction of individuals in the wild are discussed. Techniques for this reinforcement or reintroduction are established.
Results indicator 3-3: Standards for the reinforcement or reintroduction of individuals in the wild.
Reports, academic papers, and other publications on techniques for this reinforcement or reintroduction.

Effect 3

Effect 3: A system to allow for reinforcement or reintroduction of individuals in the wild should the continued existence of the wild population reach critical status is constructed.

Effects indicator 3: If, in fact, reinforcement or reintroduction is implemented, the status of existence of these individuals and the status of recovery of the wild population.

4. Promotion of education and awareness-raising activities

Target 4: Efforts toward education and awareness-raising activities to mitigate pressure on the species will be increased; understanding of the need for conservation of the species will be promoted; and ways in which the local community can be revitalized through conservation and effective utilization of the species will be studied.

Activity 4

Activity 4-1: Implement more effective education and awareness-raising activities to mitigate pressure on the species.

Activity 4-1-1:

From FY 2015 to 2019: With the collaboration of relevant organizations, place emphasis on the implementation of education and awareness-raising activities, hold joint events, and so on.

Activity 4-1-2:

From FY 2015 to 2024: Through the collaboration and cooperation of relevant organizations and bodies, and also local communities, emphasize the implementation of roadkill-prevention activities as well as education and awareness-raising activities, such as roadkill-prevention campaigns, rail festivals, and campaigns against abandonment of cats and dogs.

Activity 4-1-3:

From FY 2015 to 2024: Predict the behavior of the species on the basis of past data, up-to-date information, and weather factors, and send out Okinawa rail roadkill-risk forecasts to drivers and local residents to raise their awareness of the potential appearance of the species near roads.

Activity 4-1-4:

From FY 2015 to 2024: Circulate information on roadkill prevention through events such as Okinawa rail observation events.

Activity 4-2: Promote understanding of the species through education and awareness-raising activities, and study ways in which the local community can be revitalized through the species' conservation and effective utilization.

Activity 4-2-1:
From FY 2015 to 2024: In addition to education and awareness-raising activities that use images, pamphlets, and other purpose-made media, frequently and pro-actively implement education and awareness-raising activities through local events.
Activity 4-2-2:
From FY 2015 to 2024: Liaise with car rental associations, *kyodo-baiten* (community cooperatives), and other private associations, and hold far-reaching education and awareness-raising activities.

Activity 4-2-3: Jointly with local governments and residents, study and formulate programs and projects that connect conservation of the species to revitalization of the local community, and implement these programs and projects.
From FY 2017 to 2019: Study and formulate programs that revitalize the local community.
From FY 2020 to 2024: Implement the local community revitalization programs.

Activity 4-3: Create rules that need to be followed when observing the species near small settlements and along roadsides where it is frequently sighted, and make these rules widely known to visitors and tour guides.

Activity 4-3-1:
From FY 2015 to 2016: To make sure that the rules do not interfere with local residents' lives and that they benefit the local community, incorporate local residents' opinions, and draw up unified observation rules that take the species' behavior and ecology into consideration.

Activity 4-3-2:
From FY 2017 to 2024: Distribute the observation rules to tour guides, roadside stations, relevant organizations and bodies and others so that they become widely known.

Activity 4-3-3:
From FY 2017 to 2024: Okinawa rail observation events and other events are held by local communities.

Result 4
Result 4-1: Education and awareness-raising activities intended to reduce pressure on the species are implemented. Okinawa rail roadkill-risk forecast information is sent out. Okinawa rail observation events and other events intended to increase understanding of the species' roadkill prevention are held.
Results indicator 4-1: The number of activities and events held through the collaboration of relevant organizations and bodies and local residents to mitigate pressure on the species. The number of times the

topic is covered by newspapers, television, and other media. The number of times roadkill-risk forecast information is sent out. The number of observation events held.

Result 4-2: Materials for education and awareness-raising, such as images, pamphlets, and other materials on the conservation of the species, are published and distributed to local residents, tourists, car rental agents, and so on. Education and awareness-raising activities are held at local events. Projects that aim to conserve the species and revitalize the local community are implemented. Understanding among concerned parties is improved and the numbers of supporters and advocates are increased.

Results indicator 4-2: The numbers of education and awareness-raising materials (images, pamphlets, etc.) published and distributed. The number of times that education and awareness-raising activities aimed at conserving the species is held at local events, and the number of participants at each event. The number of local community revitalization projects aimed at species conservation, and the number of implementation. The number of times the topic is covered by newspapers, television, and other media. The number of liaison events held with private associations.

Result 4-3: Rules for observing the species are created and become widely known to visitors and tour guides.

Results indicator 4-3: The observation rules, the people to whom they are distributed, and the numbers of materials distributed to inform the rules. The numbers of locally held education and awareness-raising activities, observation events, and other events implemented.

Effect 4

Effect 4-1: The number of roadkills and the number of victims of attacks by cats and dogs are decreased. Awareness and understanding of pressure factors and conservation of the species are increased among local residents and tourists.

Effects indicator 4-1: The number of roadkills; the number of victims of attacks by cats and dogs; and the level of awareness and understanding of pressure factors and conservation of the species among local residents, residents of Okinawa Prefecture, tourists, etc.

Effect 4-2: Understanding of the species is increased and leads to revitalization of the local community.

Effects indicator 4-2: The level of understanding of the species, and the numbers of local community revitalization programs and policies.

Effect 4-3: People observing the Okinawa rail begin to improve their methods of observation.

Effects indicator 4-3: The number of observers that comply with the rules.

5. Consolidation of collaboration for effective promotion of the program

Target 5: Collaboration among relevant organizations and bodies, educational institutions, local governments, and concerned parties will be strengthened so that species conservation measures can be effectively promoted and the Action Plan is reflected in local government conservation plans and other relevant plans.

Activity 5
Activity 5-1: To promote more effective conservation measures, share information with the relevant facilities, promote allocation of the roles and responsibilities of each relevant organization and body, and promote collaboration among these relevant organizations and bodies in relation to protection measures.

Activity 5-1-1:
From FY 2015 to 2024: Strengthen collaboration with facilities that are presently engaged in education and awareness-raising, and promote information-sharing and cooperation in various activities.

Activity 5-1-2:
From FY 2015 to 2024: Allocate roles and responsibilities among relevant organizations and bodies, local governments, and concerned parties to promote more effective conservation actions.

Activity 5-2: Promote environmental education through collaboration with institutions in the field of education.

Activity 5-2-1:
From FY 2015 to 2024: In collaboration with elementary and junior high schools in the local community and Okinawa Prefecture, use relevant facilities in extracurricular classes to provide environmental education on protection of the Okinawa rail and on the Yambaru area. Moreover, hold Okinawa rail observation events, surveys, and other activities with local elementary and junior high schools.

Activity 5-2-2: In collaboration with the Okinawa Prefectural government, village educational institutions, and others, develop educational programs to protect the Okinawa rail and the Yambaru area, and use the programs in extracurricular classes and environmental education.
From FY 2015 to 2017: Develop educational programs
From FY 2018 to 2024: Implement the educational programs

Activity 5-2-3:
From FY 2015 to 2024: Provide environmental education to tourists and to students on school trips from outside Okinawa Prefecture by making use of the Yambaru Wildlife Conservation Center, the Okinawa Rail Ecology Center, and other facilities.

Result 5

Result 5-1: Liaison, discussions, and a wide range of coordination meetings are held to collaborate and share information on survey results, protection measures, development plans, and other matters. A variety of data are visualized, and reports on survey results and other information are shared.

Results indicator 5-1: The numbers of liaison, discussion, and coordination meetings held. The amount of data consolidated and visualized. The number of reports on survey results shared.

Result 5-2: Environmental education is held through, for example, extracurricular activities and observation events and joint surveys by elementary and junior high school students in the three local villages and in Okinawa Prefecture. Environmental education programs on the Okinawa rail and the Yambaru area are developed. Environmental education activities for tourists and for students on school trips are implemented.

Results indicator 5-2: The number of extracurricular activities (such as environmental education and joint surveys) held. The number of environmental education activities offered to tourists and to students on school trips.

Effect 5

Effect 5-1: The number of cases in which development plans and others are revised out of consideration for the species is increased. The number of protection measures implemented through the collaboration of relevant organizations and bodies is increased. The use of data and survey results by relevant organizations and bodies and by others is increased.

Effects indicator 5-1: The number of development plans and other plans revised out of consideration for the species; the number of protection measures implemented through the collaboration of relevant organizations and bodies; and the amount of data shared.

Effect 5-2: The level of understanding of the need for protection of the species is improved among elementary and junior high school students in the three local villages and in Okinawa Prefecture. The number of elementary and junior high school students from the local communities and Okinawa Prefecture who participate in observation events and extracurricular activities is increased. The level of understanding of the need to protect the species is improved among tourists and among students on school trips.

Effects indicator 5-2: The level of understanding of the need for protection of the species among elementary and junior high school students in the three local villages and in Okinawa Prefecture. The numbers of participants in observation events and extracurricular activities aimed at protection of the species.

6. More effective and efficient implementation of the Action Plan

Target 6: The progress of the Action Plan will be reported on annually at the Yambaru Rare Wildlife Protection and Recovery Program Review Committee Meeting (hereinafter referred to as the "Protection and Recovery Program Review Committee Meeting") and at the meeting of the Okinawa Rail Protection and Recovery Program Working Group (hereinafter referred to as the "Working Group"), and the improvements identified will be implemented. The state of progress of the Action Plan will be evaluated every five years and the Action Plan will be revised accordingly.

Activity 6

Activity 6-1:

From FY 2015 to 2024: Annually report the results of implementation of the Action Plan at the Protection and Recovery Program Review Committee Meeting and at the meeting of the Working Group; seek the review committee members' advice on points that need to be improved; and make the improvements needed for more effective and efficient implementation of the program. Introduce more effective conservation methods in response to changes in social conditions and developments in science and technology.

Activity 6-2: In FY 2019, comprehensively evaluate the state of progress of the Action Plan on the basis of the results and effect indicators, and revise the Action Plan if necessary. In the final fiscal year, FY 2024, similarly evaluate the level of target achievement of the Action Plan.

FY 2019: Mid-term evaluation

FY 2024: Final evaluation

Result 6

Result 6-1: Implementation results are reported annually at the Protection and Recovery Program Review Committee Meeting and at the meeting of the Working Group, and implementation of the program is appropriately improved as advised by the committee members.

Results indicator 6-1: Annual holding of the Protection and Recovery Program Review Committee Meeting and the meeting of the Working Group, and the status of improvements made to the program in response to the committee members' advice.

Result 6-2: The state of progress of the Action Plan is evaluated comprehensively on the basis of the results and the effect indicators, and the Action Plan is revised accordingly.

Results indicator 6-2: Results of the evaluation of the state of progress of the Action Plan on the basis of the results and effect indicators, and the resulting revised Action Plan.

Effect 6

Effect 6-1: The Okinawa Rail Protection and Recovery Program is implemented with increased effectiveness and efficiency.

Effects indicator 6-1: Improvement of results and effect indicators in the case of those activities that have been improved.

Effect 6-2: Necessary improvements are made to the Action Plan, and the status of the species is improved.

Effects indicator 6-2: The status of improvements in the species' population size, distributional area, and so on.

4-29 Phase 2 Small Asian Mongoose Control Plan for Amami-Oshima Island (FY 2013 to 2022)[1]

April 1, 2013

Naha Nature Conservation Office, Ministry of the Environment

1. Subject of control

Small Asian Mongoose (*Herpestes javanicus*)

*The subject will change to the small Indian mongoose (*Herpestes auropunctatus*) following the revision of the relevant Cabinet Ordinance; hereinafter referred to as "mongoose."

2. Controlled area

Amami-Oshima Island, Kagoshima Prefecture

Figure1. Mongoose control area map (omitted)

3. Period of control

From April 1, 2013, to March 31, 2023

4. Control objective

The plan objective is to control mongooses and recover status of Amami rabbits (*Pentalagus furnessi*), Amami woodcocks (*Scolopax mira*), and other native species to Amami-Oshima Island; to further reduce mongoose density and promote local elimination; and ultimately, to achieve complete elimination of mongooses from Amami-Oshima Island.

5. Control system

[1] This plan was established by the Ministry of the Environment in accordance with the notice "Regarding the control of small Indian mongooses" from the Ministry of Agriculture, Forestry and Fisheries and the Ministry of the Environment (Notice No.10 of 2005 of the Ministry of Agriculture, Forestry and Fisheries and the Ministry of the Environment) issued under the Invasive Alien Species Act (Article 11, paragraph 2).

Trapping and monitoring will be performed systematically by the organized structure known as Amami mongoose busters (mongoose control specialists engaged since 2005; "mongoose busters" hereinafter) and other specialists.
In addition, dogs to detect mongooses ("detection dogs" hereinafter) will be retained and trained in cooperation with handlers (detection dog trainers) chosen from among the specialists engaged.

6. Subsidiary objectives and action items

To achieve the plan objective, we set subsidiary objectives and action items.

6-1 Objective for completely eliminating mongooses

Objective 1

Further reduce mongoose density across the entire area of their distribution; achieve local elimination in each work area, starting from the northernmost area; and completely eliminate mongooses from Amami-Oshima Island by FY 2022.

Action to achieve Objective 1

(1) Control policy

Action 1: The following policies will be implemented to achieve complete elimination of mongooses from Amami-Oshima Island:

(i) Divide Amami-Oshima Island into areas of approximately 60 km^2, each based on geographical features and other characteristics.
(ii) Define the northernmost area of the mongoose distribution range as an "intensively controlled area," where intensive capture work will be undertaken to achieve elimination.
(iii) When the possibility of surviving mongooses is reduced through work under (ii), the intensively controlled area will be reclassified as a "monitored area," which will be further combed for surviving mongooses.
(iv) Upon reclassification as a "monitored area," the area to the south will then be defined as a new "intensively controlled area."
(v) Areas yet to be set as "intensively controlled areas" will be classified as "low density promotion areas," where capture work will be undertaken to further reduce mongoose density.
(vi) Through these steps, we will eliminate mongooses from a growing number of areas, from the northernmost to the southernmost, and ultimately achieve complete elimination of mongooses from the whole of Amami-Oshima Island.

Figure 2. Work areas (map omitted)

Area name	Size (km^2)
Akina, Yanyu	35.1
Honcha Pass	51.4
Toguchi, Hatohama	50.2
Kinsakubaru	41.4
Wase	41.3
Ongachi, Santaro	70.5
Naon	76.7
Mt. Yuwandake	46.6
Shinokawa	45.1
Uken Peninsula	51.3
Yanma	64.9
Koniya	73.1
Kasari	62.6

(2) Control methods

1) Capture and other measures

(i) Trapping

- Set traps at lines and places where deemed effective in view of the mongoose distribution, alongside other measures.
- The types of traps used will mainly be basket traps to catch mongooses alive and pipe traps to capture and kill them (including extended types). Appropriate types will be deployed in light of the status of native species, including Amami spiny rats (*Tokudaia osimensis*), Ryukyu long-haired rat (*Diplothrix legata*), and other native species. Any new and effective capture methods developed will be introduced.

(ii) Monitoring

- To collect information on mongoose inhabitation, monitoring will be performed with hair traps, trail cameras, detection dogs, and other methods.
- Detection dogs will search for feces, odors, and other traces of mongooses. If they find mongooses, they will be prompted to chase when appropriate in view of site conditions and other factors to allow handlers to catch mongooses.

2) Details of control measures in each work area

Pursuant to the policy set forth in (1) above, the following control measures will be implemented in each work area (Attachment).

(i) Low density promotion area

The objective here is to "further reduce mongoose density in the work area." This goal will be pursued primarily with permanent traps. Hair traps and trail cameras will be systematically installed to gather information on mongoose inhabitation.

(ii) Intensively controlled area

The objective here is to "eliminate mongooses from the work area." We will strengthen capture efforts relative to low density promotion areas, including increasing the number of permanent trap lines and monitoring frequency. At places where mongooses are likely to be surviving, we will carry out intensive capture work, including pinpoint captures (carefully setting traps at certain points whose environmental conditions deem favorable to mongooses, around locations where surviving mongooses have been reported) and use of detection dogs for search and capture. More hair traps and trail cameras will be installed to collect information on mongooses surviving at low density.

(iii) Monitored area

The objective here is to "confirm the elimination of mongooses in the work area." While maintaining a certain level of capture efforts using permanent traps, we will place a primary emphasis on monitoring to confirm the elimination of mongooses through area searches with detection dogs, as well as with hair traps and sensors.

6-2 Objective for effective control

Objective 2

Promote the development and enhancement of capture and other techniques

Action to achieve Objective 2

Action 2: In cooperation with universities, research institutes, business enterprises, and other entities, we will promote improvements in capture techniques, including trap improvements, studies of effective trap baits, and efforts to establish capture methods for detection dogs and handlers, as well as improvements in and studies of ways to enhance the accuracy of monitoring with hair traps, trail cameras, detection dogs, and other methods.

Objective 3

Evaluate native species recovery and examine the measures needed.

Action to achieve Objective 3

Action 3-1: We will evaluate native species recovery at regular intervals, assembling and organizing native species monitoring by mongoose busters, by-catch results, and photographs from trail cameras, findings under protection and recovery programs, and academic research.

Action 3-2: This evaluation will take place at the review committee set forth below. Based on the evaluation results, we will examine the measures needed to further promote native species recovery (e.g., protection and recovery programs).

Objective 4

Promote public awareness and secure greater public understanding and cooperation.

Action to achieve Objective 4

Action 4: In cooperation with the organizations concerned, we will promote public awareness on the need for, progress on, and the details and results of control measures through the websites, brochures, and other media, thereby promoting understanding and cooperation among the general public, including local residents.

Objective 5

Evaluate the status of control measures at regular intervals and make necessary improvements.

Action to achieve Objective 5

Action 5-1: We will establish a review committee composed of specialists to perform periodic scientific evaluations of control measures under this plan and elimination achievements in each work area. We will then make necessary improvements in control systems and methods.

Action 5-2: To completely eliminate mongooses, we must employ adaptive management measures based on their status and local conditions; therefore, this program will be reviewed whenever necessary based on the committee's discussions.

Attachment

Area name	Size (km^2)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Kasari	62.6										
Akina, Yanyu	35.1										
Honcha Pass	51.4										
Toguchi, Hatohama	50.2										
Kinsakubaru	41.4										
Wase	41.3										
Ongachi, Santaro	70.5	★									
Naon	76.7										
Mt. Yuwandake	46.6	★									
Shinokawa	45.4	★	★	★	★						
Uken Peninsula	51.3	★	★	★	★						
Yanma	64.9	★	★	★	★						
Koniya	73.1	★	★	★	★						

monitored area (1st year)
monitored area (after 2nd year)
intensively controlled area
low density promotion area
low density promotion area (preparing for intensive control)
★ permanent traplines

4-30 Phase 2 Mongoose Control Plan for the Northern Part of Okinawa Island (FY 2013 to 2022)[1]

April 1, 2013

Naha Nature Conservation Office, Ministry of the Environment

Nature Conservation Division, Department of Environmental Affairs, Okinawa Prefecture

1. Subject of control

Small Asian Mongoose (*Herpestes javanicus*)

* The subject will change to the small Indian mongoose (*Herpestes auropunctatus*) following the revision of the relevant Cabinet Order; hereinafter referred to as "mongoose."

2. Controlled area

Northern part of Okinawa Island, Okinawa Prefecture

The "complete elimination area" in which efforts will be made to completely eliminate mongooses is the area north of the first northward migration prevention fence installed along the line running from Shioya, Ogimi Village through Fukuji Dam and Lake Fukugami to Odomari Bridge (the Shioya-Fukuji line; the "SF line" hereinafter). The area lying between the SF line and the second northward migration prevention fence installed along the line running from Shioya, Ogimi Village to Taira, Higashi Village (the Shioya-Taira line; the "ST line" hereinafter) is set as the "buffer zone" to block mongoose invasion from areas south of the ST line. Furthermore, neighboring areas south of the ST line where capture and other work are carried out to curb mongoose invasion into the areas north of the ST line are defined as the "controlled density areas." Areas south of the controlled density areas, including the City of Nago, will be defined, if necessary, as the "test areas" where capture and other work will be undertaken on a preliminary basis.

The complete elimination area, buffer zone, controlled density areas, and test areas together constitute a "control area."

[1] This plan was established by the Ministry of the Environment and Okinawa Prefecture in accordance with the notice "Regarding the control of small Indian mongooses" from the Ministry of Agriculture, Forestry and Fisheries and the Ministry of the Environment (Notice No.10 of 2005 of the Ministry of Agriculture, Forestry and Fisheries and the Ministry of the Environment) issued under the Invasive Alien Species Act (Article 11, paragraph 2).

Figure 1. Mongoose control area map (omitted)

3. Period of control

From April 1, 2013, to March 31, 2023

4. Background

Mongooses prey on Okinawa rails (*Gallirallus okinawae*), Okinawa spiny rats (*Takudaia muenninki*), and other native species, threatening the existence of endemic endangered wild animals of the northern part (called "Yambaru") of Okinawa Island. Removal programs were launched by Okinawa prefectural government in FY 2000 and by the Ministry of the Environment in FY 2001. Pursuant to the Invasive Alien Species Act enacted in FY 2005, a 10-year control plan leading up to FY 2014 was developed and control programs implemented accordingly. Intensive capture work and other measures undertaken so far have led to remarkable reductions in mongoose populations and density, as well as to a reduced distribution range. As the mongoose population has decreased, we have confirmed Okinawa rails and Ryukyu long-haired rat (*Diplothrix legata*) across more areas and in greater numbers. The Phase 1 control program was highly successful, as discussed above, but complete elimination from the northern part of Okinawa Island has not been achieved as of FY 2014 (Attachment 1; omitted).

Based on the evaluation of the control measures undertaken so far, we developed a Phase 2 mongoose control plan for the northern part of Okinawa Island ("Plan" hereinafter).

The control of mongooses from the northern part of Okinawa Island is regarded as a key program under and a progress indicator of the National Biodiversity Strategy of Japan 2012-2020 (Cabinet Decision in September 2012) and the Okinawa prefectural government's "Okinawa Strategy for Biodiversity" (established in March 2013). Therefore, the achievement of the objectives under this Plan is essential to these biodiversity strategies.

5. Control objective

The Plan objective is to achieve the complete elimination of mongooses from the complete elimination area, an area north of the first northward migration prevention fence installed along the SF line, by FY 2022, and to prevent the re-invasion of mongooses into this area, thereby recovering and maintaining the ecosystem of the Yambaru area, which features a unique endemic biota and many rare species, and eliminating the impact of mongooses on the ecosystem and minimizing long-term control costs.

6. Control system

This Plan will be implemented jointly by the Ministry of the Environment and Okinawa prefectural government in their respective roles. They will implement joint control measures, determining the division of work for each fiscal year, securing coordination between respective mongoose control programs, and sharing information. Trapping and monitoring will be performed systematically by the organized structure known as Yambaru mongoose busters (mongoose control specialists engaged since 2008; "mongoose busters" hereinafter) and other specialists.
In addition, dogs to detect mongooses ("detection dogs" hereinafter) will be retained and trained in cooperation with handlers (detection dog trainers).

7. Subsidiary objectives and action items

To achieve the Plan objectives, we set subsidiary objectives and action items as follows (Attachment 2 for the overall timeline).

(1) Objectives for complete elimination

Objective 1: Completely eliminate mongooses from the complete elimination area (Attachment 3 for more information; omitted).

Action 1-1. To achieve local eradication from one area to another and to move toward complete elimination, the complete elimination area is divided into eight eradication work areas, based on physical borders, such as rivers and dam lakes. Eradication work will begin from the eradication work area I (north), where current mongoose density is low.

Figure 2. Eradication work areas (omitted)

Action 1-2. Based on the results of trapping and monitoring in each eradication work area, we will (i) reduce mongoose density; (ii) eliminate survivors; (iii) confirm eradication; (iv) implement follow-up measures; and (v) keep the area free of mongooses.

Objective 2: Prevent re-invasion from areas south of the SF line.

Action 2-1. To minimize the risk of mongoose re-invasion from the buffer zone into the complete elimination area, we will perform intensive capture and monitoring in neighboring areas north of the SF line.

Action 2-2. To prevent northward invasion across the SF line, we will maintain a powerful capture pressure in the buffer zone.

Action 2-3. To reduce as much as possible opportunities for mongooses to invade into the buffer zone, we will perform capture work in the area on the south side along the ST line (controlled density areas) and reduce those approaching the ST line.

Action 2-4. Re-invasion prevention efforts in the buffer zone as well as in the area north of the SF line and the area south of the ST line must be continued, even after complete elimination from areas north of the SF line is achieved. Specific actions, including those for controlling alien snakes, will be examined and determined by FY 2022.

Objective 3: Recover the population and distribution range of native species.

Action 3-1: Evaluate recovery status based on changes in population density and distribution range of rare species by analyzing data from rare species recovery surveys, monitoring by mongoose busters, rare species by-catch, and other protection and recovery program surveys.

Action 3-2: Continuously accumulate data on rare species caught in mongoose traps to assess the latest by-catch risks. A review committee will discuss by-catch risks and countermeasures and modify the types of traps used, the time and place of trapping, and so forth to manage by-catch risk and consequently promote the recovery of population density and distribution range of rare species.

Action 3-3: Even after the complete elimination of mongooses is achieved, we will continue monitoring surveys other than by-catch information for a certain period to evaluate the recovery status of native species.

(2) Objective for effective control

Objective 4: Enhance the effectiveness of programs through the development and improvement of control techniques and methods.

Action 4-1: In cooperation with universities, research institutes, and business enterprises, we will develop new control techniques and methods, including more effective mongoose traps that at the same time are less likely to catch rare species and new baits and poisons; new monitoring techniques with high detection accuracy; and low-cost migration block fences that are easily installed to maintain the mongoose-free status of local areas.

Action 4-2: Introduce new techniques and methods developed or improved as above proven effective through demonstration tests.

Objective 5: Promote public awareness through various media so that the general public, including the local residents, will understand the significance of and cooperate in the control project.

Action 5-1: Periodically provide local residents with information and opportunities for exchanging opinions on project details, progress, and so forth, via publication, newsletters, briefing sessions, and exhibitions at the Yambaru Wildlife Conservation Center.

Action 5-2: Provide information on capture results, the recovery status of native species, and other project achievements through press releases and websites of the Ministry of the Environment and Okinawa prefectural government at appropriate times each year. We will also print and distribute brochures, posters, and other literature periodically, depending on the progress of the project, to inform and gain the cooperation of the citizens of Okinawa Prefecture and other regions.

Action 5-3: Provide information on project status and achievements in an intelligible way for progress evaluations under the National Biodiversity Strategy and Okinawa prefectural government's local biodiversity strategy.

Objective 6: Periodically evaluate the status and achievements of the control project and make necessary improvements.

Action 6-1: Establish a review committee and hold meetings twice a year to evaluate project achievements and progress by objective standards and identify aspects that need to be improved; modify the Phase 2 control plan based on committee evaluations and proposed improvements to enhance project effectiveness.

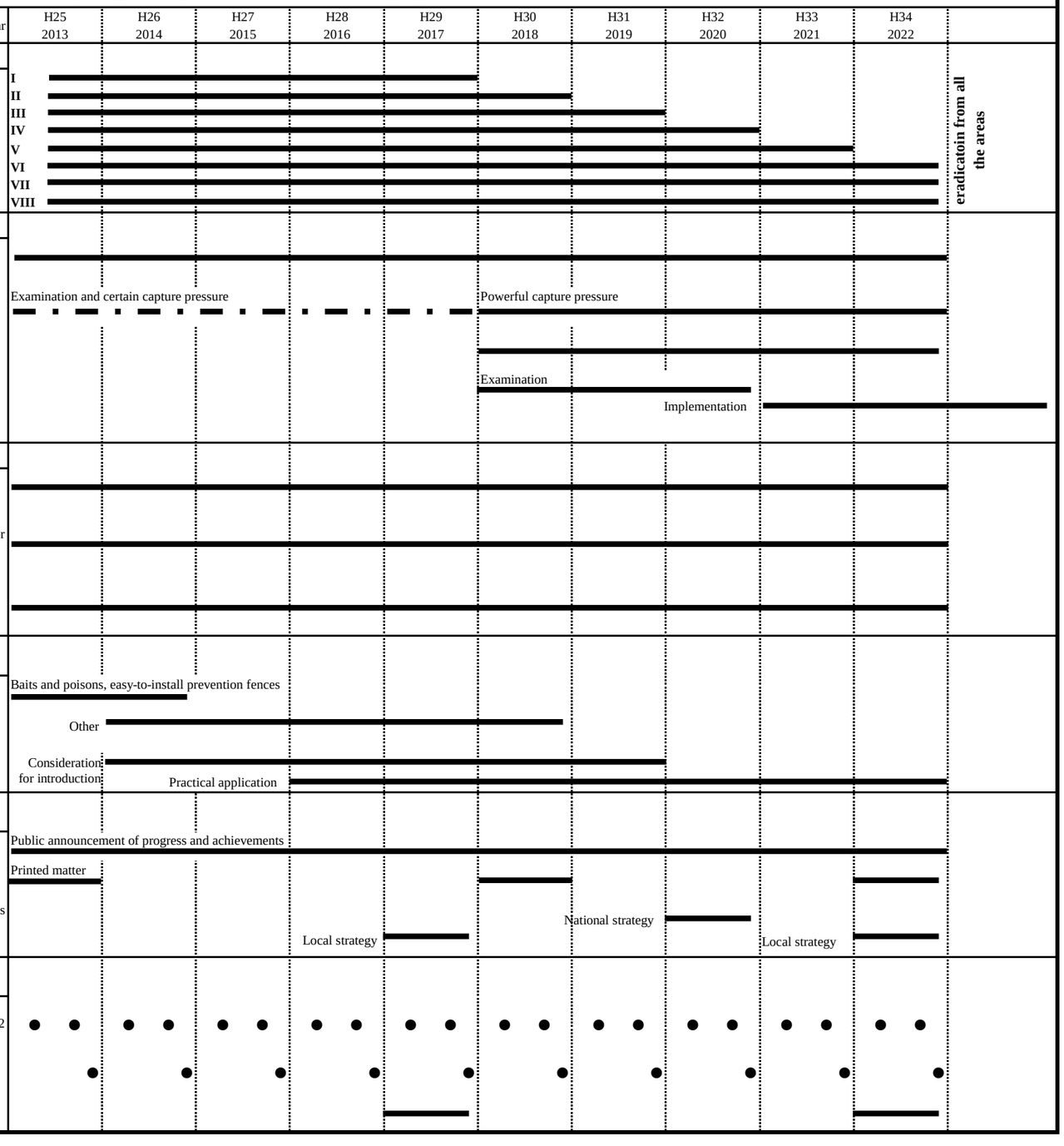
Action 6-2: Based on the committee's evaluations and proposed improvements, we will develop a project implementation plan for each fiscal year and execute the project accordingly.

Action 6-3: To completely eliminate mongooses, we must employ adaptive management measures appropriate to their population status and local conditions; therefore, we will review this Plan in the fifth year of the Plan (FY 2017) or whenever necessary based on the committee's discussions.

Plan time-line

Attachement 2

Control objective: Achieve the complete elimination of mongooses from the complete elimination area, an area north of the first northward migration prevention fence installed along the SF line, by fiscal 2022, and to prevent the re-invasion of mongooses into this area, thereby recovering and maintaining the ecosystem of the Yambaru area, which features a unique endemic biota and many rare species, and eliminating the impact of mongooses on the ecosystem and minimizing long-term control costs.



Objective 1:	Completely eliminate mongooses from the complete elimination area
Action 1-1:	Divide the complete elimination area into eight eradication work areas and achieve local eradication in each area toward complete elimination, starting from the northernmost area.
Action 1-2:	Divide eradication work area into five stages based on mongoose population density, and implement the control measures for each area accordingly.
Objective 2:	Prevent re-invasion from areas south of the SF line.
Action 2-1:	To minimize the risk of mongoose re-invasion from the buffer zone into the complete elimination area, perform intensive capture and monitoring in areas north of the SF line.
Action 2-2:	To prevent northward invasion across the SF line, maintain a powerful capture pressure in the buffer zone.
Action 2-3:	To reduce as much as possible opportunities for mongooses to invade into the buffer zone, perform capture work in areas south of the ST line and reduce those approaching the ST line.
Action 2-4:	Continue re-invasion prevention efforts in the areas north of the SF line, buffer zone, and south of the ST line, after complete elimination is achieved. Specific actions, including those for controlling alien snakes, will be examined and determined by fiscal 2022.
Objective 3:	Recover the population and distribution range of native species.
Action 3-1:	Evaluate the recovery status from changes in the population density and distribution range of rare species, by analyzing data from rare species surveys.
Action 3-2:	Accumulate rare species by-catch data and assess the latest by-catch risks. A review committee will discuss by-catch risks and countermeasures and modify the types of traps used, the time for trapping, etc., to manage the by-catch risk for recovery of rare species.
Action 3-3:	Even after the complete elimination of mongooses is achieved, continue monitoring surveys other than by-catch information for a certain period to evaluate the recovery status of native species.
Objective 4:	Enhance the programs effectiveness through the development and improvement of control techniques and methods.
Action 4-1:	In cooperation with universities, research institutes, and business enterprises, develop new control techniques and methods, including more effective mongoose traps that at the same time are less likely to catch rare species, new baits and poisons; new monitoring techniques with high detection accuracy; and low-cost, easy-to-install migration block fences.
Action 4-2:	Introduce new techniques and methods developed or improved as above proven effective through demonstration tests.
Objective 5:	Raise awareness through various media so that the general public, including the local residents, will understand the significance of and cooperate in the control project.
Action 5-1:	Provide the local residents with project progress information periodically.
Action 5-2:	Announce project achievements via the press releases, websites, and print and distribute brochures periodically for public information.
Action 5-3:	Provide information on project status and achievements in an intelligible way as part of progress evaluations under the National Biodiversity Strategy and Okinawa prefectural government's local biodiversity strategy.
Objective 6:	Periodically evaluate the status and achievements of the control project and make necessary improvements.
Action 6-1:	Hold review committee meetings twice a year to evaluate project achievements and progress and identify what needs to be improved. Based on the committee discussion, modify the phase-2 control plan so that the project will be carried out more effectively.
Action 6-2:	Based on the committee's evaluations and proposed improvements, we will develop a project implementation plan for each fiscal year and execute the project accordingly.
Action 6-3:	Review this Plan in fiscal 2017 and whenever necessary based on the committee's discussions and in light of other issues.

4-31 Cane Toad (*Rhinella marina*) Control Plan for the Yaeyama Region of Okinawa Prefecture[1]

Formulated on June 3, 2005
Revised on April 1, 2011
Naha Nature Conservation Office, Ministry of the Environment

1. Control objective

The Yaeyama Region is home to many endemic species, including Iriomote cat (*Prionailurus bengalensis iriomotensis*) found in Iriomote Island, and features a distinctive biota and unique island ecosystems developed as the result of the limited geographic space and the long-term isolation. These ecosystems are extremely vulnerable to human activity and alien species. Alien species control is therefore essential to their conservation.

Cane toads (*Rhinella marina*) are the subject of control under this plan. Efforts were initiated in FY 2001 to monitor this species on Iriomote Island and control them on Hatoma island. Since FY 2005, data on their status or on their invasion into islands in the Yaeyama Region has been gathered and island-specific measures implemented in accordance with a cane toad control plan. Based on these past efforts, we will promote cane toad control measures for each island as follows:

(1) Ishigaki Island

Since Ishigaki Island is a center of traffic and transportation in the Yaeyama Region, we will seek to disseminate the necessary knowledge and information to prevent toads spreading to outside areas. The effectiveness of control measures will be properly evaluated to reduce toad density.

(2) Iriomote Island and Yonaguni Island

[1] This plan was formulated by the Ministry of the Environment in accordance with the notice "Regarding the control of *bufo marinus* (cane toad)" from the Ministry of the Environment (Notice No. 54 of 2005 of the Ministry of the Environment) issued under the Invasive Alien Species Act (Article 11, paragraph 2).

These islands feature a rich natural environment that is home to many endemic species and must be kept free of cane toads. We will establish a proper monitoring system to achieve preventive control in the early stages in case of invasion.

(3) Other islands (Taketomi, Kohama, Kuroshima, Aragusuku, Hatoma, and Hateruma islands)

It appears possible to implement highly effective control measures since water bodies where cane toads can breed are limited. In this way, we will ensure that information on any cane toad discovered will be reported to a central point and prompt, proper action taken to achieve preventive control.

2. Controlled areas: Ishigaki City, Taketomi Town, and Yonaguni Town in Yaeyama County, Okinawa Prefecture

3. Period of control: From April 1, 2011, to March 31, 2016

4. Control methods

(1) Identify current status and other information

For Ishigaki Island, examine appropriate methods to identify the current status of cane toads; perform monitoring and identify density accordingly. For Taketomi, Kohama, Kuroshima, Aragusuku (comprising Kamiji and Shimoji islands), Hatoma, and Hateruma Islands, identify the location and environmental conditions for water catchment measures and other lentic water bodies that may serve as breeding grounds for cane toads.

(2) Examine actual damage

Seek to clarify the actual damage caused by cane toads to the native ecosystem, biodiversity, agriculture, forestry and fisheries, or human health.

(3) Identify invasion routes

Identify cane toad invasion routes within Ishigaki Island as well as from Ishigaki Island to other islands in the Yaeyama Region to prevent their spread to other areas within Ishigaki Island or to other islands.

(4) Establish monitoring and information systems

a. For Iriomote Island and Yonaguni Island, thoroughly control cane toads in the early stages of invasion by establishing a monitoring system to detect and capture any toads promptly upon invasion, based on the monitoring experience on Iriomote Island gained to date under the control plan.

b. On Taketomi, Kohama, Kuroshima, Aragusuku (comprising the Kamiji and Shimoji islands), Hatoma, and Hateruma Islands, suitable breeding grounds are found in limited lentic water bodies. Thus, perform periodic patrol inspections and establish information systems that any cane toads discovered by local residents will result in a prompt report and control measures.

(5) Capture

a. On Ishigaki Island, organize cane toad capture events that local volunteers participate in. Also, examine other effective capture programs and seek to establish a framework allowing enrolled local residents to capture cane toads throughout the year.
b. On the artificial land south of Ishigaki Island, capture any cane toads found in goods carried in by truck or other routes.
c. Strive to develop effective and efficient control techniques.

(6) Promote public awareness

a. Propagate information on control measures carried out under the control plan, including cane toad capture events, through printed matter and briefing sessions so that local residents will understand the significance of and cooperate with those measures.
b. Develop a learning program for cane toad control and have it incorporated into the education curriculum in cooperation with local schools.
c. To prevent human induced but unintentional invasion, establish and implement public awareness methods for informing and educating visitors, tourist agencies, carriers, and others.
d. Provide cane toads and their egg masses captured, destroyed, and stored, for use as teaching materials or samples for environmental or science education, academic research, and other such efforts.

5. Other

(1) Establish a cane toad control council

For this plan, establish a cane toad control council composed of academic expert, relevant administrative agencies, environmental conservation organizations, local residents, and so forth. This council will discuss and evaluate control measures based on scientific knowledge and local information, to implement effective control measures based on a local consensus.

(2) Review the control plan

This plan will be reviewed once every five years or so for appropriate implementation of cane toad control measures based on changes in natural and social conditions.

4-32 The Biodiversity Strategy and Action Plan of Kagoshima Prefecture (Excerpt)

Chapter 5: Basic Idea

Basic Ideas: "Symbiosis" and "Circulation"

This action plan is based on the ideas of "symbiosis" and "circulation". These are universal ideas in the viewpoint of the connection between human and nature, as they were incorporated as the basic ideas to the "Yakushima Environmental and Cultural Village Concept" in 1992. Each policy and effort based on this action plan is implemented in accordance with the ideas.

What is "Symbiosis"?

"Symbiosis" means that all human beings live and exist together with all organisms; nature is regarded as a necessary resource for human life, but human beings should not control nature because we are equal to other organisms; nature rather makes human beings alive. The idea of "symbiosis" could be united to Japanese traditional ideas of nature in which a soul is dwelling everywhere in nature like a giant tree, a mountain, river, ocean and land.

"What is "Circulation"?

The word "circulation" indicates the whole connection of all living creatures including human beings; all living organisms are continuing circulating all their lives in the cycle of birth and death. Lives of other organisms would become human body and blood, and a human could also turn back to soil in the end, so life is succeeded to another life on and on. Not only substances but also lives are circulating.

People could be aware that those who are living in present days should not impose a burden on other organisms and future generations because a sequel in which we greatly seek benefits, by realizing that human beings live together with other organisms as just one of a piece of the life cycle. The concepts of "symbiosis" and "circulation" show a sense of value and ethical perspective of which people should live with restraint and share resources equally with other organisms and future generations.

<Reference>
Desirable principles of "symbiosis and circulation"
(from the report of "Conversation of Yakushima Environmental Culture" in September 1992.)
Rebirth of the concepts of symbiosis and circulation

We realize; a human being, as a part of nature, we can be alive only by living together with many other living organisms in nature; it is impossible that only human beings would be able to grow and expand endlessly. Not placing absolute emphasis on personal existence and the present time, it is necessary to have a viewpoint that we found ourselves as just a passing point in the lives of human beings keeping an endless

circulation for a long time.

Chapter 6: Basic Objectives

Basic Objectives: Realizing a new "Society in Harmony with Nature"

Nature provides abundant gifts for our life while it sometimes brings serious disaster and takes our lives and assets; along with the two sides of nature, Japanese have lived in harmony with nature by adopting and respecting it as well as receiving gifts from nature, not by controlling and conflicting with nature.

However, such lifestyle in harmony with nature is getting difficult to maintain due to bipolarization in which population is concentrated to urban areas where lifestyles are based on consumption while population of rural areas is aging and decreasing and unsettled areas are spread in the prefecture.

Having rich biodiversity and high productive capacity in nature are main characteristics of Kagoshima, people however, have repeatedly harmed biodiversity by not utilizing the productive power of nature, but rather relying on imported resources and energies in their industrial activities and lifestyles.

The Great East Japan Earthquake on March 11, 2011 reminded us of a respect to nature that Japanese had forgotten in civilized society that greatly relies on modern science, and gave us a chance to rethink the relationship between nature and human beings.

This strategic plan aims to realize a new society in harmony with nature.

In this modern society, which seeks convenience and security, it is not easy to return the current lifestyle to being in harmony with nature as in the past, which may lower the standard of living. Thus the strategic plan sets basic objectives to realize a new society to coexist with nature by utilizing a new wisdom and scientific technology while learning environmental culture of living in harmony with nature.

The basic objectives will be achieved based on the model initiative in Yakushima and the Amami Island Group, which have environmental culture with nature and a value of world natural heritages.

To realize a new society in harmony with nature, the following three goals shall be satisfied in a good balance; 1) improving quality of biodiversity, 2) succeeding environmental culture in harmony with nature, 3) developing local communities based on biodiversity.

In this regard, the ideal images of Kagoshima in the short term (10 years) and mid-long term (30-50 years) are indicated in the following sections.

Short Term Goals

Images of Kagoshima in 10 years (in 2024)

1. No damage on biodiversity is generated in Kagoshima, and efforts to reproduce nature is started with resident participation to increase natural waterfront such as coasts, riverbanks, and tideland as well as natural forests and secondary grasslands.
2. No species is newly added to the red list due to deterioration of habitat and overhunting. No extinction on wildlife is generated by human factor.
3. A number of specified alien species that invade land of the prefecture has not increased. More than two kinds of specified alien species are successfully eradicated including mongooses.
4. Understandings of issue on alien species on citizens in the prefecture are advanced. No invasive alien species are brought to the prefecture deliberately.
5. Each city and town establishes the system for prevention of wildlife damage by employing professional hunters; combined with management of habitat, generation of wildlife damage is controlled to less than a determined level.
6. Understandings of biodiversity and environmental culture on citizens in the prefecture are highly advanced.
7. Children have a rich experience in nature and an original and memorable image of nature.
8. Efforts of biodiversity-friendly agricultural production are implemented in each area, and the products are widely sold by retailers.
9. “Biodiversity” is clearly positioned in action policies of CSR (Corporate Social Responsibility) of many agencies.
10. Strategic plans of biodiversity are established at the local level; residents participate in prevention and sustainable utilization of natural environment suited to each local feature.
11. The Amami Island Group is registered to the list of the World Natural Heritage, and sustainable tourism is established over the Islands.
12. Through quality eco-tours, Yakushima Island and the Amami Island Group are brought to international attention as places where people can experience rich biodiversity and life of environmental culture in harmony with nature.
13. More people are getting involved in wildlife investigation in the prefecture; a lot of information is accumulated and increasingly utilized.

Mid-Long Term Goals

Images of Kagoshima in 30-50 years (2044-2064)

1. In urban areas, natural forests and waterfront areas are regenerated in many places, where children can experience nature through collecting insects and fishing in their daily lives.
2. In Satochi-Satoyama, reorganization of land use makes abandoned fields be utilized as farms and land for natural regeneration; people can maintain biodiversity and local communities to succeed local traditions, wisdom and techniques.
3. In mountains, green corridor of evergreen broad-leaved forests (ecological network) is established; it secures continuity of habitat of forest wildlife.
4. While rivers maintain a disaster prevention function, aquatic organisms can freely move from estuaries to mid streams, tributaries, and small catchments; a number of fish in rivers in the past are increasing again due to the influence of regeneration of natural environments along basins.
5. By controlling impacts on marine environments, the bountiful ocean is regenerated due to the balanced relationship between forest and sea.
6. A large scale of waterfront and tideland is generated in each areas of the prefecture, in which many migratory birds and cranes come to winter.
7. Population of each species is increased by improvement of their habitat; many species are excluded from the red list because the danger of extinction is eliminated.
8. A society with an environmentally sound material cycle to utilize the productive capacity of nature is established; nitrogen deposition on soil is resolved combined with sustainable use of biomass resources.
9. The name of KAGOSHIMA is widely known in the world as an advanced region of studies on preservation and sustainable use of biodiversity as well as community development in harmony with nature, where students of environmental studies wish to visit at least once in their lives.
10. Investigation on environmental information is advanced in quality; institutions and organizations are well functioned to accumulate, analyze and disseminate information, and they spread it widely not only within the prefecture but also to the world.

Chapter 7: Basic Policy

This chapter provides the following 5 basic policies regarding the efforts to be implemented on this strategic plan in order to achieve the objectives to realize a new "society in harmony with nature", taking in consideration of characteristics and problems of biodiversity in Kagoshima.

1. Understand the Interconnection between Human Beings and Nature (Biodiversity) through Participation

Our life and nature (biodiversity) originally has a close and inseparable relationship. However, many people in modern society now never get food directly from nature and natural environments are lost in our daily lives; people hardly realize the connection between nature and themselves. Loss of recognition to the connection with nature leads to a loss of interest in nature as well as being insensitive to where nature is altered and changed. Consequently, it creates a vicious cycle of expanding the separation between human life and nature.

In order to realize a society in harmony with nature, it is important to increase public awareness of the connection between human life and nature firstly, and nurture a sense of living in the connection (biodiversity) through not only knowledge learning but also actual experience of nature. Thus, taking many chances of experience and study of nature, many of us need to understand the connection (biodiversity) and act proactively.

Example of Activity

Promotion of community development using organisms as indicators: Activity of "One Village, One Organism"(provisional title)

An activity called "One Village, One Organism" (provisional title) means that each city and town (local community and schools) chooses an organism as a symbolic feature (or indicator) and implements an activity to preserve the organism and its habitat for community development in harmony with nature. Cities, towns, villages, groups and schools in each region have already started such kind of activities. They try not only to preserve a specific species but also to promote the activities with a view to biodiversity as a background of the species; such sectors will be increased through introduction of pioneering projects of community development. This "One Village, One Organism" activity targets not only symbolic native species in local areas but also traditional vegetables, traditional culture and customs related to nature. The Kagoshima prefectural government will encourage local communities and schools to start the activity.

2. Conserve Key Areas and Retrieve the Interconnection of Nature

In Kagoshima prefecture, there are many key areas for preservation of biodiversity such as characteristic eco-systems, habitats of endangered wild fauna and flora, and northern and southern limits of distribution of organisms. Not to lose such key areas without realizing, it is important to assess such areas scientifically and conserve them well. In addition, it is also important to conserve not only such key areas but also natural environments near human life where ordinal wild species populate.

The National Biodiversity Strategy of Japan translates biodiversity into organisms' "character" and "interconnection", however, the interconnection of organisms becomes separated and quality of biodiversity are being lowered.

For example, in the main land of Kagoshima and Islands, the continuity of forest are lowered which make habitats of wildlife in forest separated due to economic activities and development of agricultural land after WWII; development of structures such as revetments would separate the connection of eco tone of watersides that is important for biodiversity. For improvement of quality of biodiversity, it is necessary to start an effort to retrieve the connection of ecosystems that were separated by development in the past.

Example of Activity

Comprehensive Check of Prefectural Nature Parks and Authorization of Nature Parks from the Viewpoint of Preservation of Biodiversity

While the existing prefectural nature parks are comprehensively checked in the aspect of preservation of biodiversity, some key areas will be additionally chosen in a scientific manner and preserved as new prefectural nature parks when not designated as a protected area. The Kagoshima prefectural government will start activities to increase the rate of designated nature parks to the whole area of the prefecture, reaching the national average, combined with designation of National and Quasi-National Parks by the Japanese government.

3. Accumulate Information on Biodiversity and Manage Eco-systems in Scientific Manner

Biodiversity in the prefecture has been investigated by many researchers and private groups, however, reports and information of the investigation are not well integrated and shared among relevant entities enough to take effective measures of protection; it is necessary to develop some systems to accumulate and share information of biodiversity.

In addition, measures to wildlife and alien species damage against agriculture, fishery and eco-systems are not sufficiently functioned due to lack of investigation and analysis, so that actions for conservation do not work effectively in some cases. Because conservation activities for rare wild species tend to be dependent on controls on hunting and collecting, it is a fact that habitat of such species is not conserved and managed well. Taking into consideration that the size of population is shifted under the influence of relations of some environmental conditions such as habitat (dens) and feeding as well as hunting pressure (predators), it is necessary to accumulate scientific knowledge and take an adoptive measure to conserve and manage environments of habitat and feeding, not only measures in the population level such as promotion of hunting and control on collection in order to manage wildlife

and alien species, and conserve rare wild species.

Example of Activity
Integrated Promotion of Measures against Alien Species

The prefecture will assess the current status of alien species invasion and damage generation, and make a list of alien species including species which might possibly invade to the prefecture in the future. Taking into consideration the seriousness of damage and expansion of distribution, the prefecture will integrally promote measures against alien species such as selection of alien species that need to be prevented with priority and acceleration of control of invasion.

4. Support Biodiversity and Succeed Environmental Culture Supported by Biodiversity

Traditional culture, wisdom, and techniques relating to nature are now rapidly being lost in each area in the prefecture due to the progress of population decline and aging population. The loss of such culture, wisdom and techniques means not only folkloric loss but also loss of local food production and skills to secure our lives in the future. Knowledge and techniques, which people have built up for a long time to secure bio-resources suited to each local area, like efficient cultivation of crops and vegetables depending on the climate, should be regarded as assets of our life that may contain some hints and models in such environmental culture of respect and lifestyle to co-existence with nature for the purpose of realization of a new "society in harmony with nature".

However, people who inherit such assets are now becoming old, so it is urgently necessary to learn about, and research such culture, wisdom and techniques from them. To succeed such environmental culture as much as possible, it is also important to offer a chance for younger generations to experience it, and research by experts should be encouraged more.

Example of Activity
Promotion of Oral Transcription to Inherit Environmental Culture

The Kagoshima prefectural government will work on an activity of "oral transcription" (provisional title), which is the activity of interviewing with elder workers and those who have lived in the community for a long time about the lifestyle in harmony with nature including agriculture, forestry and fishery, and making report to incorporate it to future efforts among administrative organizations, schools, universities, companies, and local communities. The prefectural government will also discuss how the activity should be implemented, as it is important to accumulate, conserve and utilize such oral transcriptions.

5. Shift Industrial Activities and Lifestyles for Improvement of Biodiversity

Degradation of quality of biodiversity, such as damage of habitats of many organisms, is currently generated by industrial activities and modern lifestyles in excess pursuit of efficiency, economy, convenience, and comfort.

Industries including agriculture, forestry and fishery in Kagoshima are blessed with biodiversity, and at the same time, such industrial activities contribute to conserve local biodiversity. For example,

Satochi-Satoyama, which is developed for agricultural and forestry use, results in providing suitable environments for habitats of many organisms; targeted areas of eco-tourism may become an incentive to proactive conservation of nature for local people. Industrial activities and our lifestyles should not damage local biodiversity; if anything, it is necessary to encourage them to contribute to improvement of quality of biodiversity through participation and consensus building with local residents.

In addition, it requires effort to be implemented combined with measures against solid waste, eutrophication, and global warming caused by industrial activities and modern lifestyles, for the purpose of conservation of biodiversity.

Example of Activity

Promotion of Biodiverse-friendly Products

This activity aims for the promotion of biodiverse-friendly products through the improvement of consumer awareness; in collaboration with relevant entities, the prefecture will provide information of relations between materials of products and biodiversity such as food, fiber, and woods consumed in our daily life, to make consumers choose products that contribute to the maintenance and importance of biodiversity.

■ **Pioneering Efforts in Kagoshima for Aiming to Obtain Two World Natural Heritage Sites**

By designing an effort to support other efforts to achieve the strategic goals, the efforts based on the five basic policies will work more effectively than when they are implemented separately.

The Kagoshima prefectural government already promotes various efforts for biodiversity, as it has two valuable treasures of nature; Yakushima Island, Japan's first World Natural Heritage Site and the Amami Island Group, a candidate of the World Natural Heritage Sites. It is said that environmental culture in harmony with nature is widely spread over these places. In the area of World Natural Heritage and its candidate, specific and pioneering initiatives and efforts could be a model of realization of a society in harmony with nature as well as it is expected to influence to the whole country and the world. Thus, in addition to the five basic policies, the "promotion of pioneering initiatives as a prefecture that aims to obtain two World Natural Heritages" is positioned as a special policy.

Example of Activity

The Amami Island Group World Natural Heritage Trails (provisional title)

Walking courses to learn different environmental cultures in each village and island will be designated in order to let visitors to experience each unique nature in each island of the Amami Islands Group. Systems for recruiting and developing authorized guides and local resident guides (Village Walking Ecotours) will be developed in order that visitors could experience both nature and local environmental culture.

Example of Activity

Strengthen function of buffer zone around the candidate site of world natural heritage in the Amami Island Group (Strengthen ecological network)

In Amami-Oshima Island and Tokunoshima Island of the candidate sites for the World Natural Heritage, in order to strengthen function of buffer zone, efforts for restoration of forests such as transforming of planted *Pinus luchuensis* to evergreen broad-leaved forests will be implemented to improve biodiversity and reinforce ecological network.

Example of Activity

Study on environmental culture on southern islands

Besides biodiversity, each island of the Amami Island Group, which aims for inclusion to the World Natural Heritage List, has each unique culture of language, food, songs and festivals. Study on such cultural aspects, relations to nature, diversity, origin and history will contribute to develop candidate areas.

Example of Activity

Promotion of recruiting elderly people in the Amami Island Group as supporters of the World Natural Heritage and activity of oral transcription

The prefecture will request support for the promotion of registration for the World Natural Heritage Sites to elderly people over 80 years old who are familiar with lifestyles in harmony with nature (environmental culture) in the Amami Island Group; the oral transcription from interview with them will be made at the same time to record details of environmental culture.

Theme 3: Efforts for Accumulating Information on Biodiversity and Management of Biodiversity in a Scientific Manner

1. Collection, Accumulation and Sharing of Information of Biodiversity

It is important to properly assess the current status of conservation of biodiversity and sustainable use; the prefecture will collect scientific and objective data of biodiversity through research and investigation, and share the information with various entities, in order to incorporate them to specific measures.

<Strategic Effort>

Platform of Information of Biodiversity and Formation of Information Networks
The initiative will accelerate research activities by researchers of universities and associations who are engaged in investigation of biodiversity; the prefecture will establish and enhance a platform of share and use of information collected through research activities; in collaboration with Kagoshima Prefectural Museum, visitor centers and NPOs in each area, the prefecture will form a network to collect information of biodiversity on each area and Island.

<Main Activities>

1) Based on various data in the prefecture, key areas for conservation of biodiversity will be chosen in a scientific manner; sharing the information in cross-sectional ways will decrease environmental impacts from prefectural projects.
2) Information of biodiversity will be updated through revising the Red Data Book of Kagoshima; the information will be shared through publication of the book.
3) Through monitoring research on inhabitation status of *Cervus nippon* based on the Specified Wildlife Conservation and Management Plan and capturing investigation of crown of thorns starfish at the control activity, the prefecture will promote efficient control measures and collect habitat information of wildlife which damage ecosystems.

2. Measures against Alien Species

Due to movement of people and goods activated by globalization of economy and society, organisms also move beyond their original capacity via transportation such as ships and rail. Impacts on ecosystems recently became serious by invasive alien species which may cause great damage to local natural environments and biodiversity. The impacts on ecosystems by introduced species from other areas in the country (domestic alien species) also became serious, and it would be a big problem for Kagoshima, having a lot of islands. Thus, for biodiversity in Kagoshima, it is crucial to prevent invasion and establishment of alien species, which may cause an invasive impact on ecosystems regardless of origin. In addition, pet animals and livestock need to be properly controlled and managed not to allow them to escape and harm ecosystems as alien species.

Regarding alien species that are already established, it is necessary to implement measures systematically and efficiently.

<Strategic Effort>

Integrated Promotion of Measures against Alien Species
The Kagoshima prefectural government will assess the current status of alien species invasion and damage generation, and make a list of alien species including species which might possibly invade the prefecture in the future. Taking into consideration seriousness of damage and expansion of distribution, the prefecture will integrally promote measures against alien species such as selection of alien species that need to be prevented with priority and acceleration of control of invasion. [aforementioned]

<Main Activities>

1) Taking into consideration that early detection and response are the keys to prevent alien species, it is important to provide warnings widely to cities, towns and villages as well as set up priority for the list of invasive alien species in the prefecture and promote prevention in collaboration with relevant entities.
2) As many organisms have southern and northern limits of habitats and Kagoshima has lots of islands, it is necessary to pay attention to movement of the species beyond their capacity even if they are common species in the prefecture. The Kagoshima prefectural government will disseminate information of alien species and raise awareness of residents in the prefecture.
3) The Japanese government implements the control of mongoose with the aim of complete elimination by 2022; "the Amami Island Group Rare Wildlife Protection Program Council " will cooperate to the measures against mongoose in Amami-Oshima Island.
4) Scientific and adoptive capture of feral goats that may give impact on ecosystem in Amami-Oshima Island will be implemented based on the investigation of the status of its habitat. Mongoose on the mainland of Kagoshima had been eliminated by the countermeasure implemented by the prefecture in 2009, however they are still being monitored in cooperation with residents and exterminated as soon as they are found.
5) Because plants used for slope greening may cause problems as alien species in some cases, some special attention will be paid to selection of greening methods; utilizing native species and waiting for them to naturally come from around the target area will be encouraged to be adopted.
6) As it is a serious problem that feral cats that used to be pets prey on rare species on the islands, the prefecture will promote efforts of local communities regarding proper breeding.

3. Protection and Management of Wildlife

It is important to properly protect and manage wildlife habitats in order to keep a variety of wild organisms from local common species to rare species to be able to survive for a long time in the

future because wildlife is an important component of the ecosystem.

Cervus nippon, wild boar, and Japanese macaque, of which populations are increasing and the habitats are expanding, will be controlled by drastic measures because impacts on ecosystems and damages on agriculture and forestry by them have become serious in recent years. As the population is changed by multiple factors such as habitats (den and migratory routes), feeding environments, and predators (hunting pressure), it requires compound efforts of environmental development to reduce the change of population and effective capture.

For protection of rare wild species, it is necessary to take measures depending on characteristics of species and reasons of decrease based on the assessment of distribution and habitats of the species as well as balance of environments of habitats and population for protection.

Furthermore, countermeasures for highly pathogenic avian influenza of wild birds and poultry as well as appropriate rearing management for pets shall be practiced.

<Strategic Effort>

Promotion of management of wildlife in scientific manner
To perform proper management of wildlife such as Cervus nippon which causes a serious damage to agriculture, forestry and ecosystem, scientific data of population density, growth rate of population, sites of capture, and status of damage generation will be accumulated and analyzed to promote effective capturing efforts and management of habitats of wildlife. Based on the "Future Vision of Wildlife Management in Kagoshima", effective capturing methods will be tailored to the situation in Kagoshima, and a new system for capture will be developed by professional hunters who have scientific knowledge and skills of capturing.

<Main Activities>

1) Protection and management of wildlife

i. The "Specified Wildlife Conservation and Management Plan" will be established regarding local population of *Cervus nippon* which is remarkably increasing, and scientific measures to manage its habitat will be promoted based on the "Future Vision of Wildlife Management in Kagoshima".

[Population density of *Cervus nippon* on the mainland of Kagoshima and Tanegashima Island (protection area): 5/km^2]

[Population density of *Cervus nippon* on the mainland of Kagoshima and Tanegashima Island (control area): 2/km^2]

ii. Dissemination and awareness raising will be promoted, aiming to increase the number of hunters that underpin professional hunters.

iii. The prefecture will encourage farmers who have problems of wildlife damage to obtain a license to use traps to capture wildlife.

iv. The prefecture will promote the establishment of wildlife damage control measure implementation teams to take practical actions based on the local plan for prevention of wildlife damage.

v. The prefecture will protect sick and wounded wildlife in cooperation with specified veterinary facilities.

vi. Based on the "Technical Manual on Wild Bird Highly Pathogenic Avian Influenza Surveillance" (in 2011 by the Ministry of Environment), in collaboration with relevant entities including the Japanese government, the prefecture will work on investigation, monitoring and information collection of the status of infected wild birds through feces sampling 4 times a year, as well as develop inspection workflow and an emergency contact system.

2) Protection of rare species

i. The prefecture will utilize the Red Data Book of Kagoshima in order to establish protection measures of rare wild species; information on wildlife will be disseminated among citizens and agencies in the prefecture for the improvement of public awareness of nature protection
[Numbers of endangered species listed in the red list of Kagoshima due to deterioration of habitats: maintain the status quo]

ii. The prefectural government will designate some areas of breeding grounds and migration destination of flocks of birds as special protection areas of wildlife when it requires special protection; the prefectural government will also control some activities and implement conservation projects in an area which requires protection for specified endangered species by designating the area as a natural habitat protection area in accordance with the "Ordinance to Protect Endangered Wild Fauna and Flora of Kagoshima". [aforementioned]

iii. To operate the "Ordinance to Protect Endangered Wild Fauna and Flora of Kagoshima", the prefectural government will designate endangered wild fauna and flora subject to prohibition of capture and specified endangered fauna and flora having a potential of commercial breeding as well as investigate the status of habitats of wild fauna and flora based on the ordinance; the prefecture will also encourage promoters of protection of endangered wild fauna and flora to protect and monitor them. [aforementioned]
[Specified of endangered species of wild fauna and flora: 42 species → 60 species by 2023]

iv. Regarding the rare species designated as natural monuments and endangered wild fauna and flora, the prefecture will protect the species in collaboration with guidance officer for protection of cultural properties and promoters of protection of endangered wild fauna and flora, through appropriate operation of the "Act on Protection of Cultural Properties", "Act on Conservation of Endangered Species of Wild Fauna and Flora", "Ordinance to Protect Cultural Properties of Kagoshima", and "Ordinance to Protect Endangered Wild Fauna and Flora in Kagoshima". [aforementioned]

v. Regarding cranes that migrate to the Izumi region, the prefecture will perform protection activities through conservation of migration grounds and feeding in cooperation with the prefectural organization of protection of crane, and work on decentralization of migration grounds.

vi. Regarding sea turtles that come to land on the coastline of Kagoshima, the prefecture will protect them through the establishment of sea turtle protection observers and monitoring activity in collaboration with relevant local administrative organizations based on the ordinance on sea turtle conservation.

vii. Regarding the endemic species *Malus spontanea* that grow only in the Kirishima region, measures for deer feeding damage will be taken to activate natural regeneration, and the ex-situ conservation will be undertaken by the Kagoshima Prefectural Forestry Technology Center.

viii. Regarding wildlife in the Amami Island Group, the Amami Wildlife Center will be regarded as a base of conservation of ecosystems, research on rare wildlife and raising public awareness.

3) Animal welfare and proper management

i. To prevent troubles concerning animals, the prefectural government will improve morale of pet owners.

ii. In light of the fact that animals are living beings, the prefectural government will let the general public know about the needs of appropriate rearing management for animals as well as inform people about prohibited acts such as the abandonment of animals and cruelty to animals, in collaboration with relevant local administrative organizations, institutions, and groups.

iii. The prefectural government will reduce the number of dogs and cats taken to prefectural facilities through implementation of efforts to promote spaying and neutering to prevent uncontrolled breeding, and encourage people not to make snap decisions regarding having pets and to take lifelong care of their pets.

Special Theme: Pioneering Efforts in Kagoshima for Aiming to Have Two World Natural Heritage Sites

1. Efforts in the Amami Island Group as Candidate Site of World Natural Heritage

The Amami Island Group was nominated as the candidate site for the World Natural Heritage Site by the review committee of the Japanese government in 2003, and the Kagoshima prefectural government has worked on efforts to aim at inclusion to the List since then. To be included the List, the site shall have outstanding universal value, and it is properly protected and managed in accordance with protection measures.

After inclusion to the List, it is necessary to anticipate changes in the site and take appropriate measures to prevent natural environments and local communities from negative impacts by unexpected change of society and economy.

Inclusion of the Amami Island Group to the List is not the final goal, and it is crucial to establish how society will be developed after inclusion. It is expected that some parts of Amami-Oshima Island and Tokunoshima Island will be included to the List, so that it is necessary to make the inclusion cause spillovers throughout the islands.

<Strategic Effort>

Study on environmental culture on southern islands
Besides biodiversity, each island of the Amami Island Group, which aims for inclusion to the World Natural Heritage List, has each unique culture of language, food, songs and festivals. Study on such cultural aspects, relations to nature, diversity, origin and history will contribute to develop candidate areas. [aforementioned]

Strengthen function of buffer zones around the candidate sites of World Natural Heritage in the Amami Island Group (Strengthen ecological network)
In Amami-Oshima Island and Tokunoshima Island of the candidate sites of the World Natural Heritage, in order to strengthen function of buffer zones around the sites, efforts for restoration of forests such as transforming of planted Pinus luchuensis to evergreen broad-leaved forests will be implemented to improve biodiversity and reinforce ecological network.

Development of a guideline for pro-environmental actions on public projects in the Amami Island Group
The prefectural government will develop a guideline for public projects in the Amami Island Group in order to systematically carry out required pro-environmental actions to conserve endangered and endemic species and secure the continuity of ecosystems. The guideline will contribute to improve biodiversity through renovation projects of existing facilities by introducing the neo-natural river reconstruction method and animal pathways. [aforementioned] [The guideline for pro-environmental actions on public projects in Amami-Oshima Island and Tokunoshima Island will be developed by FY2015]

Promotion of recruiting elderly people in the Amami Island Group as supporters of World Natural Heritage and activity of oral transcription
The prefectural government will request support for promotion of inclusion to the World Natural Heritage List to elderly people over 80 years old who are familiar with lifestyles in harmony with nature (environmental culture) in the Amami Island Group; the oral transcription from them will be implemented at the same time to record details of environmental culture. [aforementioned]

The Amami Island Group World Natural Heritage Trails (provisional title)
Walking courses to learn different environmental cultures in each village and Island will be designated in order to let visitors experience each unique nature of each island of the Amami Island Group. Systems for recruiting and developing authorized guides and local resident guides (Village Walking Ecotours) will be developed in order that visitors could experience both nature and local environmental culture.

<Main Activities>

1) Efforts to aim at the inclusion to the World Natural Heritage List

i. The prefectural government will promote the formation of networks of lifestyle in harmony with nature, conservation of coral reefs and coastlines, protection of rare wildlife and forests, environmental-friendly nature experience programs as well as the inclusion to the World Natural Heritage List, based on the "Amami Island Group Symbiotic Society Plan", which is an indicator of community development for the purpose of living in harmony with rich natural environment in the Amami Island Group.

ii. Based on existing investigations and research on ecosystems and reviews by the "Scientific Committee on the Amami Island Group and the Ryukyu chain as the Candidate Site of World Natural Heritage Sites", the prefectural government will work on efforts to aim at inclusion to the World Natural Heritage List such as conservation of rare wild fauna and flora as well as core areas of outstanding universal value.

iii. For the purpose of further understanding of nature in the Amami Island Group, the prefectural government will hold study meetings for residents about inclusion to the World Natural Heritage List, designate national parks, implement measures against feral dogs and cats, and protect endangered wild species; the prefectural government will also publish and distribute pamphlets and paper bags to disseminate activities for encouragement of promotion of inclusion to the World Natural Heritage List.

2) Conservation of rare wildlife and ecosystems

i. To conserve endangered species and forests in the Amami Island Group, the prefectural government will protect key species and areas concerning biodiversity as well as take measures against invasive alien species in collaboration with

organizations for conservation of nature.

ii. The prefectural government will carry out protection measures of endangered wild species and pro-environmental public projects for conservation of environments.

iii. Protection measures for coral reefs will be implemented such as elimination of crown of thorns starfish.

iv. Spontaneous actions of residents will be activated by distribution of handbooks of the "Guideline for Pro-Environmental Actions" to each household in the Amami Island Group and the "Traveler's Etiquette Guide to the Amami Island Group" to visitors.

v. The prefectural government will take measures against roadkill (traffic accidents) which may cause death of endangered wildlife such as Amami rabbits (*Pentalagus furnessi*), and feeding damage by feral dogs and cats, in collaboration with the national and local governments.

[Numbers of death of Amami rabbits caused by roadkill and feeding by other organisms: to be reduced to less than one tenth of the current number (20 rabbits per year in average from 2009 to 2013)]

vi. To prevent feeding damage by feral goats, the prefectural government will scientifically assess the status of its habitat and prevent it in a scientific manner.

3) Promotion of ecotourism

i. The prefectural government will aim toward quality ecotourism through the establishment of a system of authorized guides and provide quality training to make good guides.

[Number of guides authorized by the Amami Island Group Ecotourism Promotion Council: 50 guides by 2018.]

ii. The prefectural government will control ecotourism that utilizes the resources of the Amami Island Group such as nature, history and culture in order to avoid damage caused by overuse, develop facilities for environmental protection to the sightseeing spots, discover new sites for ecotourism for decentralization, and endeavor toward the integrated use of resources in the Amami Island Group as well as providing good information.

4) Community development by branding the Amami Island Group through efforts of the plan of harmonization with nature

i. The prefectural government will promote local features of the Amami Island Group such as *oshima tsumugi* kimono, farm-raised tuna, longevity of life and high fertility rate, as well as community development by utilizing nature, based on the Plan of Harmonization with Nature in the Amami Island Group.

ii. The prefectural government will support sustainable use of natural resources in accordance with rules and philosophy concerning nature in local community such as

traditional lifestyles and culture; for community development with additional value, it will also work on tourism promotion and branding of local features utilizing these resources, while keeping life in harmony with nature.

4-33 Act on Special Measures for the Promotion and Development of the Amami Island Group (Excerpt)

(Act No.189, June 21, 1954)

Last amended by Act No.67 of June 13, 2014

Chapter I General Provisions

(Purpose)

Article 1
In light of the unique circumstances of the Amami Island Group (which refers to Amami City and the Ooshima area of Kagoshima Prefecture; the same applies hereinafter), this Act serves to establish a basic policy, as well as to clarify the responsibilities of national and local public entities, regarding the promotion and development of the Amami Island Group. Based on this policy, this Act sets forth a comprehensive plan for promotion and development projects for the Amami Island Group, implementing special measures for the promotion of business which conform to the geographic and natural characteristics of the area. All of this aims to improve the basic conditions of the Amami Island Group, promote autonomous development within the Amami Island Group, improve the stability and welfare of its residents, and to promote settlement.

(Basic Policy)

Article 2
In view of the fact that the Amami Island Group plays an important role that benefits our nation and citizens, measures for its promotion and development shall be conceived to make the most of its geographical and natural characteristics, to increase its attraction, and in recognition of the important role that the Amami Island Group plays in providing our country with marine resources, a diverse cultural inheritance, a preserved natural environment, a stable food supply, an opportune place to interact with nature, etc., as well as other advantages for its citizens and our country.

(Responsibilities of National and Local Public Entities)

Article 3
National and local public entities have the responsibility to formulate and implement necessary measures for the promotion and development of the Amami Island Group under the provisions of the preceding article and based on its basic policy.

Chapter II The Amami Island Group Promotion and Development Plan

Section I Basic Guidelines

Article 4
Paragraph 1
Based on the basic policy (Article 2), the competent minister shall draft basic

guidelines for the promotion and development of the Amami Island Group (hereinafter referred to as the “basic guidelines”).

Paragraph 2

The basic guidelines shall provide for the following:

(i) matters concerning the significance and direction of the promotion and development of the Amami Island Group;

(ii) basic matters concerning industrial promotion, agricultural development, forestry, fisheries, commerce and industry, etc.;

(iii) basic matters concerning expansion of employment opportunities, development of vocational abilities, and other means to promote employment;

(iv) basic matters concerning the development of tourism;

(v) basic matters concerning the maintenance and needed cost reduction of infrastructure, such as roads, ports, airports, etc., and of communications facilities, as well as the transportation of people, goods, and waste matter (hereinafter referred to as “people's traffic, etc.”); securing traffic and communication infrastructure both within the Amami Island Group, and between the Amami Island Group and the rest of the country;

(vi) basic matters concerning the improvement and development of residents’ living environment (including reduction of waste and its proper disposal, etc.; the same shall apply hereinafter);

(vii) basic matters concerning the improvement of public health;

(viii) basic matters concerning the promotion of welfare for the elderly and others;

(ix) basic matters concerning the security, etc., of medical care;

(x) basic matters concerning the development of infrastructure pertaining to disaster prevention and national land conservation;

(xi) basic matters concerning the conservation and restoration of the natural environment, as well as pollution prevention;

(xii) basic matters relating to the supply and use of energy, such as the use of renewable energy (meaning solar power, wind power, and other non-fossil fuel energy sources that are deemed to be permanently usable as energy sources; the same shall apply hereinafter), etc.

(xiii) basic matters concerning the promotion of education and culture (including support for securing opportunities for children’s school attendance; the same shall apply in the provision of the following article, paragraph 2, item number 13)

(xiv) basic matters concerning promotion of exchange with domestic and international areas;

(xv) basic matters concerning the securing and training of people who contribute to the promotion and development of the Amami Island Group;

(xvi) basic matters ensuring the coordination and cooperation among concerned

parties involved in the development and promotion of the Amami Island Group, such as the Amami Island Group Promotion and Development Fund (an independent administrative agency), business people, residents, specified nonprofit corporations prescribed in Article 2, paragraph 2, of the Specified Nonprofit Corporation Promotion Act (Act No.7, 1998) (hereinafter referred to as "Specified Nonprofit Corporation"), etc.;

(xvii) basic matters concerning the promotion and development of the Amami Island Group, in addition to what is listed in each of the preceding points.

Paragraph 3

The basic guidelines' goals should be achievable within five years from the initial year of 2014.

Paragraph 4

Prior to establishing basic guidelines, the competent minister shall consult with the heads of relevant administrative agencies, as well as with the Amami Island Group Promotion and Development Council.

Paragraph 5

When basic guidelines are established, the competent minister shall provide public notice without delay.

Paragraph 6

The provisions of the preceding paragraph 2 shall apply, *mutatis mutandis*, to any amendments of the basic guidelines.

Section II Promotion and Development Plan, and Measures based on this Plan

(Promotion and Development Plan)

Article 5

Paragraph 1

Kagoshima Prefecture shall endeavor to establish an Amami Island Group Promotion and Development Plan (hereinafter referred to as "Promotion and Development Plan") under the provisions of the basic guidelines.

Paragraph 2

The Promotion and Development Plan shall provide for the following:

(i) matters concerning basic policies for promotion and development of the Amami Island Group;

(ii) matters concerning the promotion and development of industries, such as agriculture, forestry, fisheries, commerce and industry, etc., in accord with the special characteristics of the region;

(iii) matters concerning the expansion of employment opportunities, development of vocational abilities, and the promotion of other employment;

(iv) matters concerning the development of tourism;

(v) matters concerning the maintenance of infrastructure, such as roads, ports, airports, etc., and of communications facilities, as well as needed cost reduction for people's traffic, etc.; securing traffic and communication infrastructure both within the Amami Island Group, and between the Amami Island Group and the rest of the country;

(vi) matters concerning the improvement and development of residents' housing and living environment;

(vii) matters concerning the improvement of public health;

(viii) matters concerning the improvement of welfare for the elderly and others;

(ix) matters concerning the security, etc., of medical care;

(x) matters concerning the development of infrastructure pertaining to disaster prevention and national land conservation;

(xi) matters concerning the conservation and restoration of the natural environment, as well as pollution prevention;

(xii) matters relating to the supply and use of energy, such as the use of renewable energy, etc.;

(xiii) matters concerning the promotion of education and culture;

(xiv) matters concerning promotion of exchange with domestic and international areas;

(xv) matters concerning the securing and training of people who contribute to the promotion and development of the Amami Island Group;

(xvi) matters ensuring the coordination and cooperation among concerned parties involved in the development and promotion of the Amami Island Group, such as the Amami Island Group Promotion and Development Fund (an independent administrative agency), business people, residents, specified nonprofit corporations, etc.;

(xvii) necessary matters concerning the promotion and development of the Amami Island Group, in addition to what is listed in each of the preceding points.

Paragraph 3

A Promotion and Development Plan shall be established to promote development of the Amami Island group, that conforms to each island's geographical and natural characteristics, population, distribution of industry, and other special characteristics.

Paragraph 4

The goals of the Promotion and Development Plan should be achievable within five years from the initial year of 2014.

Paragraph 5

Prior to establishing a Promotion and Development Plan, Kagoshima Prefecture may request those municipalities (excluding municipalities that make requests under the provisions of the following paragraph) that will be affected, to draft their own plan, either separately or jointly, for the promotion and development of their area, and to submit it to the prefecture.

Paragraph 6

In case there is no promotion and development plan in place for their area, municipalities in the Amami Island Group (hereinafter referred to as the "Amami Island Group municipalities") may request permission to develop their own plan, made separately or jointly, for promotion and development. The draft of this plan shall be attached with their request.

Paragraph 7

When a request under the provision of the preceding paragraph has been submitted, Kagoshima Prefecture shall endeavor to promptly establish the relevant promotion and development plan.

Paragraph 8

When Amami Island Group municipalities intend to draft a plan, per paragraphs 5 or 6, they shall first endeavor to take necessary measures so that their plan reflects the opinions of the residents.

Paragraph 9

When plans are submitted, per paragraphs 5 or 6, Kagoshima Prefecture shall strive to reflect, as much as possible, the contents of that submission in their promotion and development plan.

Paragraph 10

Prior to establishing a promotion and development plan, Kagoshima shall consult with the competent minister and obtain consent. When this occurs, before granting consent, the competent minister shall consult with the heads of relevant administrative agencies.

Paragraph 11

On obtaining consent, per the preceding paragraph, Kagoshima Prefecture shall endeavor to announce the promotion and development plan without delay.

Paragraph 12

The provisions of paragraphs 6 to 8 shall apply, *mutatis mutandis*, to any amendments of the promotion and development plan. In this case, the phrase, "municipalities (excluding municipalities that make requests under the provisions of the following paragraph)" in paragraph 5 shall be replaced with "municipalities," and the phrase "paragraphs 5 or 6" in paragraphs 8 and 9 shall be replaced with "paragraph 5."

(Special Subsidy)

Article 6

Paragraph 1

Regardless of the provisions of other laws or ordinances, the proportion of the nation's share of, or subsidies for, expenses for projects based on the promotion and development plan shall remain within the limits prescribed in the attached list, per government ordinance.

Paragraph 2

Regardless of the provisions of the preceding paragraph, when the proportion of the nation's share of, or subsidies for, funds required for projects, prescribed in the preceding paragraph but drafted under a different law, exceeds the proportion prescribed by the government ordinance mentioned in the preceding paragraph, the ratio of the nation's share or subsidy for that project shall depend on the ratio prescribed in the other relevant laws or regulations. (These other laws include Act No. 112, 1961. In the case that a project corresponds to the designated development project prescribed under Act No. 112, 1961, article 2, paragraph 2, regarding special cases receiving a ratio of the nation's share for public works projects that fall under the development of underdeveloped areas, said provisions shall apply.)

Paragraph 3

The nation shall calculate the amount of funding that the nation shall bear, taking into consideration the provisions of the preceding paragraph 2 and its application to the project. The nation shall decide the appropriate proportion and grant funding, according to the government ordinance, for project expenses which are based on the promotion and development plans prescribed in the attached list, per government ordinance.

Paragraph 4

Regardless of the provisions of other laws or ordinances, regarding the proportion of the nation's

funding or subsidies for projects prescribed in paragraph 1 (pursuant to the provisions of paragraphs 1 or 2), the nation may decide to make exceptions in special cases.

Paragraph 5

Regarding post-disaster reconstruction projects in the Amami Island Group, according to Article 3 (Act No. 97, 1951) of the Public Works Post-Disaster Reconstruction Project National Treasury Law, in cases where the nation bears part of the expenses for affected local entities, if the rate calculated by the provisions of Article 4 (of said act) is less than four-fifths, notwithstanding the provisions of the same act, the amount shall be four-fifths. Regardless of the provisions of Article 3 of the Public School Post-Disaster Reconstruction Project National Treasury Law (Act No. 247, 1953), in cases where the nation bears part of the expenses for affected public school facilities, the proportion of the funding needed for restoration of public school facilities provided by the nation shall be four-fifths.

(Consideration for Municipal Bonds)

Article 7

Special consideration shall be given regarding municipal bonds sold to raise needed funding for projects by local entities for promotion and development projects, within the scope of relevant laws or ordinances. This consideration shall be given to the extent that the local financial situation and the financial situations of the appropriate public organizations allow.

Section V Other Special Measures for the Promotion and Development

(Conservation and Restoration of Natural Environment)

Article 32

In order to contribute to the conservation and restoration of the natural environment of the Amami Island Group, local and national public entities shall consider and take appropriate measures necessary for the maintenance and/or restoration of its ecosystem.

(Promotion of Tourism and Interregional Exchange)

Article 36

In light of the abundant natural beauty that exists in the Amami Island Group, as well as its close proximity to foreign countries, etc., local and national entities shall work to deepen in their citizens interest in and understanding of the Amami Island Group. In order to contribute to the revitalization of the Amami island Group, local and national entities shall give appropriate consideration to the promotion of tourism and to exchange with both domestic and foreign regions.

4-34 Plan for the Promotion and Development of the Amami Island Group (Excerpt)

Part 1: Outline

1. Significance of the Development of the Plan

Since the Amami Island Group was returned to Japan in 1953, several projects were implemented for the development of infrastructures such as traffic, industry and life base in accordance with reforms of regulations, and the projects accomplished certain achievements.

However, due to the geographical conditions of being remote and isolated islands from the mainland of Japan, as well as severe environments in a typhoon-prone zone, there is economic disparity between the mainland including income level and prices of commodities; a number of challenges to be solved still remain such as decreasing population and advancement of aging society.

On the other hand, "Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island", which are repositories of valuable endemic and endangered species, are selected as a combined candidate site of World Natural Heritage; it is blessed with unique attractiveness and features such as rich subtropical and marine environments, various and distinctive traditions, suitable environments for childbirth and care, as well as diverse resources for longevity and healing. It is expected that these features could allure many visitors to Amami from both inside and outside the country, as it adjoins fast-growing East Asian countries.

In future of the Amami Island Group, in order to move towards autonomous and sustainable growth of the Islands, it is necessary that the local society independently implements policies with its own responsibility, while utilizing its superiority, aiming to solve the problems of income disparity and decreasing population. In this context, local 12 cities and towns of the Amami Island Group developed the "Strategic Vision of Growth in Amami Islands" in order to promote the Island's growth as one united body.

Based on circumstances and recognition, the Kagoshima Prefectural Government developed this plan with the purpose of future implementation of required policies for promotion and development of the Amami Island Group.

2. Features

This plan is developed based on the "Act on Special Measures Law for the Promotion and Development of the Amami Island Group"; the plan shows the basic policies of the promotion and development of the whole island chain and directions of measures of promotion in each of the islands, which are important for national, prefectural, and local governments as well as local residents, relevant institutions and groups as a

whole, for innovation of local society and independent development of the Amami Island Group.

3. Period

This plan is effective for 5 years from FY2014 to FY2018.

4. Objectives

This plan aims to improve the basic conditions of the Amami Island Group and promote and develop the Islands depending on geographical and natural features for the self-reliant growth of the islands, improvement and stabilization of local life and welfare, as well as promotion of settlement in the islands.

Part 2: Basic Policy of Promotion and Development of the Amami Island Group

In the Amami Island Group, there are concerns about declining vitality of the region due to the decrease of population and an increasingly aging society, while the islands play an important role in the maintenance of the territorial integrity of the country, utilization of marine resources, inheritance of diverse culture, conservation of natural environments, opportunities for nature experience, stable provision of foods, and protection and promotion of national benefit.

Under these circumstances, in order to achieve the objectives of the plan, the Kagoshima Prefectural Government will encourage regional initiatives to promote settlement in the Island, stimulate exchange and interaction, improve upon the disadvantages of living in the islands, secure and enrich the life base based on the basic principles of utilizing geographical and natural characteristics of the Amami Island Group and enhancing the attractiveness.

1. Regional Initiatives

The prefecture will enhance the regional initiatives aiming for self-reliant growth of the Amami Island Group by utilizing action policies which are newly established in the Act on Special Measures for the Promotion and Development of the Amami Island Group" to encourage measures implemented by the Islands autonomously on regional responsibility.

1) Efforts based on the Strategic Vision of Growth in the Amami Island Group

The 12 cities and towns of the Islands developed the Strategic Vision of Growth in the Amami Islands as a regional initiative in accordance with the basic principle of promotion of industry by job creation in the three key fields for the residents' satisfactory life (agriculture, tourism/exchange, and the communication and information industry); the Kagoshima Prefectural Government will support region-wide efforts carried out by the Amami Island Group Regional

Administrative Association and independent efforts by each city and town, which are based on the strategic plan and the basic and action plans to make the strategic plan take shape.

2) Use of Subsidies for Promotion of the Amami Island Group

Utilizing the newly established Subsidies for Promotion of the Amami Island Group, the prefectural government will develop policies mainly on soft infrastructure based on the regional discretion on the regional responsibility to overcome geographical, natural, and historical disadvantages of the Amami Island Group.

3) Use of Accreditation Schemes for the Municipal Plan to Promote Industry

As local initiatives are the keys for promotion of industry in the Amami Island Group, municipal organizations can collaborate with private entities that clearly know the situation of the region, the prefectural government will encourage the use of legal and taxation measures to support industry promotion approved in the Accreditation Scheme for the Municipal Plan to Promote Industry; special provisions of the License Guide-Interpreters Act, special provisions of Travel Agency Act, and measures to facilitate procedures for the use of existing facilities.

2. Measures to Promote Settlement

Agriculture, tourism, and communication and information technology are the key industries in the Amami Island Group to promote industry and settlement.

Regarding agriculture of the core industry of the Islands, based on the multiple management with combination of staple crops such as sugarcane in the subtropical and warm climate, garden crops such as vegetables, flowers and fruit, and beef cattle, each island develops its own unique agricultural industry; the prefectural government will differentiate the individual island's industry from other regions by measures of recruiting and fostering human resources, efficient use of farm lands, development of basic infrastructure, development of disaster resilient cultivating facilities, development of facilities to improve logistical efficiency, and enhancement of environments for new agricultural workers; the prefectural government will add high value to agricultural products in the Amami Island Group through branding and creation of the sixth industry.

The tourism industry is a comprehensive industry having a huge array of supporting industries, and not only a motive power of local economy but also a utilizer of local resources, such as nature and culture; the prefectural government will properly protect these resources and carry out tourism measures to utilize local resources of the Amami Island Group, while considering the harmony of protection and utilization.

With respect to the communication and information industry, the disadvantages of time and space distance of the remote islands are being improved through the development of communication and information technology. Due to the superiorities of the Islands such as rich natural environments and inexpensive

office rent, the prefectural government will develop the base of the communication and information industry in the Islands, and make an effort to firmly establish the industry through utilization of ICT by companies and regional vitalization in collaboration with other industries.
In addition, the prefectural government will promote fishery such as aquaculture and mariculture in the warm and tranquil sea area as well as creation of fishing grounds by setting floating fishing banks; forestry will be promoted by sustainable fulfillment of the multifunctional role of forests as well as utilization of forest resources such as broad-leaved forest and special forest products.
Furthermore, the prefectural government will promote local industry, support entrepreneurs to use local features such as *oshima tsumugi* kimono and brown sugar *shochu* alcoholic beverage, and help those who wish to relocate and return to work and settle in the Islands.

3. Measures to Stimulate Exchange and Interaction

The Amami Island Group has some advantages of attractive natural environments, such as being blessed with subtropical and rich natural environments and rare wild species with no similarities in the world; unique and diverse traditions and culture that are different among each island and village; being situated near other Asian countries including China, from which many visitors are expected to travel to Japan.
Under these circumstances, the prefectural government will take measures to utilize local resources of the Amami Island Group, such as the development of systems of recruiting workers and fostering hospitality; to attract large cruise ships and promote cruising tours around the Islands; to disseminate the charms of the Islands to the public through media, like the Internet; and to collaborate with local private companies.
In addition to these measures, the prefectural government will promote the inheritance of local culture that helps enable residents to have attachment, stimulate the activities of hometown associations, and to enable exchange both inside and outside the Islands including Okinawa, and foreign countries.
For inclusion to the World Natural Heritage List, it is necessary to properly protect local resources of natural environments, traditions and culture, and expand activities for exchange in the region while considering the balance of protection and utilization of these local resources.
Aiming at the region where people and nature live together, the prefecture will create a network of local residents, and improve their awareness of attractive natural environments of the Amami Island Group to advance their understanding and motivation of registration to the World Natural Heritage Sites.
With respect to efforts for inclusion to the World Natural Heritage List, the prefectural government will maintain the value of the region through protection of endangered wild species and nurturing tour guides who have appropriate knowledge of natural environments in the Islands, establish a sound material-cycle society that reduces the burden to nature as much as possible, and implements environmentally-friendly public projects.

4. Measures to Improve Disadvantages of Living in the Amami Island Group

In the Amami Island Group which is situated in the open sea remote from the main land of Japan, sea and air routes are the crucial means of transportation for movement of residents and industrial activities, however, airfare is particularly rather expensive compared with that of Okinawa, which causes a problem for improvement of convenience of life and promotion of tourism, so this situation requires measures be taken to reduce travel expenses, including ship fares.
It is also necessary to take measures to reduce transportation costs of agriculture, forestry and fishery products traveling to the market.
Moreover, as the prices of commodities are generally more expensive than that of the mainland, other measures will be taken to reduce the price of daily commodities such as gasoline.
As disasters frequently occur caused by record torrential rainfall in recent years and the importance of disaster prevention throughout the country has been pointed out, the prefectural government will develop systems to provide information for residents' safety and security as well as mutual aid when disasters occur. For the promotion of disaster prevention suited to the geographical characteristics of the Amami Island Group; the prefecture will also work on development of a disaster resilient region such as soil and water conservation, sand erosion control, and coastal protection.
The prefectural government will take measures to develop the bases of transportation such as airport, ports, and roads, as well as to restore existing aging facilities.

5. Measures to Secure and Enrich the Life Base in the Islands

While the Amami Island Group has the characteristics of "the Islands of Longevity" with a high population of centenarians as well as "the Islands of babies" with a high total fertility rate, the problems such as lack of medical workers and high rate of premature death are much more severe than other regions.
Due to these regional circumstances, the prefectural government will enhance the measures of healthcare and welfare, such as health maintenance, the system of medical service, and the promotion of welfare for elderly people and children.
The prefecture will also work on education and training, develop living environments, and secure energy resources.

Part 3: Schemes for Promotion and Development

The Amami Island Group, consisting of 8 inhabited islands of Amami-Oshima Island, Kakeroma Island, Ukejima Island, Yoro Island, Kikai Island, Tokunoshima Island, Okinoerabu Island, and Yoron Island, which are dotted in about 220km of the sea from the east-northern tip of Kikai Island to the most southern tip of Yoron Island.

These islands are blessed with attractiveness and characteristics which bear no similarities in other regions; subtropical and marine-rich natural environments, endemic and endangered species that are valuable throughout the world, unique traditions and cultures, health care, longevity, and resources regarding healing. By utilizing these features, the islands have the potential to greatly achieve their own particular style of development.

From now on, while promoting efforts such as environmental conservation aiming at inclusion to the World Natural Heritage List, it is necessary for the islands to pursue independent and integral development in one united body by maximizing the advantages of these resources and charms of the Islands.

1. Regional Efforts to realize the Strategic Vision of Growth in the Amami Island Group

For the future independent development of the Amami Island Group, it is necessary to materialize the Strategic Vision of Growth in the Amami Island Group by refining the charms and features of each island and improve competitive capacity among the islands especially regarding the 3 key fields of “agriculture”, “tourism/exchange”, and “communication and information technology” that create jobs, and 2 fields of “settlement” and “culture”. Meanwhile the islands need to collaborate with each other to solve problems of each island; the prefectural government will proactively support measures for independent growth of the Amami Island Group Regional Administrative Association, Amami Archipelago Tourism and Products Association, Amami Islands Premium Mango Products and Sales Cooperative, and Amami Islands ICT Council, in collaboration with the Fund for the Promotion and Development of the Amami Islands, municipal organization and other related groups.

1) Recruiting, Training and Nurturing of Human Resources

To motivate the residents in the islands to positively try something new, the prefectural government will, for mid/long term, recruit, train, and nurture professionals who will take a major future role in the development of industrial promotion in the Amami Island Group, such as island coordinator, products coordinator, guide–interpreter, eco-tour guide, guide of history and culture, facilitator of the “Amami Island Expo”, product planner, designer, and project manager. The prefectural government will also offer opportunities for young generations to learn the charms of the Amami Island Group, certification system of history and culture, seminars for the hospitality industry regarding volunteer guides and persons engaged in tourism, programs to improve management perspectives in the industry such as study tours to advanced regions and lectures by invited professionals, in order to raise the levels of human resources in the whole island chain.

The prefectural government will also provide avenues to accumulate and develop human resources, nurture leaders and create innovation like the Silicon Valley through the support of entrepreneurs, providing opportunities to evaluate and improve various efforts, support of job hunting for youth and immigrants, development of a system to facilitate settlement through

combined employment and housing, and enhancement of internship programs in the future.

2) Demonstration of Charms of the Amami Island Group

To establish the "Amami Brand" in various fields by demonstrating the charms of the Amami Island Group at most and telling the world about them, the prefectural government will raise social awareness of Amami's features such as "nature, history, culture, warm hearts of residents, healing, longevity, and blessing of many children", and integrally promote activities to support and evaluate measures to utilize various attractive features of each island and village for industrial development.

The contents will be enriched to introduce the charms of dialect, food culture, local products, and traditional performing arts through various cultural experience programs, nature discovery tours, and programs to experience the island lifestyle, served in the Amami Island Expo; community FM network will be established as a tool of communication; ICT such as a portal website, problem solution contents, and smart phone apps, will be also proactively used.

For the purpose of inclusion to the World Natural Heritage List, several more projects will be implemented such as continuing and effective environmental conservation, starting the system of eco-tour guides including training, and further effort to actively and impressively disseminate the charms and roles of the Amami Island Group to both inside and outside Japan.

3) Promotion of Coexistence and Collaboration, Reinforcement of Exchange and Cooperation

To have all residents in the Islands take an important role, the prefectural government will promote efforts to cooperate among residents, administrative organizations, and private companies.

The Amami Archipelago Tourism and Products Association will make a network throughout the Islands regarding tourism products and development of new local products. The prefectural government will form an industrial cluster of business owners in the islands.

As the domestic candidate site of World Natural Heritage Sites, economies of scale of the Islands will be maximized by enhancing exchange and collaboration among various regions in the Islands and diverse agencies, including financial institutions and academia, through preparation of tours connected to Yakushima of the World Heritage and Okinawa that aims the inclusion to the World Natural Heritage Lists with the Amami Island Group, deployment of tourism campaigns, promoting exchange with the hometown associations on the mainland, field work and research activities in collaboration with institutions of higher education.

4) Expansion of Market

Aiming at market expansion based on the point of view of customers, food and products fairs and business conventions will be held in large cities; market analysis will be reinforced by conducting test marketing, surveys on tourism, and tourism sales caravans; Amami brand in the whole island chain will be strategically reinforced by creating a sixth industry led by tourism, developing new local products, offering various services, and enhancing contents regarding tourism.

Developing a database of tourism and products on portal websites, advertising the islands at various events, and utilizing each kind of information media will promote effective dissemination of information. Marketing strategies will be also implemented through business activities to pioneer new markets in nearby Asian countries and around the world, improvement of capacity of business itself, selection and concentration to target customers, and creation of customers.

Measures implemented by municipal organizations to materialize the Strategic Vision of Growth in the Amami Island Group

Each city and town is supposed to work on measures to materialize the Strategic Vision of Growth in the Amami Island Group based on the following directions. Each measure is mentioned in the following section.

1. Recruiting, Training and Nurturing of Human Resources
2. Demonstration of Charms of the Amami Island Group
3. Promotion of Coexistence and Collaboration, Reinforcement of Exchange and Cooperation
4. Expansion of Market

2. Promotional Measures of Amami-Oshima Island

(2) Deployment of Measures

I. Measures to Promote Settlement

i. Promotion of Industry

D. Promotion of Industry Utilizing Local Features

(B) Forestry

a. Development of Forests

- Forests will be developed depending on functions to be valued in each category such as the forest managed for publically-beneficial functions and the forests to be maintained and increased for productive functions, such as timber, and promoted to enhance forest resources and the functions which benefit the public.
- Measures against damage such as that by pine weevils will be operated in pine forests that should be protected. Monitoring will be continued to prevent damaged or infested wood products being brought from outside of the Islands.

b. Development of Base of Forestry Production

- Due consideration for the natural environment will be given when forest roads are developed and existing forest roads are restored and paved.

c. Development of Systems for Production, Processing and Distribution of Forestry Products

- Balance of conservation and utilization of forest will be taken into consideration for development of efficient and stable production of timbers as well as promotion of utilization of wood to interior materials and furniture materials.

d. Promotion of Special Forest Products

- Creation of production areas will be promoted regarding special forest products with unique regional characteristics by developing production and shipping systems of mushrooms, bamboo shoots, and cycad.

e. Recruiting and Training of Forestry Workers

- Forestry workers will be recruited and trained by utilizing a system of a training course for forestry technologies. The Forest Owner's Cooperative Association will be united over all islands to reinforce the management base.

f. Promotion of Programs to Experience Forests

- Forests will be developed and conserved by utilizing features of nature and landscape of Amami-Oshima Island to be served as oases for local residents. Moreover, nurturing forest volunteers will provide support for interactive programs for visitors. Forest environmental education will be actively developed for elementary and junior high school students.

g. Research on New Usage and Conservation of Forest Resources

- *Pinus luchuensis* will be encouraged to use for timber products of the Amami Island Group. Research and investigation on conservation of subtropical forests will be advanced.

II. Measures to Stimulate Exchange and Interaction

i. Utilization of Local Resources of History and Culture Only in Amami

A. Expansion of Tourism Measures Utilizing Local Resources

(A) Utilization of Tourism Resources

- Attractiveness and resources such as unique natural environments, culture, and local industries will be organically connected with a story line to integrally promote industry and culture focusing on tourism.
- Using rich local resources will enhance experience programs for visitors.
  Interactive programs and stay-type tours will be encouraged to be held in the event called the "Amami Island Expo" and promotion of eco tourism.
- A tourism network will be developed so that visitors can enjoy the natural environment and culture in the Amami Island Group while walking.
- The islands' features of "longevity, blessing of many children, and healing" will be utilized for tourism promotion such as advertising of a thalassotherapy facility called "Thalasso Amami no Ryugu".
- Amami City's "Sports Island Plan" utilizing Amami's warm climate will be promoted by inviting visitors for sports camping from both inside and outside Japan. Projects will be implemented to make marine sports such as diving become widespread, to hold various events, and lure study tours to the Islands.

(B) Development of Systems to Accept Visitors

- The Amami Park, as a tourism center of all islands, will be mutually collaborated upon with other tourism facilities such as the Kuroshio-no-mori Mangrove Park to create a round trip course of the islands.
- To help visitors move smoothly between destinations, more guide signs will be developed and while existing signs will be improved, and information of transportation among islands will be provided on the Internet.
  Moreover, comfortable and convenient environments for visitors will be improved by making facilities such as public restrooms and resting areas as well as managing green areas.
- Towards the National Athletic Festival to be held in 2020 in Kagoshima, sports facilities

will be developed and improved to meet high quality demands of sports camps in which top athletes would participate, coming from domestic and international areas.

- Capacity development of tourism will be enhanced by service training targeting tourism workers in order to offer visitors full hospitality; guidance for foreign visitors will also be improved to enable all tourists to enjoy their travel with no concerns.
  Human resources will be nurtured and organized, such as island coordinator, goodwill guides, instructors, and tour guides, all of whom show visitors the attractiveness of the islands; an event will be designed to integrally offer visitors unique interactive programs and stay-type tours such as marine sports and a program of making *oshima tsumugi* kimono cloths dyed with mud.
  Special systems of guide-interpreters and tour agents targeting the Amami Island Group will be spread and established to fulfill the acceptance system of visitors.
- Tourism facilities and accommodations will be developed to meet new necessities emerging from interactive programs and stay-type tours.
- "Amami Numbers", which may contribute to the promotion of tourism and the activation of local communities, will be encouraged.

(C) Development of Transportation for Tourism

- Airports and harbors will be developed as bases of transportation in order to promote round-trip tours connecting locations inside and outside of the Islands.
- Toward inclusion to the World Natural Heritage Lists, development of an organization will be considered in order to assign CIQ officials who can smoothly regard international chartered flights.
- Methods of how to speed up regular lines and improve the comfort will be discussed; a cruising network will be formed so that visitors can travel around the islands via sightseeing ships.
- In order to promote exchanges through tourism via cruise ships and regular lines, environments will be developed for tourists who would travel by large cruise ships and regular lines from both inside and outside of the Islands; sea lines will be maintained and developed.
- To improve transportation to airports and harbors, arterial roads such as route No. 56 and prefectural roads connecting sightseeing spots will continue to be developed.
  Longitudinal and circular routes will be developed as the main route for sightseeing; parking areas and pubic restrooms will be constructed along the routes so as to enable tourists to take a break and enjoy sceneries of the Islands; greening along the routes will be made to conserve landscapes unique to the Amami Island Group.

Relevant entities of transportation will be encouraged to discuss development of regular sightseeing bus services and sightseeing taxi services for the convenience of tourists.

(D) Dissemination of Attractive Tourism Information

- The Amami Park will be regarded as a base for the dissemination of information, and such information will be spread via various media both inside and outside of the Islands like the website of Amami Archipelago Tourism and Products Association.
- The Amami Archipelago Tourism and Products Association will take a central role to implement measures of business activities targeting tour agencies outside the prefecture, inbound activities, and planning and sales of round-trip tours around the Islands, aiming to have high recognition and attract more tourists.

(E) Collaboration with Local Industries

- By cooperating with local industries such as agriculture, forestry, fishery, and production and sales of local products, various kinds of interactive programs will be offered to visitors, and natural cultural assets in the Amami Island Group will be used to produce new local specialties.

(F) Promotion of tourism measures targeting Asian countries

- To attract visitors from Asian countries, increased amounts of multilingual information and guide signs will be provided.

B. Inheritance and Creation of local culture enabling residents to have attachment

- In order to inherit rich local culture based on the climate of Amami-Oshima Island, local residents will be encouraged to have direct access to excellent works of art and unique culture, and actively use cultural facilities such as the Amami Park.
- Local cultural properties will be conserved and utilized, and the spirit of protection of cultural properties will be disseminated and raised to the public, through conservation and management of natural monuments and development of historical sites.
  Measures will be taken to protect and inherit traditional performing arts, for example offering opportunities to show island folk songs and August Dance at schools and facilities of lifelong learning. Interactive and exchange programs will also support indigenous culture to be inherited and used.

C. Exchange with regions inside and outside of the Islands

- Exchange with the Asian region, which expects remarkable growth in the future, while having a deep connection with the Islands both geographically and historically will be promoted more for the purpose of increasing the population of exchanges.
- To advance inter-prefectural exchange with Okinawa prefecture, whose geography, history and culture have a deep connection with the Islands, transportation and information networks will be developed to form a base of exchange and collaboration; tourists destinations of each prefecture will be connected to form a sightseeing network; cultural exchange between the prefectures will be also be held through showing traditional performing arts of each region.

  In particular, public and private sectors will jointly promote exchange and collaboration under local initiatives through the Council for the Promotion of Amami-Yambaru Regional Exchange as a central part.

ii. Measures toward Inclusion to the World Natural Heritage List

A. Formation of a Symbiotic Society Network

- In order to conserve and utilize the "treasures" such as diverse and rich natural environments as well as lifestyles, history, culture, traditional techniques and arts, and local specialties, which are grown in Amami-Oshima Island's natural environments, a project of interviewing and making oral transcripts will be implemented; based on the "Amami Island Group Symbiotic Society Plan", formation of a network among relevant entities, local residents, and NPOs will be promoted to disseminate the value of them widely both inside and outside the Islands.
- Promotion of research and studies on the connection between nature and culture, the origins and diversity will be stimulated to accumulate and disseminate information.

B. Promotion of Measures towards Inclusion to the World Natural Heritage List

(A) Conservation, Management and Development of National Parks

- Designation of national parks will be promoted through stronger collaboration with the relevant entities for taking appropriate measures as the candidate of the World Natural Heritage towards the future; protection zones will be properly managed and conserved, and park facilities will be developed, while raising public motivation of natural conservation.

(B) Maintaining Values as Candidate of the World Natural Heritage

- Regarding the protection of endangered natural fauna and flora, proper measures will be taken based on ordinances focusing on protection and monitoring activities, monitoring

research, and dissemination of information will be implemented to understand and conserve diverse ecosystems.

- "Roadkill (traffic accidents)" of endangered natural fauna and flora and illegal collection will be controlled, and measures toward alien species will be taken to implement prevention of migration of alien species from both inside and outside the country, elimination of mongoose and feral goats, dogs and cats, as well as promotion of proper breeding of pets.

  In addition, conservation and regeneration of coral reef will be promoted through measures to eliminate crown-of-thorns starfish, monitoring research and development of environments with regards to the establishment and growth of coral reef.
- In cooperation with the Amami Wildlife Center, investigation and research on endemic ecosystems of the Amami Islands will be spread and encouraged, and base functions will be taken into consideration to observe and conserve endangered natural fauna and flora.
- Measures of restoration will be undertaken to revitalize natural ecosystems damaged by human factors in the past, and conservation of habitats of endangered natural fauna and flora will be cared for, even outside of protection zones.
- There will be a prohibition to enter areas vulnerable to human factors in which many endangered species, and the area of use will be strictly controlled. Eco-tours and environmental learning activities will be also controlled based on the concept of environmental conservation in Amami-Oshima Island, while such programs are promoted by utilizing local features.

  Furthermore, the current situation will be clarified in order to avoid damage by excessive utilization of valuable natural environments in the areas where many tourists visit; municipal administration offices, relevant entities, and NPOs will make jointly efforts to raise public awareness of conservation and utilization of nature and landscape, and nurture guides toward having adequate knowledge of endangered natural fauna and flora.
- As the candidate of the World Natural Heritage, quality conservation and management of natural environments will be promoted in collaboration with relevant administrative offices, local residents and experts for the purpose of proper conservation and utilization towards the future; the entities will cooperatively respond to anticipated situations such as development and restoration of facilities, conservation of nature, balance of traditional use of nature and socio-economic activities, and increasing expenditure for conservation of nature.
- As the candidate of the World Natural Heritage, from the viewpoint of proper

conservation and utilization in the future, a system to accept tourists will be deliberately developed to create balance between conservation of valuable nature and regional development in cooperation with municipal offices.

- Each kind of project will be implemented under required measures in consideration of impact on the diverse and rich natural environments in targeted areas.

(C) Raising Motivation

- Local residents will be encouraged to understand the importance of maintaining values as the candidate of the World Natural Heritage, and motivation towards inclusion to the World Natural Heritage Site will be arisen by taking measures in collaboration with Okinawa that is another candidate aiming the inclusion together with the Amami Island Group, and the registered site of Yakushima.

C. Conservation of Local Environment

- To maintain good regional environments, municipal offices will collaborate to conserve the air and water environments as well as control noise and malodor.
- Coastal drifting debris will be smoothly treated with relevant entities based on the Kagoshima Prefecture Regional Plan for the Promotion of the Clearing of Coastal Drifting Debris.
- *Chamberlinius hualienensis* will be effectively eliminated and its spread prevented depending on the situation of regions; measures to eliminate suited to local features will be further discussed at the same time in which development of environments will be also encouraged.

D. Formation of Environmentally-Sound Material Society

- Reducing and Recycling of waste will be continuously promoted; regarding home appliances, collection sites for recycling will be designated in the Islands and measures will be taken to further decrease the burden of garbage collection and transportation fees.

  Automobiles will be encouraged to be recycled.

  Regarding small home appliances, a collection system will be smoothly developed.

  Raising public awareness will prevent illegal dumping of waste.
- Living wastewater will be treated in a facility developed suitable to the situation of regions for proper treatment.
- Concerning industrial waste, reducing and recycling will be promoted and industrial waste treatment facilities will be developed.

A treatment facility of livestock excrement will be developed for enhanced proper treatment and recycling to compost.

Construction waste generation will be reduced, recycled and treated in proper ways.

E. Natural Environmentally-Friendly and Nature Restoration Public Projects

- When public projects start, an environmental impact assessment will be performed based on the Environmental Impact Assessment Act, toward inclusion to the World Natural Heritage List; public projects will be conducted in consideration of conservation and formation of habitats of valuable endangered natural fauna and flora; public projects for restoration of nature will be considered and adopted based on the concept of the Law for the Promotion of Nature Restoration.

  From the viewpoint of maintaining value as a candidate of the World Natural Heritage, integrated guidelines for environmental consideration will be formulated to take necessary measures.

  Concerning red soil runoff, measures will be taken at each stage of public projects; research and investigation of effective prevention will be promoted; developers and constructors will be reminded and instructed to be careful.

  Farmers and local residents will be also informed of the importance of prevention of red soil runoff from farmlands.

5. Promotional Measures of Tokunoshima Island

(2) Deployment of Measures

I. Measures to Promote Settlement

i. Promotion of Industry

D. Promotion of Industry Utilizing Local Feature

(B) Forestry

a. Development of Forests

- Forests will be developed depending on functions to be valued in each category such as the forest managed for publically-beneficial functions and the forests to be maintained and increased for productive functions, such as timber, and promoted to enhance forest resources and the functions which benefit the public.
- Measures against damage such as that by pine weevils will be operated in pine forests that should be protected. Monitoring will be continued to prevent damaged or infested wood products being brought from outside of the Islands.

b. Development of Base of Forestry Production

- Due consideration for the natural environment will be given when forest roads are developed and existing forest roads are restored and paved.

c. Development of Systems for Production, Processing and Distribution of Forestry Products

- Balance of conservation and utilization of forest will be taken into consideration for development of efficient and stable production of timbers as well as promotion of utilization of wood to interior materials and furniture materials.

d. Promotion of Special Forest Products

- Creation of production areas will be promoted regarding special forest products with unique regional characteristics by developing production and shipping systems of mushrooms.

e. Recruiting and Training of Forestry Workers

- Forestry workers will be recruited and trained by utilizing a system of a training course for forestry technologies. The Forest Owner's Cooperative Association will be united over all islands to reinforce the management base.

f. Promotion of Programs to Experience Forests

- Forests will be developed and conserved by utilizing features of nature and landscape of the Tokunoshima Islands to be served as oases for local residents. Moreover, nurturing forest volunteers will provide support for interactive programs for visitors. Forest environmental education will be actively developed for elementary and junior high school students.

g. Research on New Usage and Conservation of Forest Resources

- *Pinus luchuensis* will be encouraged to use for timber products of the Amami Island Group. Research and investigation on conservation of subtropical forests will be advanced.

II. Measures to Stimulate Exchange and Interaction

i. Utilization of Local Resources of History and Culture Only in the Amami

A. Expansion of Tourism Measures Utilizing Local Resources

(A) Utilization of Tourism Resources

- Attractiveness and resources such as unique natural environments, culture, and local industries will be organically connected with a story line to integrally promote industry and culture focusing on tourism.
- Using rich local resources will enhance experience programs for visitors. Interactive programs and stay-type tours will be encouraged to be held in the event called the "Amami Island Expo" and promotion of eco tourism.
- A tourism network will be developed so that visitors can enjoy the natural environment and culture in the Amami Island Group while walking.
- The islands' features of "longevity, blessing of many children, and healing" will be utilized for tourism promotion.
- Events will be invited and held by utilizing the warm climate of the Islands. Sports events such as marathons, ekiden, and triathlons in the Amagi Cross-Country Park, and cultural tourism events such as bull fighting will be included.

(B) Development of a System to Accept Visitors

- Marine recreation facilities such as the Yonama Beach Park, Aze Price Beach Park, and Setaumi Sea Park as well as an information center of local culture such as the Tokunoshima Nakusami Center will be encouraged to be utilized; tourism facilities will be developed for interactive programs and stay-type tours; a round-trip course will be created with the combination of unique regional resources such as Kanamizaki Cycad Tunnel and Inutabumisaki Cape.
- To help visitors move smoothly between destinations, more guide signs will be developed and while existing signs will be improved, and information of transportation among islands will be provided on the Internet.

  Moreover, comfortable and convenient environments for visitors will be improved by making facilities such as public restrooms and resting areas as well as managing green areas.

- Towards the National Athletic Festival to be held in 2020 in Kagoshima, sports facilities will be developed and improved to meet high quality demands of sports camps in which top athletes would participate, coming from domestic and international areas.
- Capacity development of tourism will be enhanced by service training targeting tourism workers in order to offer visitors full hospitality; guidance for foreign visitors will also be improved to enable all tourists to enjoy their travel with no concerns.

  Human resources will be nurtured and organized, such as island coordinator, goodwill guides, instructors, and tour guides, all of whom show visitors the attractiveness of the islands; an event will be designed to integrally offer visitors unique interactive programs and stay-type tours such as marine sports and a program of making *oshima tsumugi* kimono cloths dyed with mud.

  Special systems of guide-interpreters and tour agents targeting the Amami Island Group will be spread and established to fulfill the acceptance system of visitors.
- Tourism facilities and accommodations will be developed to meet new necessities emerging from interactive programs and stay-type tours.
- "Amami Numbers", which may contribute to the promotion of tourism and the activation of local communities, will be encouraged.

(C) Development of Transportation for Tourism

- Airports and harbors will be developed as bases of transportation in order to promote round-trip tours connecting locations inside and outside of the Islands.
- Chartered flights will be continuously supported and required facilities will be developed.
- Methods of how to speed up regular lines and improve the comfort will be discussed; a cruising network will be formed so that visitors can travel around the islands via sightseeing ships.
- To improve transportation to airports and harbors, development of a loop line will continue.

  Main routes for sightseeing, parking areas and pubic restrooms will be constructed along the routes so as to enable tourists to take a break and enjoy sceneries of the Islands; greening along the routes will be created to conserve landscape unique to the Amami Island Group.

(D) Dissemination of Attractive Tourism Information

- Attractive information regarding tourism will be spread via various media to areas inside and outside the Islands like the website of Amami Archipelago Tourism and

Products Association.

- The Amami Archipelago Tourism and Products Association will take a central role to implement measures of business activities targeting tour agencies outside the prefecture, inbound activities, and planning and sales of round-trip tours around the Islands, aiming to have high recognition and attract more tourists.

(E) Collaboration with Local Industries

- By cooperating with local industries such as agriculture, forestry, fishery, and production and sales of local products, various kinds of interactive programs will be offered to visitors, and natural cultural assets in the Amami Island Group will be used to produce new local specialties.

(F) Promotion of tourism measures targeting Asian countries

- To attract visitors from Asian countries, increased amounts of multilingual information and guide signs will be provided.

  Development of an organization will be considered in order to assign CIQ officials who can smoothly regard international chartered flights.

B. Inheritance and Creation of local culture enabling residents to have attachment

- In order to inherit rich local culture based on the climate of Tokunoshima Island, local residents will be encouraged to have direct access to excellent works of art and unique culture, and actively use cultural facilities.
- Local cultural properties will be conserved and utilized, and the spirit of protection of cultural properties will be disseminated and raised to the public, through conservation and management of natural monuments and development of historical sites.

  Measures will be taken to protect and inherit traditional performing arts, for example offering opportunities to show island folk songs and August Dance at schools and facilities of lifelong learning. Interactive and exchange programs will also support indigenous culture to be inherited and used.

C. Exchange with regions inside and outside of the Islands

- Exchange with the Asian region, which expects remarkable growth in the future, while having a deep connection with the Islands both geographically and historically, will be promoted more for the purpose of increasing the population of exchanges.
- To advance inter-prefectural exchange with Okinawa prefecture, whose geography, history and culture have a deep connection with the Islands, transportation and information networks will be developed to form a base of exchange and collaboration;

tourists destinations of each prefecture will be connected to form a sightseeing network; cultural exchange between the prefectures will be also be held through showing traditional performing arts of each region.

In particular, public and private sectors will jointly promote exchange and collaboration under local initiatives through the Council for the Promotion of Amami-Yambaru Regional Exchange as a central part.

ii. Measures toward Inclusion to the World Natural Heritage List

A. Formation of a Symbiotic Society Network

- In order to conserve and utilize the "treasures" such as diverse and rich natural environments as well as lifestyles, history, culture, traditional techniques and arts, and local specialties, which are grown in Tokunoshima Island's natural environments, a project of interviewing and making oral transcripts will be implemented; based on the "Amami Islands Group Symbiosis Society Network Plan", formation of a network among relevant entities, local residents, and NPOs will be promoted to disseminate the value of them widely both inside and outside the Islands.
- Promotion of research and studies on the connection between nature and culture, the origins and diversity will be stimulated to accumulate and disseminate information.

B. Promotion of Measures towards Inclusion to the World Natural Heritage List

(A) Conservation, Management and Development of National Parks

- Designation of national parks will be promoted through stronger collaboration with the relevant entities for taking appropriate measures as the candidate of the World Natural Heritage towards the future; protection zones will be properly managed and conserved, and park facilities will be developed, while raising public motivation of natural conservation.

(B) Maintaining Values as Candidate of the World Natural Heritage

- "Roadkill (traffic accidents)" of endangered natural fauna and flora and illegal collection will be controlled, and measures toward alien species will be taken to implement prevention of migration of alien species from both inside and outside the country, elimination of mongoose and feral goats, dogs and cats, as well as promotion of proper breeding of pets.

  In addition, conservation and regeneration of coral reef will be promoted through measures to eliminate crown-of-thorns starfish, monitoring research and development of environments with regards to the establishment and growth of coral reef.

- In cooperation with the Amami Wildlife Center, investigation and research on endemic ecosystems of the Amami Islands will be spread and encouraged, and base functions will be taken into consideration to observe and conserve endangered natural fauna and flora.
- Measures of restoration will be undertaken to revitalize natural ecosystems damaged by human factors in the past, and conservation of habitats of endangered natural fauna and flora will be cared for, even outside of protection zones.
- There will be a prohibition to enter areas vulnerable to human factors in which many endangered species, and the area of use will be strictly controlled. Eco-tours and environmental learning activities will be also controlled based on the concept of environmental conservation in Tokunoshima Island, while such programs are promoted by utilizing local features.

  Furthermore, the current situation will be clarified in order to avoid damage by excessive utilization of valuable natural environments in the areas where many tourists visit; municipal administration offices, relevant entities, and NPOs will make jointly efforts to raise public awareness of conservation and utilization of nature and landscape, and nurture guides toward having adequate knowledge of endangered natural fauna and flora.
- As the candidate of the World Natural Heritage, quality conservation and management of natural environments will be promoted in collaboration with relevant administrative offices, local residents and experts for the purpose of proper conservation and utilization towards the future; the entities will cooperatively respond to anticipated situations such as development and restoration of facilities, conservation of nature, balance of traditional use of nature and socio-economic activities, and increasing expenditure for conservation of nature.
- As the candidate of the World Natural Heritage, from the viewpoint of proper conservation and utilization in the future, a system to accept tourists will be deliberately developed to create balance between conservation of valuable nature and regional development in cooperation with municipal offices.
- Each kind of project will be implemented under required measures in consideration of impact on the diverse and rich natural environments in targeted areas.

(C) Raising Motivation

- Local residents will be encouraged to understand the importance of maintaining values as the candidate of the World Natural Heritage, and motivation towards inclusion to the World Natural Heritage Site will be arisen by taking measures in collaboration with the

registered sites of Yakushima and Okinawa, which also aims the inclusion together with the Amami Island Group.

C. Conservation of Local Environment

- To maintain good regional environments, municipal offices will collaborate to conserve the air and water environments as well as control noise and malodor.
- Coastal drifting debris will be smoothly treated with relevant entities based on the Kagoshima Prefecture Regional Plan for the Promotion of the Clearing of Coastal Drifting Debris.
- *Chamberlinius hualienensis* will be effectively eliminated and its spread prevented depending on the situation of regions; measures to eliminate suited to local features will be further discussed at the same time in which development of environments will be also encouraged.

D. Formation of Environmentally-Sound Material Society

- Solid waste has been treated in a wide area of Tokuoshima since 2003 at the incineration plant, final disposal site and recycle plaza, which were jointly developed by the cross-regional federation consisting of three towns in Tokunoshima. Reducing and Recycling of waste will be continuously promoted; regarding home appliances, collection sites for recycling will be designated in the Islands and measures will be taken to further decrease the burden of garbage collection and transportation fees.
  Automobiles will be encouraged to be recycled.
  Regarding small home appliances, a collection system will be smoothly developed.
  Raising public awareness will prevent illegal dumping of waste.
- Living wastewater will be treated in a facility developed suitable to the situation of regions for proper treatment.
- Concerning industrial waste, reducing and recycling will be promoted and industrial waste treatment facilities will be developed.
  A treatment facility of livestock excrement will be developed for enhanced proper treatment and recycling to compost.
  Construction waste generation will be reduced, recycled and treated in proper ways.

E. Natural Environmentally-Friendly and Nature Restoration Public Projects

- When public projects start, an environmental impact assessment will be performed based on the Environmental Impact Assessment Act, toward inclusion to the World Natural Heritage List; public projects will be conducted in consideration of conservation and formation of habitats of valuable endangered natural fauna and flora; public

projects for restoration of nature will be considered and adopted based on the concept of the Law for the Promotion of Nature Restoration.

From the viewpoint of maintaining value as a candidate of the World Natural Heritage, integrated guidelines for environmental consideration will be formulated to take necessary measures.

Concerning red soil runoff, measures will be taken at each stage of public projects; research and investigation of effective prevention will be promoted; developers and constructors will be reminded and instructed to be careful. Farmers and local residents will be also informed of the importance of prevention of red soil runoff from farmlands.

4-35 The Amami Island Group Symbiotic Society Plan (Excerpt)

Part 3: Basic Policy

Chapter 1: Basic Concept

This “Plan” proposes regional development by “symbiosis with human beings and nature” as the mainstay based on the idea of transforming conventional standards, aiming at revitalization of local communities, namely setting principles as “transformation of our lifestyle to a symbiosis society with nature”, “transformation towards regional diversity ”, and “transformation of initiatives from national level to local level”. Based on the current situation of the Amami Island Group, the Plan indicates a new way of “symbiosis with human beings and nature” in the Islands.

In order to discover a new way of “symbiosis”, the Plan sets basic policies to take measures based on “conservation of biodiversity” and “interaction with nature” with the Amami Island Group’s “treasures” as a core. The Amami Island Group’s “treasures” on the Plan are defined as regional resources having academic and social value of nature, which the local residents of the Amami Island Group explored during “treasure hunting” that they independently undertook. Measures on the “Plan” show direction of appropriate usage according the value of the “treasures” of the Islands that local communities autonomously discovered.

These basic concepts intend to allow local communities to recognize the value of local natural environments and use them subjectively by themselves. By experiencing recognition and utilization repeatedly, the connection between human beings and nature is expected to be better and deeper in the Amami Island Group and become worthy to be called the “symbiosis society with human beings and nature”.

Chapter 2: “Treasures ” of Amami

Section 1: Overview

1. “Treasure Hunting” in the Amami Island Group

When the Plan started to be formulated, local communities of 14 cities, towns and villages of the Islands participated in “treasure hunting” in cooperation with local residents and administrative organizations. The activity of “treasure hunting” offers local residents to independently reaffirm and rediscover “treasures” buried in each region.

The “treasure hunting” has significance to raise public awareness of local people’s pride and identity; namely, as the traditional connection between human beings and nature is weakening due to socio-economic change, this activity provides a chance for local residents to positively realize the value of the connection again.

At the same time, this activity is meaningful as basic research for planning and operating measures in accord with the Plan; as the result of “treasure hunting”, each local community discovered various “treasures”, which will be subject to a variety of measures to be planned and implemented.

2. “Treasures” of Amami

The “treasure hunting” has unearthed many “treasures” of the Amami Island Group such as nature, history, culture, lifestyle, masters, and industries. All have diverse values in each area, but some of “treasures” can be specified as remarkable assets having representative and universal values for the whole island chain. Ecosystems of coral reef and marine life, coastal landscapes, and forestry ecosystems and landscapes consisting of natural fauna and flora can be identified as natural environments with remarkable academic value; nearby nature and landscapes can be categorized as nature with outstanding social value; furthermore, culture and industries which deeply relate to such kinds of nature, for example, religion, traditional events, island folk songs, and food materials can be included as “treasures”.

Chapter 3: Management of “Treasures” of Amami

Section 1. Overview

Development of regions with the Amami Island Group’s “treasures” as a core shall be proceeded through proper management so as to harmonize nature and society with each other.

Management of “treasures” should be based on conservation and utilization of them. Recognition of the academic and scientific values of “treasures” will allow appropriate maintenance. After conserving them like this, they will be utilized in various ways as resources of revitalization of regions. Premising that conservation will protect the values of them as resources of regional development, they will be able to be utilized in a sustainable manner.

Conservation and utilization shall be integrally promoted. Promotion of only one of them might cause imbalance between nature and society, namely “symbiosis with human beings and nature” in the future. Neither utilization setting aside conservation, nor conservation without consideration of possibility provided by utilization will not be suitable for “symbiosis with human beings and nature”.

Each relevant entity shall correctly recognize challenges regarding conservation and utilization of the “treasures”, and make decisions with coordination of multiple stakeholders to implement efficient measures and actions; it is also important to develop a base for information, systems and facilities to respond to these demands.

Section 2: Conservation of "Treasures"

1. Basic Concept

Conservation of "treasures" means to maintain good condition without damage to the values of the "treasures" by placing positive influence on the "treasure" and reducing negative impacts to them. Several methods of conservation measures and policies can be enumerated, such as protection of important targets, measures against influence factors, and development of bases for conservation (accumulating and disseminating information, system development, and facility development). The value of "treasures" and characteristics as resources is required to be incorporated to measures and policies by means of each direction and various methods associated with the directions.

2. Direction of Conservation

Taking into account of the values of "treasures", it is important to properly select and combine the following methods depending on the characteristics of "treasures" and situations around them.

(1) Protection of Important Targets

The "treasures" shall be utilized in many ways. They support local communities in the Amami Island Group and have a great effect on local people. As long as they are utilized in a proper way, there is no problem, however, the method of utilization may unexpectedly cause damage to the value of "treasures" and creating difficulty in maintaining sustainable utilization in the future. Important targets should be conserved in accordance with laws and ordinances for protection.

(2) Measures against Influence Factors

In the case that the value of "treasures" would be damaged by various socio-economic activities and natural phenomena besides direct utilization of them, it is necessary to specify the influence factors and take appropriate measures.

(3) Promotion of Management

Some type of "treasures" may need proactive human intervention in the form of operation management and maintenance to protect the value. Management would be promoted in order to conserve such "treasures". Basically, an owner of a treasure is required to protect it with the proper methods, depending on the characteristics.

(4) Development of Bases for Conservation

Efficient conservation may require development of bases of information, systems, and facilities to support measures and actions of conservation.

Corresponding to concrete measures, capacity building of relevant entities, fulfillment and enhancement of

information and facilities may be enumerated.

(5) Regeneration of "Treasures"

Conservation of "treasures" aims to keep a good condition of them based on the current situation, however, if a "treasure" would be lost, it is necessary to restore, recover, and recreate it by implementing appropriate measures and activities.

(6) Consideration to "Treasures"

Consideration to "treasures" is generally required to all socio-economic activities even if the activities do not need to directly utilize the "treasures".

Section 3: Utilization of "Treasures"

1. Basic Concept

Utilization of "treasures" means to properly use them and connect the value of them with vitalization of local communities.

As examples of utilization, use as resources for tourism, food, and industrial products can be listed. Each of them is inevitable for local communities. However, inappropriate utilization might cause damage of the value of "treasures" and create difficulty in maintaining sustainable utilization in the future.

Elaborating on the forms of utilization and proper use can reduce such kinds of risk. For example, as resources for tourism, they can be used in eco-friendly learning tours (eco-tours); branding can enhance the value of them when they are used as materials of food and industrial products.

Several directions of measures and actions for utilization can be enumerated, such as presentation of concepts, formulating concrete efforts in accordance with the concept, and development of bases for utilization (accumulating and disseminating information, system development, facility development). These directions are required to be incorporated to measures and policies depending on the forms of utilization.

2. Direction of Utilization

Taking into account the conditions of utilization, it is important to properly select and combine the following methods:

(1) Presentation of Concepts

Concepts of utilization shall be clearly displayed as indicators in a manner in which various entities in local communities can elaborate on forms of utilization and promote appropriate use.

As premises of which the "treasures" are surely protected, the concept should be presented to enable two factors for harmonizing with each other; namely, on one hand economic benefit derived from utilization of

“treasures” is returned to local communities, and on the other hand utilization of “treasures” does not damage the connection between human beings and nature in local regions as well as residents’ lifestyle, culture, and identity.
It is crucial that responsible authorities take initiative to show the concept depending on the forms of utilization.

(2) Concrete Efforts

It is important that various relevant entities such as administrative offices, private companies, regional NPOs, and local residents discuss original and effective methods of utilization, incorporate ideas make to concrete effort, and proactively implement them.

(3) Development of Bases for Utilization

Efficient utilization may require development of bases of information, systems, and facilities to support measures and actions of utilization. Corresponding to concrete measures, capacity building of relevant entities, fulfillment and enhancement of information and facilities may be enumerated.

Part 4: Specific measures

Chapter 3: Conservation of Forest and Endangered Wild Fauna and Flora

Section 1: Basic Concept

Diverse ecosystems established in the Amami Island Group, where various kinds of fauna and flora inhabit, and especially endangered wild species such as Pentalagus furnessi or Amami Rabbit have an extremely high academic value. Subtropical broad-leaved forests left in the Amami Island Group, which are close to natural vegetation, are not only valuable itself, but also precious as the main habitats of endangered species. In addition, such subtropical broad-leaved forests grow in quantity and form the endemic and significant landscape.

In this context, endangered wild fauna and flora as well as forests in the Amami Island Group are of paramount importance for the "treasures" of the Amami Island Group, which shall be subject to the promotion of integrated measures of conservation.

Section 2: Implementation of Measures

1. Protection of Important Targets

Focusing on area and species will institutionally protect habitats of endangered wild species and subtropical broad-leaved forests, which are important for conservation of biodiversity and landscapes. Various institutional schemes are available for protection, and these schemes will be properly combined and enhanced to sufficiently ensure the protection of important targets.

(1) Designation of Natural Parks and Wildlife Protection Areas

Protection areas such as National Parks and Wildlife Protection Areas play an important role in the conservation of paramount regions of habitats of endangered wild species and forests.

Currently the Amami Islands Quasi-National Park (496.0ha as the Special Protection Zone; 446.0ha for Marine Park; 7,332.0ha as the Special Zone, 24,611.0ha as the Ordinary Zone) is designated in accordance with the Natural Parks Act. Activities such as building construction, cutting down trees or bamboo, and collecting of animals and plants are prohibited in each category of protection zone.

Mt. Yuwandake National Wildlife Protection Area (320ha) is designated based on the Wildlife Protection, Management, and Proper Hunting Act (Wildlife Protection Act), and a part of the area is designated as a Special Protection Zone (103ha). Additionally, prefectural protection areas are set in 5,208ha in a total in 23 areas. Hunting of wildlife is prohibited in the Wildlife Protection Area.

From the viewpoint of conservation of biodiversity and landscapes, however, designated places and areas do not necessarily match the current status. The Review Committee on Candidate Natural Sites for Nomination to the World Heritage List held in 2003 pointed out that protection measures were not

sufficient in some parts of important areas including habitats of endangered wildlife.
Protection measures suited to characteristics of targeted areas shall be enhanced more in the existing Protection Areas designated by the Natural Parks Act and Wildlife Protection Act; particularly in protection areas including habitats of endangered wildlife shall be expanded; more protection areas under the responsibility of the national government will be subject to new designation as National Parks.

(2) Measures based on the Act on Conservation of Endangered Species of Wild Fauna and Flora, and Ordinance to Protect Endangered Wild Fauna and Flora of Kagoshima

The Act on Conservation of Endangered Species of Wild Fauna and Flora (Act on Conservation of Endangered Species) and the Ordinance to Protect Endangered Wild Fauna and Flora are important to avoid extinction of endangered wildlife.
Concerning the Act on Conservation of Endangered Species, 8 fauna and flora populating the Amami Islands (*Luscinia komadori* or subspecies of Ryukyu Robin; *Scolopax mira* or Amami woodcock; *Zoothera dauma major* or Amami thrush; *Dendrocopos leucotos owstoni* or Amami Woodpecker; *Garrulus lidthi* or Amami Jay; *Polystichum obai*; *Liparis elliptica*; *Vaccinium amamianum*) are designated as domestic endangered wild species, in which hunting and transfer are controlled; 2 species out of the eight (Amami woodcock and Amami thrush) are subject to the Program for the Rehabilitation of Natural Habitats and Maintenance of Viable Populations. These measures will be enhanced.
In 1999, The Kagoshima Prefectural Government started a research project of endangered wild species, and summarized the results in the Red Data Book of Kagoshima published in March 2003 including the list of endangered wild species in the Amami Islands. In the same month, the prefectural government also established the Ordinance to Protect Endangered Wild Fauna and Flora in Kagoshima; species subject to protection will be designated in order to control hunting and transfer based on the ordinance.
Yamato Village also established the Ordinance to Protect Endangered Wild Fauna and Flora, and implements measures to designate protection areas to 98 endangered wild species. Measures in accordance with these acts and ordinances shall be further enhanced from now on.

(3) Measures based on the Act on Protection of Cultural Properties and Ordinance of Protection of Cultural Properties of Kagoshima Prefecture

The Act and Ordinance of Protection of Cultural Properties take a role of conservation of endangered wild species by designating animals and plants that have academic value and their habitats as Natural Monuments.
Currently the Act on the Protection of Cultural Properties designates the Amami Rabbit as a Special Natural Monument of the Japanese government, and animals and plants including *Tokudaia osimensis*, *Diplothrix legata* or Ryukyu Long-furred Rat, Ryukyu Robin, Amami Thrush, Amami Woodpecker, Amami Jay, and *Coenobita cavipes*, as well as natural forests in Kamiya and Yuwandake, are designated as Natural Monuments. In 2003, *Odorrana splendida*, *Echinotriton andersoni*, and *Goniurosaurus kuroiwae splendens* were designated as Prefectural Natural Monuments. Municipal governments manage these species and control changes of the current status and actions that would influence conservation.

The proper management of the Act on Protection of Cultural Properties will continue to be maintained.

2. Measures against Influence Factors

Some introduced species were found in a part of the Amami Island Group that greatly impacts native ecosystems including endangered wild fauna and flora.
There is a concern that native and endangered species may be hunted and eaten by introduced species such as mongoose on Amami-Oshima Island, feral cats and dogs, and *Mustela itatsi*. It is anticipated that native species (*Tokudaia osimensi* and Ryukyu Long-furred Rat) may be reduced by competition with *Rattus rattus* or black rats. It is pointed out that there is a risk of genetic invasion to native insects by hybridization with introduced species. Moreover, 70-130 species (varies depending on each island) out of 1,300-1,500 species of vascular plants populating in the Amami Islands are introduced from outside, and may have a negative impact on native species.
While the Amami Island Group contains the habitats of endemic and endangered species, the region is subject to be exposed to introduced species, which requires integrated measures against introduced species including prevention of invasion, controlling species after establishment, and monitoring, in collaboration with the national government.
To prevent dogs, cats, and goats from entering habitats of endangered wild species, proper management of those animals shall be enhanced, and careless releasing of animals will be controlled by appropriate measures. The current status of species such as boars, which are already established in Okinoerabu Island will be researched to consider targets of control, and measures of elimination and containment will be taken in proper way.
It is particularly clear that mongoose established in the Amami Islands have a devastating effect on endangered wild species, thus the national government has already undertaken the project of elimination of mongoose. From now, measures of complete elimination will be continued and further enhanced by introducing more effective ways of hunting.

3. Promotion of Management

Management of operation and maintenance in protection areas will be properly implemented to conserve forests and endangered wild fauna and flora.
Forests in the Amami Island Group are categorized as “Forests for Water and Soil Conservation”, “Forests for Symbiosis of Forest and People”, and “Forests for Cyclical Use of Forest Resources” according to each preferential function. In the “Forest for Symbiosis of Forest and People”, in particular, management for conservation will be promoted based on natural transition and operation dealing with single-stored forest and uneven-aged forest. National Forests in Amami-Oshima Island and Tokunoshima Island will be necessary to be properly managed according to the current classification of protected forests.

4. Development of Base for Conservation

(1) Scientific Investigation and Research

An inventory (a list of species) will be compiled by implementing investigation from a scientific viewpoint to continuously accumulate information of distribution, population and density of specific species.

(2) Participation of Various Entities

Participation and consensus building with local communities may be required for conservation of endangered wild species as necessary. Especially various entities will be encouraged to participate in the initiatives related to control of introduced species such as mongoose.

(3) Function as a Hub of the Amami Wildlife Center

The Amami Wildlife Center owned by the national government was opened in 2000, and the function of the center will be enhanced regarding research projects of endemic ecosystems in the Amami Island Group, in addition to accumulation and dissemination of related information.

Chapter 8: Intensifying Consideration to Nature

Section 1: Basic Concept

The awareness of local residents living in each region in the Amami Island Group is important to inherit the "treasures" of Amami such as nature in the Islands that is valuable to the world. In other words, residents are required to proactively play a main role to create a unique and symbiotic society of people and valuable nature in the Amami Island Group. As a base of regional development, residents need to take the initiative in basic living activities and each kind of project in order to consider nature by energy saving, reducing waste, and controlling living wastewater.

Concerning the general socio-economic activities in the Amami Island Group, impact on "treasures" shall be appropriately controlled with the consideration not to harm the value of them when implementing measures, projects, and industrial activities.

Section 2: Implementation of Measures

1. Consideration by Residents

(1) Ways of Consideration by Residents

The Kagoshima Prefectural Government is implementing the "Citizen's Eco-Friendly Activity in Kagoshima"; three initiatives of development of eco-friendly lifestyles, regional development in harmony with environment, and social system development based on circulation are being operated by the "Conference for Citizen's Eco-Friendly Activity in Kagoshima" as a promotion center.

It is desirable that circulation is independently established in each island as much as possible because the Amami Island Group consists of independent islands. Residents in each local community are expected to proactively work on energy saving, reducing waste, conserving water, conserving the natural environment, participating in environmental conservation activities, and properly treating waste.

(2) Measures to Support Consideration by Residents

To support such activities of consideration by residents, measures relating to waste management will be promoted; in addition to control of generation of waste, promotion of recycling, facility development to ensure the proper treatment of waste, and measures against illegal dumping.

Setting designated collection sites and developing a system of collection and transfer will enhance recycling of home appliances. Recycling of automobiles will also be properly implemented.

Several other measures will be also implemented: facility development for water and sewage, wastewater from agricultural and fishery activities, a combined sewage treatment tank, as well as introduction of new energy resources such as wind and solar power.

2. Consideration upon Implementation of Industrial Activities

(1) Environmental Assessment

As it is crucial for environmental conservation that the environmental assessment is preliminarily undertaken to the "treasures" before implementing projects, the Environmental Impact Assessment Laws of both the national government and the prefectural government will be continuously operated in the proper way.

(2) Promotion of Environmentally-Friendly Public Projects

When a public project is anticipated to have an impact on the "treasures" but necessary to be implemented for socio-economic reasons, it is important to reduce the impact as much as possible. The "Opinion Survey" shows 73% of residents responded that public project shall be implemented with due care to natural environments". In this regard, public projects will be encouraged to be implement in an environmentally friendly manner.

Public projects for roads, rivers, ports and harbors, and development of agriculture as well as agricultural villages have been implemented with care to natural environments. Development of agriculture and agricultural villages has been also promoted in an environmentally friendly manner. Forests are being treated to demonstrate their multiple functions. Forest roads are being developed with care for conservation of landscapes and ecosystems; National Route 58 was designated as an "eco-road" with consideration for the ecosystem, and tunnels and bridges are constructed so as not to separate ecosystems; cross paths along the route are built for animals.

The "Development of Multi-Natural Rivers" project is promoted for the development of rivers such as the Yakugachigawa river; environmentally friendly efforts including conservation of diverse watersides, making of green slopes on river banks, development of facilities excellent in hydrophilicity, and construction of revetment with natural stones are being incorporated to each project.

The "Review Committee for the Natural Environment for the Construction of the Yamato Dam" promotes the dam construction as a reservoir of living water in an environmentally-friendly manner. Projects for prevention of soil erosion are implemented with consideration for the environment of streams. Green slopes on revetments are developed with consideration for hydrophilicity at ports and harbors. Around the ports and harbors, trees and plants of native species are used for development of green areas.

Projects will be implemented in an environmentally-friendly manner continuously from now on such as: development of roads and multi-natural rivers with care to habitats of endangered wild species in the Amami Island Group, setting of fishways, blowing seeds of native species to slopes; skills and technologies with consideration to natural environments will be introduced based on the features of nature in the Amami Island Group.

Regarding housing, environmentally symbiotic houses will be developed and supported by both public and private sectors based on the climate in the Amami Island Group, for the purpose of the conservation of the global environment such as energy saving and resources.

(3) Promotion of Environmentally Friendly Agriculture

Productive activities, which may have an impact on the "treasures", will be also operated while avoiding impact.

Regarding agricultural production, "environmentally friendly agriculture", namely sustainable agriculture will be promoted with consideration both to utilizing the function of natural circulation provided by agricultural activities and to reducing the impact on environments. As it is difficult to recover the valuable nature in the Amami Island Group such as endangered species if it is once lost, agricultural production will be promoted with special care for the environment.

With respect to environmentally-friendly agriculture, various measures will be further promoted aiming at "development of environmentally friendly production centers" for reducing environmental impact: facility development for compost, production, transportation and utilization of quality compost by securing composting materials, land reform by subsoil plowing and breaking, proper fertilizing based on soil assessment, proper control on pests based on prevention measures, proper treatment of agricultural waste plastics.

Concerning environmentally friendly stock farming, management of livestock excrement, required technologies for treatment, and circuit teaching will be enhanced; treatment facilities of livestock excrement will be developed in accordance with the current situation of each region based on the Plan for Utilization of Livestock Excrement in Kagoshima Prefecture".

(4) Measures to Prevent Erosion of Red Soil

There is a concern of environmental impact caused by the erosion of red soil to rivers and the sea along the coastline of the Amami Island Group at each kind of development; measures to prevent red soil erosion are now implemented based on the "Keys of Prevention of Soil Erosion" (by municipal offices), Measure of Prevention of Red Soil Erosion of the Oshima Sub-prefectural Office (by the prefectural government), and the Practice Standard of Soil Erosion by Development and Construction Projects in Tokunoshima Island (by the national government). Grit tanks will be set at each project, and research and investigation will be promoted.

Chapter 9: Efforts for Inclusion to the World Natural Heritage List

Section 1: Basic Concept

The World Heritage Convention is an international agreement to protect and conserve natural heritages and cultural properties having “Outstanding and Universal Value”. On the other hand, it also attracts attention as a measure of regional activation such as sight seeing and contribution to identity in each region.
The Amami Island Group has unique natural environments including subtropical broad-leaved forests, endemic and endangered wild fauna and flora, and coral reefs with rich diversity. These “treasures” of Amami are highly valuable throughout the world; and the Review Committee on Candidate Natural Sites for Nomination to the World Heritage List held in 2003 chose the Islands as one of the regions that have great potential to meet the requirements for inclusion to the List as regulated by the World Heritage Convention.
Inclusion to the List requires setting a framework of conservation and utilization of the “treasures”, thus consensus building with local residents will be the keys as they are regarded as the main entities of conservation and utilization. The “Opinion Survey” indicates that many natives and inhabitants of the Amami Island Group support the Inclusion to the List based on consensus with residents.
In this context, efforts aiming toward Inclusion to the List will be positively promoted.

Section 2: Implementation of Measures

1. Measures to Ensure Conservation

(1) Necessity of Measures to Ensure Conservation

For inclusion to the List, the World Heritage Committee examines properties nominated by countries with criteria of natural features including topography, soil type, ecological system, and biodiversity. Besides these criteria, it also requires that a property must have a measure to ensure its protection not to damage the value based on laws and regulations. Namely, no matter how valuable a property is, it is not included to the World Heritage List without sufficient measures to inherit the value in the future.

The Amami Island Group sufficiently meets the criteria of natural features; the Review Committee acknowledged that the Ryukyu Chain including the Amami Island Group meets the standard criteria of topographic feature of an arc-trench system, ecosystem widely and mutually related to subtropical broad-leaved forests and coral reefs, and diverse beauty of landscapes. The committee also pointed out that the endangered wild fauna and flora including endemic species is especially valuable as the center of a World Natural Heritage Site.

On the other hand, however, the committee indicated that it requires setting of more protection areas for habitats of endangered wild species regarding measures to ensure conservation based on laws and regulations.

Therefore, in order to aim toward inclusion as a World Natural Heritage Site, it is necessary to provide satisfactory measures to ensure conservation from the viewpoint of biodiversity for important areas, in particular habitats of endangered species.

(2) Discussion on Measures to Ensure Conservation

Inclusion to the Lists requires; firstly, institutional establishment of protected areas with a certain level of areas of effect in important regions, and secondly, establishment of management plans regarding such protected areas.

Concerning establishment of protected areas, areas subject to protection will be identified, and existing protected areas will also be reviewed and expanded. Protected areas such as National Parks for which the national government is responsible will be designated by the national government.

To realize the integrated management of regions subject to the properties, national, prefectural, and municipal organizations will work cooperatively and management plans will be formulated in collaboration with each other. The management plans will include management policies, establishment of protected areas, management systems such as liaison committees, and management projects such as restoration of nature.

2. Development of Base for Inclusion

(1) Collaboration of Various Entities

Efforts for inclusion to the World Natural Heritage List shall be promoted not only at the national level, but

also prefectural, municipal, and community levels, with collaboration with various and diverse entities. As the Review Committee selected the candidate site including Okinawa Island Group, collaboration with Okinawa Prefecture will be the key of implementation of such efforts.
To ensure the collaboration of various entities, a liaison committee will be formed to discuss operational aspects of actions for inclusion. Consensus building with local communities will be promoted through workshops with participation of local NPOs and residents as well as open learning courses of nature in the Amami Island Group.

(2) Promotion of Investigation and Research

Scientific information about nature in the region is inevitable to promote the inclusion to the World Natural Heritage List. Investigation and research activities will be encouraged to gather information about nature in the Amami Island Group; study groups consisting of experts will be established.

(3) Promotion of Exchange and Dissemination of Information

Symposiums will be held with participation widely from both inside and outside the Islands to implement opinion exchange with other domestic regions and international exchange regarding efforts for inscription to the World Natural Heritage and display of measures after inscription. As conservation and utilization of natural environments will require proactive participation of local communities, local residents' opinions will be positively encouraged to be disseminated at such conferences.

(4) Expectation for Residents as the Main Actor

It is anticipated that implementation of efforts for inscription to the World Natural Heritage Sites will activate exchange with parties outside the Islands, and opportunities to attract attention from outside will increase. From the viewpoint of those outside the Islands, it is important to maintain landscapes and scenery suited to the World Natural Heritage Sites in the non-protection areas. Attracting attention from outside the Islands will raise residents' awareness, and it is expected that it will stimulate motivation towards inclusion to the World Natural Heritage Sites.
Based on these circumstances, development of landscapes and sceneries suitable to the World Natural Heritage will be promoted through efforts with residents' positive participation.

4-36 Kagoshima Prefecture Tourism Promotion Basic Policy

Basic Policy of the "Kagoshima prefectural ordinance for a tourism-oriented prefecture." (Excerpt)

Part 1 Basic Objective

1. The definition of "tourism-oriented prefecture"

Currently our country is encountering a major transformation period in every aspect of society. We are experiencing rapidly progressing globalization, full-scale population decline and the onset of a quickly aging society. In our prefecture, there are specific concerns of the decline or regional vitality due to depopulation of rural areas and the aging population.
On the other hand, our prefecture is blessed with "authentic" resources, such as rich biodiversity, beautiful natural landscapes, distinctive history, culture, and diverse ingredients for food.
We also believe that in this era of Asia, this prefecture has a huge geographical advantage because it is the opening to the south, and has the potential to make a great leap as a gateway to Asia in the future.
Tourism is vital to the health of our region. Also tourism benefits a wide range of related industries such as agriculture, forestry, fisheries, and other commerce. The promotion of tourism will improve the local economy by bringing more people to our area, and will also create and increase employment opportunities, or participation in the local economy.
In addition, to economic benefits, the process of various efforts to promote tourism will offer a great opportunity to rediscover our heritage and showcase the natural environment, scenery, history, and culture of our area. We can also bring attention to the area by promoting the regional motto, "Good to live, good to visit." By doing so, it is expected to lead to the creation of a sustainable and developmental community.
By promoting tourism, we will create a rich and vibrant community and society. Our goal is to build upon and improve the sustainable development of the regional economy. It is our belief that the combined efforts of the contributing local entities and tourism-related organizations will steadily advance the creation of a community that is respected by other districts in each prefecture. This will greatly contribute to the establishment of a "powerful Kagoshima".
In order to establish Kagoshima as a "tourism-oriented prefecture", it is important to accurately understand tourism demands. By assessing demands, we can better design our tourism promotion policies and corporate activities to meet customer needs. With this in mind, we must develop tourism products and services that match customer demands, and promote effective attraction activities. We also believe that it is necessary to advance strategic initiatives such as the promotion of environmental management.

2. Background and purpose of formulation

In March 2008, the "Kagoshima Future vision" was formulated, which outlines the medium and long-term status of this prefecture as well as the future direction. This vision states that Kagoshima should be seen as a sightseeing destination that fascinates the world and outlined the future ten-year vision for Kagoshima.
In addition, in March 2009, The "Kagoshima prefectural ordinance for tourism" (hereinafter referred to as "the ordinance") set out the basic items of each role and measure.
It states that every citizen of the prefecture should deepen their understanding of the "tourism-oriented prefecture ", and accept responsibility to educate future generations, and cooperate and collaborate with prefectures, municipalities, prefectural citizens, tourism-related business operators, and tourism-related organizations in order to deeply understand the "tourism-oriented prefecture ".

The Kagoshima Prefecture Tourism Promotion Basic Policy (hereinafter referred to as "the Basic Policy") is a complete and comprehensive measure and policy in order to achieve "Kagoshima's Future Vision" and promote tourism in Kagoshima. In the fiscal year 2009, public comments will be implemented and discussed at the "Kagoshima Prefecture Tourism Promotion Council" per ordinance and voting at the prefectural assembly. After the decision was made, the Basic Policy will be planned to establish the timeframe for 2010 to 2014 and move ahead on policies and measures, and now various measures are being worked on.
Also, the current Basic Policy is being followed, and the next Basic Policy is being created. Based on this Basic Policy, municipalities, citizens, prefectural citizens, tourism related business operators and tourism related organizations are working together in order to establish a "tourism-oriented prefecture in Kagoshima". Measures aimed at the goal will be promoted.

3. Characteristics of Basic Policy

The Basic Policy is based on the philosophy stipulated in the ordinance. It outlines the future ten-year vision for Kagoshima. Its purpose is to meet the goal of establishing a "tourism prefecture in Kagoshima."
In addition, the Basic Policy includes the responsibilities of the prefecture, municipalities, citizens, tourism-related business operators, and tourism-related organizations to recognize and respect each other's characteristics, roles and to unite in order to establish a "tourism prefecture in Kagoshima". It is a guide (guideline) to comprehensively and strategically accomplish the establishment of a "Tourism prefecture in Kagoshima".

Part 4 Action Guidelines to Establish "Tourism-Oriented Prefecture in Kagoshima"

Each region must play a role and take responsibility in creating regional tourism. These responsibilities are not limited to the tourism industry. Various entities performing diverse projects and activities share the mission and purpose for the region while trying to cooperate beyond the boundaries of industry.
For these reasons, using the following five action guidelines as a basic viewpoint to establish a "tourism prefecture in Kagoshima will be fulfilled."
All parties responsible for sightseeing share a score based on these areas and are required to play their respective roles.

1. Designing an area

○ Determine the resources unique to the region such as local nature and landscapes, history, culture, food, traditional arts, etc and explore their charms from the viewpoint of sightseeing.

○ Aim to construct diverse tourism selections that enhances regional attractiveness, such as narrative and thematic trips that take advantage of regional characteristics.

2. Deliver the message from the region

○ Deliver a consistent message by having a common understanding of the vision.

○ Understand the views of the audience and create a strategic plan to disseminate information.

3. Connect regions

○ Facilitate collaboration within the regions, strengthen ties between organizations and industries within the regions, and link tourists with people living in the areas. This will lead to the creation of new regional attractiveness.

○ As regional partners promote improvements and enhancements of the traffic access connecting the regions, and focus on wide-area tourism, so that each region mutually complements each other. This will enhance the attractiveness of the whole area and synergistically expands each region throughout the area.

4. Hospitality in the region

○ Everyone who visits should do so with peace and comfort. Aim to be a tourist destination where travelers feel they want to visit again. The goal is to foster a feeling of hospitality that warmly welcomes tourists which spreads to the whole area.

○ Based on the recognition that "people are important regional resources", discovering and developing human resources who see the attractiveness of the region by providing high quality training regarding specific features of the community will proceed.

○ Provide information and services required by tourists, enhance functions of automated tours, etc, and prepare destinations corresponding to the needs of tourists throughout the region.

5. Protect the regional environment

○ This region of Japan has a lot of biodiversity that naturally attracts tourism. It is necessary to utilize the natural environment through protection.
○ In addition to protecting the natural environment; protection of the residents' lifestyle environment is needed. It is greatly desired to create a mutual feeling that this region is a good place to live, visit, and share the experience of this region's rich history and culture.

○ Using Yakushima (famous as a World Natural Heritage Site) as a model, environmental conservation and development of the region in harmony with the environment will be actively engaged.

○ Aim to show the world-renowned natural heritage of the Amami Island Group. Each island is different in its flora and fauna. Actively promoting the Amami Island Group as a World Natural Heritage Site, Kagoshima can establish the image of creating a tourist destination that coexists with the natural environment.

Part 5 Measures to Establish "Tourism-Oriented Prefecture in Kagoshima"

Section 2 Direction of measures

Oshima region

Amami-City, Yamato-Village, Uken-Village, Setouchi-cho, Tatsugo-cho, Kikai-cho, Tokunoshima-cho, Amagi-cho, Isen-cho, Wadomari-cho, China-cho, Yoron-cho.

≪Regional characteristics≫
There are the following attractive tourist resources.

○ The subtropical climate and rich natural marine environment of Kinsakubaru the original natural forest, Oshima Strait, Mt. Yuwandake, Inutabu Cape, Mushiroze, Fu-cha (cave), Yurigahama (beach), Tebiro-kaigan (Tebiro coast), and rare plants and animals such as the Amami rabbit.

○ Local produce such as authentic Oshima-Tsumugi weave (type of pongee), Kokuto-Shochu (liquor distilled from brown sugar), tropical fruits and local foods such as Keihan (dish of seasoned chicken with rice, pickles, etc.)

○ Various traditional festivals and events such as Shodon Shibaya, Agina's Arasetsu festival, Yoron Island Jyugoya dance, Shima Uta (Shima song), Hachigatsu Dance, Bullfights and iron man race

○ Historical resources such as Ushuku Kaizuka and Sumiyoshi Kaizuka, which are designated as historical sites by the government

○ Amami Park, Tanaka Isson Memorial Museum, Thalasso Amami no Ryugu, Kuroshio no Mori Mangrove Park, Hyakunodai Park, ShoRyuDo, and unique tourism-related facilities such as the forest of the Amami Nature Observation.

Having these attractive tourism resources as a background adds to this region's already existing healing characteristics.

≪Direction of measures≫

We will proceed with the development of the region by maintaining the natural trails in harmony with the natural environment while working on the World Natural Heritage registration of the region in collaboration with Okinawa. Based on the characteristics of the region, this area can promote its rich and unique environment and culture such as ocean recreation and cultural-based song to the island (Shima song).
We will promote LCC (Low Cost Carrier) services and establish an acceptance system compatible with cruise ships. These systems will include a formation of wide-ranging tourist routes within the Amami Island Group. We will promote unique foods and healing therapies such as thalassotherapy; which will appeal to various groups such as sport camps.

Section 3 Expansion of measures

Based on the "system of polices" in the prefecture, the following measures base on Part 4 "Action guidelines to establish tourism-oriented prefecture in Kagoshima" will be developed.

Creating a tourist region with attractive healing benefits

In order to create a competitive tourist attraction the unique characteristics of each area (both city and nature) will be utilized by conserving the rich natural environment. This will create an ideal tourist destination for those looking for healing through nature and food because it is in harmony with nature.

①The conservation, utilization and creation of regional tourism resource

We aim to create and enhance new travel products unique to Kagoshima that accommodates the diverse tourism needs through the preservation of rich natural beauty and culture of the area such as story telling of the

area’s history and the conservation of natural resources with cooperation among government, industry and academia.

< Examples of implemented measures >

○ Promotion of various events utilizing the resources unique to the areas

○ Promotion of utilization of the historical heritage and culture as tourist resources

○ Promotion of the establishment of transportation routes, connecting each tourist resource in the region.

○ Promotion of development and economic stimulus in a variety of communities in the region

○ Promotion of utilizing cultural art centers

②Securing high-quality services that make full use of local strengths

The highest quality services will consistently be promoted by working closely with a wide range of industries including agriculture, forestry, fishery, and manufacturing. The goal is to create unique products produced by using local foods, nature, and ancestral know-how with these products and services.

< Examples of implemented measures >

○ Promotion of utilization of local agriculture, forestry, and fishery products cooperated by producers and tourism-related business operators

○ Creating a brand of 'Kagoshima's food' that is safe and secure

○ Promotion of value added local produce

○ Promotion of value added tourism such as the allocation of tour guides

③ Maintenance of tourism-related facilities

In order to make it easier and more comfortable for tourists to visit, we will promote improvements of roadsides and city scenery. Create easier access to transportation networks (bus, train, etc.), as well as domestic and overseas flights.

< Examples of implemented measures >

○ Promote maintenance and improvements of streetscapes unique to the cities, urban areas, parks, waterfront environments, etc.

○ Improvement of public transportation networks connecting both domestic and overseas areas, as well as enhancing regional public transportation networks, and the maintenance of highways.

○ Improve tourist access and convenience of the Osumi area; known for Cape Sata and its surrounding areas which is a famous nationwide tourist destination located at southernmost tip of the mainland.

○ Promoting the development of tourism-related facilities

④ Development of new types of tourism

Various types of exchanges of tourism through interactions with the local people, life, culture, etc; in relations with the seasons, and cultural history of the area will be promoted.

< Examples of implemented measures >

○ Promote new types of sightseeing tours such as community-based tourism, green tourism, blue tourism, ecotourism, walking tours, and industrial tourism.

○ Promotion of new tourism, that focuses on long staying visitors for the purpose of healing and beauty.

⑤ Conservation of the environment in tourist spots

A sustainable tourist resort will be created and promoted, as well as the utilization and conservation of natural tourist resources, maintenance of enriched biodiversity, and beautiful tourist destinations. Efforts are also being made to register the Amami Island Group as a World Natural Heritage.

< Examples of implemented measures >

○ Promote harmonious interactions between the natural environment and tourists.,
- ∗ Promotion of ecotourism
- ∗ Maintenance and management of natural sidewalks and preservation of the natural environment
- ∗ Awareness of environmental issues and the manner of how they should behave

○ Promotion of environmental preservation by hosting activities such as preservation of natural environment and wildlife at tourist destinations

○ Planned tourism management - Zoning protected areas and buffer areas in tourist destinations

○ Management and preservation of natural parks.

4-37 Master Plan of the Amami Island Group Sustainable Tourism

1. Beginning

1.1 Background

"The Master Plan for sustainable tourism in the Amami Island Group (hereinafter called "The Master Plan") is a policy to actively promote "the sustainable utilization of tourism" in the Amami Island Group. Promoting local sustainable tourism associated with the preservation of the natural environment in a planned and consistent manner, utilizing local resources. The aim is the preservation and succession of environmental culture[1], and the promotion of the local economy and society.

(1) Why promote sustainable tourism?

Sustainable tourism seeks the sustainability of society, economy and environment, and is a new style of tourism expecting to replace mass-tourism.[2] Mass-tourism is a phenomenon in which tourism used to be limited to the rich, but has spread more widely to other economic classes[3], and has recently been referred to as the "mass tourism phenomenon"[4]. Mass-tourism, which brings a large number of people has been giving great impact to tourism sites and their surroundings. This has caused the destruction of the natural environment, local communities and their traditions, and also troubles of inappropriate tourist facilities, in which the lack of manners and ignorance of the tourist was highlighted. In reflection of these problems, new modes of thought "Alternative tourism" and "Appropriate tourism" were generated in the 1980s, instead of mass-tourism.

Based on the principle of "sustainable utilization of local resources" and "coexistence with nature", new local community development in the Amami Island Group aims toward the realization of a sustainably fulfilled local community. Aiming toward "sustainable tourism" as one aspect of local development means to show "objectives which are easily understood and make effort" toward local people. In "tourism" programs which local communities are proactive in doing, there are many people engaged, not only tour agencies but also local people, and it directly contributes to the promotion of the local community and economy.

Therefore, aiming for the realization of sustainable tourism in the Amami Island Group through the use of the Master Plan Guide will help ensure the sustainability of the local nature, culture, economy and community while using "tourism" as a tool which is very closer to the relevant local constituencies.

We will positively use the Master Plan as a tool to preserve the natural environment and the succession of the environmental culture, which has been greatly changed by World Heritage registration, as well as to pursue the promotion of the local community and economy. The Master Plan is one of the ways of thinking to develop "a

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1 Environmental culture: It is the relation between nature and people, which built up for many years, and it is the local life and culture that people formed while getting meal without destructing nature.

2 *"Towards the sustainable earth from self-sustaining tourism~Challenge of the ecotourism~"* (tentative translation title), Shikida Asami. Research Faculty of Media and Communication, Hokkaido University, Series of researches 70, 2008

3 "JTB Tourism Research & Consulting Co.", http://www.tourism.jp/tourism-database/glossary/mass-tourism/ (Access date: 2016/3/15)

4 *"A Study on Requirements for "Sustainable Tourism": Two Process for Constructing the Concept,* Miyamoto Yoshinori. Aichi Toho University publication, Vol.38,2nd issue, December, 2009

new local community" where various local proactive agencies use tourism as a method and they will be connected for the preservation of the natural environment and promoting and improving the wealth of the Amami Island Group.

(2) What is sustainable tourism in the Amami Island Group?

Reflecting on the negative effects of mass-tourism, new tourism types such as ecotourism and green tourism were born.

Ecotourism is defined as "the experience and study of the natural environment while minimizing the burden of it, and providing appropriate benefits and contributions to local destinations of tourism sites (Shikida, Shigemori, 2003)", "The idea of tourism to experience and study the subjects of natural environment and historical culture, and have the responsibility for preserving the natural environment and historical culture of local target tourism sites, (Ecotourism Propulsion Council, 2003~2004, Ministry of Environment)" and so on. The aim is to preserve the natural environment while promoting the tourism industry and local community. However, promoting tourism types like ecotourism and green tourism are not necessarily equal with achieving sustainable tourism. The causes of the negative effects of mass-tourism, which have been considered problematic, are not popularization and extension of tourism, but it because that tourist industry kept going without preparing proper structures to reduce bad effects toward tourism related sites and people. In the existing mass-tourism model, the aim is to pull in excessive amounts of customers in the short period in the pursuit of profits by outside constituents, which tends to progress the commodification of local resources, regardless of the local community's intentions. Usage by many people or groups of people, which is the characteristic of mass-tourism, brings great economic effect to local sites.

If ecotourism only had formal characteristics such as "small number of people-based", "experience-based" and "community-based", its might give a lot of burden to tourism sites like the existing mass-tourism system. Furthermore, depending on the planning, even mass-tourism can be sustainable, and it brings great positive effects to the local economy, utilizing the advantages of it. On the basis of prior experience, the promotion of tourism from a viewpoint of the community development should be considered, and it is necessary that local community manage it by themselves.

According to our experience, to make the Amami Island Group tourism sustainable, it is important to clearly divide into distinct areas for the usage of both large (mass-tourism) and small groups of people, and it is important to manage local tourism appropriately by using each area's uniqueness.

1.2 Definition

Since the Amami Island Group has been registered as a national park and World Natural Heritage Site, approaching the local society's sustainable development, while the protection and succession of diverse rich nature and environmental culture is demanded. Therefore, to cope with the change of local society and economy after the heritage registration, it is important to promote a new "building local community" based on the heritage value principle of the preservation of the natural environment. This Master Plan is defined as a common guideline among relevant related authorities, namely the central government, prefectural governments, municipalities and private sectors, to promote "Systematic tourism management", which is one of the strategies of the Amami original community development. Through promotion of the sustainable usage of tourism, we seek preservation and succession of the Amami's peculiar nature and environmental culture, and sustainable development of the community.

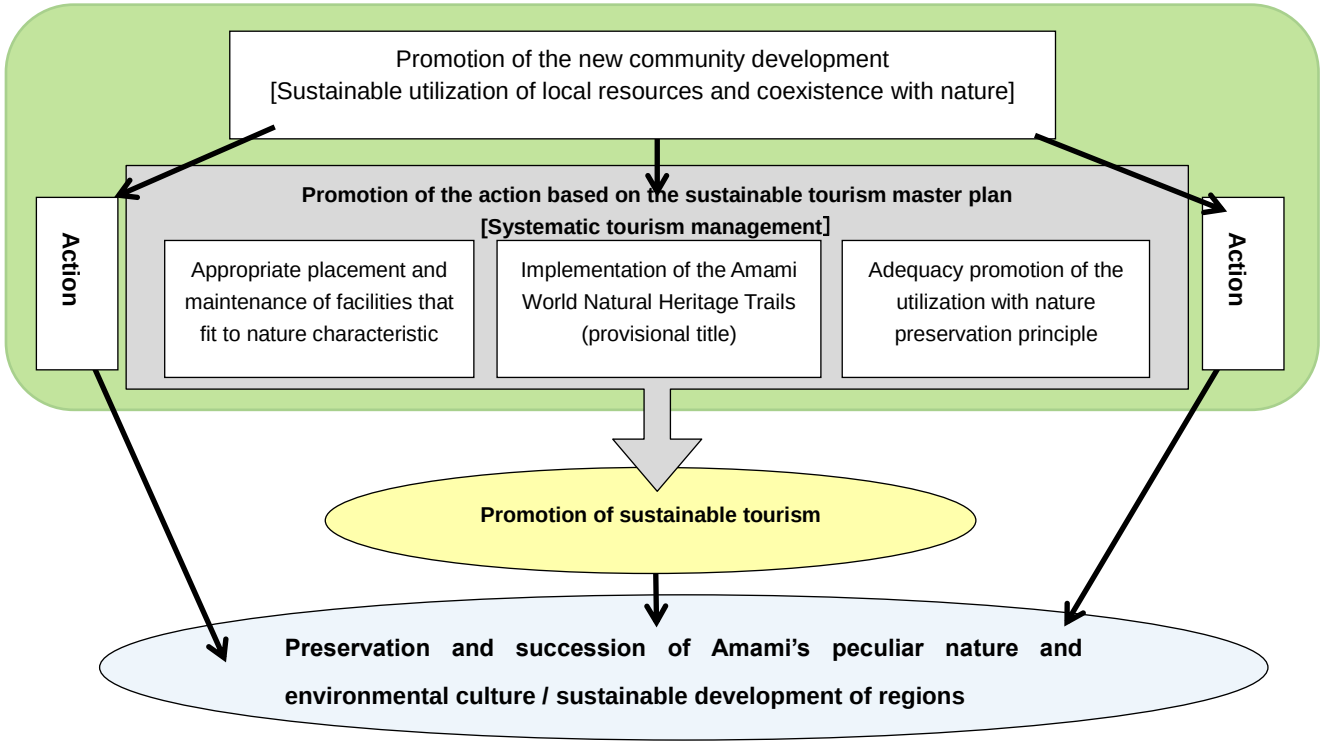

Figure 1 Framework of the Master Plan

2. The recent conditions and problems of the Amami Island Group

2.1. Nature and life

The original rich natural environment has been preserved, and the livelihood and faith at Shima (village) continued having a close relationship with the natural environment. You can experience it in the current lifestyle, and deep environmental culture in the community. This experience becomes an attractive reason the Amami Island Group.

(1) Biodiversity in Kagoshima prefecture

Through 600km from Shishijima Island (northern edge) to Yoron Island (southern edge), there are mountain areas, which are over 2,000 meters above sea level in Kagoshima, and you can see the vegetation of cool-temperate, warm-temperate and subtropical zones. It corresponds approximately to an expanse from Hokkaido to the Nansei-Shoto Islands. Kagoshima is the both northern and southern limit of many kinds of species along Japanese islands. In Kagoshima, there are many islands having a long history after isolation from the main island. Therefore, almost a half of wildlife species, which are seen in Japan, can be confirmed, and they contain a variety of rich species. In addition, Kagoshima prefecture belongs to two biogeographical regions separated by Watase's Line[5], which cuts through the Tokara Islands. Biogeographical regions are divisions of the Earth's land surface, based on the distributional patterns of terrestrial organisms. The warm-temperate group of organisms locates on the north side of Watase's Line, and the subtropical group of organisms locates on south side of it.

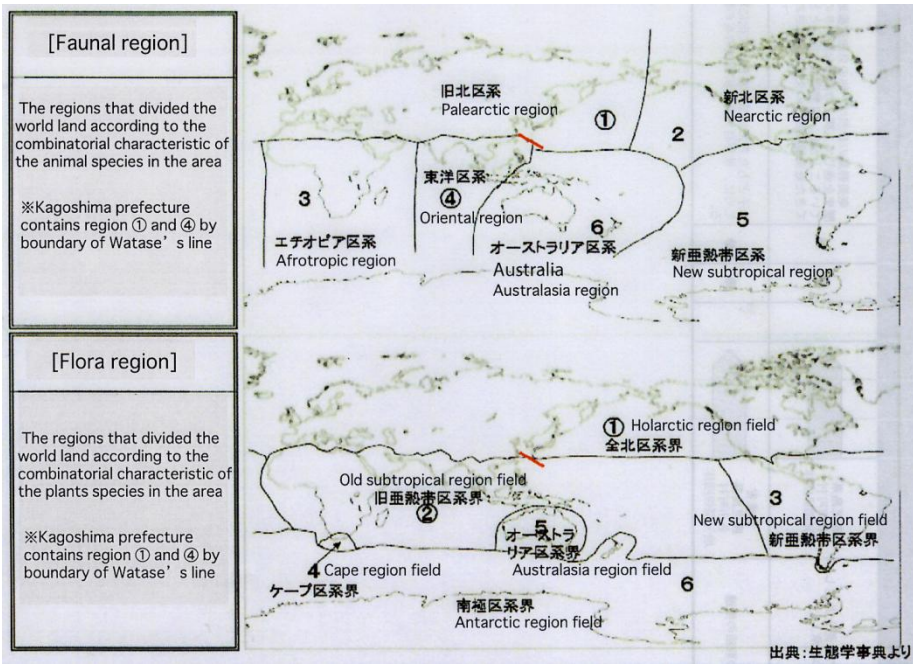

Figure 2 World Biogeographic Region (Red line is the Watase's Line: between Akuseki Island and Kodakarajima Island)

[5] Watase's Line: A biogeographical regional line that cuts through the Tokara Islands to the east and the west which is located between Yakushima, Tanegashima Island and The Amami Island Group. It divides two biogeographical regions. Biogeographical regions are divisions of the Earth's land surface, based on the distributional patterns of terrestrial organisms. They were confirmed by the zoologist, Shozaburo Watase, and named after of him. It is an important boundary line for the distribution of Japanese flora and fauna.

(2) History of the Amami Island Group

The Nansei-Shoto Islands, which include the Amami Island Group, are located on the border of the Eurasian plate and the Philippine sea plate, and it was formed by the formation of the Okinawa trough 15 million years ago, a series of ridges and troughs created by crustal movement, the change of the sea level due to climate change from 1.7 million years BCE, and sedimentation of the Ryukyu limestone with the development of the coral reef.

The current Amami Island Group contains eight inhabitant islands, Amami-Oshima Island, Kakeroma Island, Yorojima Island, Ukeshima Island, Kikaijima Island, Tokunoshima Island, Okinoerabu Island and Yoron Island.

(3) Nature environment

① Geography: A variety of scenery and organisms on every island.

Among the Amami Island Group, Amami-Oshima Island (including Kakeroma Island, Ukeshima Island and Yoro Island) and Tokunoshima Island are relatively high-altitude islands with precipitous mountains. These islands have few flatlands and most of the land areas are covered by forest. The dominant tree species are evergreen broadleaf trees such as Castanopsis, *Distylium racemosum*, *Schima liukiuensis Nakai*, *Quercus miyagii* and *Amamiana hatusima*. Because there are many mountains, there are also many valleys, and swamps with enough water volume and small rivers are frequently seen in these islands. In addition, Kuroshio warm current and monsoon, which flow through the coast, brings rain. Near the northern latitude of 27 and 28 degrees where the Amami Island Group is included, there are countries such as Pakistan, Saudi Arabia, Egypt, Morocco and Mexico. There are not so many areas that have a large of amount of precipitation and richly developed forests at this latitude, like the Amami Island Group. The Amami forest is a humid laurel forest that only exists in very limited areas in the world's subtropical zone, and it is a rare area in the world. These forest are not only the habitation of many wild animals and plants including endemic species, but also delivering organic substances and nutritious salt to mangroves, tidelands, seaweed beds and coral reef by river flow, which is the basis of the ecosystem of the Amami Island Group.

Mt. Amagidake Waterfall (Tokunoshima Island)

Gregariousness of Otani-watari: Asplenium antiquum (Yuwan river, Amami-Oshima Island)

Subtropical evergreen broadleaf forest (Amami-Oshima Island central forest road)

Figure 3 Evergreen broadleaf forest of the Amami Island Group

On the other hand, Kikaijima Island, Okinoerabu Island and Yoron Island are lower flat islands, which are created by the Ryukyu limestone from the original coral reef. Kikaijima Island is continuing to rise at the speed of 1.5m per 1,000 years. Even though there are evergreen broadleaf forests such as those on Amami-Oshima Island and Tokunoshima Island which are spread around the Hyakunodai (203.2m above sea level), Kikaijima Island's highest point and Daisen (240.1m), Okinoerabu Island's highest peak, you can see typical subtropical ocean areas and undersea scenery around coastal places of these islands, such as coral forests and mangroves. Furthermore, there are a lot of calcareous caves underground on Okinoerabu Island and Yoron Island. As described, the Amami Island Group has a variety of sceneries on each island.

Hyakunodai hill
(Kikaijima Island)

Shoryu-do limestone cave
(Okinoerabu Island)

Terasaki beach (Yoron Island)

Figure 4 Sceneries of Kikaijima Island, Okinoerabu Island and Yoron Island

②Endemic species

The Amami Island Group was formed by repeated separation and combination with the Eurasian continent. In the process of establishment a small island group was separated by the ocean, Terrestrial organisms, which were inhabitant of these areas, were isolated in those islands. In these organism groups, some species became extinct on the main continent but survived only in islands, and some of them differentiated in several species after the isolation from the continent. In this way, organisms were born and it became endemic species that only exist in Ryukyu Chain now.

1,334 species of vascular plant (included 68 kinds of endemic species), 14 species of mammals (included 10 kinds of endemic species), 257 species of birds (included 2 kinds of endemic species), 18 species of terrestrial worms (included 13 kinds of endemic species), 13 species of amphibian (included 4 kinds of endemic species), 3,824 species of insect (included 1038 kinds of endemic species), 23 species of freshwater crustaceans (included 4 kinds of endemic species), 226 species of land-freshwater-brackish snails (no information of endemic species) have been confirmed in the Amami Island Group. For example, *Rhododendron latoucheae var. amamiense*, *Lilium alexandrae*, *Calanthe amamiana* as endemic species of plants, and Amami rabbits, Ryukyu

long-furred rats, Amami spiny rats, Amami Thrush, Amami jays, Ryukyu grounded geckos, and Ayu fish as endemic species of animal, are included as the Amami Island Group origin organisms.

③Diversity

At the northern part of the Amami Island Group and between Tokara Islands and Kodakarajima Island, there is a boundary line of the biogeographical region called “Watase’s Line” that is the distribution border of varieties of organisms which are gathered, and it is the both southern and northern limits of most of the species.
Accordingly, 132 kinds of plants are assumed in the Amami Island Group as the northern limit. The representative animals, such as Okinawa habu and Okinawa pit viper defines the Amami Island Group as the northern limit, and organisms that cannot be seen on the mainland are living and existing. On the other hand, some northern organisms, which also have seen on the mainland, are also distributed, and twenty kinds of plants assume the Amami Island Group as the southern limit.
According to the above, various elements including the coexistence of organisms from north and south, rich precipitation and moist environment, a history of separation and independence from the continent, create a variety of biota in the Amami Island Group.
There have been approximately 37,000 confirmed organism species in the entirety of Japan, and 5,716 species out of that number are confirmed in the Amami Island Group. Approximately 16% of domestic organism species are confirmed in the Amami Island Group, which is only 0.3% of Japan’s land.
In addition, the Islands group is an important stopping point, wintering place and breeding site for wide-area mobility animals, such as sea turtles’ spawning place, sea birds’ breeding area (Sterna and Bulwer’s petrel), butterflies’ wintering place for Chestnut Tiger butterflies, and marine mammal’s breeding site for dolphins and whales. In the marine area, there are 220 species of hearmatypic coral, and it is forming a typical habitation place for a variety of organism for fish, shellfish and crustaceans. It is an important northern limit location in the world, which has a coherent scale and certain biodiversity of coral reef.
Due to the flora and fauna like above, rich marine biota have also become a factor to improve the biodiversity of the Amami Island Group.

Rhododendron latoucheae var. amamiense

Amami rabbit

Green turtle

Figure 5 Characteristic flora and fauna of the Amami Island Group

(4) History

①Local life and culture

It is thought that human beings have been living in the Amami Island Group since 25,000 years BCE. There have been excavated stone artifacts from the Tsuchihama site in Kasari-chō, Amami-Oshima Island and the

Garasao site in Isen-chō, Tokunoshima Island, and these archeological sites are estimated to be older than the Stone Age, 25,000 years BCE. It is an unusual fact in the world that people already existed in this area before other people had started to live in other islands in the world, after 10,000 years BCE.

Generally, islands don't have enough food resources, so only agricultural people tend to be the first living populations. However, it is considered that an existence of the hunter-gatherer had continued until the Gusuku era from the 8th to the 12th century. Exceptionally, in the islands around the world, the hunter-gatherer have existed in places applicable to one of the conditions or plural numbers as follow; ①large land size like Japan's main island, ②closer to a continent,

③where large marine mammals are available (food purposes), and ④ those who brought in organisms from the continent. It is considered as a very rare example that the hunter-gatherer was able to settle in the small island like the Amami Island Group, which is a remote area from the continent. Natural destruction such as the deforestation and animal extinction happens when a person enters an island, but it was more likely minimal in the Amami Island Group. Since the prehistoric age, the people of the Island continued living together with nature for a long time without causing depletion of resources and environmental deterioration, and have been using resources stably. The hunter-gatherers and the later agricultural people in the Amami Island Group, continued living life in harmony with the natural environment, and it can be called as sustainable life in present terms.

The rich natural environment of today's Amami Island Group existed mostly by local life and the culture that the wisdom to live of creating balance between human and nature, and the art of living are fully applied.

Traditional event to pray for the production of grain, Shyochogama (Amami-Oshima Island)

Stone wall of the coral (Aden village, Kikaijima Island)

Traditional bullfighting (Tokunoshima Island)

Figure 6 Life and culture of the Amami Island Group

②Interchange and trade

The shellfish bracelet, which was found at a Yayoi period site in Kitakyushu, was made from a large shellfish (strombus latissimus, cone shell) of south sea origin. According to this, the Amami Island Group was the south sea's special large shellfish supplier, and it had been recognized as a long-distance trade post since the Yayoi period.

During the Heian era, a great-green turban appeared in the diary of imperial court nobles, and it became raw materials of the domestic Raden[6]. Since the great-green turban was only available from the Ryukyu Chain, it is

[6] Raden: A Japanese decorative method that uses the cut linings of mother-of-pearl to fit into the surface of engraved

highly probable that it was the source of the material. Moreover, the great-green turban was an important export material of trade between Japan and the Sung Dynasty China. Based on these factors, there was an exchange between the Amami Island Group and mainland through shellfish trade from the Yayoi and Kofun period. At the Kamuiyaki kiln site in Isen-chō, Tokunoshima Island, unglazed ceramics with a gray surface were excavated, which were made mainly between the 11th and the 13th centuries. The distinctiveness of this ruins site is that 11 kiln sites (more than 100 kilns) were distributed in a very large forest of approximately 120 hectares. Since the Kamuikiya was carried from South Kyushu to Sakijima Islands and products of Kyushu were brought to the Ryukyu Chain with the Kamuikiya. It is obvious that the Amami Island Group performed the important function to be the base of trade to bind Kyushu and Okinawa Island together.

Furthermore, at the Gusuku archeological site of Kikaijima Island (with the peak between the 11th to the 12th century), many of the old ceramics excavated were brought from China and the Korean peninsula, and a lot of large-scale buildings and many other remains were discovered. Basically, these remains were brought from outside of the Island.

Therefore, the Gusuku archeological site is assumed to be the transborder of the trade base, where people from the Goryeo, the Sung dynasty and mainly from Kyushu stayed. The possibility is suggested that the surroundings of Kikaijima Island were a connecting place for large-range trade in the East China Sea, which was from the southern China to the Nansei-Shoto Islands, Kyushu and the Korean peninsula.

(5) The complicated administration and the unique culture

The Amami Island Group had an unusual historical transition, which was administrated by the Ryukyu kingdom in the 15th century. It belonged to the Satsuma governance from 1609, and was registered to mainland Japan after the Meiji period, governed by the US armed forces in the postwar period, and returned to Japan in 1953. From its historical background that was affected by many countries, the Amami Island Group has developed a unique culture with strong individuality, which coexists with and assimilates characteristics of various cultures. In addition, looking at the Amami Island Group from the view of local life and culture, there is common space recognition, such as the Kaijin (God of sea) that comes over from the Utopia of the distance of the sea to bring fertility, The Kamiyama (God of mountain) that is located behind the village to protect it, a water resource and farmland for the food of the Kamiyama, the Shin-do which is the God's road, and haunting of the Kenmun (yokai) in the neighboring forests and at the borders of villages.

Those are unique faiths and natural views of the Amami Island Group in which people have lived together with, and paying awe and respect to nature. The traditional culture and entertainment such as Shima-uta (Island song), Hachigatsu odori (dance in August), Hounen-sai (harvest festival), and Oshima-tsumugi (type of pongee), which represents the local industry.

Furthermore, there are cardinal rules of using neighboring nature sustainably, and wisdom and skills to make use of the circulation system in daily life in each village, even today. The lifestyle of Island people that live in nature with the feeling of awe and respect to nature has protected and succeeded the nature of the Amami Island Group.

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materials such as lacquer ware and woodwork.

However, the relationship between people and nature has been changing rapidly. Therefore, the Amami Island Group's unique traditional life and culture are not passed down enough among locals, and it is concerned whether it will be handed on to the next generation in the future. Nevertheless, local tradition still plays an important role in the Amami Island Group forming a basis of unique climate still now, and it is considered to be important for preserving and managing the natural environment that includes inheritance sites to the future.

2.2 The general condition of the use for tourism

(1) The number of visitors to the Amami Island Group

① The change of the number of visitors in the Amami Island Group

The total numbers of visitors to the entire Amami Island Group were 708,763 people in 2014, and it is increasing in recent years. This increasing tendency is most prominently visible on Amami-Oshima Island.

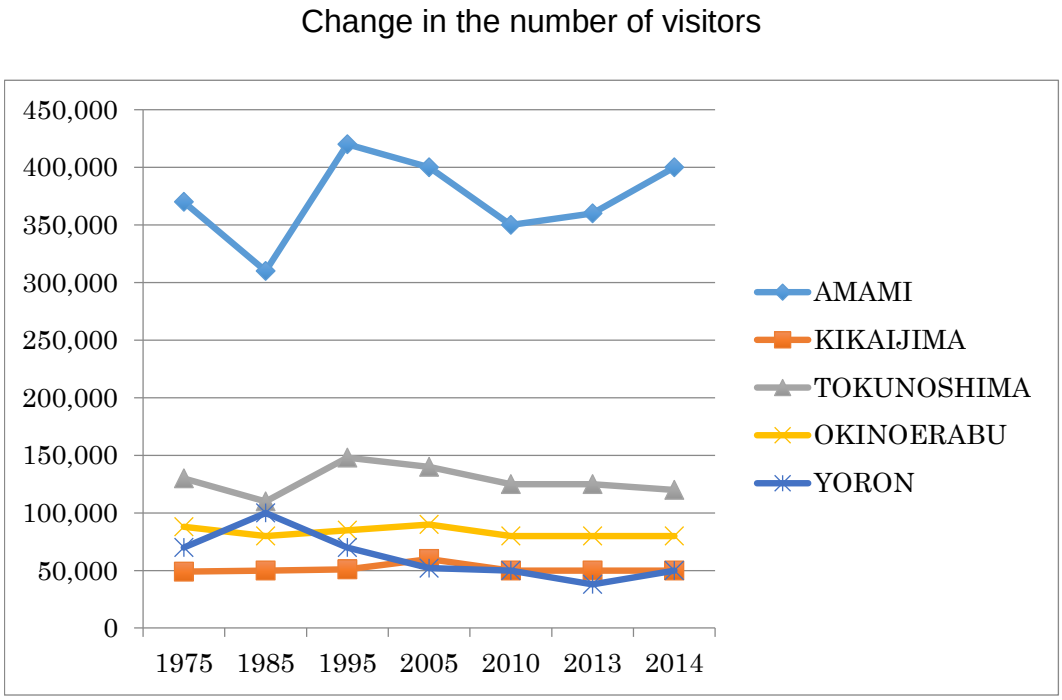


Figure 7 Change in the numbers of visitors

Reference: The general condition of the Amami Island Group in 2014: Oshima Subprefecture

② The total number of the foreign lodgers in individual regions

The numbers of the foreign lodgers from 2012 to 2013 increased nationwide, but it decreased in the Amami Island Group in 2014.

Table 1 The total number of the foreign lodgers in individual regions

2011			2012			2013			2014		
Entire Prefecutre	Amami	Composition rate	Entire prefecture	Amami region	Composition rate	Entire prefecture	Amami region	Composition rate	Entire prefecture	Amami region	Composition rate
85,280	1,287	1,5	138,120	785	0.6	186,600	1,116	0.6	252,330	1,093	0,4

Reference: Trend of tourism in the Amami Island Group (2011~2014) Kagoshima Prefecture

(2) Transportations and destination

①Traffic

According to the Road Traffic Census in 2010, the traffic in the center of Naze district and the northeastern part of the Island that connects Naze district and Amami Airport are heavy. On the other hand, the traffic in the southwestern part of the Island is light.

On Tokunoshima Island, on Isen-Kametsu Tokunoshima Airport road, which is the collecting road of cargo in the southeastern part of the Island, traffic is heavy. Traffic in the northern part of the Island is light.

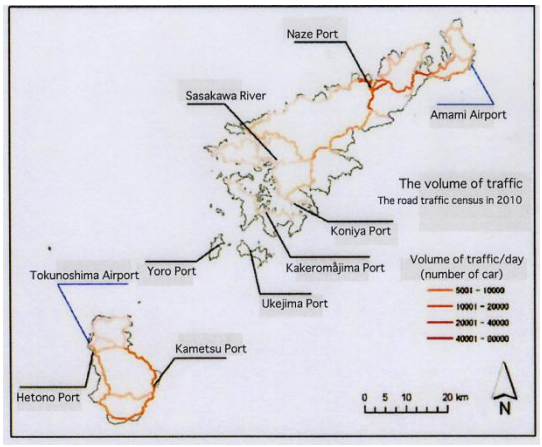


Figure 8 The road traffic in 2010

Reference: Kagoshima prefecture

②Destination

According to a 2015 survey by the Special Mission Committee for Promotion of Amami-Oshima Island, the most visited place was “Naze district, Amami City (65.4%)", and also “The northern district of Amami-Oshima Island (58.3%)”, “Amami City Sumiyo district (33.7%) follows.

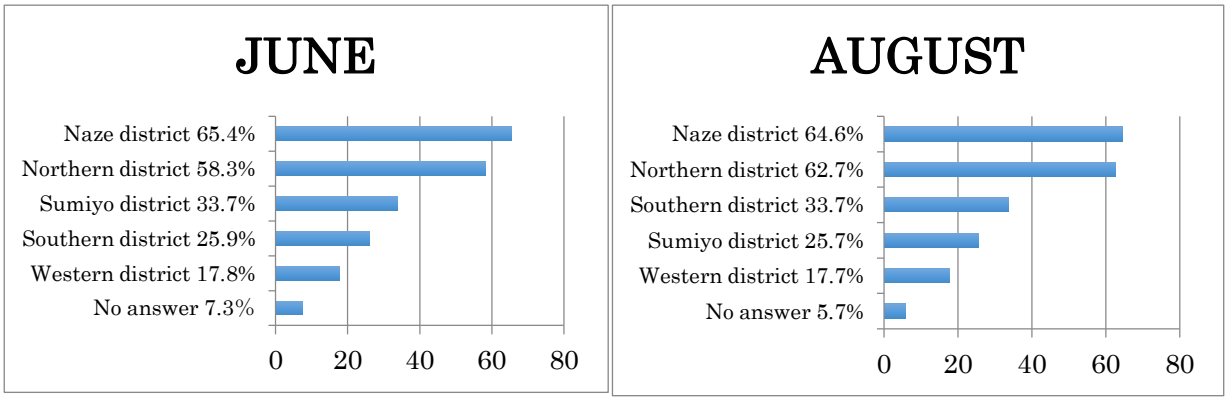


Figure 9 The visitor’s demographic statistics of Amami-Oshima Island in 2015

(Date of June and August) summary reporting (QE)

(3) Capacity of the facilities

The capacity of accommodations in the entire Amami Island Group is for approximately 2.3 million people, and the rate of operations of accommodation facilities is approximately 20%, compared to the number of the annual accommodations. The accommodation facilities and lodgers are concentrated in Amami-Oshima Island.

Table 2

The capacity and annual number of guests at accommodation facilities in the Amami Island Group

Unit: building, person

		2008	2009	2010	2011	2012	2013
AMAMI-OSHIMA ISLAND	Number	122	124	121	120	113	118
	Capacity	3439	3428	3547	3482	3024	3091
KIKAIJIMA ISLAND	Number	17	17	16	16	15	14
	Capacity	325	315	295	295	285	272
TOKUNOSHIMA ISLAND	Number	27	23	24	24	32	35
	Capacity	1051	978	950	965	1067	1081
OKINOERABU ISLAND	Number	17	17	16	18	20	22
	Capacity	595	595	554	588	465	481
YORON ISLAND	Number	30	25	25	24	23	31
	Capacity	1986	1597	1597	1577	1342	1379
AMAMI ISLAND GROUP	Number	213	206	202	202	203	220
	Capacity	7396	6923	6943	6907	6183	6304

Reference: The General Condition of the Amami Island Group

Unit: thousand

Name of island	Municipalities	Number of guests
AMAMI-OSHIMA ISLAND	Amami city	225.3
	Yamato village	1.2
	Uken village	5.3
	Setouchi village	22.2
	Tatsugo town	5.8
	Setouchi town	6.9
Amami Oshima Island's total		266.7
KIKAIJIMA ISLAND	Kikai town	30.1
TOKUNOSHIMA ISLAND	Tokunoshima town	52.2
	Amagi town	16.7
	Isen town	16.7
Tokunoshima Island's total		67.1
OKINOERABU ISLAND	Wadomari town	22.3
	China town	27.9
Okinoerabu Island's total		50.2
YORON ISLAND	Yoron town	65.2
Total		479.3

Reference: The Remote Island Statistic Annual Report 2012

(4) Utility form and needs

①The average length of stay and purpose of tourists

According to the "Interchange Demand Promotion Special Project Effectiveness Verification Survey in the Amami Island Group in 2014", the rate of air passengers from outside of the Amami Island Group are 29% for 2 days stay, 30% for 3 days stay and 31% for 4 or more days stay.

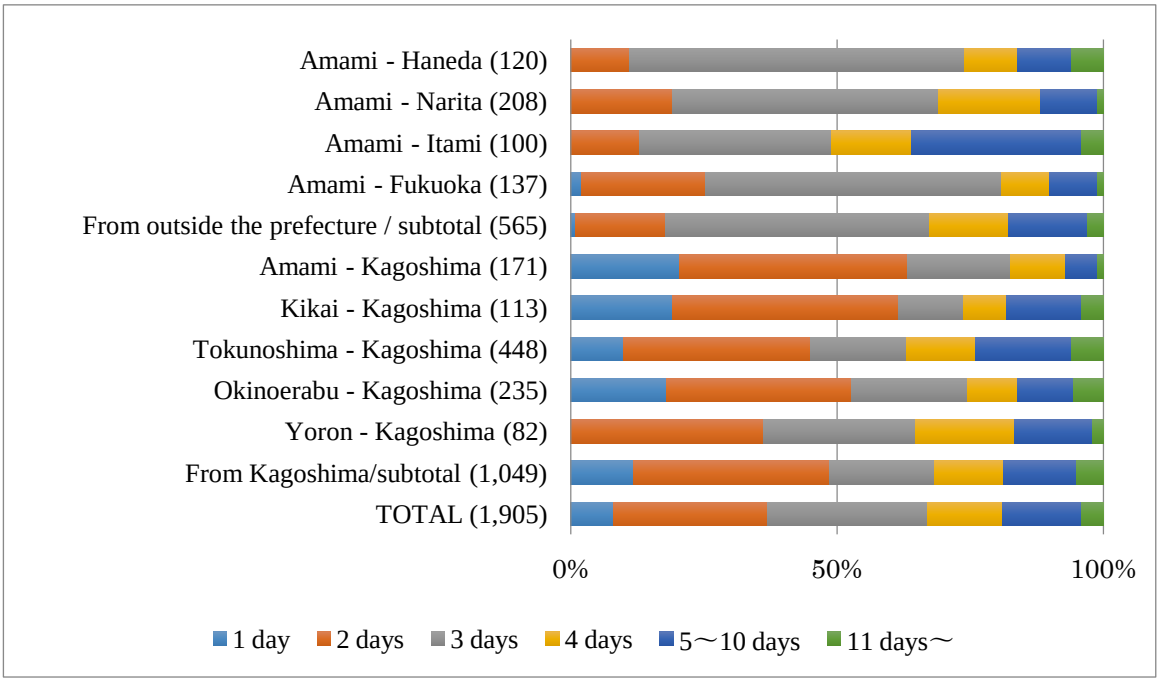


Figure 10 The Amami Island Group Interchange Demand Promotion Special Project Effectiveness Verification Survey

Reference: Committee for fare reduction of aviation and vessels of the Amami Island Group

On the other hand, visitors arriving by ship for 2~4 days stay is 51% and 5~10 days stay is 42% and the length of stay tends to be longer than air user.

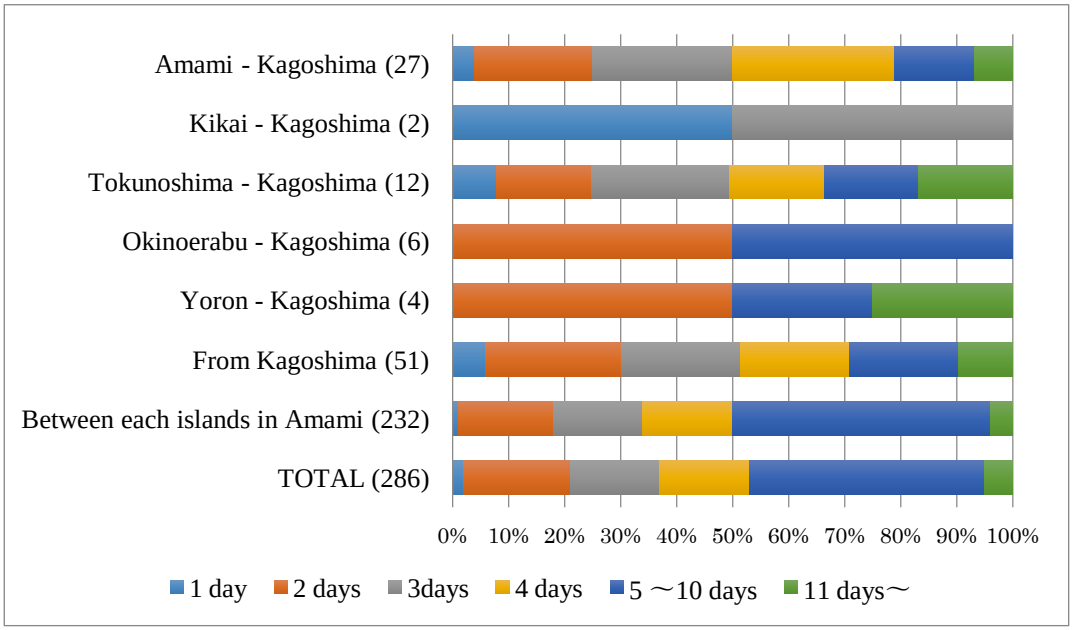


Figure 11 The Amami Island Group Interchange Demand Promotion Special Project Effectiveness Verification Survey

Reference: Committee for fare reduction of aviation and vessels of the Amami Island Group

②The reasons for visiting

The reasons for visiting to Amami-Oshima Island are more often “seeing the beauty of nature”, “enjoying the sea” and “healing tiredness” rather than “enjoying forest” and “experiencing traditional culture”.

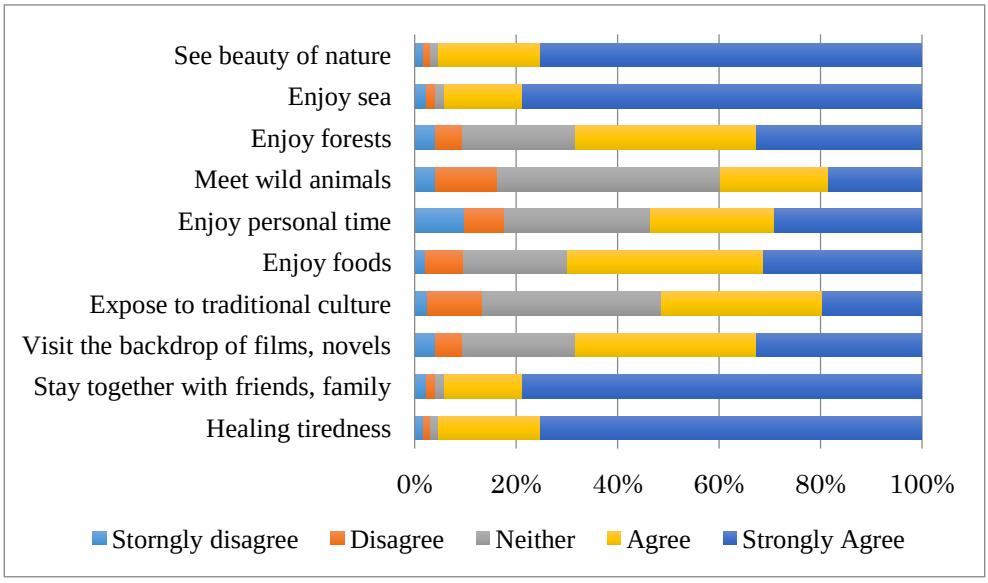


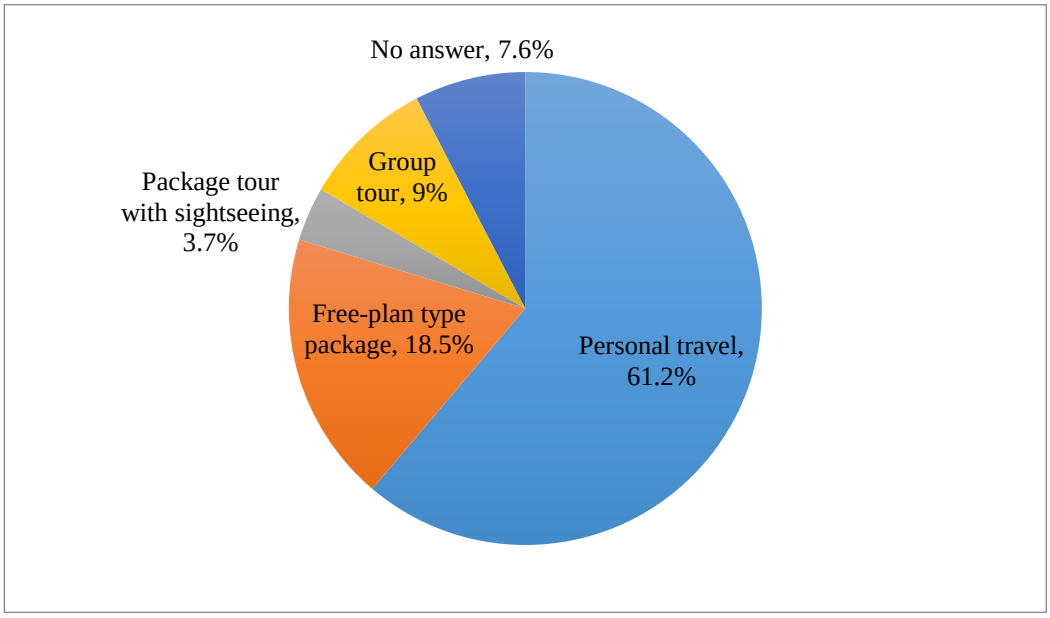
Figure 12 The visiting incentive to Amami-Oshima Island

Refrence: The Survey of National Institute for Environmental Studies in 2014: Provided from Mr. Kubo

③The type of visit

According to a 2015 survey by the Special Mission Committee for the Promotion of Amami-Oshima Island, “personal travel (61.2% in June and 73.6% in August)” is the biggest reason, and “Package trip of the free plan type (18.5% in June and 21.5% in August)” is next. “Group travel” is 9.0% in June and 0.2% in August.

JUNE



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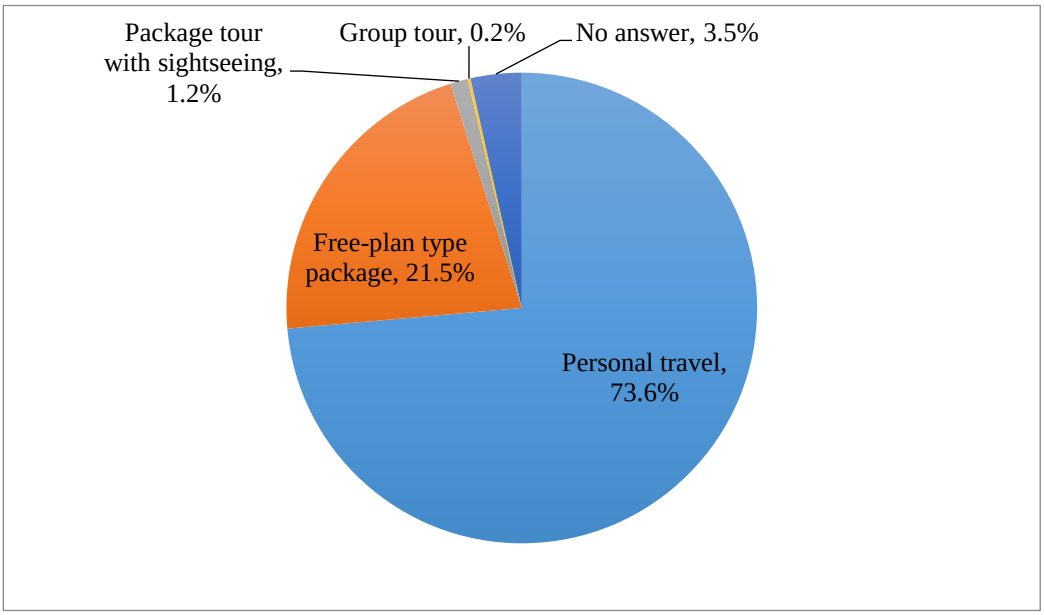
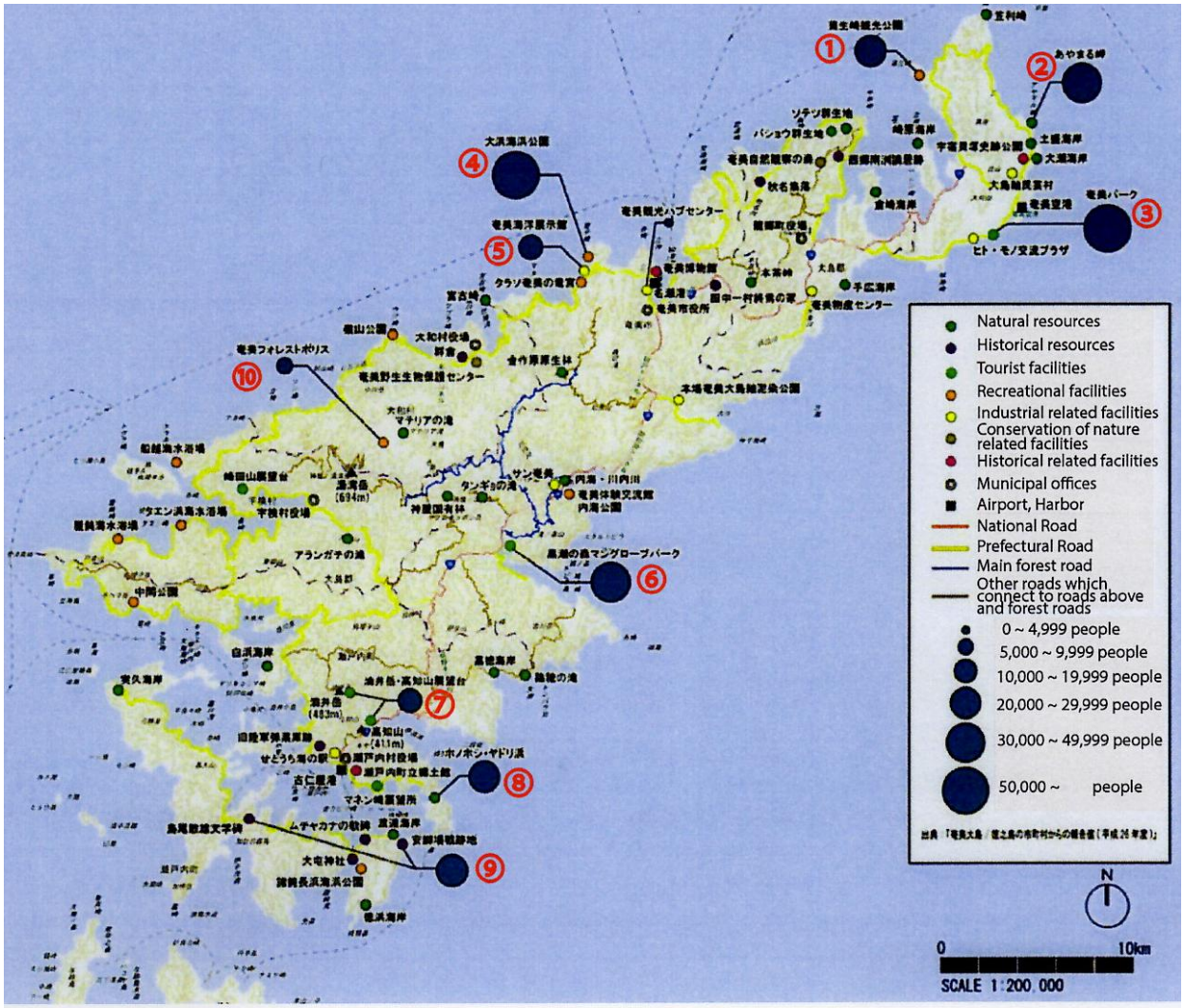


Figure 13 Visitor's demographic statistics of Amami-Oshima Island in 2015 (Data of June and August), summary reporting (QE)

Reference: Committee for fare reduction of aviation and vessels of the Amami Island group

(5)The resource locations and the number of the users

Among the tourist resources and facilities that reported the number of the visitors in Amami-Oshima Island in 2014, more than 50,000 people visited to Amami Park and Ohama Seaside Park, more than 30,000 people to the Ayamaru Cape and the Kuroshio no Mori Mangrove Park, and more than 20,000 people to the Honohoshi-Yadori Beach. The number of the visitors at the Amami Nature Observation Forest in the north and the Amami Forestpolis in the south were less than 10,000. Also, the numbers of the visitors to Kinsakubaru National Forest were 2.321 cars (daily average is 6.4 cars, 16.3% change from the previous year), and 1,631 cars to the Sutarumata forest road (daily average is 4.5 cars, 20.6% change from the precious year) in 2015. (Vehicle counting measuring result by Kagoshima)



① Gomozaki Sightseeing Park ② Ayamaru Cape ③ Amami Park
④ Ohama Seaside Park ⑤ Amami Marine Museum ⑥ Mangrove Park
⑦ Yuidake, Kouchiyama Observatory ⑧ Honohoshi-Yadori Beach
⑨ Ankyaba Battle Site Park ⑨ Toshio SHIMAO Monument
⑩ Amami Forest Police Campground

Figure 14 Locations of resources and facilities in Amami-Oshima Island

Reference: Report from municipalities of Amami-Oshima Island (2014)

In Tokunoshima Island, it was only possible to count the number of users at Houraikan, which was more than 50,000. The facility contains a local product market and sports gym, and it has the function of both of tourism facility and local use facility.

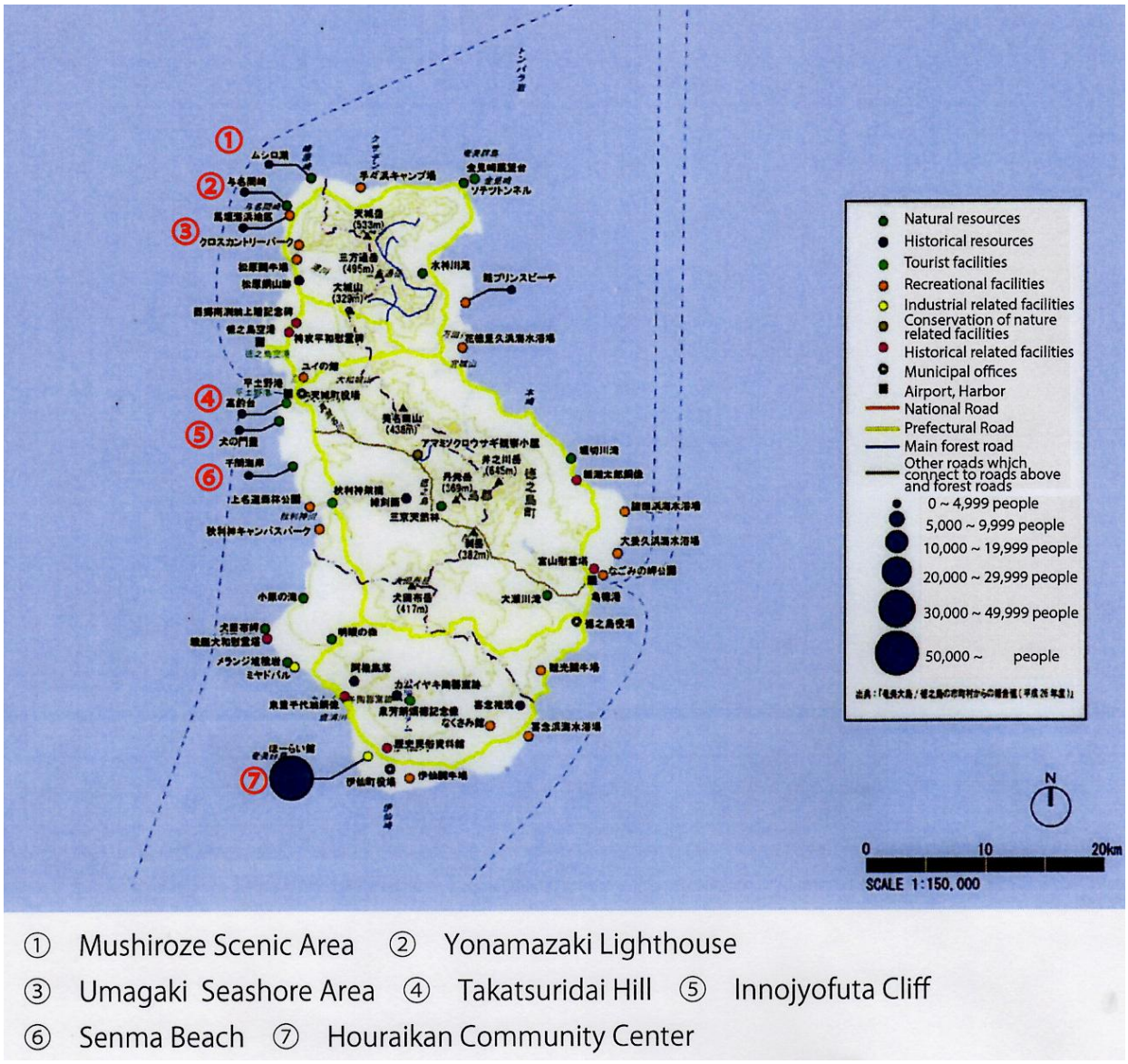


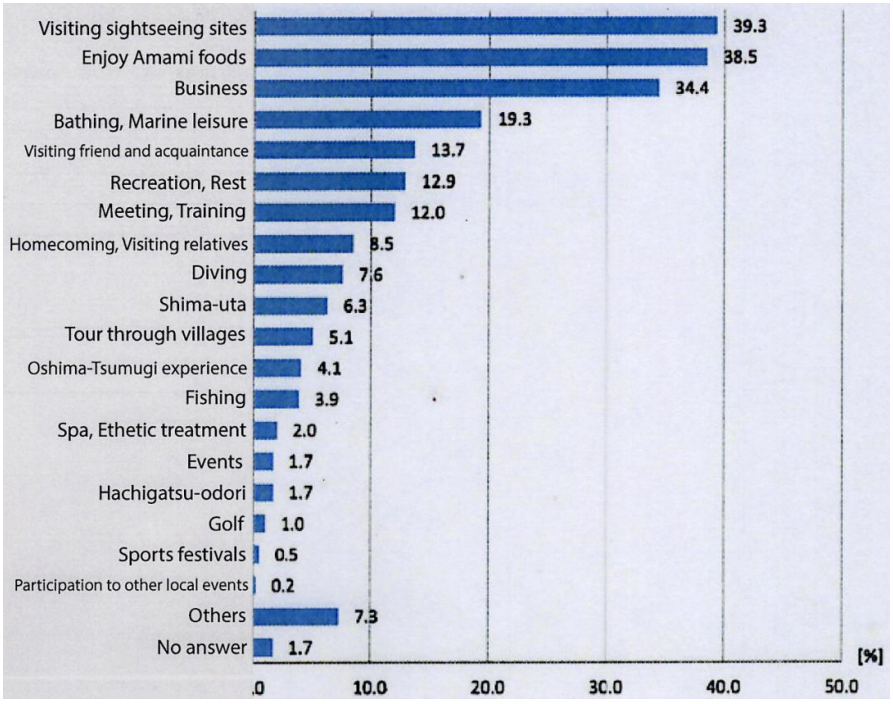
Figure 15 Locations of resources and facilities in Tokunoshima Island

Reference: Report from municipalities of Tokunoshima Island (2014)

(6) Activities

①Activities during the travel

Regarding activities during travel in Amami-Oshima Island “visiting sightseeing sites”, “bathing and marine leisure”, “enjoying the Amami food”, “meetings and training” and “business” have been increasing. On the other hand, the rate of experiencing the Amami original culture such as “Shima-uta (local song)”, “Oshima-tsumugi”, “events” and “Hachigatu Odori” are decreasing.



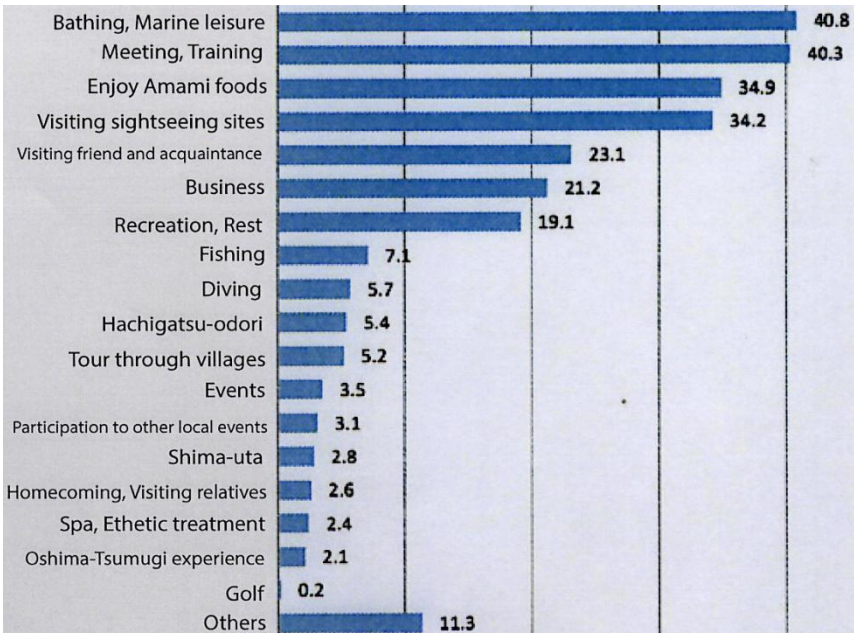


Figure 16 The visitor’s demographic statistics of the Amami-Oshima in 2015 (Date of June and August), summary reporting (QE)

Reference: Committee for fare reduction of aviation and vessels of the Amami Island Group

②Nature using experience

[General overview]

According to questionnaire results, trekking and canoeing through the mangrove forest are popular activities. Moreover, the rate of the nature experience with guide's accompaniment is increasing.

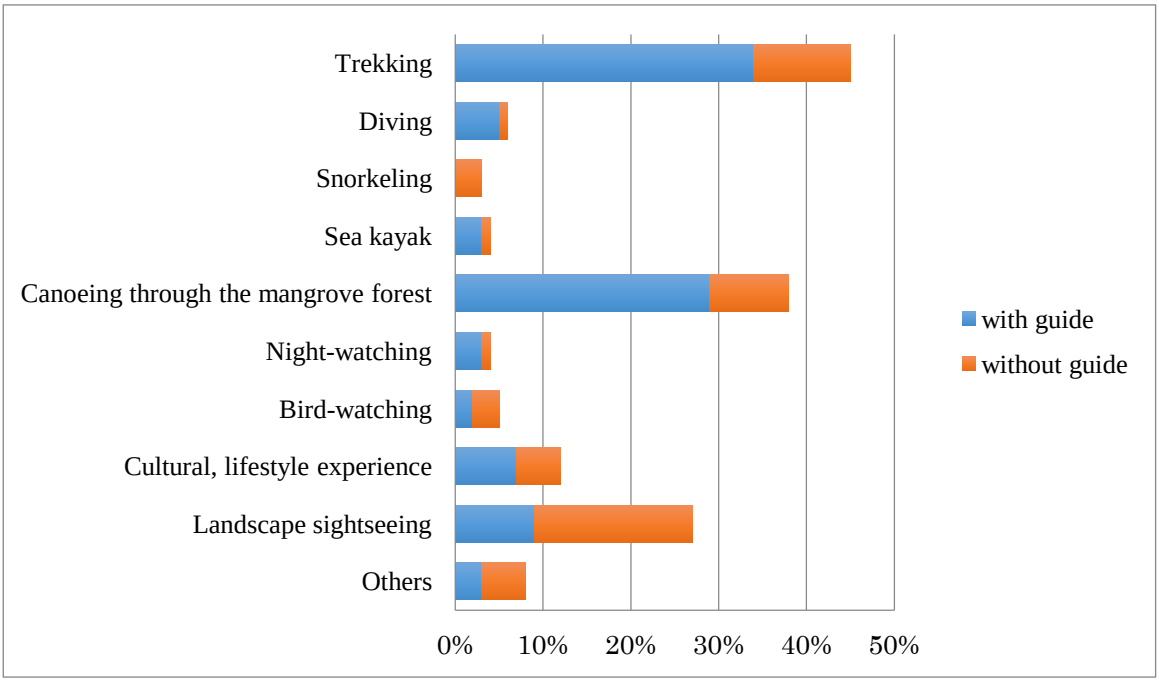


Figure 17 Nature use experience in Amami-Oshima Island

Reference: "The Investigation of Utilization Method of Amami Natural Resources" 2007, Kagoshima

[Forest utilization]

According to the "Investigation and Survey of Utilization Strategies for Forest Areas in Amami-Oshima Island" (Ministry of Environment, 2008), the Kinsakubaru National Forest and the Sumiyo-Mangrove Forest encompasses over 60% of the forest area on Amami-Oshima Island.

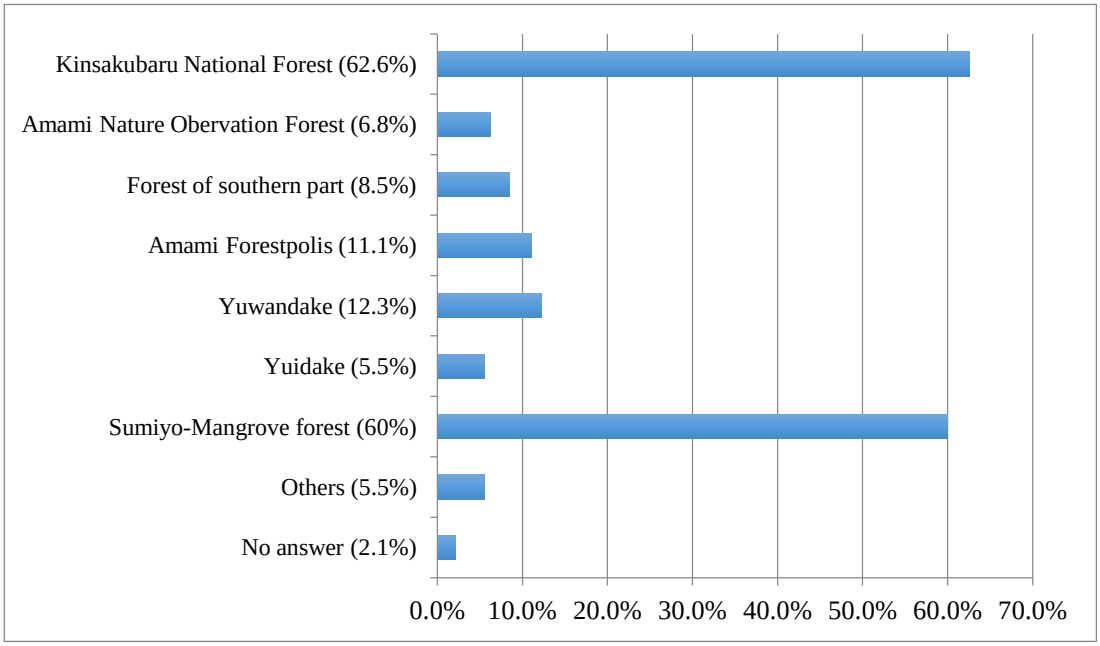


Figure 18 Visiting destinations in the Amami-Oshima forest area

Reference: Investigation and survey of utilization strategy to forest area in Amami-Oshima (Ministry of the environment, 2008)

According to the vehicle counting investigation of Kagoshima, when comparing the daily average number of vehicles in both year of 2014 and 2015 at Sutarumata Forest Road and Kinsakubaru National Forest, increases have been realized in both places, from 3.9 to 4.5 vehicles at Sutarumata forest road and from 5.3 to 6.4 vehicles at Kinsakubaru National Forest. The growth rate is 16.3% for Sutarumata Forest Road and 20.6% for Kinsakubaru National Forest. It is showing that both the number of vehicles and the growth rate of Kinsakubaru National Forest is higher than Sutarumata Forest Road.

Table 3 The daily average numbers of vehicles at the Sutarumata line and the Kinsakubaru line (2014, 2015)

	2014			2015			Increase-Decrease Rate [%]
	Average	Total	Measurement days	Average	Total	Measurement days	
Sutarumata	3.9	1,018	261	4.5	1,638	361	16.3
Kinsakubaru	5.3	1,555	295	6.4	2,321	365	20.6

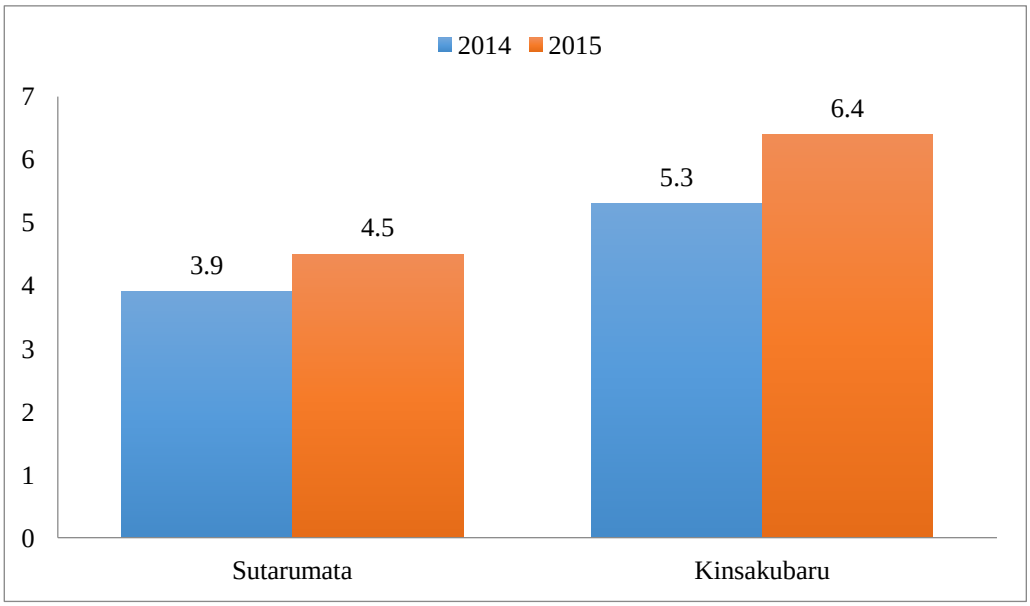


Figure 19 The Number of Vehicles Passing Through the Sutarumata Line (city road) and around the Kinsakubaru Area

Reference: Kagoshima Prefecture

(7) Transition of the number of tourists at domestic World Natural Heritage Sites

Among the domestic World Natural Heritage Sites, the change of numbers of increasing tourists are different according to every site.

- Yakushima Island: After registered as the World Heritage Site, the numbers of visitors are increasing and it has been growing to around 320,000 in recent years.
- Shirakami-Sanchi (white god mountain area): Although the numbers of tourists increased at each town for about ten years, it is returning to a preregistration level in recent years.
- Shiretoko: Although tourists increased for two or three years after registration, it tends to be decreasing since then.
- Ogasawara Islands: The numbers of tourists are increasing drastically since registration time in 2011.

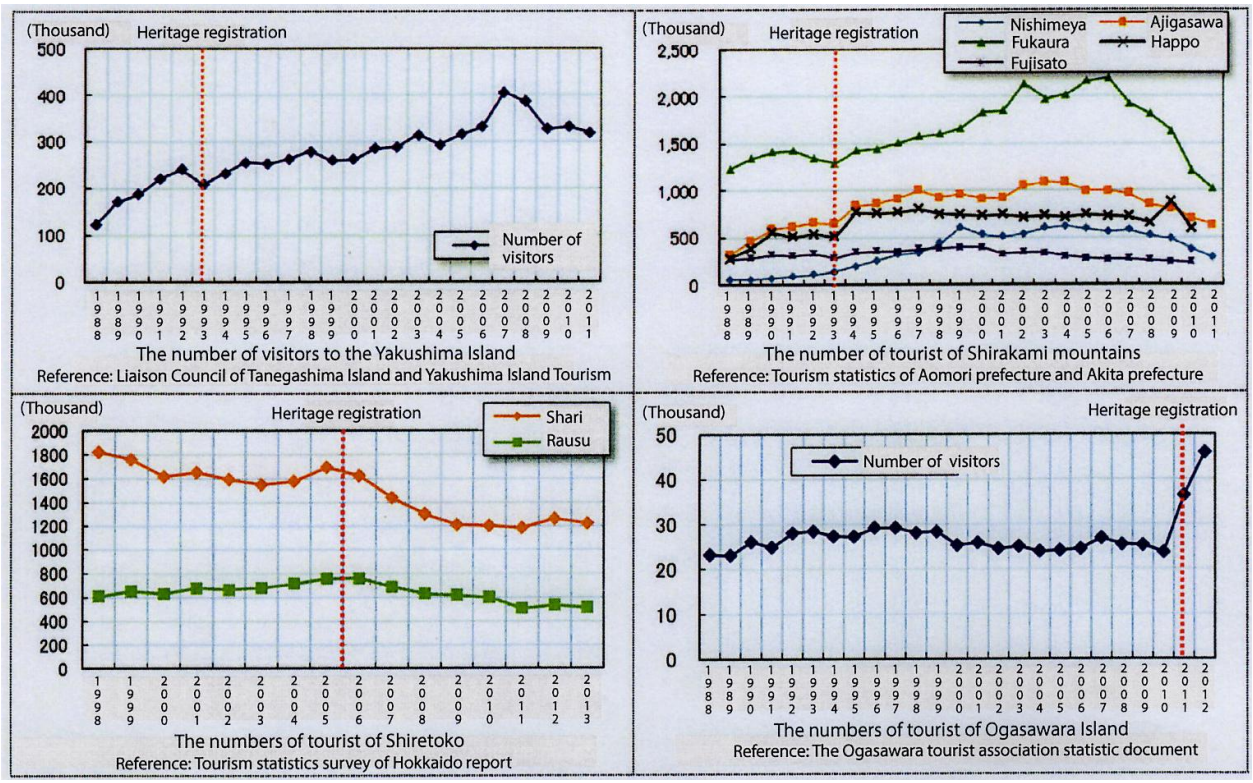


Figure 20 Change of the number of tourists at World Natural Heritage Sites
Reference: The Amami Island Group World Natural Heritage Site Promotion and Registration Project in 2012 (Kagoshima prefecture)

(8) Establishment and promotion action of sustainable utilization by the relevant local individuals

In anticipation of registration as a World Heritage Site, the approach to sustainable utilization is progressing via various relevant authorities such as the central government, prefectural governments, municipalities and private sectors.

①Nature experience promotion

While making the basic policy of ecotourism, organization of the Amami-Oshima Island Ecotour Guide Liaison Council and Eco-Tourism Promoting Council, implementing the cultivation and authorization system of ecotour guides, and executing trial package tours, are ongoing. In addition, green-tourism (taking a relaxed holiday in a forest, or other natural area) and blue-tourism (taking a relaxed holiday at a marine or island area) are also being carried out.

②Explore Shima (local community) and experience local life and culture

There are several experience type plans and actions to enjoy Shima life, such as Amami-shima exhibition, developing and creating a walking course map of Shima by municipalities and NPOs, and experiencing

traditional events and foods.

③Preparation of an acceptance mechanism

The promoting of coordination among Minpaku (B&B or inn) by the establishment of a Minpaku Council, a study group for people to start Minpaku, learning from advanced areas, establishment of a tourism association beyond different municipalities, implementation of a group to think about tourism and Shima as well as searching for resources, and the formation of a local platform function with various related authorities and private sectors are progressing.

④Maintenance project of facilities

Establishment and improvement such as an observatory station, a rest station, a walking trail and information board are commensurate with convenience and comfort.

2.3 Agenda of the promotion of sustainable tourism in the Amami Island Group

1. We will consider agendas of the promotion of sustainable tourism in the Amami Island Group based on ; 1. way of thinking toward sustainable tourism, and 2. current situation in the Amami Island Group ("2.1 Nature and Life" and "2.2 The general condition of the use for tourism").

(1) The assumable transition after heritage registration, and sustainable utilization of local resources

After the registration of National Park and World Natural Heritage Site, it is expected that tourism users to Amami-Oshima Island and Tokunoshima Island would increase. After heritage registration, it is assumed the number of tourists on Amami-Oshima Island would increase with the same tendency as Yakushima, the daily numbers of tourists are estimated at approximately 1,800. Even though the condition varies depending on season, climate, and time, large numbers of individuals and groups cause more damage to nature than the small numbers of users do, generally. There are concerns about various problems if large numbers of people visited a forest at the same time, such as damage of plant life and the deterioration of living environments for animals, derogation of usable environment quality and tourist's satisfaction. It is important to progress the usage scale to fit to each localities' natural capacity for promoting sustainable tourism while minimizing the load on the natural environment by tourists. For this reason, it is necessary to define areas for mass-tourism use only and small number of people use only. It is crucial to categorize user's areas appropriately both for small number of people and mass-tourism, and it premises that only small numbers of people are allowed to access important preservation areas, and utilize urban areas and roads which have been already developed for mass-tourism use.

(2) Corresponding to user's needs

It is assumed that the people's needs will diversify with the increase of users after heritage registration. According to a questionnaire result of Amami Island Group users, first-time visitors' purposes for taking a tour is visiting famous places and historical sites, and enjoying local foods, which is the same as "visiting sightseeing sites", "enjoying the Amami foods" and "bathing and marine leisure". By contrast, those people

who experienced ecotourism in the forest; their next purpose of visit will be having a deeper experience, such "trekking" and "animal observation". Improvement of user satisfaction and the acquisition of repeat visitors to avoid the increase of tourists will be part of the transitory change. It is necessary to correspond to various needs by learning from the majority needs of first-time visitors, which will be the motivation for repeat visits, such as "I want to do it again", "I want to know more" and "I could not do it this time, but I want to do it next time".

(3) Implementation of original tourism style in the Amami Island Group

The forests of Amami-Oshima Island and Tokunoshima Island symbolize the value of World Heritage, and the use of these places will characterize future tourism of the Amami Island Group. There are several characteristics of the Amami forest, such as less symbol like grand scenery and Yakushima, knowledge is necessary to observe valuable endemic species of flora and fauna, many places have complicated geography and are precipitous, such as the existence of highly poisonous Okinawa habu. From the above-mentioned characteristics, there are few suitable factors for large group use and thus, is more appropriate for small number user's experience types such as guided ecotourism.

In addition, there is unique life and culture in the Islands. The wisdom, and life and culture, which is in accord with nature, is continuing from the prehistoric age, and leaves a lasting impression with visitors. Moreover, the existence of the local people, who have always lived with nature in a balanced manner, is considered to be the greatest message as a symbol of coexistence. It is conceivable that the closeness with local people, the experience of local life and culture, and the high quality natural experience by a small number of people in the forest will be the major elements to lead tourism in the Amami Island Group. We will put those elements in the center of tourism in the Amami Island Group and take the opportunities presented from registration as a World Natural Heritage Site, and promote mass-tourism and marine tourism simultaneously. We believe that those actions are linked to the Amami Island Group original tourism style.

(4) Autonomous tourism management by locals

It is necessary to supervise the effects on the natural environment and the social environment due to tourism usage in order for Amami Island Group tourism to be sustainable. For example, if even only a small number of people experience the forests and each person's load is small, it still causes a big impact due to the accumulation effect, and there are problems as more success brings more people and it expands the scale. Keeping these problems in mind, it is important that various local constituencies communicate voluntarily to talk about the direction of tourism and conceive sustainable ways to use local resources such as the natural environment. Furthermore, if the local people manage tourism by themselves, they are able to maintain benefits from tourism locally, linking adaptable correspondence toward environmental change of local tourism, and it reduces the chances of unconscious damage of the local natural environment. Also, in anticipation of registration as a World Natural Heritage Site, various related officials are creating projects and holding meetings to build a framework of preparedness to receive and to produce tours. Those core members cooperate together toward the goal of "sustainable tourism", and collaborating on each plan that is being carried out separately, producing a synergistic effect.

(5) The balanced utilization and development in Islands

According to the road traffic census in Amami-Oshima Island and Tokunoshima Island, the southwestern part of Amami-Oshima Island and the northern part of Tokunoshima Island tended to have lighter traffic. It is important for reaching balanced development of the Islands that the central government, prefectural governments, municipalities and private sectors think about the flow through the entire Island, promoting locations of appropriate facilities to be the base of experience usage, and create equal usage around the Island.

(6) Development in the entire Island group

The Islands of the Amami Island Group are connected in various parts such as the history of intercommunion, common living things and lifestyle, and people's concept of nature. On the other hand, there are animals which only exist on certain islands, and the transformation of the musical scale of Shimauta, and methods of events and ritual ceremonies on each Island that individually exist in each natural environment and culture. The Amami Island Group united together to take action that begins to send the strong image of the Amami Island Group, while maintaining both connection and individuality. It is expected that these condition lead to strengthened cooperation among the Islands, to entice tourist from Amami-Oshima to go to four other Islands, and to connect sustainable development of the entire island group.

(7) Development with perspective of the Asian region

The Amami Island Group is suggested as a possibility that it was the connecting hub of wide range trading in the East China Sea Rim during the Middle Age, which started from the southern part of China to the Nansei-Shoto Islands, Kyushu, and even connected to the Korean Peninsula. With this Asian based dynamic history, the presence of National Parks and the World Natural Heritage Site with international brand power, and the Japanese traditional lifestyle that harmonized with nature, those elements might be interesting for the increasing number of foreign tourists. Therefore, it is essential to take action such as the building of systems and infrastructure, and transmission of information, including the Asian region.

3.Basic idea

2. Based on the recent conditions of the Amami Island Group's endemic nature and life culture and agendas, the Master Plan's goal and basic principles will be implemented for systematic tourism management in anticipation of changes after the heritage registration.

3.1 Objectives

The Master Plan promotes action with the following 3 objectives.

Objective 1. Systematic instruction of the use with the best fit to the local characteristic
Objective 2. Spreading the heritage registration effects to the entire region
Objective 3. Realization of high quality tourism and improvement of user satisfaction

3.2 Basic principles

The basic principles of objectives will be defined as follows.

(1) Promotion of the appropriate utilization of the zone. (Targets: Amami-Oshima Island, Tokunoshima Island)

After the heritage registration, if assuming the volume of tourists in Amami-Oshima Island would increase with the same tendency as Yakushima, the daily numbers of tourists are estimated at approximately 1,800. There are concerns about various problems if the large numbers of people visited forest on at the same time, such as damage of plant life and deterioration of living environments of animals, derogation of environment quality due to usage, and tourist satisfaction. For that reason, the core forest area of Amami-Oshima Island and Tokunoshima Island, which would be registered as World Natural Heritage Sites, is only available for a small number of people as a basic principle, and the rule of utilization will be set. Furthermore, a small number of walking trails will be set up when facilities are established.

In contrast, it is assumed that the numbers of group tours and many people usage will increase after the heritage registration. To prevent the visit of many people to the forest at the same time, it is important to provide facilities and fields where large numbers of tourists can enjoy Amami's attractive points so people feel satisfied. Secondary forest and farmland are spreading outside of the laurel forest where rare animals and plants are inhabit and grow. It is possible to prepare the experience-based fields so guests can enjoy Amami's attractiveness, such as forest walks and observation of wild animals, with the utilization of these secondary forest areas. In addition, the general utilization base that many people can use at the same time and is easy for large numbers of tourists to use without causing a big impact on resources, which appropriately located at living areas such as urban area where accommodation facilities and tourist utilization facilities have already been made and the road side of the highway.

Accordingly, we will do zoning that depends on the capacity and the characteristics of natural environments, where to situate the possible utilization areas for large numbers of people and small numbers of people. Setting rules and facility maintenance appropriate to the industry and life environment within the area, and providing

utilization experiences, we will improve load reduction of the natural environment and increase satisfaction of users. Therefore, we will promote the utilization among 3 local regions as described in the next figure.

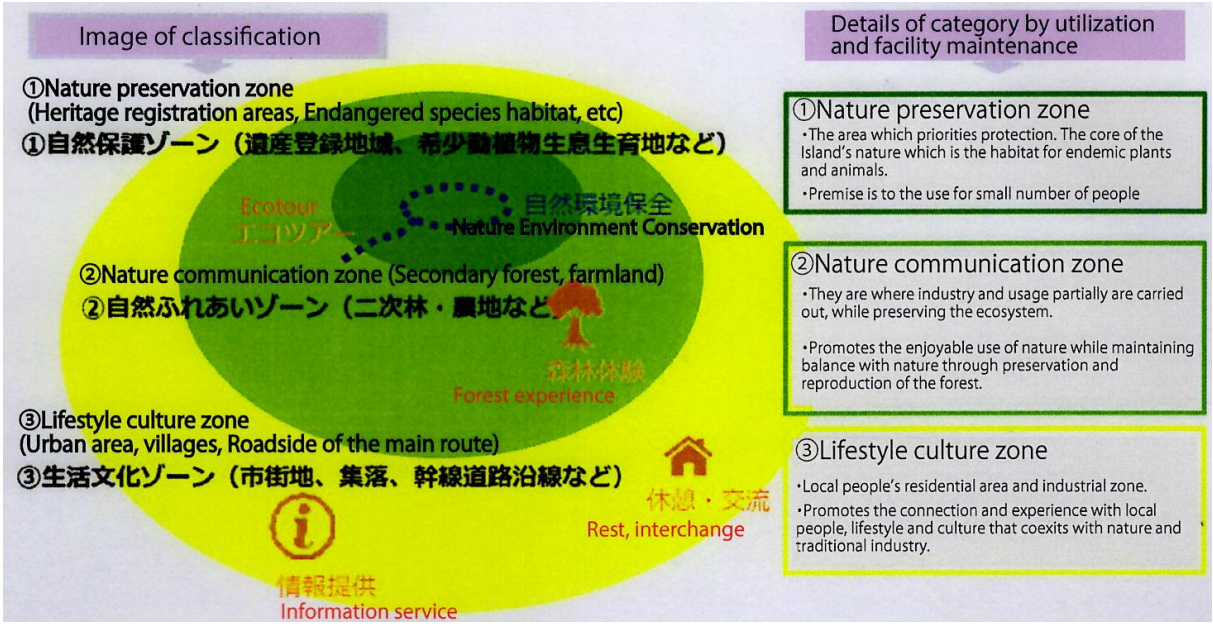


Figure 21 Area classification image by nature characteristic

(2) Implementation of the action with local characteristics (Target: entire island group)

Among the Amami Island Group, local uniqueness of each island has seen, such as forests, marine areas, cities, land utilization like farmland, presence of facilities like airports and harbors, natural resources and cultural resources, and the Natural Park Area designation. We will execute the necessary action while being aware of these characteristics.

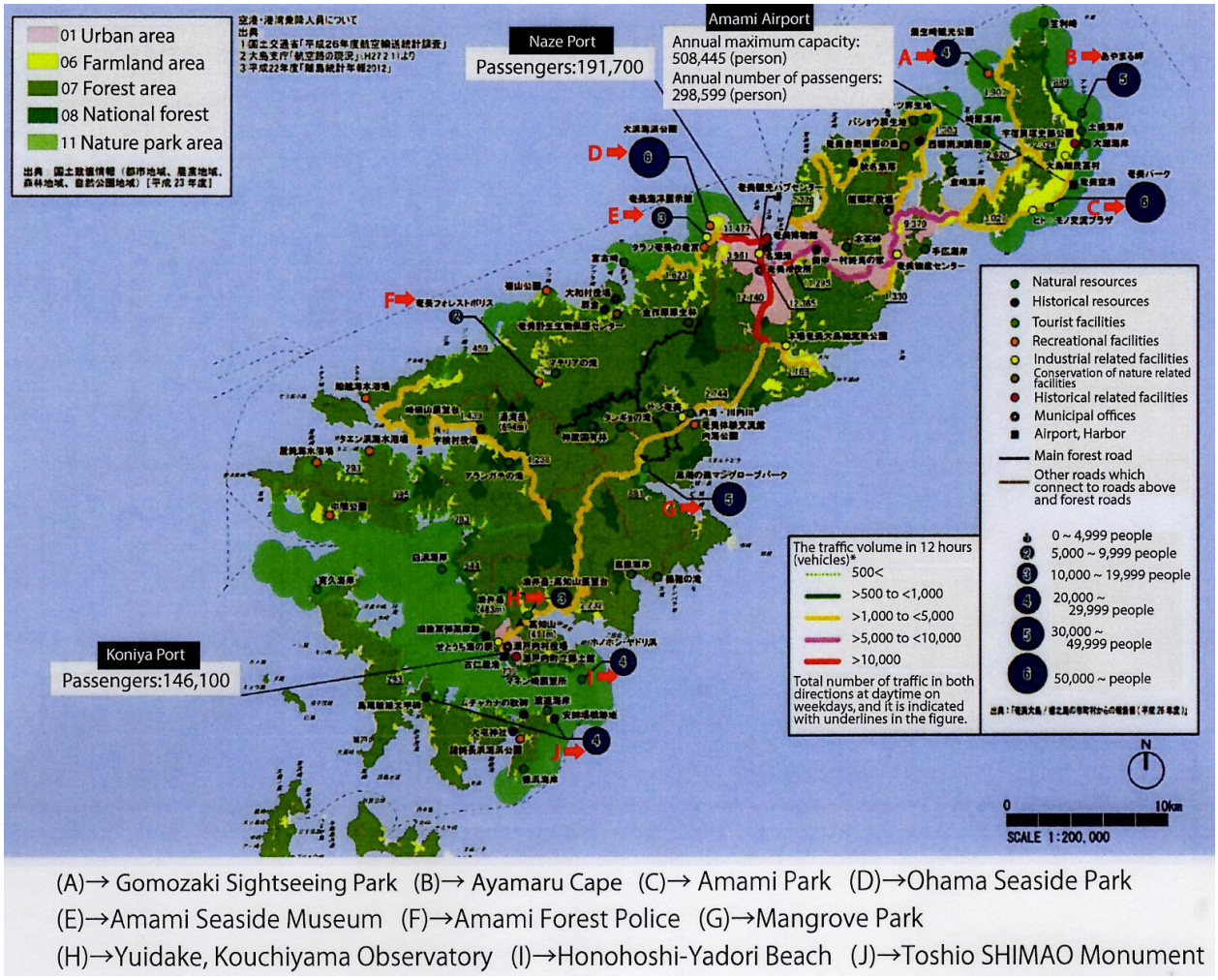


Figure 22 Local characteristics of Amami-Oshima Island

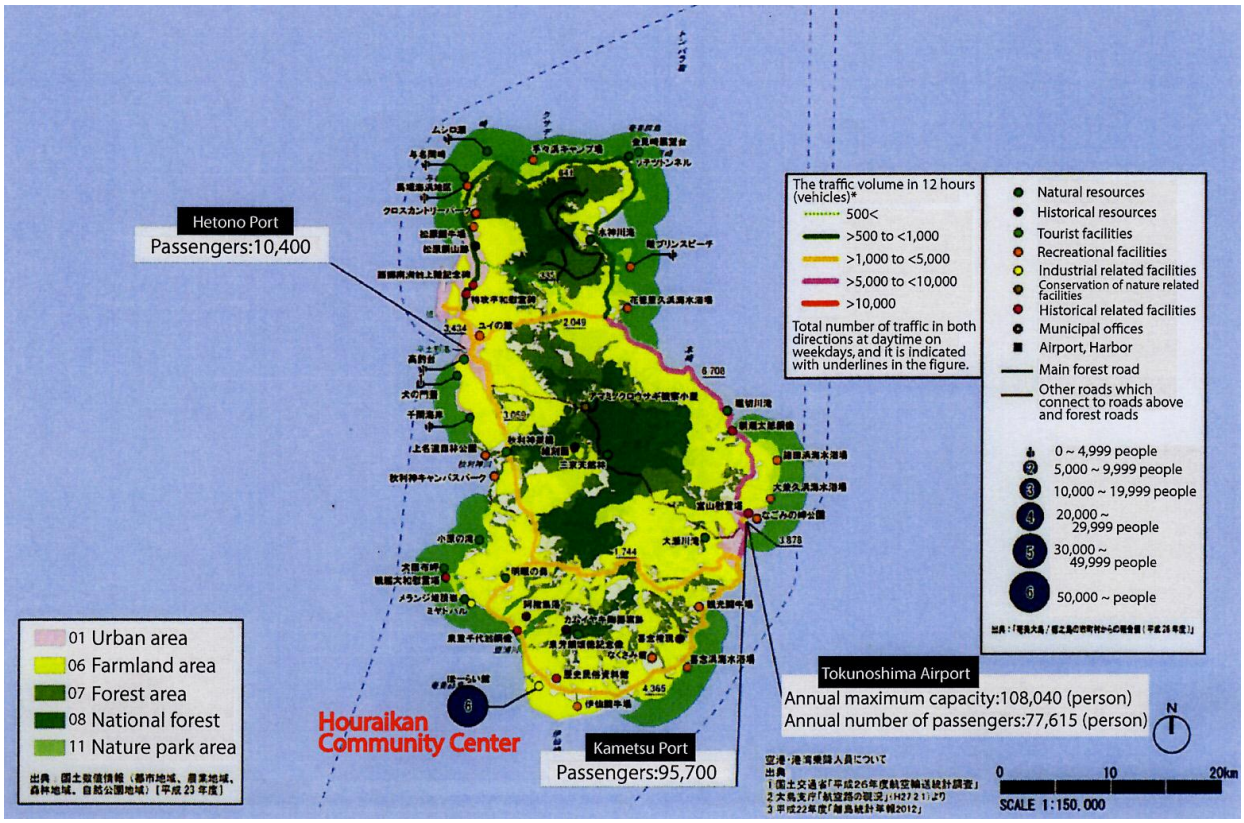


Figure 23 Local characteristics of Tokunoshima Island

(3) Maintenance of the flow line that meets various tourism needs and the type of utilization (Target: Amami-Oshima, Tokunoshima Island)

To promote balanced utilization inside the Islands while fulfilling individual tourist's needs, it is important to set courses and flow lines that correspond with items such as the utilization scale of large numbers people and small numbers people, and experience-based usage and circular tour usage. For that reason, we will locate facilities with appropriate size and functions to meet local characteristics as mentioned above, and promote experience type utilization based on that.

We will consider locating the comprehensive utilization base (important base) within lifestyle culture zone, which accept large numbers of people, to the Island's entrance or urban areas like the airports, the ports, and roadside of the main line. Regarding maintenance, to gather tourists effectively and to better improve tourist satisfaction, we will consider putting facilities, which have different functions, in certain areas with the cooperation of the central government, prefectural governments and municipalities, and local sectors. Also, we will consider setting up the quasi-base (sub-base) following the important base inside of lifestyle culture zone and the contact with nature zone. For example, it is assumed that the forest experience zone will be located at the contact point with the nature zone, as the place, which large numbers of people can use. And we will create flow lines where large numbers of people can move around inside the Islands through the preparation of courses

to connect these bases.

Moreover, we will consider a decentralizing arrangement of the resources and the small nature communicating bases that are scattered inside of Islands now, with the promotion of the experience type utilization bases which will be the starting or transiting points, and try to produce flow lines for small numbers of people. For instance, we will decentralize arrangement of small size facilities such as waterfalls, forest observation stations, trails and the lifestyle culture experience bases. Accordingly, we will guide tourists systematically by creating a network between the main bases, sub-bases, small bases and experience utilization bases.

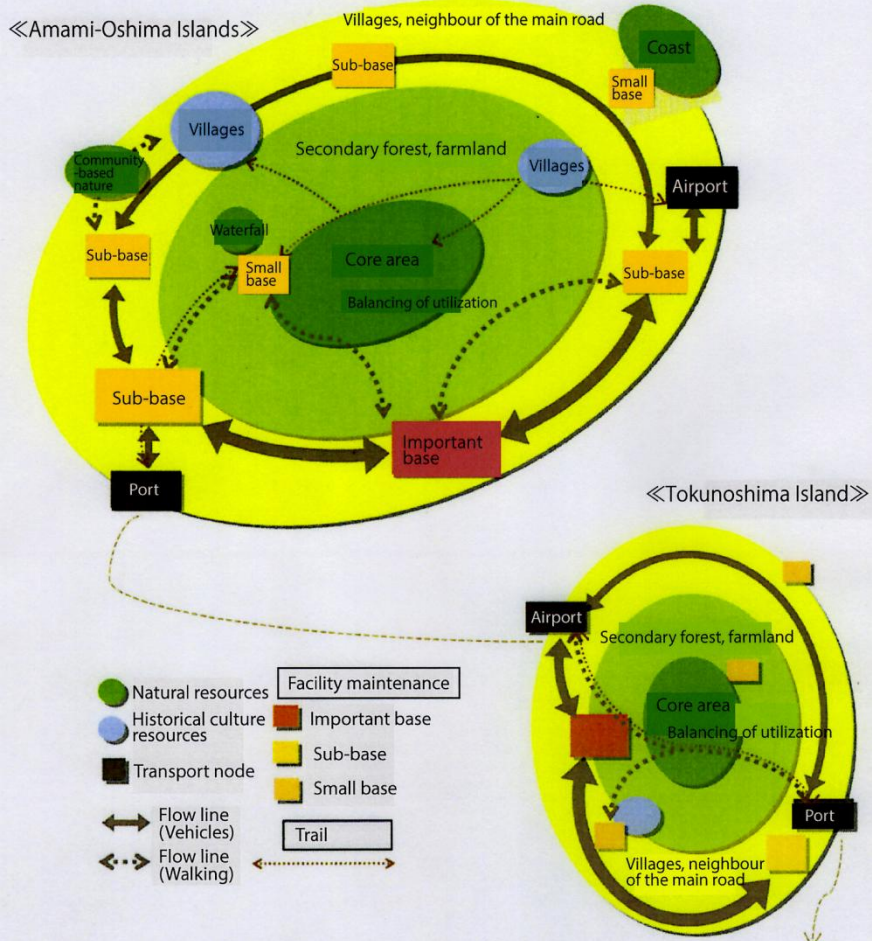


Figure 24

Conceptual diagram of the functional layout based on the Master Plan

Important Base

It is the World Heritage general utilization base, which includes different functions such as the World Heritage exhibition display with explanations and exhibits, and a gift shop. We will invite a large numbers of people through the accumulation of services, and try to protect the core zone and improve user satisfaction.

Sub-Base

It is the place that provides information and users can experience each island's characteristics and resources. It will be located in a place connecting important bases and small bases, and creating anadromous flow line.

Small-Base

It is the place where you can feel scattered nature of the Islands, such as waterfalls, forests and observation stations. We will spread the utilization while corresponding to the ecotourism and the lifestyle culture experience for usage by small numbers of people.

The flow line assumes the walking. The flow line which starts from the base facilities and the sub-base facilities.

The Amami Natural World Heritage Trail is the line that connects everything by footpaths through the Amami Island Group.

(4) The creation of the space to connect with attractiveness of nature, people, life and culture (Target: entire island group)

We aim to establish the Amami Island Group unique sustainable tourism style, through the creation of the improvement of satisfaction for the mass tourism of large numbers of people, while achieving high quality experience style utilization for small numbers of people as the focal point.

Inside of the core part of the forest that symbolizes heritage value, we will promote high quality nature experiences with guide accompaniment for small numbers of people.

At the lifestyle culture zone, which is outside of the core part, we will create a space where large numbers of tourists can experience the forest, animals and plants, and environmental culture through movies and facilities.

At the village where the environmental culture takes root inside of the lifestyle culture zone, we will promote human communication and lifestyle culture experiences via walking through Shima and an experience program.

Furthermore, we will promote the creation of trail courses that connect each attractive point and communication space.

Virgin Forest Tour (Kinsakubaru)

Communicate with senior

Oshima-Tsumugi experience

Figure 25 The locations to connect with the attractiveness of Amami

(5) Maintenance of the Amami World Nature Heritage Trail for spreading the heritage registration effect to the entire Islands group (provisional title, Target: entire island group)

Among the Amami Island Group, there are diverse endemic animals and plants and customs that come from different geological histories and a history with the foundation of common nature and culture. Using heritage registration as an opportunity, we will promote the maintenance of the Amami World Nature Heritage Trail to connect the entire island group and make it possible to enable visitors and local people feel the connections of the Amami Island Group's nature, history and culture as well as each local endemism. We will try to reinforce the entire Island's group collaboration to spread the heritage registration effect to all locals by forming a communication opportunity between the Amami Island Group's nature, people and culture through the walking trail.

(6) Promote proper utilization rules (Target: Amami-Oshima Island, Tokunoshima Island)

It is essential to provide high quality services based on the preservation of the natural environment for sustainable tourism promotion, without consumption of natural resources or transformation of cultural resources. Therefore, we will implement the set up of utilization rules in the nature preservation zone, which is the center of the core area. The rules will be set after discussion and consensus building by the local constituencies.

(7) The accumulation of information and knowledge, and the promotion of effective information transmission outside of the Islands (Target: entire islands group)

Local constituencies collaborate together to carry out a tourism usage survey and monitor it's usage, as well as discovering other examples to promote sustainable tourism, and we will continue conforming to respond to need. Furthermore, we will spread information about tourism usage of the Amami Island Group that is easily understood by tourists, to promote the sustainable tourism based on local aim, while responding to the needs of tourists.

4-38 Implementation Policy of Environmental Consideration Guidelines for Public Projects on Amami-Oshima Island and Tokunoshima Island

1. Basic concept

1) The background and purpose of the guideline formulation

The Amami Island Group is an area with the habitat and breeding environment for a variety of animals and plants, which includes many endemic species and rare species. Also, the Amami Island Group residents formed their distinctive culture while utilizing that nature.

While at the same time, public projects such as improvement of traffic infrastructures of route and forestry roads, disaster prevention measures, and development of agricultural infrastructure have been implemented. The public projects in the Amami Island Group have been contributing to improve local people's standard of living according reach the same level of national and prefectural route improvement rates and paved road ratios closely, exercise a constant disaster prevention function and national land conservation functions for rivers, dams and shore protection facilities. Moreover development of agricultural infrastructure is advancing to a certain level, contributing to improve the local people's quality of life, and it is the necessary public projects for improvement of convenience and safety that support island people's life in the future. Therefore, there have been various environmental consideration actions carried out to create balance with the local natural environment through public projects.

Amami Island and Tokunoshima Island have already decided to be listed as one site as "Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Okinawa Island" World Natural Heritage Nominated Property Site, and it is required to give full consideration to natural environment, history and cultural resources in Amami more than ever while implementing public projects, for realization of the World Natural Heritage Registration.

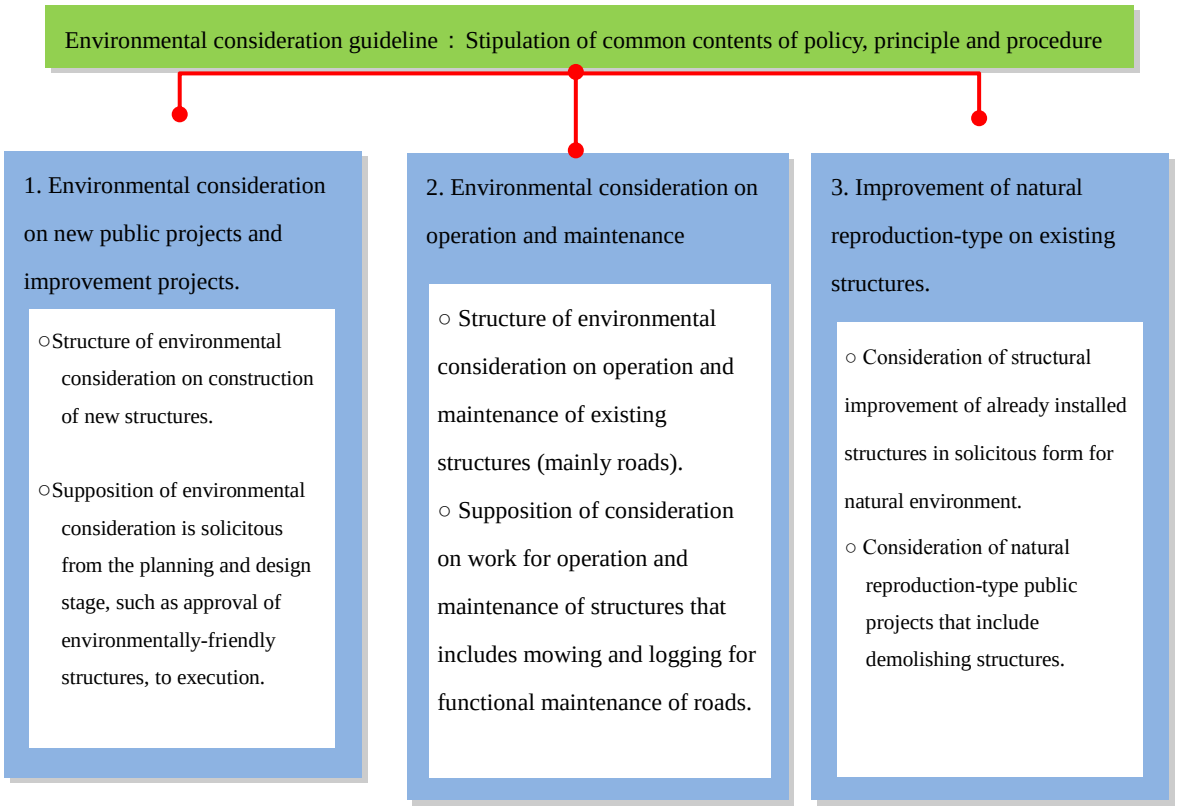
In past public projects, environmental consideration has been examined in each project individually. However, to focus on the World Natural Heritage Registration, it is necessary to have a common guideline for every location to collaborate as a whole that permanently maintains natural environment, landscape, history and culture in Amami-Oshima Island and Tokunoshima Island.

This guideline is intended to define common policy, principles and procedure of environmental consideration for the enforcement of public projects that reduce the influence on natural environment, landscape, history and cultural resources from public projects.

2) Fundamental policy

The project plan will be decided after thorough consideration to avert or reduce environmental influence, such as change of project sites, prior to the public project plan decision. Also we aim to reduce the influence on the natural environment, landscape, historical and cultural resources, and communication places between people and nature when enforcing public projects.

We will continuously reduce those influences during the maintenance process while taking reduction of influence from new projects for granted. In addition, we will attempt to improve the quality of natural environment through the betterment of existing structures and implementation of nature reproduction-type public projects.



3) Fundamental principle

The public projects in Amami-Oshima Island (including the Kakeroma Island area) and Tokunoshima Island will be constructed based on principles as below, with consideration for such ideas as natural environment, landscape and culture.

①Review the execution of the project after consideration of influence toward natural environment and preservation of the rare wildlife, and examine the way to avoid burden to natural environment sufficiently.
②When the situation of natural environment effects by public projects are essentially inevitable, try to take appropriate measures such as minimization, restoration and recovery to reduce the burden to the natural environment.
③Reducing the burden of natural environment, not only at the starting time of new projects, but also during operation and maintenance stages.
④Review and consider needs and possibility of improvement into environmental consideration structures for existing structures that were constructed as a public project which was deployed before this principle

was established, as much as possible.
⑤Regarding public projects of nature restoration, enforcement will be determined based on adaptive resource management and scientific knowledge that is mentioned in the natural reproduction basic policy.
⑥Consider measures for prevention of alien invasive species entering and expanding distribution, and preservation of species of wildlife to secure a native natural ecosystem in the Amami Island Group.
⑦Aim the environmental cultural type of public project that follows local uniqueness and utilize wonderful nature, history and cultural wisdom of Amami while protecting it.
⑧Consider keeping locations where people and nature communicate together, such as ecotourism fields.
⑨Consider not only the natural environment, but also preservation of history and cultural resources.
⑩All people engaged in public projects should try to comprehend the purpose of this principle.
⑪Additionally, for matters not stipulated in this principle, environmental consideration will be conducted based on laws, ordinances, and other regulations.

4) Applicable scope of guidelines

The targeted area and projects for this guideline are defined as indicated below.

(1) The environmental consideration according to the guideline application target area and local area

The importance of environmental consideration varies according to local conditions, so that it divides into the following areas and executes environmental consideration to match each area. The applicable scope covers Amami-Oshima Island (including Kakeroma Island area) that includes areas outside of the boundaries of the heritage site, and Tokunoshima Island.

a. Within the boundaries of the heritage site

Within the boundaries of the heritage site, an advisory council will be set up which will conduct environmental research, and exercise the details of environmental consideration.

b. Buffer area [National Park Class II Special Zone, Class III Special Zone, Marine Special Zone and Foreshore that contacts with the Ordinary Zone (only marine area)]

Understand the presence of environmental consideration targets in this area, and think about environmental conditions to fit into each local situation according to advice from the advisory council and result of environmental research that depends on a scale of projects with standard principles. If there is habitation information of important species, and especially the existences of important elements for preservation identified, we will take advice from experts.

c. Other area

Basically, understand the presence of environmental consideration targets in this area, and think about the environment according to the local situation. However, if the existence of especially important elements for the preservation of nature and culture in the Amami Island Group are identified, we will take advice from

experts.

(2) Projects covered by the guideline application

All public projects have targets that are ordered by the country, prefecture, and municipalities, such as changing the features of land, constructing or reconstructing buildings and structures, removing, planting or sowing seeds of plants, releasing animals and modifying hydrological environments. Furthermore, the case of maintenance work, such as mowing against the effect of the natural environment, can be applicable objects of the guidelines.

As best as possible, a disaster recovery project will be performed based on this guideline. However, absolutely necessary cases, such as urgent restoration of functions, are exceptional.

The application of the guidelines is recommended to private sectors.

(3) Excluded projects from the guideline application

About public projects that have already started project planning before this guideline was created, this guideline does not apply to them.

5) Factors should be considered

The Amami Island Group belongs to the subtropical climate, and there is a possibility that some factors may give influence, which would not be a problem to Honshu (main island) and northward. Furthermore, regions such as the Amami Island Group's special landscape area have been protected by individual villages, and those local distinctive elements require sensitivity.

In implementation of public projects, examples of factors that should be considered about natural environment and landscape are as follows.

①Biodiversity	Habitation and breeding environment of wild animals, wild plants, and rare animals and plants.
②Fundamental environment	Geography, Geology, Water quality, Land, Ground, Bottom sediment, Hydrological circulation, Groundwater, Wave, Tide, Red soil outflow
③Local traditional life, culture, history	Cultural property, Historical sites, Village landscape, Holy places (places is have been valued for a long time in the community), Customs, Landscape, other historical legacy.
④Communication with landscape and nature	Ecotourism field, Nature landscape, Cultural landscape, Streetscape, other Communication places.
⑤Reduction of the burden to the environment	Disposition of waste, Recycling, Utilization of natural energy, Global warming countermeasures.
⑥Living environment	Atmosphere, Bad odors, Noise pollution, Vibrations

6) Method for the environmental consideration

①Business operators promote the environmental consideration on public projects according to this guideline.
②Business operators examine the environmental consideration and execute it at the each stage of "business planning", "design", "construction" and "maintenance".
③Setting up an examination authority. Business operators perform checks about environmental consideration at each stage and submit the results to the examination authority. The examination authority reviews the contents and will request revision to the business operators as necessary.
④The examination authority accumulates information of the examination results to a database as example cases of environmental consideration.

7) Construction of structures to support the implementation of the environmental consideration guideline

(1) Check sheet

Collate factors of environmental impact due to project and environmental consideration elements of targeted areas; we will create a check sheet that can point out items that need environmental consignation. In case of problems occurred while using the check sheet, it will be updated appropriately.

(2) Database

Build a database which accumulates information about the distribution of environmental consideration elements (such as rare species, high value vegetation, history and cultural resources, and the ecotourism field) in Amami-Oshima Island and Tokunoshima Island, and make conditions of environmental consideration elements at the location of execution for public projects to be able to refer from the planning stage. In this regard, from the standpoint of rare species preservation, the information should be managed so as not to have external leaks and only be available to use with necessary approval from the administrator.

(3) Execution casebook

Create a casebook showing methods of constructions and effects (or monitoring process) of the previously executed environmental consideration projects, and use it to examine the methods of environmental consideration.
Moreover, in each public project, execute the environmental consideration, and gather summaries on a casebook sheet after performing verification of effectiveness, then information will be accumulated.

(4) Human resources

Register knowledgeable people about the local natural environment as the advisers who are trustworthy to provide on-the-ground advice and consultation. The advisers give appropriate advice regarding environmental preservation and execution of public projects.

(5) Operation manuals

Summarize basic matters and create operation manuals that should be followed by workers engaging in construction and maintenance operation to ensure environmental consideration in operation.

(6) Training programs

Conduct training programs so construction and maintenance operation workers can learn basic knowledge about environmental consideration, so they are confidently able to accomplish environmental consideration. Moreover, utilize workshops hosted by affiliates, such as construction companies.

2. Environmental consideration guidelines

1) Contents of project planning and design stage

(1) Agenda of the planning stage

At the formulation of public project planning, consideration about the bypass or reduction of environmental effects such as change of public project sites, and in case that it is inevitable, try to take appropriate measures such as minimization, restoration and recovery that reduce the burden to the natural environment.

(2) Formulation of project planning

During formulation of public project planning, pay attention to the natural environment and landscape based on the basic principle of this guideline.

(3) Examination of environmental consideration matters

Examine "environmental consideration matters" that should be considered for each project through the following procedures.

a. Confirmation of locality conditions

Project operational sites will be divided into the one of the following three category areas after confirmation, and environmental consideration will be executed to match each area.

① Within the boundaries of the heritage site

②Buffer area [National Park Class II Special Zone, Class III Special Zone, Marine Special Zone and Foreshore that contact with Ordinary Zone (only marine area)]

In addition, inside of buffer area, the projects divide into "A: large scale project" and "B: small scale project" according to the size of the project with a fixed standard.

③Other area

b. Extraction of the environmental influence elements at the site of the project implementation

Depending on the location requirements of the project operation place, extract environmental consideration elements based on the following information and advice:

①Within the boundaries of the heritage site

Aside from basic contents of all public projects that should be considered, the environmental consideration elements will be extracted based on the information of the database, the advice of the adviser and the results of environmental research. Set up the committee consisting of an expert, and get advice.

②Buffer area [National Park Class II Special Zone, Class III Special Zone, Marine Special Zone and Foreshore that contact with Ordinary Zone (only marine area)]

Aside from the basic contents of all public projects that should be considered, the environmental consideration elements will be extracted from the information of the database, the advice of the adviser that based on the standard scale of the project, and the result of environmental research. In the case of large-scale projects, and if there is habitat information of important species, especially where the existences of important elements for preservation are identified, we will take advice from experts.

② Other area

Aside from the basic contents of all public projects that should be considered, the environmental consideration elements will be extracted by reference to information of the database. However, if the existences of especially important elements for preservation of nature and culture in the Amami Island Group are identified, we will take advice from experts.

c. Extraction of the environmental influence factor

According to details of project implementation, we will extract "the environmental influence factor" which has the possibility to give influence to natural environments.

d. Extraction of the environmental consideration contents

Collate "the environmental consideration factors" and "the environmental consideration elements" by using the check sheet, and extract the contents that need consideration.

e. Examination of the environmental consideration contents

Use the construction casebook as an example for the contents of consideration matters, and examine the environmental consideration contents while getting advice from advisors, if necessary. (In case of large-scale projects within the boundaries of heritage sites and the Buffer Zone, acquire advice from the advisory council.)

f. Reflection to project planning

Reflect environmental consideration contents to project planning, and clarify consideration matters on each stage of design, construction, and maintenance.

(4) Consideration in project planning and design

Grasp environmental consideration factors that occur because of the project, and examine locations, scales and contents of the facilities comprehensively, while considering influence to the natural environment. The

preservation of the natural environment is the basic condition, but in case that unavoidable influence occurs, we will try to reduce the burden based on “the basic principle” that is defined in this guideline.

(5) Consideration related to the structures

The structures should assume construction by using materials and designs which match the natural environment and landscape. Specifically, the division of habitat and micrometeorological change such as sunshine conditions caused by structures giving influence to the wildlife habitats, therefore, it is necessary to pay adequate attention in order to reduce that influence.

Moreover, it is desirable to minimize the influence to landscapes that are coupled with ecotourism fields and cultural elements. Even though the structures don’t cause any major problem in other ways, it may modify local special landscape, and as such, it requires consideration.

(6) Introduced species measures

In the selection of materials and resources to use, caution about not giving negative affect to the native natural ecosystem of the Amami Island Group will be required.

Since the Amami Island Group is comprised of various islands and the ecosystem contains many endemic species, there is a possibility to get great influence from introduced species, so it is necessary to prevent the invasion of introduced species.

Not only introduced species from overseas, but also careful supervision for the prevention of the animals and plants entering from outside of the island, domestically is required.

Especially, in case of the same kind, or related species of native species from an outside Island are introduced while executing forestation projects, such as slope greening, there is a possibility of DNA disturbance by hybridization, giving great influence to the existing ecosystem. Therefore, as much as possible, it is necessary to consider prevention carefully.

As the Amami Islands Group belongs to the subtropical climate, some species possibly may give great influence, which would not be the case from Kyushu, northward, and as such, it requires attention.

(7) Application to disaster recovery projects

Even though the disaster recovery projects are usually performed with the principle to restore to the original form, we will consider the way to restore it as an environmental consideration structure by using improved methods.

(8) Application to existing structures

Regarding structures that were built before this guideline was developed, examinations will be conducted as to whether those structures are influencing precious natural environment continuously or not, mainly related to the World Natural Heritage sites, and we will consider them about repairs or improvements.

(9) Promotion of the construction recycling

Construction by-products should be processed appropriately based on applicable laws and regulations such as the Construction Material Recycling Law and the Waste Management and Public Cleansing Act. To minimize the influence to the environment, we will attempt to recycle (reuse or recycle) such available items, the diversion at the construction site or between construction sites, and processing at resource recovery facilities, while trying to expand the operating life of the structures and control the construction by-product production.

(10) Regulation of diversion between construction sites

Exchange information about diversion between construction sites and try to coordinate the promotion of construction recycling. For diversion of construction by-products at the site, the diversion between construction sites and processing at the resource recovery facilities, we will exchange information at utilization conciliation meetings on Islands and adjust the usage.

2) Contents in the construction stage

(1) The construction-planning manual

The construction operator will create a construction-planning manual based on the basic policy from this guideline with the supervision of contractee, while considering the natural environment and landscapes. Especially in the habitat of rare animals, we will carefully consider details that depend on the lifecycle of the inhabitant animals while setting construction periods that will not disturb the breeding behavior, as well as the prevention of road-kill, while also reducing the influence from night illumination.
Furthermore, except during disaster situations, we will pay attention carefully to rare plants when perform mowing and cutting, and setting temporary structures (temporary roads, etc.).

(2) Responsibility of construction operators

The construction operators must understand the details of the ordered public constructions and try to minimize influence from construction toward the natural environment and landscape of neighboring areas according to the construction plan. In case of differences caused in the field condition, it will be considered appropriately based on the consideration contents in the execution plan and the design stage.
In that regard, in cases difficult to determine, we will take advice from the advisor by contractee.

(3) Technical support for constructional operators that implement environmental consideration

At the Nature Conservation Department, training for the construction operators will be organized to teach them about environmental consideration so they can improve their knowledge and skills about environmental consideration. At the same time, we will support workers to improve their knowledge and skills about environmental consideration.
Moreover, we will make an “operation manual” gathering points of concern during the progress of work at the construction site, and support to execute environmental consideration on the field.

(4) Use of construction machines and set up of safety facilities

The construction operators should use construction machines such as low-noise, low-vibration and emission controlled types, with considering about environment. Furthermore, we will consider the color of safety facilities that cause no influence for safety, while creating harmony with surrounding scenery.

(5) Placement of the environmental consideration representative

The construction operator should place the environmental consideration representatives as shown below, and report details about the placement to the contractee or the investigation agency.

In addition, the contractee instructs the construction operator so that the construction will be performed with consideration for natural environments.

Location conditions	The environmental consideration representatives	Check
①The Boundaries of the Heritage Site	Placement	Check by environmental consideration representatives
②Buffer area [National Park Class II Special Zone, Class III Special Zone, Marine Special Zone and Foreshore that contact with Ordinary Zone(only marine area)]	A. Large-scale project Placement B. Small-scale project None	Check by environmental consideration representatives Check by construction operator
③Other area	None	Check by construction operator

(6) Confirmation of materials

Environmental consideration representatives and construction operators (contractor) should check materials thoroughly to prevent entry of introduced species (not only from foreign countries but also domestic species) and the diffusive transfer.

Production places and storage conditions of materials will be investigated and verification of introduced species measures at the instillation time will be conducted, to prevent entry of introduced species.

Regarding the relocation of construction materials inside or among islands, preventive measures shall be performed completely as per introduced species.

Particularly, even though species are same as native species on the Island, species from outside of the Island have different DNA codes from indigenous species. Therefore, we should pay sufficient attention and caution about genetic pollution.

3) Contents at the maintenance stage

(1) Development of the maintenance plan

During development of the maintenance plan, consideration will be paid about the natural environment and

landscape based on the basic policy of this guideline.
We consider environmental consideration matters same as “2. 1) (3) Examination of the environmental consideration matters”, and reflect it to the maintenance plan.
However, environmental research and setting up of a committee are not necessary. Maintenance workers should follow this principle and ensure environmental consideration.
Examine environmental consideration matters before the start of construction, even if the maintenance plan could not be prepared on time, work executors should follow and ensure environmental consideration.

(2) Process of environmental consideration for maintenance

Technical support for the work executor and placement of environmental consideration representatives are performed by environmental consideration as same procedure as “2) Contents in the construction stage”.

(3) Execution of the monitoring survey

Execution of the monitoring survey is necessary, according to the condition of the construction site’s natural environment. If the influence to the natural environment is observed by the monitoring result, the maintenance worker should reconsider the method, and take appropriate measures. At that time, request appropriate advice from the advisor.

(4) Recovery of natural environments

Regarding facilities (structures) that fade in importance or use has been discontinued, careful consideration will be given after checking tertiary and secondary effects, and try to engage in nature recovery as soon as possible by doing processes such as removal of manufactured structures.
In the case of planting trees, use seed as greening material that would not give adverse affect to the ecosystem as much as possible, by methods (seedless) to derive the native plants of the island.

(5) Adjustment of diversion between construction sites

Exchange information about diversion between construction sites to promote construction recycling, and try for utilization adjustment.
For the diversion of construction byproducts at the site, the diversion between construction sites and processing at resource recovery facilities, we will exchange information at utilization conciliation meetings on Island and adjust the use.

4) Contents about the examination of the project

(1) Setting of the Examining Authority

Setting up the Examining Authority to verify contents of self-inspection about consideration to the natural environments, that business operators perform based on this guideline.

(2) Verification by the Examining Authority

At the construction stage, business operators perform self-inspection based on this guideline, and the Examining Authority verifies those contents.

5) The nature restoration public project

The natural environments always change due to various natural phenomenon (typhoon, heavy rain, climate change) and people's lifestyle. If those changes are determined as undesirable for the natural environment and biodiversity conservation in Amami-Oshima Island and Tokunoshima Island, the positive improvement of changing natural environment and attempting of the public project for reproduction are desired.

4-39 Biodiversity Strategy of Okinawa
(Excerpt)

Preparer: Okinawa Prefecture

Date: March 2013

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(Omitted)

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(Omitted)

Section 1 Basic Approach

1. Intent behind the Enactment of Regional Strategies

In light of the challenges concerning biodiversity in Okinawa Prefecture, the prefecture has enacted the Biodiversity Strategy of Okinawa to serve as its basic plan for achieving a society in harmony with the natural environment. Such a society will be capable of conserving, maintaining, and restoring biodiversity, as well as passing it down to future generations, and will also be capable of enjoying our connections with nature and the blessings from it in a sustainable manner.

2. Positioning of the Regional Strategy

(1) Basic Act on Biodiversity

Laws and ordinances related to the conservation of biodiversity and its sustainable use span a wide range. Under the Basic Act on Biodiversity, it is important to have mutual coordination between these legal schemes so that they are applied effectively. The national strategy plays the role of indicating the basic policies for this.

The Biodiversity Strategy of Okinawa was enacted on the basis of the National Biodiversity Strategy of Japan, and has been positioned as the basic plan for Okinawa Prefecture concerning the conservation and sustainable use of biodiversity pursuant to Article 13 of the Basic Act on Biodiversity.

(2) Okinawa 21st Century Vision and Basic Plan for 21st Century Vision of Okinawa (Okinawa Promotion Plan)

The Okinawa 21st Century Vision is a basic plan that describes an ideal vision for Okinawa in the future (roughly around the year 2030) and clarifies the orientation of initiatives and the roles of the prefectural residents and government with a view towards achieving this on the basis of the participation and cooperation of the residents.

The Basic Plan for 21st Century Vision of Okinawa clearly lays out things like the “Basic policies” and “Basic measures” in the Basic Plan for 21st Century Vision of Okinawa in order to maximize the welfare of Okinawa based on things like the orientation of initiatives for achieving the future vision expressed in the Okinawa 21st Century Vision.

The Biodiversity Strategy of Okinawa was enacted in accordance with the Basic Plan for 21st Century Vision of Okinawa. Its role is to serve as a plan for promoting the Okinawa 21st Century Vision and the Basic Plan for 21st Century Vision of Okinawa in the interest of working towards the conservation and sustainable use of biodiversity.

(3) Second Okinawa Prefecture Basic Plan for the Environment

The Second Okinawa Prefecture Basic Plan for the Environment is a plan that is based on the provisions of Article 8 of the Okinawa Prefecture Basic Environment Ordinance. It is a basic plan aimed at promoting measures related to environmental conservation within the prefecture in a comprehensive and systematic manner.

The Biodiversity Strategy of Okinawa has been positioned as a plan needed in order to achieve the "Development of a pleasant region where humans and nature coexist," which is one of the objectives of the Second Okinawa Prefecture Basic Plan for the Environment.

(4) Appropriate Responses to Roles concerning International Initiatives

The United Nations has established the ten years from 2011 to 2020 as the United Nations Decade on Biodiversity, and stipulated that all of the actors among the international community are to come together to address issues with biodiversity for the achievement of the Aichi Targets during this. When it comes to such social trends, having local government continue to promote measures related to biodiversity according to the natural and social conditions of the region plays an extremely important role in conserving Japan's biodiversity and promoting its sustainable use.

Therefore, the enactment of the Biodiversity Strategy of Okinawa as a basic plan in aiming for the conservation and sustainable use of biodiversity in the prefecture fulfills one of the roles of the local government for this.

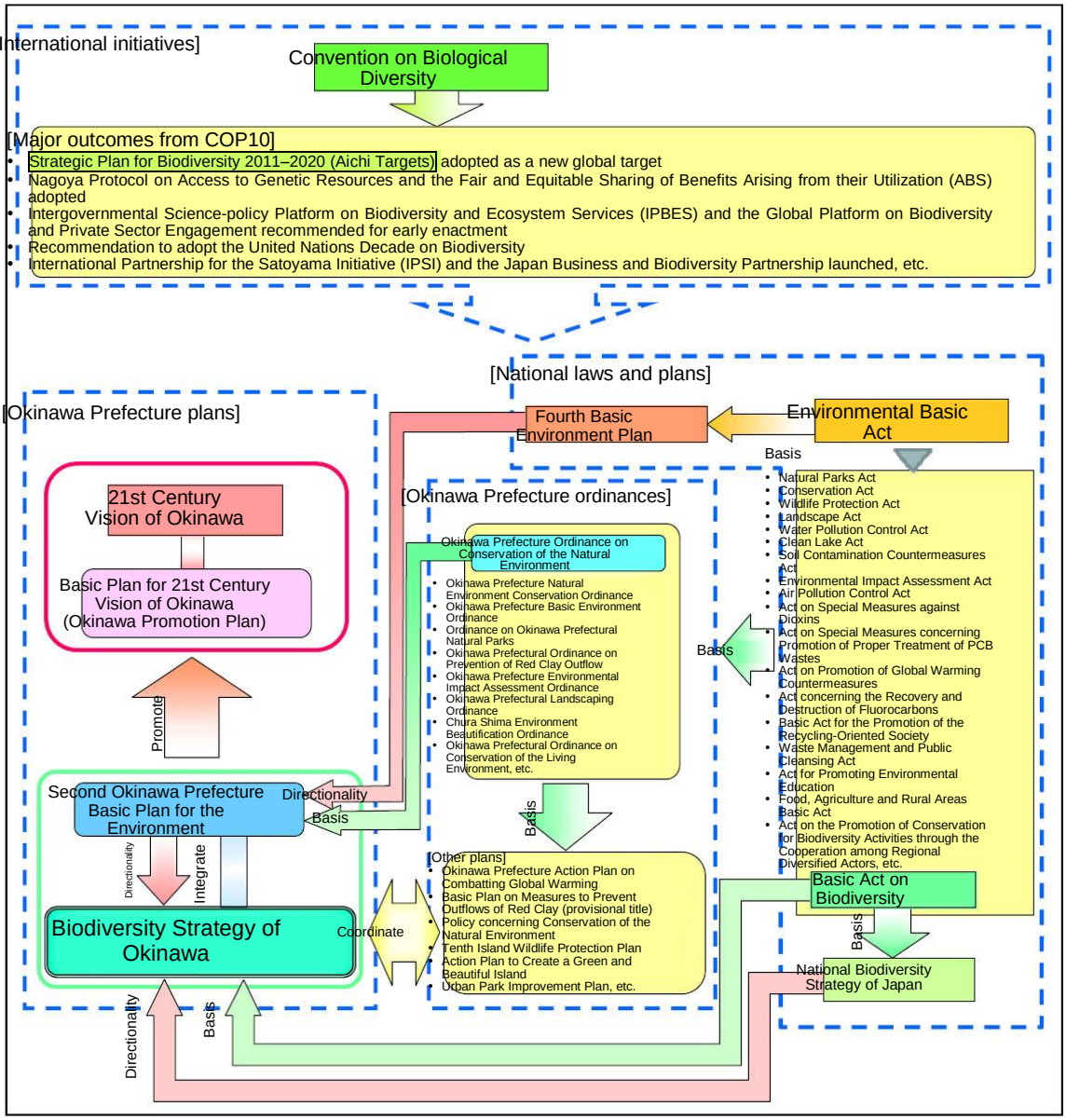

Fig. Connection between the Biodiversity Strategy of Okinawa and other laws and ordinances

In the above diagram, “Basis” indicates the law, ordinance, or so forth that serves as the basis on which something was formulated. “Directionality” indicates the directionality from higher-level plans to lower-level plans, while “Integrate” shows efforts to integrate the contents between plans that exist within a hierarchical relationship. “Coordinate” indicates the fact that measures and the like are promoted by working for coordination between plans that exist within a concurrent relationship, while “Promote” indicates that a plan has been promoted and developed from a lower-level plan to a higher-level one.

3. Area Subject to the Regional Strategy

The area subject to this regional strategy consists of the entirety of Okinawa Prefecture.

4. Reappraisal of the Strategy

The decision has been made to reappraise the Biodiversity Strategy of Okinawa, with the fifth year following its formulation set as the target year for this. However, it may be reappraised as needed in the event that drastic changes come about in regards to the natural environment, social conditions, and so forth.

Moreover, individual target years will be set for those matters for which it would be appropriate to set targets over a short time span.

Section 2 Grand Design

(Omitted)

2. Aspirational Future Vision for the Region

(Omitted)

(1) Northern Region

"A region that values a connection between the forests and sea where human activities and the workings of nature coexist"

- For the Yambaru forests, Yambaru-style Forestry has been established. This considers zoning and forest management plans that are function-specific, and combines a sustainable, recycling-oriented forestry and forest products industry with activities for experiencing nature in harmony with the environment.
- For ecotours, forethought is given to the environmental carrying capacity in order to avoid and mitigate the impact on the environment and overuse. Being a guide is becoming a popular occupation.
- Progress is being made with river improvements that give forethought to biodiversity, and fish such as the Ryukyu sweetfish have established themselves in rivers where ecosystems native to Okinawa have been restored.
- Work is being done to restore coral communities of a certain size. In addition, efforts are being made to achieve balanced conservation and use for said communities by classifying important ocean areas with coral reefs and tidal flatlands as conservation districts, as well as coordinating between national and prefectural conservation measures and the self-management of the local region. The thinking that forests and oceans form a single, cohesive unit is shared throughout the local region, and land-based impacts from

things like contamination by red clay is being reduced through a number of countermeasures. What is more, deserted arable land that has no possibility of being restored as farmland will be used to regenerate forests and wetlands and contribute to the conservation of coral reefs.

- Environmentally-friendly agriculture contributes to maintaining both the local lifestyle and the natural environment.
- Mongooses and feral cats and dogs are being completely eliminated from the northern part of Okinawa Island, and the area of distribution for endangered species like the Okinawa rail is being restored. What is more, laws and ordinances that protect endangered species are functioning effectively, and are preventing the collection and trade of rare insects and plants.
- The number of roadkill incidents involving endangered wild fauna such as the Okinawa rail and the Ryukyu long-haired rat is falling as a result of cooperation on the part of the concerned parties. In addition, all of the prefectural residents understand the importance of the nature up north and things like the recycling of garbage is common knowledge among them, so illegal dumping is no longer seen there. What is more, etiquette among dog and cat owners is thoroughly enforced, and so stray dogs and cats are no longer seen.
- As a region with an abundance of nature that has been registered as a Natural World Heritage Site and a global geopark, the area is visited by a large number of tourists from within Japan and overseas. This is bringing about a certain richness for the local people in both a physical and spiritual sense. What is more, the tourism industry takes responsibility in working to conserve natural resources, while simultaneously proactively emphasizing and spreading the word that the area is a tourist region that coexists with nature.
- Dugongs and their habitats are being conserved, and so now people can catch glimpses of dugongs out for a swim. Furthermore, the sandy beaches where sea turtles lay their eggs are being conserved.
- Traditional rituals, the natural environments involved in the rituals, and the natural systems surrounding mountains are being carefully maintained and conserved.
- The former site of the US Army's training ground up north that was returned to Japan is being carefully maintained and conserved as an asset of the prefectural residents.

(Omitted)

(5) Yaeyama Region

Islands where the living creatures that live in the abundant coral reefs and primeval forests are reared on human kindness, and that are prized by a great many people

- This has been zoned into areas that should be conserved and areas that can be used, and tourism whereby people experience things like ecotourism and stay the night is being carried out.

- Ecotours are being carried out at major rivers like Iriomote Island's Nakama River and Urauchi River by taking their environmental carrying capacity into consideration. What is more, the tourists that visit the rivers and mountain streams have an understanding of and attachment to the natural environment, and enjoy recreational activities while being conscientious of the ecosystem.
- Efforts are being made to achieve balanced conservation and use by classifying important ocean areas with coral reefs and tidal flatlands as conservation districts, as well as coordinating between national and prefectural conservation measures and the self-management of the local region. In addition, progress is being made on elucidating the mechanism by which mass outbreaks of crown-of-thorns starfish occur, and it is now possible to observe this. In regions that have been positioned as especially important coral reefs, coral communities are being protected by means of continuous and concentrated control measures.
- The thinking that the land and oceans form a single, cohesive unit is shared throughout the local region, and land-based impacts from things like contamination by red clay is being reduced through a number of countermeasures.
- Environmentally-friendly agriculture contributes to maintaining both the island lifestyle and natural environment.
- Ordinances that protect endangered species are functioning effectively, and are preventing the collection and trade of rare insects and plants.
- The number of roadkill incidents involving endangered wild fauna such as the Iriomote cat and the crested serpent eagle is falling as a result of cooperation on the part of the concerned parties. What is more, the tourism industry, for which the island's nature is the greatest source of attraction for tourists, takes responsibility in working to conserve natural resources, while simultaneously proactively emphasizing and spreading the word that the area is a tourist region that coexists with the environment.
- As a region with an abundance of nature that has been registered as a Natural World Heritage Site, the area is visited by a large number of tourists from within Japan and overseas. This is bringing about a certain richness for the local people in both a physical and spiritual sense. It is creating a unique tourism style that uses a variety of different resources, including the historical and cultural resources; subtropical fruit trees and other agricultural, forestry, and fisheries products; and the hospitality of the residents found in the local region.
- Traditional rituals, the natural environments involved in the rituals, and the natural ecosystems surrounding mountains are being carefully maintained and conserved.
- On Uotsuri Island countermeasures are being promoted to stop goats from turning feral and vegetation is being restored. Species like the Senkaku mole, short-tailed albatross, masked booby, and common tern are breeding there as well.

(Omitted)

Chapter 5 Action Plans

(Omitted)

Section 2 Priority Measures and Initiatives

1. Priority Measures for the Whole Prefecture

	Priority measure 1-1	Promote registration as a Natural World Heritage Site
	Initiatives	Aim to register the area as an important regional Natural World Heritage Site in its capacity as a home to a diverse natural environment and habitat for endemic and endangered species in order to conserve Okinawa's invaluable nature for the world and pass it down to future generations as the treasure of Umanchu. To do so, make progress on establishing ordinances aimed at expanding Iriomote-Ishigaki National Park and converting the Yambaru region to a national park. In addition, promote initiatives such as for the protection of endangered species, and promote the use of local resources befitting a Natural World Heritage nominated property.
	Division(s) in charge	Nature Conservation Division
	Projects/initiatives for each related measure	1-(2)-a. Expand protection and security measures 1-(2)-b. Promote countermeasures against alien species 1-(2)-c. Promote initiatives in cooperation with local residents

	Priority measure 1-2	Conserve and restore the coral reef ecosystem
	Initiatives	The coral reef ecosystem that characterizes the seas of Okinawa is being significantly affected by problems like the bleaching of coral, mass outbreaks of crown-of-thorns starfish, and the impact from red clay that flows out from the land. These are giving rise to dangers to biodiversity. Therefore, formulate a Comprehensive Coastal Management Plan that treats onshore and ocean regions as a single, cohesive unit, and have the concerned parties work together to conserve and restore the coral reefs. In addition, elucidate the mechanism by which mass outbreaks of crown-of-thorns starfish occur and take drastic countermeasures against this. Moreover, promote systematic surveys and countermeasures against outflows of red clay based on the Basic Plan on Measures to Prevent Outflows of Red Clay (provisional title), and verify the restoration of coral communities that extend throughout the entire region. Also, support coral reef conservation activities being implemented by a diverse array of entities, such as fishermen and diving business operators.
	Division(s) in charge	Nature Conservation Division, Environmental Policy Division, Fisheries Division, Environmental Conservation Division, Farming Support Division, Forest Development and Planning Division, Agricultural Irrigation Division
	Projects/initiatives for each related measure	2-(2)-a. Formulate the Basic Plan on Measures to Prevent Outflows of Red Clay (provisional title) 2-(2)-b. Have local residents prevent outflows 2-(2)-c. Strengthen and support countermeasures against outflows, and properly maintain and manage existing facilities for combatting this 2-(2)-d. Study and research techniques for preventing outflows 2-(5)-a. Conserve and restore coral reefs 2-(5)-c. Study and research techniques for restoration 5-(1)-a. Promote and support activities by companies, producers, organizations, and more

	Priority measure 1-3	Create tourist attractions that coexist with the environment
	Initiatives	To ensure that the tourism industry, which utilizes the rich natural environment of Okinawa, can continue to develop sustainably on into the future, it will be necessary to promote a tourism industry that coexists with nature by reducing its environmental impact and taking responsibility in working to conserve natural resources. To do this, promote the creation of tourist attractions and ecotourism that coexist with nature by giving consideration to the conservation of the natural environment. In addition, promote tourism that uses the cultural resources borne from the nature of Okinawa.
	Division(s) in charge	Tourism Promotion Division, Nature Conservation Division
	Projects/initiatives for each related measure	3-(2)-a. Promote the creation of tourist attractions that coexist with the environment

	Priority measure 1-4	Establish the Okinawa Prefecture Biodiversity Plaza (provisional title)
	Initiatives	In order to boost the visibility of biodiversity and promote initiatives geared towards conservation, network-style hubs linking various entities will be needed. These will be necessary for carrying out initiatives like deepening the awareness of prefectural residents and visitors when it comes to Okinawa's biodiversity and fostering activities to conserve biodiversity. To do this, establish the Okinawa Prefecture Biodiversity Plaza (provisional title), which will have the following functions. (1) Collect and disseminate information <Major initiatives> • Disseminate information using a homepage, agency bulletin, and diverse media sources • Collect and organize information, create databases with it, and

		provide it • Hold events like traveling exhibitions at municipalities, museums, and schools, etc. (2) Functions to support activities and human resource development <Major initiatives> • Support the holding of activities carried out in the local region • Develop expert human resources through lectures and inspection trips to advanced regions • Expand learning opportunities via traveling classes held at schools, children's welfare facilities, etc. • Expand nature classes through travel programs • Respond to consultations regarding the aforementioned activities, etc. (3) Functions for establishing networks <Major initiatives> • Foster activities sponsored by companies via matching with Corporate Social Responsibility (CSR) • Develop study sessions and hands-on activities with the potential to be viable businesses
	Division(s) in charge	Nature Conservation Division
	Projects/initiatives for each related measure	4-(1)-d. Establish the Okinawa Prefecture Biodiversity Plaza (provisional title)

2. Priority Measures by Region

(1) Northern Okinawa Island

Based on the current status of and challenges for biodiversity on Northern Okinawa Island, preference will be given to promoting the following three items as priority measures.

	Priority measure 2-(1)-1	Coexist with nature via zoning
	Initiatives	In the Yambaru region, which is rich in biodiversity, there are some areas where forestry has been carried out since long ago. It is necessary to continue to promote the conservation and sustainable use of the natural environment in a well-balanced manner. To do this, coordinate with the concerned parties to consider modalities for forest conservation that strikes a balance between conservation and use, such as zoning districts into those where the natural environment should be conserved and those that can be used. In addition, aim to develop Yambaru-style Forestry that combines sustainable, recycling-oriented forestry and forest products industry with activities for experiencing nature in harmony with the environment.
	Division(s) in charge	Nature Conservation Division, Tourism Promotion Division, Forest and Green Area Division
	Projects/initiatives for each related measure	1-(2)-a. Expand protection and security measures 1-(2)-b. Promote countermeasures against alien species 1-(2)-c. Promote initiatives in cooperation with local residents 3-(1)-c. Conserve biodiversity for forests, forestry, and greening 3-(2)-a. Promote the creation of tourist attractions that coexist with the environment

	Priority measure 2-(1)-2	Protect endangered species
	Initiatives	When it comes to endangered species, such species are crucial components that make up ecosystems. We must be conscious of the fact that there are species that are only found inhabiting the Northern part of the island from anywhere throughout Japan or the world, and must work to protect them. To do this, enact the Okinawa Prefectural Ordinance on the Protection of

		Endangered Species (provisional title) and work to protect endangered species in cooperation with the local region, while also promoting the protection of natural monuments. What is more, take measures to combat roadkill, such as by installing crossing boxes by giving consideration to small animals, and take measures to eliminate alien species that threaten endangered species.
	Division(s) in charge	Nature Conservation Division, Roads and Street Division, Roadway Management Division
	Projects/initiatives for each related measure	1-(2)-a. Expand protection and security measures 1-(3)-b. Protect endangered species 1-(3)-c. Promote countermeasures against alien species 1-(3)-d. Protect and raise awareness of natural monuments

	Priority measure 2-(1)-3	Promote nature-oriented river works (river improvements that give consideration to biodiversity)
	Initiatives	To date, river improvements in the form of building dams and disaster prevention measures have been taken for the rivers of Northern Okinawa Island. These have shrunk or eliminated living creatures' habitats and split up migratory routes. As such, it will be necessary to mitigate these problems and restore these. To do this, give consideration to achieving harmony between the natural environment running the entire length of rivers, local lifestyles, and their history and culture. In addition, perform river management via "nature-oriented river works" that conserve, restore, and create habitats and breeding environments for living creatures and diverse river environments.
	Division(s) in charge	River Division
	Projects/initiatives for each related measure	2-(1)-c. Conserve and restore river environments 2-(3)-a. Adopt construction methods that give consideration to wildlife habitats

(Omitted)

(5) Yaeyama Region

Based on the current status of and challenges for biodiversity in the Yaeyama Region, preference will be given to promoting the following two items as priority measures.

	Priority measure 2-(5)-1	Protect endangered species
	Initiatives	When it comes to endangered species, such species are crucial components that make up ecosystems. We must be conscious of the fact that there are species that are only found inhabiting the Yaeyama Region from anywhere throughout Japan or the world, and must work to protect them. To do this, enact the Okinawa Prefectural Ordinance on the Protection of Endangered Species (provisional title) and work to protect endangered species in cooperation with the local region, while also promoting the protection of natural monuments. What is more, take measures to eliminate alien species that threaten endangered species and take measures to combat roadkill, such as by installing crossing boxes by giving consideration to small animals.
	Division(s) in charge	Nature Conservation Division, Roads and Street Division, Roadway Management Division
	Projects/initiatives for each related measure	1-(2)-a. Expand protection and security measures 1-(3)-b. Protect endangered species 1-(3)-c. Promote countermeasures against alien species 1-(3)-d. Protect and raise awareness of natural monuments

	Priority measure 2-(5)-2	Promote agriculture that coexists with nature
	Initiatives	The Yaeyama Region contains cultivated ecosystems that consist of agricultural land (paddy fields and regular fields) and their surrounding forests and ground, as well as the other flora and fauna that inhabit these areas. For these, it is necessary to conserve a diverse array of environmental elements, including the surrounding forests, in the interest of maintaining biodiversity. To do this, work to eradicate and prevent the incursion of specific disease-carrying insects, while also making efforts to promote countermeasures against such insects that are environmentally-conscious and to take countermeasures against outflows of red clay. In addition, work to promote soil cultivation and agriculture that conserves the environment, while also promoting systems for reusing resources by means of using biomass from livestock manure and the like. The Yaeyama water regions in particular have the highest rates of coral coverage of those found anywhere throughout Okinawa Prefecture. Therefore, recognize that cultivated ecosystems are connected to coastal and ocean ecosystems through river basins, and promote measures to prevent outflows of red clay from farmland.
	Division(s) in charge	Farming Support Division, Forest and Green Area Division
	Projects/initiatives for each related measure	3-(1)-a. Promote agriculture that coexists with the environment 3-(1)-c. Conserve biodiversity for forests, forestry, and greening

(Omitted hereafter)

4-40 Act on Special Measures for the Promotion and Development of Okinawa
(Excerpt)

(Act No. 14 from March 31, 2002)

Revised

(Omitted)

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Chapter 1 General Provisions

(Purpose)

Article 1

The purpose of this act is to work to promote Okinawa in a comprehensive and systematic manner while respecting its independence, thereby contributing to the self-sustaining development of Okinawa as well as the achievement of an affluent life for its residents. This is to be done by enacting the Basic Policy for the Promotion of Okinawa in light of the special circumstances in which Okinawa finds itself, and taking special measures to promote business based on the Okinawa Promotion Plan enacted pursuant to this.

(Considerations for the policies)

Article 2

With regard to the enactment and implementation of policies concerning the promotion of Okinawa, the national and local governments must give consideration to the geographical and natural characteristics of Okinawa. They must also give consideration to improving the underlying conditions for industrial activity and the lives of the residents, the conservation and use of the outstanding cultural output native to Okinawa, and the conservation of the environment and the creation of outstanding landscapes. In addition, they must also work to create a pleasant, affluent living environment.

(Definitions)

Article 3

For this law, the definitions of the terms listed in the following items shall be used for the stipulations in each of the applicable items hereafter.

(1) Okinawa: Refers to the region of Okinawa Prefecture.

(2) Local governments: Refers to the local governments of Okinawa.

(3) Outlying islands: Refers to those islands of Okinawa aside from the main island that have been designated by governmental ordinance.

(4) International conferences, etc.: Refers to the international conferences, etc. stipulated in Article 2 of the Act on Promotion of Inbound Tourism by Facilitating Solicitation and Implementation of International Conferences, etc. (Act No. 79 from 1994).

(5) Activities for experiencing nature that conserve the environment: Refers to activities whereby participants receive guidance and advice from people who are knowledgeable when it comes to the local natural environment, which they come into direct contact with by taking the conservation of said environment into consideration, thereby deepening their understanding of it.

(6) Telecommunications industry (Omitted)

(7) Specified telecommunications businesses (Omitted)

(8) Businesses that use telecommunications technology (Omitted)

(9) Manufacturing and other industries (Omitted)

(10) Projects for upgrading industry and business innovation (Omitted)

(11) International logistical bases and industries (Omitted)

(12) Specified international logistical base businesses (Omitted)

(13) Foreign cargo (Omitted)

(14) Small and medium-sized enterprise operators (Omitted)

(15) Sites of former military bases (Omitted)

Chapter 2 The Okinawa Promotion Plan and Other Plans

(Basic Policy for the Promotion of Okinawa)

Article 3-2

The Prime Minister shall establish the Basic Policy for the Promotion of Okinawa (hereafter referred to as the "Basic Policy") in an effort to promote Okinawa.

2. The Basic Policy shall stipulate the matters listed below.

(1) Matters related to the significance of and direction for promoting Okinawa

(2) Basic matters concerning the promotion of tourism; the promotion of the telecommunications industry; the promotion of agriculture, forestry, and fisheries industries; and the promotion of other industries

(3) Basic matters concerning the promotion of employment, human resource development, and other forms of job security

(4) Basic matters concerning the promotion of education and culture

(5) Basic matters concerning the promotion of welfare and ensuring medical care

(6) Basic matters concerning the promotion of science and technology

(7) Basic matters concerning the advancement of telecommunications

(8) Basic matters concerning promoting international cooperation and international exchange

(9) Basic matters concerning using the sites of former military bases

(10) Basic matters concerning the promotion of outlying islands

(11) Basic matters concerning environmental conservation, disaster prevention, and conservation of national territory

(12) Basic matters concerning the development of social capital and the use of land (including public waters; the same holds true for number 11 in Paragraph 2 of the following article)

(13) Basic matters concerning any other matters for the promotion of Okinawa other than those listed in the items above

3. The Basic Policy must include content that can be achieved within a target of about ten years, with FY2012 as the first fiscal year for this.

4. When the Prime Minister begins the process of establishing the Basic Policy, they must first hear the opinions of the Okinawa Promotion Council and consult with the heads of the relevant administrative agencies.
5. The Prime Minister must publicly announce the Basic Policy once it has been established without delay.
6. The provisions of the two previous paragraphs will apply to changes to the Basic Policy.

(Okinawa Promotion Plan)

Article 4

The Governor of Okinawa Prefecture shall work to establish the Okinawa Promotion Plan on the basis of the Basic Policy.

2. The Okinawa Promotion Plan shall stipulate the matters listed below.
   (1) Matters concerning the promotion of tourism; the promotion of the telecommunications industry; the promotion of agriculture, forestry, and fisheries industries; and the promotion of other industries
   (2) Matters concerning the promotion of employment, human resource development, and other forms of job security
   (3) Matters concerning the promotion of education and culture
   (4) Matters concerning the promotion of welfare and ensuring medical care
   (5) Matters concerning the promotion of science and technology
   (6) Matters concerning the advancement of telecommunications
   (7) Matters concerning promoting international cooperation and international exchange
   (8) Matters concerning using the sites of former military bases
   (9) Matters concerning the promotion of outlying islands
   (10) Matters concerning environmental conservation, disaster prevention, and conservation of national territory
   (11) Matters concerning the development of social capital and the use of land
3. In addition to the matters listed in the items of the preceding paragraph, efforts shall be made to establish matters related to the promotion of different regions that have been divided up by taking into consideration Okinawa's geographical conditions, where its population and industries are concentrated, and other social conditions in a comprehensive manner in the Okinawa Promotion Plan.
4. The Okinawa Promotion Plan must include content that can be achieved within a target of about ten years, with FY2012 as the first fiscal year for this.
5. Once the Okinawa Promotion Plan has been established, the Governor of Okinawa Prefecture must make efforts to publicly announce it and submit it to the Prime Minister.

6. Once the Okinawa Promotion Plan has been submitted per the provisions of the preceding paragraph, the Prime Minister must notify the heads of the relevant administrative agencies of its contents. In such cases, the heads of the relevant administrative agencies can offer their opinions regarding the Okinawa Promotion Plan to the Prime Minister.
7. If the Prime Minister acknowledges that the Okinawa Promotion Plan submitted per the provisions of Paragraph 5 is inconsistent with the Basic Policy, they may request that the Governor of Okinawa Prefecture make changes to it.
8. If the Prime Minister acknowledges that it is not necessary to take the measures per the provisions of the preceding paragraph regarding the Okinawa Promotion Plan submitted per the provisions of Paragraph 5, they must inform the Governor of Okinawa Prefecture to this effect.
9. The provisions from Paragraph 5 up through the preceding paragraph shall apply with regard to changes to the Okinawa Promotion Plan.

(National government assistance)

Article 5

The national government must make efforts to provide Okinawa Prefecture with the necessary assistance regarding the smooth implementation of the Okinawa Promotion Plan.

Chapter 3 Special Measures for Promoting Industry

Section 1 Tourism Promotion

(Omitted)

3. Activities for Experiencing Nature that Conserve the Environment

(Conservation and usage agreements regarding activities for experiencing nature that conserve the environment)

Article 21

Persons who offer guidance and advice regarding activities for experiencing nature that conserve the environment as a business in Okinawa can conclude agreements regarding the implementation of said activities (hereafter referred to as “conservation and usage agreements”), and receive authorization from the Governor of Okinawa Prefecture stating that said agreements are proper.

2. With respect to applications pertaining to the authorization from the preceding paragraph, representatives must be established from among the parties taking part in the conservation and usage agreements (hereafter referred to as “agreement representatives”) to carry this out.

3. Persons who offer guidance and advice regarding activities for experiencing nature that conserve the environment as a business and operators aside from such persons who offer guidance and advice regarding activities for experiencing nature that conserve the environment as a business in regions where it has been acknowledged that no persons offer such services (hereafter referred to as "independent business operators") can establish conservation and usage agreements independently, and receive authorization for them per the provisions of Paragraph 1.

4. The matters listed below shall be established for the conservation and usage agreements.
   (1) Areas of land covered by the conservation and usage agreements (hereafter referred to as "agreement-covered areas")
   (2) Matters concerning the content of activities for experiencing nature that conserve the environment
   (3) Matters meriting consideration regarding the conservation of the natural environment and the implementation of the activities for experiencing nature that conserve the environment
   (4) Term of validity for the conservation and usage agreements
   (5) Measures for when the conservation and usage agreements are violated
   (6) Other necessary matters

5. When an application seeking the authorization listed in Paragraph 1 meets all of the requirements in the items below, the Governor of Okinawa Prefecture shall authorize it per the provisions of the same paragraph.
   (1) It must be appropriate in light of the Okinawa Promotion Plan.
   (2) A considerable number of persons who offer guidance and advice regarding activities for experiencing nature that conserve the environment as a business in the agreement-covered areas must take part in the conservation and usage agreement.
   (3) It must meet the standards established in the ordinances of the competent ministry as an agreement that does not interfere with the conservation of the natural environment in the agreement-covered areas, and which contributes to properly promoting activities for experiencing nature that conserve the environment.
   (4) The contents of the conservation and usage agreement must not be unjustly discriminatory.
   (5) The contents of the conservation and usage agreement must not violate this law, decrees based on this law, or any other relevant laws or ordinances.

6. When the Governor of Okinawa Prefecture receives an application seeking the authorization listed in Paragraph 1, they must publicly announce this per the stipulations in the ordinances of the competent ministry. They must also provide said conservation and usage agreement for public inspection for a period of two weeks from the day on which it was publicly announced.

7. When the Governor of Okinawa Prefecture publicly announces this per the provisions of the preceding paragraph, they must inform the heads of the municipality in which the agreement-

covered area is found to this effect without delay. They must then hear the opinions of the mayor of the municipality in question from the standpoint of the conservation of the natural environment and other ways of properly promoting activities for experiencing nature that conserve the environment.

8. Once there has been a public announcement per the provisions of Paragraph 6, persons with opinions from the standpoint of the conservation of the natural environment and other ways of properly promoting activities for experiencing nature that conserve the environment may submit written opinions concerning the conservation and usage agreement in question to the Governor of Okinawa Prefecture. These may be submitted from the day after the date on which the inspection period from Paragraph 6 concludes until a date two weeks later.

9. Once the Governor of Okinawa Prefecture has provided the authorization from Paragraph 1, they shall notify persons who would like to take part in the activities for experiencing nature that conserve the environment, tourists visiting Okinawa, and other persons of the contents of the conservation and usage agreement that has been authorized. This shall be done via use of the internet, the distribution of printed matter, or some other appropriate method.

(Changes to the conservation and usage agreements)

Article 22

When attempting to change the matters established in a conservation and usage agreement that has been authorized per Paragraph 1 of the preceding article (referred to as an "authorized agreement" in subsequent articles), the agreement representatives and independent business operators must receive the authorization of the Governor of Okinawa Prefecture.

2. The provisions from Paragraph 5 through Paragraph 9 of the preceding article shall apply regarding the authorization for the changes from the preceding paragraph.

(Counsel)

Article 23

The Governor of Okinawa Prefecture can offer counsel to the agreement representatives or independent business operators involved in the authorized agreement to improve the implementation methods for the activities for experiencing nature that conserve the environment, altering the authorized agreement in question, or in regards to other necessary measures that should be taken. They may offer said counsel when it has been acknowledged that the activities for experiencing nature that conserve the environment have not been implemented according to the authorized agreement (when the changes from Paragraph 1 of the preceding article have been authorized, then the agreement following the changes; the same hereafter), or

when it has been acknowledged as being necessary to ensure the proper implementation of said activities in the agreement-covered area.

(Cancellation of authorization)

Article 24

In the event that the agreement representatives or independent business operators who received counsel per the provisions of the preceding article fail to take the necessary measures in accordance with said counsel, then the Governor of Okinawa Prefecture may cancel their authorization per the provisions of Paragraph 1, Article 21 or Paragraph 1, Article 22.

2. In the event that the Governor of Okinawa Prefecture cancels the authorization per the provisions of the preceding paragraph, they must notify the agreement representatives or independent business operators to this effect and also announce this publicly.

(Promoting activities for experiencing nature that conserve the environment)

Article 25

The national and local governments shall work to ensure that the funds needed to promote activities for experiencing nature that conserve the environment in Okinawa are secured, human resources are developed, information is collected and provided, and other necessary measures are taken to contribute to promoting the conservation and sound usage of natural environments in Okinawa.

2. The Minister of the Environment shall work to ensure that the activities for experiencing nature that conserve the environment are promoted in Okinawa through efforts like protecting and developing national parks in Okinawa.

(Omitted hereafter)

4-41 Basic Plan for 21st Century Vision of Okinawa
(Okinawa Promotion Plan)
(Excerpt)

Preparer: Okinawa Prefecture

Date: March 2012

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(Omitted)

2. Nature of the Plan

This plan is a comprehensive basic plan that encompasses the Okinawa promotion areas to date. Based on the approach for initiatives to achieve the future vision depicted by prefectural residents that was indicated in the 21st Century Vision of Okinawa, this plan clearly spells out the "Basic Approaches," "Basic Measures," and so on for the plan in order to maximize the welfare of Okinawa. At the same time, it also shares the nature of the Okinawa Promotion Plan, which has been positioned within the Act on Special Measures for the Promotion and Development of Okinawa. Therefore, this plan serves as the basis for measures by Okinawa Prefecture, and deserves the respect of the national government, municipalities, and others. What is more, it also serves as guidelines for voluntary activities by various entities, including the prefectural residents, companies, organizations, NPOs, and more.

The 21st Century Vision of Okinawa indicates a future vision that should aim for five goals. First, to be an "Island that values the nature, history, traditions, and culture unique to Okinawa," with a mentality of loving nature and valuing its traditional culture. Second, to be an "Island where people lead spiritually rich, safe, and secure lives" with a mentality of valuing personal bonds. Third, to be an "Affluent island abounding in aspirations and vitality" with a mentality of seeking a strong and resilient economy and affluence." Fourth, to be an "Island that coexists with and is open to exchanges with the world" with a mentality of aspiring to peace through exchanges with the world. Fifth, to be an "Island that exhibits diverse capabilities and paves the way to the future" with a mentality of fostering human resources that abound with aspirations and dreams.

Moreover, it also clearly laid out challenges unique to Okinawa that should be overcome by seeking resolutions to these under the responsibility of the national government. These include the restoration of large-scale bases and the reorganization of prefectural land that will accompany this, the new development of outlying islands, creating transit networks linking the ocean island zones of Okinawa, and growing local autonomy.

3. Plan Period

The plan period shall last for ten years from FY2012 through FY2021, which is the period for the Okinawa Promotion Plan based on the Act on Special Measures for the Promotion and Development of Okinawa. This corresponds to the first ten years leading up to the point roughly 20 years in the future envisioned by the 21st Century Vision of Okinawa.

4. Objectives of the Plan

The objectives of the plan are to exhibit Okinawa's unique qualities, connect Japan and the world, and create a cutting-edge region that will contribute to peace and development in the Asian and Pacific region. It will also set in place the underlying conditions for self-sustaining development based on the economic climate, and create a reborn Okinawa that contributes to the development of Japan. In addition, it will work to achieve a restored Okinawa that boosts Okinawa's exceptional value in the form of its nature, culture, and more, thereby striving to achieve the five future visions and resolve the four unique challenges listed in the 21st Century Vision of Okinawa. Through this, it will realize "Okinawa as a beautiful island that is mutually supportive, peaceful, affluent, and which will pave the way to a new era and engage in exchange with the world."

(Omitted)

Chapter 5 Zone-specific Deployment

(Omitted)

3. Basic Approach to Zone-specific Deployment

(1) Northern Region

(Omitted)

[Basic Approach to Deployment]

The infrastructure, facilities, and so forth built up through projects to promote Okinawa will be effectively used. In addition, progress will be made with new projects like those concerned with promoting the northern region, and efforts will be made to create employment opportunities, set in place an appealing living environment, and promote telecommunications-related industries.

Efforts will be made to promote Okinawa according to its special regional qualities. This will be done by striving to achieve harmony between the conservation of natural environments (such as the Yambaru forest that is a treasure trove of precious flora and fauna, the ocean areas inhabited by dugongs and other creatures, and the lovely seasides) and the native culture, as well as economic and social development. What is more, efforts will be made to make infrastructural and environmental improvements to it as an

international base for academic research and resorts, while also striving to promote agriculture, forestry, and fisheries industries by harnessing its unique regional qualities.

What is more, efforts will be made to round out a variety of urban functions for Nago City as a core urban area, while also promoting smooth coordination between regions and enhancing its core characteristics.

When it comes to underpopulated regions, the Okinawa Prefecture Plan on Promoting the Independence of Underpopulated Regions was enacted pursuant to the Okinawa Prefecture Policy on Promoting the Independence of Underpopulated Regions. Based on this plan and municipal plans, a variety of measures will be promoted in aiming to achieve regional communities that abound in dynamism and individuality, and which are full of appeal that will attract young people to settle in them.

What is more, remote regions are at a remarkable disadvantage when it comes to their transit conditions and other elements of their living environment as a result of their geographical characteristics. Therefore, support will continue to be provided to municipalities that are working to promote improvements to their living environment, such as by promoting the development of public facilities in a comprehensive and systematic manner.

In the outlying islands, where depopulation and the aging of communities are both advancing, efforts will be made to promote local industries by harnessing their distinctive regional resources. In addition, improvements to their living environment infrastructure will be promoted, with these including medical care, welfare, and education, in an effort to improve their settlement conditions.

A. Creating Communities that Coexist with Nature

The Yambaru Region has diverse natural environments that include secondary forests and primeval natural forests, and is inhabited by numerous endemic and endangered species. For this region, progress will be made in enhancing activities geared towards the conservation of the natural environment, such as designating it as a national park and registering it as a Natural World Heritage Site, with a view towards forming communities where people and nature can coexist.

Furthermore, to conserve biodiversity, measures to control alien species like mongooses in inland areas, and to eradicate the crown-of-thorns starfish in ocean areas, will be strengthened.

Ocean areas like tidal flats and seaweed beds, as well as inland areas that include forests, rivers, and coasts, will be zoned into regions that should be conserved and those that can be used, and efforts will be made for the conservation, restoration, and appropriate use of their natural environments. In addition, comprehensive

countermeasures will be promoted for the problem of outflows of red clay, including strengthening countermeasures against the various sources from which red clay arises, with an emphasis on farmland.

The adoption and dissemination of renewable energies will be promoted, including solar power, wind power, biomass power harnessing the abundant regional resources, and more (including on outlying islands) in aiming for pioneering energy use.

B. Promoting Industry that Harnesses the Characteristics of the Region

(a) Promoting the tourism resort industry

The creation of appealing tourist attractions that harness outstanding regional resources in a historical and cultural sense, such as Nakijin Castle and cloth made from basho (a Japanese fibrous banana) will be promoted. These tourist attractions will also make use of the region's diverse and distinctive natural environments such as lushly green mountains, beautiful coastlines, as well as the precious flora and fauna inhabiting them.

To do this, work will be done to create rules for achieving coexistence between environmental conservation activities and economic activities. Progress will be made in rounding out a style of tourism that is closely aligned with regional characteristics and local industries through initiatives for a hands-on and participatory style of tourism. This includes the production of cloth made from basho and green tourism in Ogimi Village; ecotourism in Higashi Village, Kunigami Village, and Nago City; and lodging in private accommodations on Ie Island and other places.

In addition, progress will be made in rounding out regional events, such as the Oku Yambaru Koinobori Festival, Higashi Village Azalea Festival, Ie Island Lily Festival, and the cherry blossom festivals in Motobu Town, Nago City, and Nakijin Town to boost the diverse appeal of tourism in the northern region.

What is more, initiatives will be promoted that include tourism where people stay overnight and enjoy marine-based leisure activities based around the theme of recuperating health by using the special characteristics, nature, and culture of the Port of Kin. This will take place in the circular region around the Port of Kin extending from Ginoza Village to Kin Town and as far as Uruma City in the central region.

To ensure tourism human resources in the region, tourism coordinators, tourism producers, and sightseeing guides will be fostered, and progress will be made in developing regional appeal and rounding out reception programs. In addition, efforts will be made to foster people like successors of and technical experts in traditional culture in order to ensure the human resources to take responsibility for the culture in the local region.

(Omitted)

In conjunction with this, efforts will be made to promote the development of highly distinctive landscapes befitting the region and to improve tourism impressions and regional appeal. Examples of this include by improving the landscapes along roadways and producing urban landscapes for tourism resort areas that are representative of Okinawa. In addition, interaction with local people and initiatives to unearth and spread the word on regional appeal will be promoted by using shared shops and hub facilities for urban and rural exchanges.

When it comes to tourism-related facilities, progress will be made in installing facilities that make use of regional schemes for promoting the development of tourist attractions to handle the increased number of tourists from Japan and overseas, as well as the addition of added value to tourism. What is more, efforts will be made to promote the introduction of new environmental technologies, such as energy-saving facilities.

(b) Promoting the agricultural, forestry, and fisheries industries

For items like Jerusalem artichoke tubers, goya, green beans, and mangos, the development of production facilities, fostering of production and shipping organizations, and development of sales structures will be promoted in a systematic manner, and priority will be given to the certification of new production regions and the cultivation of existing production regions. In particular, efforts will be made to develop centralized production regions for new items like the atemoya, and to strengthen production structures and perform branding.

As for sugarcane and pineapple, work will be done to improve their quality by introducing, breeding, and disseminating superior seeds and seedlings. What is more, initiatives to foster and strengthen agricultural production corporations, organizations performing work on commission, and others will be promoted, as will initiatives geared towards expanding production.

Additionally, the development and conservation of irrigation and other facilities and production bases, such as through land readjustment, will be promoted, as will shelterbelts and other measures to conserve farmland. Comprehensive countermeasures will be promoted for the problem of outflows of red clay, and efforts will be made to conserve farmland and to mitigate the environmental impact from this.

As for stock-raising, progress will be made in cultivating and expanding unique brands through the use of pigs whose lineage has been controlled, as well as in improving breeding management techniques and

adopting superior sire pigs while taking the environment into consideration. For beef cows, the stable production of high-quality calves will be promoted, such as by centralizing the production of young calves. For dairy farming, efforts will be made to supply coarse feed in a self-sufficient manner, while also striving to expand consumption of cow's milk. Regarding poultry raising, efforts will be made to promote production while striving to improve the environment in which they are raised.

Moreover, efforts will be made to add added value and brand specialty items like medicinal crops, shikuwasa, brown sugar, and black tea made in Okinawa. To do so, the development and strengthening of coordinated structures that include food processing, distribution, sales, and tourism will be promoted, and facilities for processing agricultural products will be established.

For sugar production regions, including those on peripheral outlying islands, support will be provided for stabilizing both the incomes of farmers and operations at the sugar refining businesses. Together with this, efforts will be made to increase demand for sugar through initiatives like expanding sales within Japan and to other countries, developing new products, and putting sugar to use for multiple purposes.

For forestry, efforts will be made to create production regions for lumber, promote the production of special forest products, and develop uses for prefectural lumber. What is more, the forest development needed to allow forests to exhibit the various functions they possess in a sustainable manner will be promoted, and efforts will be made for the multifaceted use of forests through forest tourism and the like.

Production, processing, and distribution functions for marine products will be strengthened by mainly focusing on Nago Fishing Harbor, which is a hub for the distribution of marine products. Maintenance and upgrades on production bases and facilities, including deteriorated fishing harbors and fishing grounds, will also be promoted in a systematic manner. Furthermore, efforts will be made to add added value in cooperation with food processors and others, as well as to expand production via resource management of the fish species found in the coastal waters.

Hubs for people from cities to hold exchanges and spend the night will be created in rural regions, and efforts will be made to further strengthen cooperation with the tourism resort industry and others.

(c) Promoting local leading industries

(Omitted)

What is more, in the aim of creating industries related to the environment, efforts will be made to hold demonstration trials in relation to, and actually implement, the adoption of renewable energies such as solar power, wind power, and biomass (including on outlying islands). Additionally, the recycling of waste and its effective use will be carried out on outlying islands and the like based on research and study on such matters, and the creation of business models related to the environment will be promoted.

(Omitted)

(d) Promoting commerce and industry

(Omitted)

Initiatives will be promoted through cooperation with agricultural commercial interests geared towards creating Yambaru brands. This includes developing products through the use of tangible and intangible regional resources, such as local agricultural, forestry, and fisheries products, and also promoting sales of said products. Moreover, the use of existing facilities for processing agricultural, forestry, and fisheries products will be promoted. Efforts will also be made to establish sales structures suited to the local region and develop human resources such as local leaders.

(Omitted)

C. Enhancing Spheres of Everyday Life

(a) Improving infrastructure for transportation and distribution

(Omitted)

(b) Improving living environment infrastructure

(Omitted)

(c) Enhancing functions related to health and medical care and welfare

(Omitted)

(d) Ensuring educational opportunities

(Omitted)

D. Promoting Use of the Sites of Former Military Bases

For the former sites of the Northern Training Area and Aha Training Area, which are facilities slated to be returned to Japan that were indicated in SACO's final report, initiatives will be taken for the appropriate conservation of the natural environment and to conserve and improve forest regions. Efforts will also be made to use them by harnessing the resources of the Yambaru forests. Furthermore, for the site of the Gimbaru Training Area, efforts will be made to install regional medical facilities and rehab-related facilities based on the plan for using the site.

E. Promoting International Exchanges

(Omitted)

What is more, efforts will be made to set in place an environment where the descriptions on informational placards are written in multiple languages to accommodate tourists from other countries. Other efforts will be made to set in place a foundation for promoting personal exchanges with people from various other countries, such as by fostering tour-guide interpreters.

(Omitted)

(5) Yaeyama Region

(Omitted)

[Basic Approach to Deployment]

Efforts will be made to conserve the rich natural environment teeming with diversity, as well as to pass down various traditional events, traditional performing arts, and traditional crafts. Tourism where people have experiences and stay in the region, such as ecotourism and green tourism, will be promoted and efforts will be made to promote the tourism resort industry unique to this region while boosting the appeals unique to each of the islands.

What is more, progress will be made with the promotion of agriculture, forestry, and fisheries industries by making use of the region's natural and geographical conditions. In addition, efforts will be made to promote personal and physical exchanges within Japan and with other countries by capitalizing on the region's quality of being situated at Japan's southwestern-most tip in working to revitalize the region.

Moreover, efforts will be made to enhance facilities for medical care, welfare, education, and more in Ishigaki City, which is a core urban area for the region, and ease of transit to the peripheral outlying islands will be improved.

In regions where depopulation and the aging of the population are advancing, such as in peripheral outlying islands, local industries that use appealing regional resources, such as their traditions or culture, will be promoted. In addition, the development of living environment infrastructure, such as for government, medical care, and education, will be promoted. Efforts will also be made to improve the conditions for settling in such regions, such as by reducing the fairly high cost of living and correcting various disparities.

What is more, by way of countermeasures against natural disasters, efforts will be made to functionally enhance public facilities in order to ensure the stability of the living environment.

A. Enhancing the Functions of Core Urban Areas

(Omitted)

For Ishigaki Port, efforts will be made to expand the port's functionality as a hub for exchange, with this to include enhancing disaster prevention functions and installing energy berths. Moreover, the installation of breakwaters and other facilities that can accommodate massive passenger ships from overseas will be promoted in an effort to strengthen its foundation as an international tourism resort area. For New Ishigaki Airport, its functions for receiving international flights will be enhanced, and initiatives geared towards expanding routes to locations in Japan and overseas will be addressed. What is more, in the interest of reducing the burden on residents, efforts will be made to reduce ship fares and airfares.

Efforts will be made to boost the region's appeal as a tourism resort area and to expand its nonresident population. This will be done by promoting the development of main roads and the municipal roads that will complement these. Said main roads will include roads linking Ishigaki Airport with wide-area transportation hubs, such as other airports and ports, central downtown areas, rural communities, tourist attractions, and more.

(Omitted)

B. Promoting Industry that Harnesses the Characteristics of the Region

(a) Promoting the tourism resort industry and advancing industry innovations

The nonresident population of Sekisei Lagoon will be expanded with a view towards revitalizing the region through the use of unique regional resources such as its natural environment, scenery, and traditional culture. To do this, progress will be made in creating a unique tourism style through the use of various resources. These include natural environments teeming with diversity, such as coral reef regions like the world-famous Sekisei Lagoon, the vast primeval forests and mangrove forests of Iriomote Island, and more. This will also include the historical and cultural resources within the region; agricultural, forestry, and fisheries products like tropical fruit trees; and the hospitality of its residents.

(Omitted)

Moreover, in order to create tourist attractions that coexist with the environment, the development of sustainable tourist attractions will be promoted. This will be done through measures like enacting usage rules for natural resources and providing thorough notification of them; developing, enhancing, and disseminating excellent tourism options that take the environment into consideration; and installing facilities that work to mitigate environmental impacts.

What is more, activities to attract tourists from neighboring countries and other areas will be promoted in concert with the region through enhancing air routes by attracting new airlines and sales activities geared towards regularly establishing airline routes, and also attracting cruise ships. In addition, the installation of facilities to accommodate the growth in the number of tourists from within Japan and other countries will be promoted by using local programs to promote the creation of tourist attractions, and the national government will be encouraged to simplify customs, immigration, and quarantine (CIQ) procedures. Efforts will also be made to enhance reception programs, such as by improving interpretation and guidance services, while also working to boost tourist satisfaction.

(Omitted)

(b) Promoting the agricultural, forestry, and fisheries industries

The development of irrigation facilities and production bases, such as by land readjustments, will be promoted. In addition, efforts will be made to reorganize and upgrade existing facilities, and measures to effectively use agricultural water will be promoted. What is more, efforts will be made to conserve farmland and reduce the environmental impact by promoting the installation of shelterbelts designed to prevent damage to agricultural produce from typhoons and other meteorological disasters, as well as comprehensive countermeasures to the problem of outflows of red clay.

For items like pineapple, okra, and tropical flowers, the installation of production facilities and establishment of distribution and sales facilities will be performed in a systematic manner, and priority will be given to fostering centralized production regions.

For things like sugarcane and beef cows, production structures will be strengthened and a type of agriculture in which resources are recycled will be promoted. For sugarcane in particular, efforts will be made to improve productivity and quality by breeding and disseminating superior seeds and seedlings, cultivating the soil, and controlling pests in the soil. In addition, efforts will be made to expand the scale of operations by aggregating the use of farmland, cultivating and enhancing agricultural production corporations and agricultural organizations performing work on commission, and more.

For sugar production, including that on peripheral outlying islands, support will be provided for stabilizing both the incomes of farmers and operations at the sugar refining businesses. Together with this, efforts will be made to increase demand for sugar through initiatives like establishing a brand of brown sugar, developing sales channels, and putting sugar to use for multiple purposes.
For stock-raising, the region will be made into a central production region for calves while taking environmental issues into consideration, the branding of “Ishigaki cattle” and other types of commercial cattle will be promoted, and a meat center will be established.

Forest development will be carried out that will allow forests to maintain and exhibit the diverse functions they possess, including for things like headwater conservation and defending against tidal, wind, and storm damage. Together with this, efforts will be made towards the multifaceted use of forests by means of forest tourism and the like.

For the fisheries industry, efforts will be made for resource management of the fish species found in the coastal waters, such as the Okinawa blue water fish, while also aiming to expand production by promoting a fishing industry that fishes and cultivates mozuku, grouper, and more, as well as through branding.

What is more, efforts will be made to enhance distribution functions by installing distributive processing facilities, and maintenance and upgrades on production bases and facilities, including deteriorated fishing harbors and fishing grounds, will also be promoted. In addition, a positive fishing ground environment will be conserved, and an orderly fishing industry will be maintained and ensured.

C. Enhancing the Spheres of Everyday Life

(a) Improving living environment infrastructure

(Omitted)

(b) Enhancing functions related to health and medical care and welfare

(Omitted)

(c) Ensuring fair educational opportunities

(Omitted)

D. Creating Communities that Coexist with Nature

As an island region, this region is structured in a way that makes it fragile when it comes to environmental impacts. Therefore, measures like curbing the output of waste, reducing its weight, and recycling it will be promoted, as will the efficient disposal of waste based on the actual circumstances in the region.

Efforts will also be made to install public sewage systems and community drainage systems, and to disseminate community wastewater treatment tanks. Additionally, the effective use of water resources like rainwater and recycled water will be promoted.

Moreover, the adoption of a type of agriculture that conserves the environment and renewable energies such as solar power, wind power, and biomass will be promoted. Various measures like demonstration projects for micro-grids will be carried out in a pioneering manner, and efforts will be made to establish a resource recycling-oriented society.

In order to conserve coral reef ecosystems, the intensive eradication of crown-of-thorns starfish will be performed, and countermeasures against the environmental impact from things like outflows of red clay from inland areas will be instituted.

E. Promoting International Exchanges

Cultural exchanges such as folk entertainment, traditional handicrafts, and field trips with Taiwan and other countries will be promoted in an effort to advance mutual understanding internationally. In addition, efforts will be made to set in place a structure that supports excursions and travel within the region by promoting the distribution of information in multiple languages. Examples of this include displays on informational

placards and labels on special products in multiple languages, and tourism and public transportation information that uses ICT.

(Omitted hereafter)

4-42 Okinawa Prefecture Basic Plan for Tourism Promotion

(Fifth Plan)

Outline

1 Significance of Developing the Plan

Okinawa Prefectural Government (OPG) has positioned tourism as a leading industry in Okinawa's economy and has been making various efforts to promote it. As a result, the prefecture is now regarded as one of the best tourist and resort destinations in Japan. However, the tourism industry in Okinawa is recently facing tough realities due to the sluggish growth in the number of inbound tourists against the backdrop of various factors such as the unstable world economy, the global outbreak of the H1N1 flu, occurrences of conflicts and terrorism, and the Great East Japan Earthquake.

In order to ensure the sustainable development of tourism in Okinawa under such circumstances, it is required to take proactive measures in various ways including strategically exploiting overseas markets, developing into an eco-friendly destination, and establishing Okinawa's tourism brand. Therefore, OPG has set up the Okinawa Prefecture Basic Plan for Tourism Promotion, and other relevant plans, to take various strategic and aggressive approaches based upon these plans.

2 Nature of the Plan

The Plan has been drawn up according to Article 7 of the Okinawa Prefectural Ordinance on Tourism Promotion (Ordinance No. 39 of 1979) to define basic directions for tourism development.

The Plan presents a vision of Okinawa's tourism 10 years from now that all those involved in Okinawa's tourism, including its citizens, should recognize, and offers basic policies to achieve the vision through concerted efforts of relevant parties.

3 Period of the Plan

The Plan targets a period of 10 years from FY2012 to FY2021.

Outline of Plans Related to Tourism in Okinawa

Okinawa 21st Century Vision

Future Goal of Okinawa in 2030

Drawn up in March 2010

Okinawa 21st Century Vision Master Plan
(Period of the Plan: FY2012-FY2021)

A comprehensive basic plan inclusive of all previous areas of promotion of Okinawa, which also serves as the Okinawa Promotion Plan defined in the Act on Special Measures for the Promotion and Development of Okinawa.

Drawn up in May 2012

Okinawa 21st Century Vision Implementation Plan
(Period of the Plan: FY2012-FY2021)

A plan that clarifies what OPG will do based on various schemes set out in the Okinawa 21st Century Vision Master Plan and the Okinawa Prefecture Basic Plan for Tourism Promotion.

Okinawa Prefecture Basic Plan for Tourism Promotion
(Period of the Plan: FY2012-FY2021)

A plan that presents basic directions in the field of tourism promotion, based on the Okinawa 21st Century Vision Master Plan.

Drawn up in May 2012

Visit Okinawa Plan
(Period of the Plan: Single Fiscal Year)
(Drawn up every fiscal year)

A specific action plan drawn up to attract tourists, based on the Okinawa 21st Century Vision Master Plan and the Okinawa Prefecture Basic Plan for Tourism Promotion, with target figures for each fiscal year.

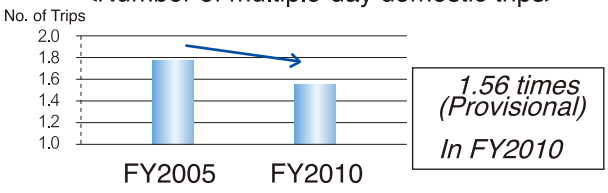
Drawn up in May 2012

4 Domestic and International Trends in Tourism

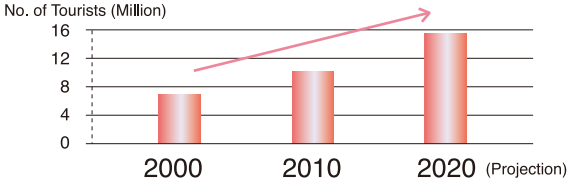
Currently more than 90% of the tourists to Okinawa are Japanese. In Japan, however, the number and the length of domestic multiple-day trips per head are on the decline as well as travel-related spending per household.

On the other hand, the number of tourists is increasing in the world as a whole, and the growth is expected to continue in the future. In light of this, the Government of Japan has set a target of receiving 25 million foreign visitors by early 2020, and 30 million visitors beyond that.

<Number of multiple-day domestic trips>



<Number of visitors by countries combined>



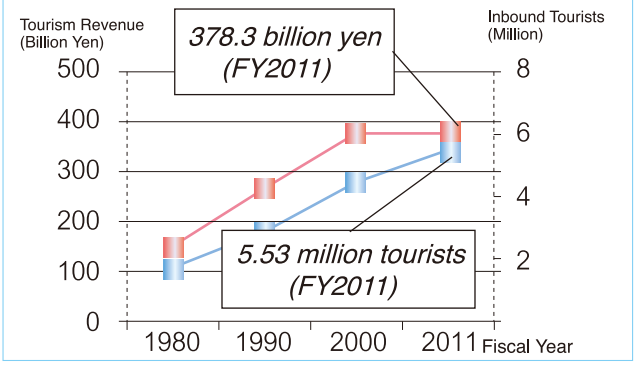
Source: International Tourism White Paper by JNTO, UNWTO

5 Situations of Tourism in Okinawa

Although the tourism-related revenue and the number of inbound tourists saw steady growth since 1972, this growth has slowed in the recent years, standing at around 4 billion yen and 5-6 million visitors, respectively. In addition, the number of nights stayed in Okinawa shows a declining trend, and in recent years, the figures have remained on the same level. Average spending in the prefecture per tourist has slowly been declining as well.

Air routes that are crucial to attract tourists have been shrinking since FY2007 for domestic flights. However, international air routes are expanding with the addition of two routes in FY2011, for Beijing and Guam, to the existing routes for Seoul, Taipei, Hong Kong and Shanghai, making the total number of international air routes to six.

<Tourism Revenue and Number of Inbound Tourists>



6 Issues of Tourism in Okinawa that Need to be Addressed over the Next 10 Years

Considering the outer and inner situations of tourism in Okinawa, we have identified, as follows, issues that need to be addressed over the next 10 years in order to materialize the vision of Okinawa's tourism in 10 years, which is the goal of the Plan.

Issues of Tourism in Okinawa that Need to be Addressed over the Next 10 Years

1.	Responding to international competitions among tourist destinations	4.	Establishing a basis for sustainable tourism
2.	Responding to environmental problems	5.	Furthering understanding of tourism among citizens
3.	Playing a role as a mainstay industry	6.	Promoting the development of human resources that can contribute to tourism development

7 Future Goal

We aim to establish Okinawa as a "world-class tourist and resort destination" through various efforts based on the Plan and other relevant plans.

"World-class tourist and resort destination" is defined as Okinawa being equipped with basic qualities as a sophisticated tourist destination. Together with the charm and allure of Okinawa's unique properties, the goal consists of being broadly recognized inside and outside Japan as "OKINAWA", a prime tourist and resort destination that stands out among other travel destinations competing in the Asia-Pacific region.

Future Goal

World-class tourist and resort destination

8 Key Value

Three core factors of Okinawa's attraction are Nature: Okinawa's sea, forests, and biodiversity; Culture: Okinawa's history and performing arts; and People and Environment: Okinawa's safety, relief, and comfort.

By increasing the competitive advantage through the full utilization of such factors, we will make a fully attractive tourist destination branded as OKINAWA.

9 Target Frame

We aim to achieve the following target figures in 10 years from now, by aggressively implementing various measures in the Plan.

Upon Materialization of the Future Goal

Tourists can:

visit destinations meeting their interests and needs, relax and enjoy memorable experiences and interactions that are unique to Okinawa.

Tourism Industries can:

obtain a stable revenue from tourism, play a leading role in the prefectural economy, and form a proud and responsible sector.

Citizens in Okinawa can:

enjoy full benefits of tourism from the viewpoint of health to social and economic aspects, recognize the value of tourism in Okinawa, and actively participate in the development of an attractive tourist destination.

Tourism Resources can be:

highly appreciated along with natural and cultural resources, utilized and preserved in an appropriate manner responding to local situations.

Figures to be Achieved by FY2021

1.	Revenue from tourism: ¥1 trillion	4.	Cumulative total number of nights stayed by tourists: 40.27 million nights (31.52 million nights by domestic tourists, and 8.75 million nights by international tourists)
2.	Spending in the prefecture per tourist: ¥100,000	5.	Number of inbound tourists: 10 million (including two million international tourists)
3.	Average days per visit: 5 days International tourists are assumed to travel by air.		

10 Strategic Directions

We will materialize the future goal in 10 years by implementing measures based on the following basic directions. The complete version of the Plan offers detailed descriptions for each measure.

1 Offering a wide variety of attractive tourism experiences

<Basic Directions>

We will provide high quality tourism experiences unique to Okinawa while keeping a balance between preservation and succession, and utilization of "Nature" and "Culture", two of the core factors of tourism in Okinawa. With such core images in the basis, we will exploit a new market by developing various tourism options that combine sports, medical services, and Okinawa's culture and performing arts.

<Development of Measures>

(1) Develop an Okinawan version of nature tourism

(2) Promote an Okinawan version of culture tourism

(3) Develop a variety of tourism options

(4) Consider the introduction of quality assurance

(5) Promote the differentiation of regions

2 Preparation of a basic tourism environment

<Basic Directions>

In order to ensure that tourists can stay in Okinawa with a sense of safety, security and comfort, we will improve the qualities of basic transportation and information infrastructures, and develop human resources engaging in tourism.

We will also promote the development of scenic views appropriate for tourist destinations, tourism environments unique to Okinawa, and universal designs, and will enhance emergency response capabilities in efforts to make Okinawa a more care-free, tourist-friendly and attractive destination.

<Development of Measures>

(1) Promote the improvement of transportation networks

(2) Work to enhance information infrastructure

(3) Nurture human resources engaging in tourism

(4) Promote the development of scenic tourist destinations

(5) Promote universal designs

(6) Enhance emergency response capabilities

3 Securing the stability of the tourism industry

<Basic Directions>

We will promote the sustainable development of the tourism industry with stable tourism revenue by promoting the increase of spending by tourist in the prefecture and the length of visits, and maintaining the number of inbound visitors all year round by leveling off seasonal fluctuations.

In addition, we will further increase the significance of tourism as a leading industry by enhancing spillover effects on related industries and maintaining employment opportunities.

<Development of Measures>

(1) Promote measures to ensure tourism revenue

(2) Work to enhance spillover effects on related industries

(3) Promote measures to maintain and secure employment opportunities

(4) Promote measures for the formulation of a responsible industry sector

4 Effective marketing

<Basic Directions>

In order to promptly respond to changes in the market and effectively attract tourists, we will conduct market researches and analyses that are high in effectiveness, take strategic approaches to exploit new markets based on the results of the analyses, and undertake promotions attentive to each target market.

In addition, we will attempt to establish a tourism brand for Okinawa in order to enhance Okinawa's competitive edge and increase the awareness of the prefecture.

<Development of Measures>

(1) Conduct highly prompt surveys and proper analyses on markets

(2) Strategically exploit new markets

(3) Establish a brand for tourism in Okinawa

(4) Undertake effective promotions

5 Reorganizing the promotion structure

<Basic Directions>

We will reorganize the structure for cooperation for all parties involved so that all the relevant people, including our citizens, can cooperate in concerted efforts.

We will also promote tourism-oriented community building in collaboration with the citizens, and deepen their understanding of tourism by promoting tourism education, and travels in the prefecture by the citizens themselves.

In addition, we will consider the use of indicators to objectively share the information on Okinawa's tourism situations.

<Development of Measures>

(1) Organize a structure for cooperation

(2) Build a tourism-oriented community in collaboration with the prefecture's citizens

(3) Adopt policies based on objective indicators

11 Basic Directions by Regions

Basic directions by regions in the field of tourism promotion will be determined taking the regional features into account, based on the five basic policy directions set out in the Plan based on "Chapter 5 Basic Directions in Implementation by Regions" of the Basic Plan of Okinawa 21st Century Vision, a superior plan to this Plan.

12 Measurement of Achievements

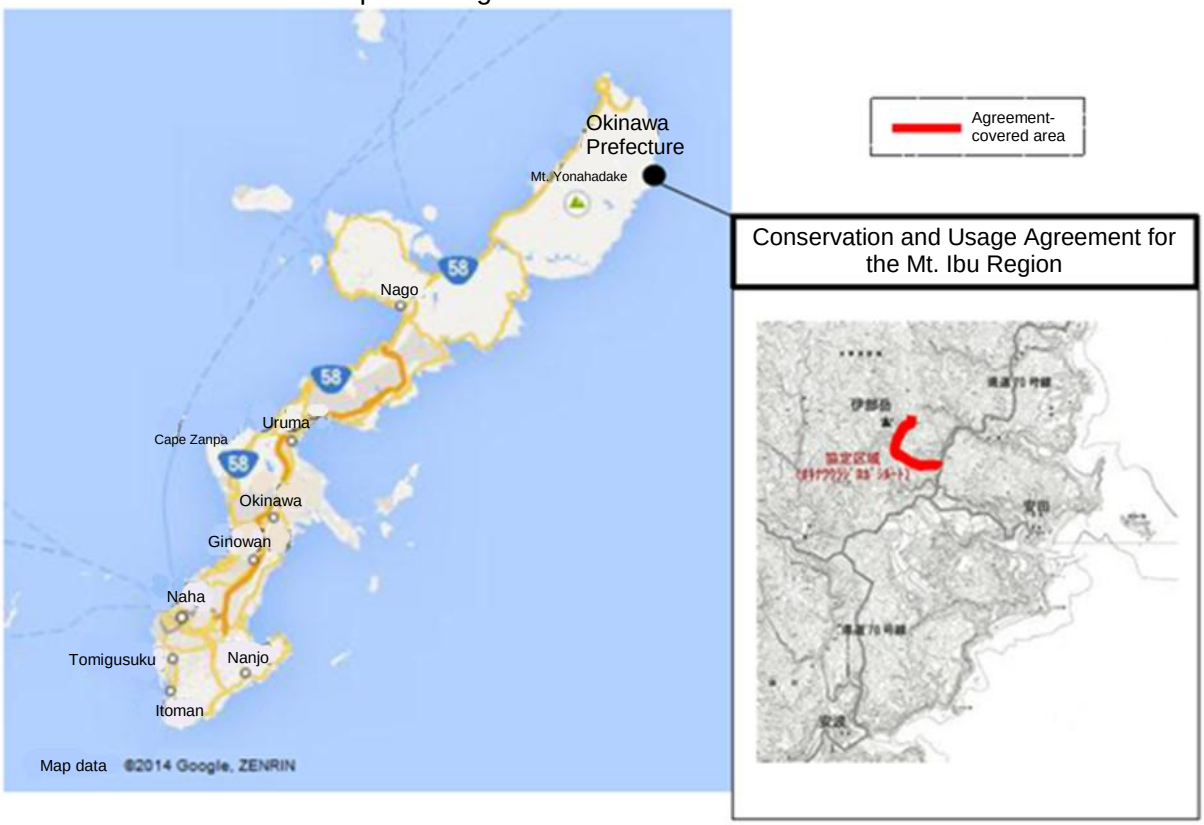
The Plan will set achievement indictors for four future pictures in materializing the "world-class tourist and destination", so that relevant parties can share information and see the achieved distances of these goals through efforts based on the Plan.

In addition, target figures for achievement indicators will be individually discussed and set, considering the future target of 10 million inbound tourists.

4-43 Mt. Ibu Conservation and Utilization Agreement (Overview)

Agreement-covered area	Mt. Ibu mountain trail—Okinawa-urajirogashi Route
Contents of activities	Trekking
Date authorized	October 31, 2014 (Term of validity for the agreement: September 1, 2014–August 31, 2016)
Businesses that concluded the agreement	Institute of Yambaru Ecotourism; Representative: Shinobu Nakane * Representative business operator
No. of business that concluded the agreement	One business in total
Main content	<Considerations for the natural environment> • Set an appropriate max number of people per tour (two trips per day, up to six people per trip (excluding the guide)) • Visitors may not bring along or take out pets or any other animals • Caution must be paid to ensure that people don't tread on anything like the roots of trees that are easily damaged along the mountain trail • Comply with local rules (Ada region regulations, etc.) regarding business operations • Perform monitoring about two times per year within the agreement-covered area <Considerations for the region> • Comply with local rules (Ada region regulations, etc.) regarding business operations • The business that concluded the agreement shall contribute environmental cooperation funds (voluntarily) • Visitors must give consideration to the residents' living environment and work to protect their privacy, such as when taking photos

Conservation and Usage Agreement Authorized by the Prefectural Governor:
Map of the agreement-covered area's location

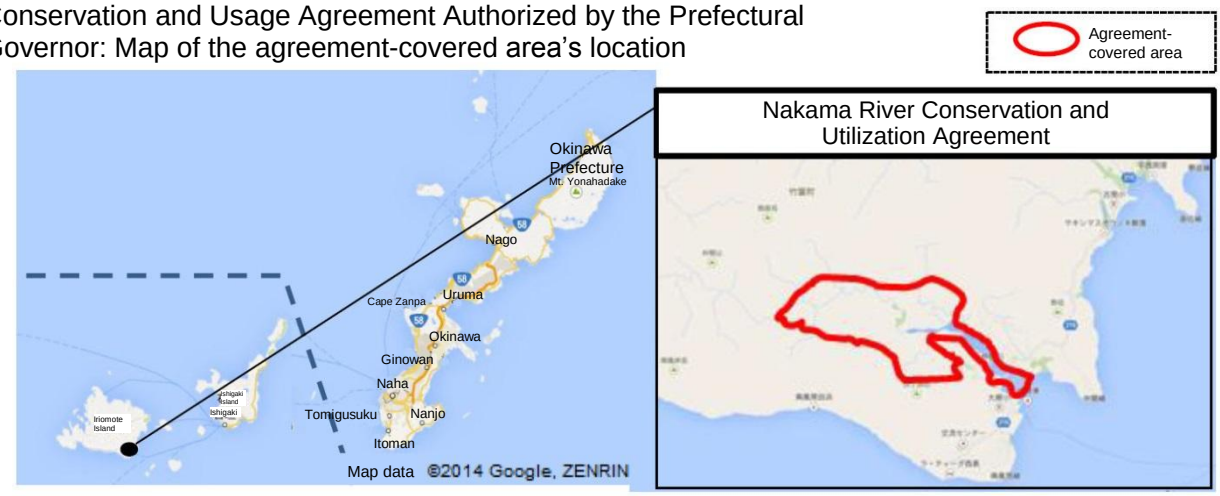


4-44 Nakama River Conservation and Utilization Agreement (Overview)

Agreement-covered area	The Nakama River and its surrounding forests (including a natural recreation forest (Nakama River Region) and a forest ecosystem conservation district)
Contents of activities	Sightseeing boats, kayaks
Date authorized	First authorization by the Prefectural Governor (June 2004) * Date the current agreement was authorized January 23, 2013 (Term of validity for the agreement: January 23, 2011–January 23, 2015)
Businesses that concluded the agreement	• Tobu Kotsu Co., Ltd.; Representative director: Masamichi Tamamori * Representative business operator • Marine Leisure Kanamori; Representative: Yoshikatsu Kanamori • Haimi Papillon; Representative: Toshio Yamamoto • Churanesia; Representative: Satoru Yahata • Sea Kayak Tour Kurage; Representative: Katsumi Kaneda
No. of business that concluded the agreement	Five businesses in total
Main content	<Considerations for the natural environment> • Regulate the speed at which the sightseeing boats operate in order to protect the mangrove forests • Establish reduced speed sections • Adopt sightseeing boats that tend to not produce bow waves • Voluntarily restrain use of vessels with two-stroke engines • Restrict the operation of sightseeing boats as a result of tide levels • Set an upper limit for the number of boats for each canoe tour party • Limit the number of canoers • Prohibit the collection of wildlife • Have business operators join forces to pick up trash <Considerations for the region> • Do not enter the mountains along the Nakama River during the wild boar hunting season • Ensure that people do not come into contact with the implements used to fish for gasami blue crab • Periodically set up venues for dialog with the local residents, report on

	field observations and records, and hold exchanges of opinions with them

Conservation and Usage Agreement Authorized by the Prefectural Governor: Map of the agreement-covered area's location



Appendix 5

Additional information

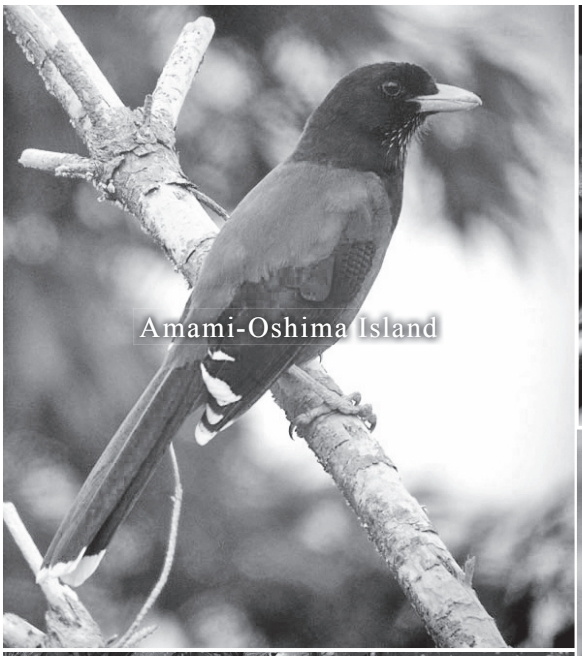
5-1: Official topographic maps (provided separately)

5-2: List of photographs and other audiovisual material

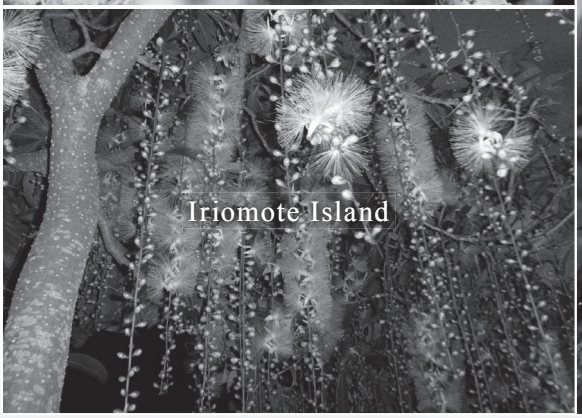
5-2 List of photographs and other audiovisual material

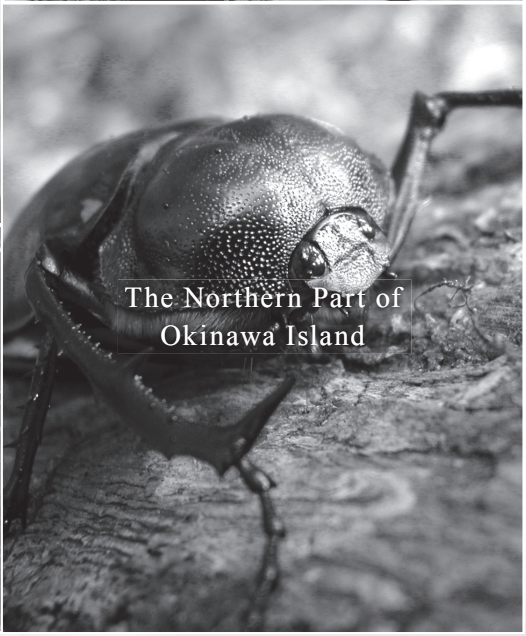
No.	Format	Caption	Date	Photographer	Copyright owner	Contact detail of copyright owner	Nonexclusive cession of rights
1	jpg	Evergreen broadleaved forest (Amami-Oshima Is.)	2011		MOEJ[*1]	MOEJ	Yes
2	jpg	Mt. Inokawadake (Tokunohsima Is.)	2008		JWRC[*2]	JWRC	yes
3	jpg	Evergreen broadleaved forest (Northern part of Okinawa Island)	2016		MOEJ	MOEJ	yes
4	jpg	Mt. Komidake (Iriomote Is.)	2010		MOEJ	same as above	yes
5	jpg	View from Funaura Bay (Iriomote Is.)	2010		MOEJ	same as above	yes
6	jpg	Cloud forest (Northern part of Okinawa Is.)	2003		MOEJ	same as above	yes
7	jpg	Mountains stream (Amami-Oshima Is.)	2012		MOEJ	same as above	yes
8	jpg	Mangrove forest (Nakama River, Iriomote Is.)	2009		MOEJ	same as above	yes
9	jpg	*Cardiandra amamiohsimensis*	2012		MOEJ	same as above	yes
10	jpg	*Arisaema heterocephalum*	2012		MOEJ	same as above	yes
11	jpg	*Viola amamiana*	2010		MOEJ	same as above	yes
12	jpg	*Asarum simile*	2013		MOEJ	same as above	yes
13	jpg	*Platanthera sonoharae*	2010		MOEJ	same as above	yes
14	jpg	*Solenogyne mikadoi*	2013		MOEJ	same as above	yes
15	jpg	*Dendrobium okinawense*	2007		MOEJ	same as above	yes
16	jpg	Amami rabbit (*Pentalagus furnessi)*	2012		MOEJ	same as above	yes
17	jpg	Iriomote cat (*Prionailurus bengalensis iriomotensis*)	2006		MOEJ	same as above	yes
18	jpg	Amami spyny rat (*Tokudaia osimensis*)	2014		MOEJ	same as above	yes
19	jpg	Tokunoshima spiny rat (*Tokudaia tokunoshimensis*)	2015		MOEJ	same as above	yes
20	jpg	Okinawa spiny rat (*Tokudaia muenninki*)	2009		MOEJ	same as above	yes
21	jpg	*Ryukyu long-haired rat* (*Diplothrix legata*)	2008		MOEJ	same as above	yes
22	jpg	Amami jay (*Garrulus lidthi*)	2015		MOEJ	same as above	yes
23	jpg	Okinawa rail (*Gallirallus okinawae*)	2007		MOEJ	same as above	yes
24	jpg	Okinawa woodpecker (*Sapheopipo noguchii*)	2012		MOEJ	same as above	yes
25	jpg	Amami woodcock (*Scolopax mira*)	2014		MOEJ	same as above	yes
26	jpg	Amami thrush *(Zoothera dauma major)*	2007		MOEJ	same as above	yes
27	jpg	White-backed woodpecker (*Dendrocopos leucotos owstoni*)	2013		MOEJ	same as above	yes
28	jpg	Ryukyu black-breasted leaf turtle (*Geoemyda japonica*)	2008		MOEJ	same as above	yes
29	jpg	Yellow-margined box turtle (*Cuora flavomarginata*)	2011		MOEJ	same as above	yes
30	jpg	Banded ground gecko (*Goniurosaurus splendens*)	2014		MOEJ	same as above	yes
31	jpg	Kuroiwa's ground gecko (*Goniurosaurus kuroiwae*)	2009		MOEJ	same as above	yes
32	jpg	Kishinoue's giant skink (*Plestiodon kishinouyei*)	2008		MOEJ	same as above	yes
33	jpg	Anderson's crocodile newt (*Echinotriton andersoni*)	2015		MOEJ	same as above	yes
34	jpg	Amami tip-nosed frog (*Odorrana amamiensis*)	2014		MOEJ	same as above	yes
35	jpg	Okinawa tip-nosed frog (*Odorrana narina*)	2009		MOEJ	same as above	yes
36	jpg	Greater tip-nosed frog (*Odorrana supranarina*)	2006		MOEJ	same as above	yes
37	jpg	Utsunomiya's tip-nosed frog (*Odorrana utsunomiyaorum*)	2007		MOEJ	same as above	yes
38	jpg	Amami Ishikawa's frog (*Odorrana splendida*)	2012		MOEJ	same as above	yes
39	jpg	Okinawa Ishikawa's frog (*Odorrana ishikawae*)	2009		MOEJ	same as above	yes
40	jpg	Namie's frog (*Limnonectes namiyei*)	2008		MOEJ	same as above	yes
41	jpg	Otton frog (*Babina subaspera*)	2008		MOEJ	same as above	yes
42	jpg	Holst's frog (*Babina holsti*)	2008		MOEJ	same as above	yes
43	jpg	Yanbaru long-armed scarab beetle (*Cheirotonus jambar*)	2005		MOEJ	same as above	yes
44	jpg	Damsel fly (*Rhinocypha uenoi*)	2016		MOEJ	same as above	yes
45	jpg	Asahina's Skipper (*Ochlodes asahinai*)	2009		MOEJ	same as above	yes

*1: Ministry of the Environment of Japan *2: Japan Wildlife Research Center


Amami-Oshima Island

Tokunoshima Island


Iriomote Island


The Northern Part of
Okinawa Island