Natural Park Systems in Japan

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Natural Park Systems in Japan Ministry of the Environment, Japan

1. Natural Park Systems

1.1 Purposes of Natural Parks

The Natural Parks Law was enacted in 1957 in order to preserve beautiful scenic areas and their ecosystems and to contribute to the health, recreation and culture of citizens by promoting their utilization.

The missions of the natural parks are conserving natural resources as well as providing the public with access to nature for their enjoyment. This is the biggest difference between natural parks and other nature conservation areas. In order to achieve these goals, the natural parks provide recreational facilities such as park visitor centers, trails and campgrounds.

1.2 History of the Natural Parks

The initial movement for establishing national parks in Japan started in 1911. In that year, a petition for creating national parks was submitted to the Diet. Around 1920, a decade after the petition, the Japanese government began to prepare legislation. The government also authorized selection of areas appropriate for national parks. The Diet passed a National Parks Law in 1931.

After much study and survey, twelve areas were designated national parks between 1934 and 1936. The first three national parks, Setonaikai (i.e., the Inland Sea), Unzen, and Kirishima, were designated in March 1934. In December of the same year, five more national parks, Aso, Nikko, Chubusangaku (i.e., the Japan Alps), and Akan and Daisetuzan in Hokkaido, were designated. Two years later, four parks (Towada, Fuji-Hakone, Yoshino-Kumano, and Daisen) were designated.

Once World War II started, efforts concerning national parks came to a halt. After the war, the designation of new national parks and the expansion of the existing national parks area were actively promoted by emphasizing the economic potential of parks as tourist destinations. Ise-Shima National Park was the first park designated after the war, in 1946. Seven more parks were designated through 1955.

In 1957, the Natural Parks Law was enacted to replace the 1931 legislation. As a result, the natural park system provides three different categories of natural parks: national parks, quasi-national parks and prefectural natural parks.

Increasing personal income and leisure time from the 1960's to the 1970's in turn contributed to the sharp increase in the number of visitors to national parks. In

accordance with these developments, the designation of national parks was accelerated.

During the same period, grave concern was voiced over the disruption of nature caused by excessive development activities together with environmental pollution in urban areas, which had become serious social problems. As a measure to solve these environmental problems, the Environment Agency was established in 1971. The Ministry of Health and Welfare transferred the responsibility for management of natural parks to the Environment Agency. The Environment Agency was changed into the Ministry of the Environment (hereinafter referred to as MOE) in the administrative reorganization 2001. This enabled a multilateral approach to the environmental concerns.

In 2002, a new law was promulgated to make a partial amendment to the Natural Parks Law. The amendment includes addition of some new regulations concerning the activities in special zones, creation of regulated utilization areas, and preparation of new systems for scenic landscape protection agreements and park management organizations.

1.3 Characteristics of Natural Parks

The Japanese Natural park system differs considerably from those in the United Stated and Australia. It was easy for America and Australia with vast virgin territories to allocate thousands of hectares of uninhabited forest as government-owned park land. On the other hand, Japan is small and densely populated with a long history of private land ownership. Moreover, Japan could only survive by using most of its land for housing or farming. Because of these reasons, the Japanese government had to create natural parks not necessarily where it owned land but where it recognized the need to preserve nature.

Consequently, park land ownership is complexly mingled in Japan, incorporating private land, state land and local government land. In fact, the state owns only about half the land constituting national parks. What is more, MOE, which has the responsibility for national park management, owns only a small portion of the state's land in the national parks. It is characteristic of Japanese natural parks that various land owners cooperatively maintain the landscape of a park.

1.4 Park Plans

In order to realize the appropriate protection and use of the natural parks, MOE formulates park plans for each national park and quasi-national park and revises them about every five years. Park plans consist of a regulatory plan and a facility plan.

The regulatory plan controls human activities that may destroy beautiful landscapes of national/ quasi-national parks by instituting a protection regulatory plan and a utilization regulatory plan. The protection regulatory plan classifies natural parks areas into several

zones on the basis of the need for conservation. Land in the national and quasi-national parks is divided into three categories: ordinary zones, special zones, and marine park zones. The most beautiful places in the parks are designated as the special zones. Special zones are further classified into four kinds: special protection zone, and special zone of Class I, Class II and Class III. Other areas are classified as ordinary zones. Areas forming the nucleus of the park are categorized as special protection zones. Sea areas are typically categorized as ordinary zones. Underwater regions which absolutely need protection are designated marine park zones.

The utilization regulatory plan defines regulated utilization zones in order to achieve conservation of ecosystems and sustainable use of the park under rules and controls. The regulated utilization zones are designated within the special zones. When someone wishes to enter a designated area, permission is required from Minister of the Environment or the governor of the prefecture concerned.

The facility plan is comprised of a utilization facility plan and a protection facility plan. The utilization facility plan establishes specifics regarding the development of user facilities, such as trails and campsites. Nature restoration facilities for landscape conservation are build according to the protection facility plan. The nature restoration facilities aim at restoring degraded natural processes and vegetation.

1.5 Controls / Regulation of Activities

In Japanese national parks, a permitting and notification system has been introduced in order to preserve the natural resources. Specified activities such as constructing buildings in special zones, special protection zones and marine park zones require permission from the Minister of the Environment or the governor of the prefecture concerned.

In the ordinary zones, large-scale establishment of facilities, extraction of minerals or setting up advertising displays requires notification of the Minister of the Environment. More stringent regulations are imposed in the special zones; establishing facilities, cutting trees, land formation or vehicle use in specified areas requires permission from the Minister of the Environment. Those activities are permitted if the natural values are not jeopardized. Special protection zones include the most stringent restrictions; everyone has to get permission for harvesting trees, plant cultivation, building campfires or gathering materials from the area.

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2. Present Conditions of Natural Parks in Japan

2.1 Designation

The Japanese natural park system provides for three kinds of parks: national parks, quasi-national parks and local nature preserves called prefectural natural parks.

National parks are designated and managed by the Natural Environment Bureau of MOE. Quasi-national parks are designated by MOE in response to requests from local governments. Prefectural natural parks are designated and managed by local governments. National parks are acclaimed as the most beautiful places in Japan. Other beautiful areas of Japan which fall somewhat short of national park standards have been designated quasi-national parks. Prefectural natural parks are regarded as beautiful places of local importance.

Definitions of each park are as follows:

National Park: Places of excellent scenic beauty and important ecosystems, worthy of designation as national scenic sites or outstanding ecosystem sites in Japan

Quasi-national Park: Places of natural scenic beauty almost equal to that of the national parks

Prefectural Natural Park: Places of local significance as designated by the local government

Standards for national parks are as follows:

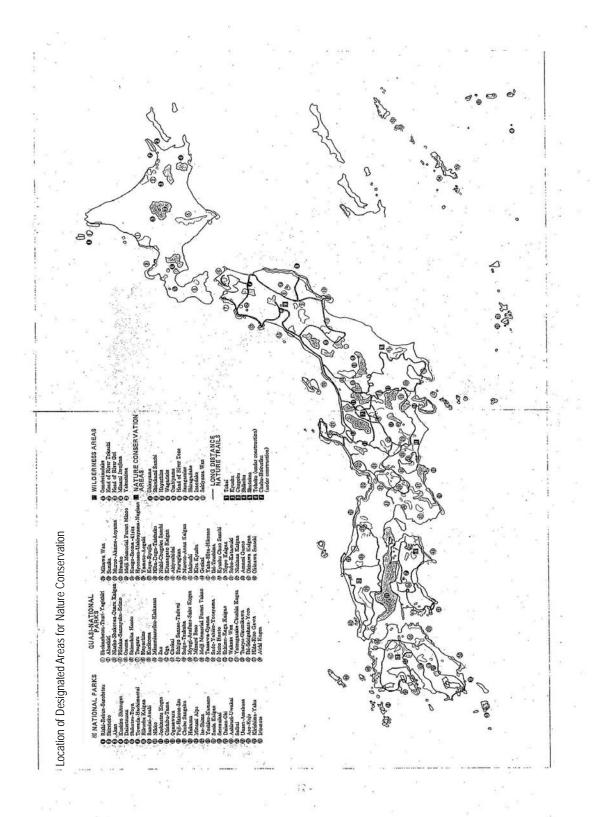
- · Superb landscape of national significance
- A land area of more than 30,000 hectares, in principle
- A landscape nucleus encompassing more than 2,000 hectares which has hardly been affected by detrimental development action
- · Seashore parks encompassing 3,000 hectares, in principle
- · Inclusion of at least two landscape elements to provided varied scenic beauty

The following are the standards for quasi-national parks:

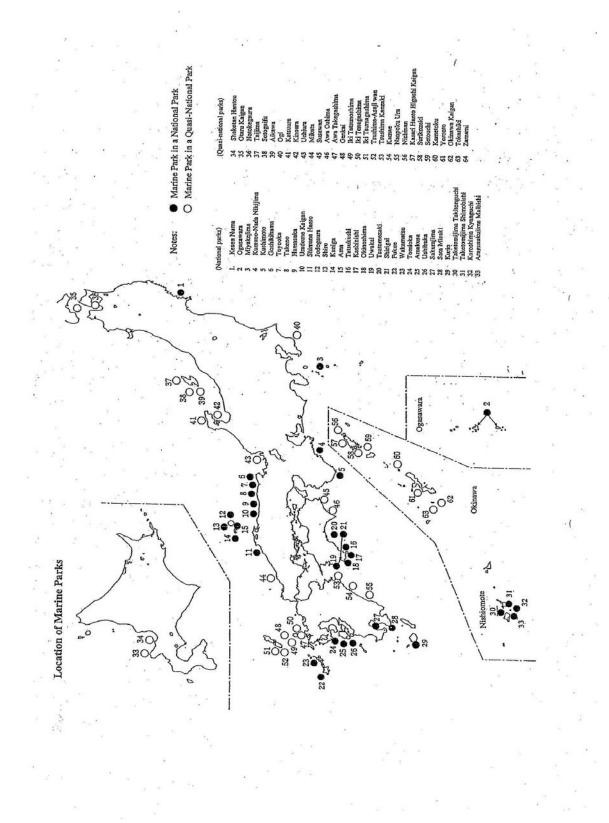
- Landscape with natural beauty almost equal to that of national parks
- Relatively large area encompassing 10,000 hectares, in principle
- A landscape nucleus encompassing more than 1,000 hectares where an ecosystem is well-maintained
- Seashore parks encompassing 3,000 hectares, in principle

As of March 2006, the Natural Park System comprised 28 national parks (2,065,161 hectares), 55 quasi-national parks (1,344,453 hectares) and 309 prefectural natural parks (1,961,287 hectares).

2.2 Distribution of National Parks



2.3 Distribution of Marine Parks



2.4 Visitors and Utilization

Many visitors enjoy natural parks in various ways. Mountain climbing, hiking and admiring the landscape are among the very popular activities in national parks. Canoeing and eco-tours are also becoming popular. Those activities enable visitors to interact with nature more deeply.

Numerous visitors enjoy nature in natural parks every year in Japan. 351,350,000 people visited national parks, 290,650,000 visited quasi-national parks and 266,120,000 visited prefectural natural parks in 2004.

3. Conservation and Management

3.1 Measures for Conservation

It is difficult to maintain beautiful landscapes and ecosystems in and around natural parks using controls or regulations of activities alone. It is necessary to implement the following projects properly in order to manage national parks.

3.1.1 The Landscape Protection Agreement

The Landscape Protection Agreement System was established to lighten the burden placed on the landowners. It is difficult to require all sites in parks to be equally managed, because management is not premised on land ownership. Some landowners have difficulties in maintaining their land. In Japan, some secondary forests and grasslands which have been formed and maintained by human activities have been designated national parks. Changes in the socioeconomic structure caused by liberalization of the agricultural trade or rural depopulation make it difficult to maintain the secondary forests and grasslands. This has significant impact on national parks management.

In order to deal with these problems, the Landscape Protection Agreement System was established. A Landscape Protection Agreement can be concluded between landowners and the Ministry of the Environment, local governments, or Park Management Organizations that have the ability to manage lands in national and quasi-national parks. The Minister of the Environment or a prefectural governor commissions the Park Management Organizations in accordance with Natural Parks Law.

Based upon this agreement, the Park Management Organizations manage and protect the land on behalf of the landowner. Park Management Organizations engage in various programs. They carry out vegetation restoration, maintenance of park facilities, dissemination of information, utilization studies and other activities. For the smooth operation of this system, Natural Parks Law expands preferential measures. The tax

burden of the landowner is also eased. As of 2006, a foundation in Aso-Kuju National Park, Aso Green Stock Foundation, was designated as a Park Management Organization.

3.1.2 Beautification Activities

Trash left in natural parks is likely to spoil the scenic beauty in parks. It also may adversely affect the ecosystems and create odor problems. Beautification activities in natural parks are therefore very important in maintaining the scenic beauty and ecosystems. Local governments and NGOs as well as MOE cleans park areas.

MOE designated the first Sunday of August as "Natural Park Cleanup Day". On that day, MOE stages a nationwide natural park cleanup campaign in cooperation with local governments and volunteers.

3.1.3 The Green Worker Program

MOE has been administering the Green Worker Program for better management of parks since 2001. Under this program, the Ministry employs local residents knowledgeable about the local nature and social situations to perform various activities including conservation of the fauna and flora, clearing alien species and cleaning locations of difficult access.

3.1.4 Regulation of Private Cars

Vehicle entry has been restricted in some national parks. Heavy concentrations of vehicles in a park cause problems: insufficient parking space, traffic jams and damage to the natural environment. These problems prevent the pleasant utilization of parks. MOE requests local governments and local police to forbid the use of private cars in national parks. As of March 2006, 28 districts in 17 national parks (such as Shiretoko, Mt. Fuji, Kamikouchi, Oze and Yakushima) have adopted such regulations.

3.1.5 The Special Private Land Purchase System

In Japan, designation of the areas used as national parks is not premised on land ownership. For this reason, if private land is included in the special protection zones and the Class I special zones, private rights are greatly restricted. As a result, irreconcilable conflicts arise between the public interests and the private property rights. This system aims at resolving such conflicts by changing private land into public land. Thus far, 8,496 ha of private land (in 14 national parks, 5 quasi-national parks and 2 national wildlife protection areas at a cost of 14,997,480,000 yen) has been converted into public land (as of March 2006).

3.2 Improvement of Facilities

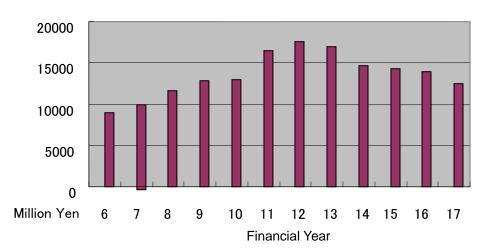
For the purpose of promoting the utilization of natural parks and ensuring coexistence with nature, MOE improves the facilities of natural parks. MOE has also been working to establish facilities to conserve and restore the natural environment. Four principles underlie the facility improvement: promotion of communion with nature, safe and pleasant use, conservation and restoration of nature and multi-dimensional consideration (of people, nature, global concerns, etc.).

Both the central government and local governments are engaged in the improvement of some of these facilities. MOE intensively improves facilities in the special protection zones, the Class I special zones and facility complex zones (centers for park utilization). MOE also selectively improves some facilities which are absolutely needed for nature restoration. Public facilities in quasi-national parks are developed by prefectural governments with financial assistance from MOE.

Visitor Centers

A visitor center is established as a facility to disseminate information and to educate visitors about nature in in the area in which a natural park is located. In the visitor center, panels are provided to introduce facts about local nature, specimens are displayed, and videos overview the park's features for visitors. At the same time field activities such as nature watching are organized to expand knowledge about the park's nature and to deepen understanding about the significance of nature conservation among visitors.

The visitor center typically offers its visitors facilities for field activities such as nature watching trails and bird watching huts. As of March 2006, 113 visitor centers have been established by MOE and prefectural governments.



Changes in the budget for the Natural Park Facility Development Program

3.3 Interpretation

Some significant roles of the natural park are to raise the level of knowledge about nature among people, to increase awareness of the need for nature conservation, and eventually to encourage them to get involved in activities for nature conservation. From this perspective, various programs or events are organized.

In a facility like a visitor center, field activities such as nature watching are used to expand knowledge about the park's nature and to deepen understanding about the significance of nature conservation among visitors.

"Greenery Week" (from April 23 to 29), "The National Campaign to Enjoy Nature" (from July 21 to August 20) and "National Trail Month" (from October 1 to 31) have been created to help people find more opportunities to get close to nature. During these periods, many events including nature watching and bird watching take place all over the country.

As a main event of The National Campaign to Enjoy Nature, "The Natural Parks Festival" is co-hosted in national and quasi-national parks by prefectural governments, MOE and the National Parks Association of Japan.

MOE also conducts a "Junior Park Ranger program" in cooperation with the Ministry of Education, Culture, Sports, Science and Technology. The primary purpose of this program is to encourage children to take part in nature conservation programs and to learn to appreciate nature. Large numbers of children take part in nature patrols, cleaning and repairing trails, vegetation protection, nature walks and wildlife research under the guidance of park rangers or volunteers.

3.4 Budgets for National Parks

MOE has established various budgets for managing national parks. Budgets for the Natural Park Facility Development Program, the Green Worker Program, night-soil disposal improvement, and the auxiliary ranger program are examples.

3.5 Management System

3.5.1 Headquarters

Ensuring coexistence with nature and biodiversity throughout the country is a primary task of the Nature Conservation Bureau of MOE. Three sections mainly engage in managing national parks. The National Park Division makes policy for conservation and utilization within national parks. The Division of Park Facilities and Conservation Technology has responsibility for improvement of facilities in the parks. The Office of Nature Appreciation undertakes various activities to promote visitors' appreciation of the natural world.

3.5.2 Regional Environmental Affairs Offices

Seven Regional Environmental Affairs Offices (Hokkaido, Tohoku, Kanto, Chubu, Kinki, Chugoku-Shikoku and Kyushu) carry out regional environmental administration. These offices also have responsibility for national park management. In order to cover large management areas, three further field agencies (Kushiro, Nagano and Naha) have also been set up under these offices.

3.5.3 Park Rangers and Auxilliary Rangers

Park rangers are assigned to the local offices. They manage park resources by examining development activities and conserving rare wildlife in parks. Although the number of rangers has been rather small, the number has been gradually increased (from 46 rangers in 1959 to 246 in 2005).

An "Auxilliary Ranger (called in Japanese an "Active Ranger"), a post newly created in 2005, also contributes to park management as an assistant ranger. They carry out patrols, conduct research, implement interpretation programs and facilitate coordination among volunteers. In 2005, 60 people were employed as auxilliary rangers in 47 districts.

3.5.4 Partnerships with Local Governments

Partnerships between MOE and local governments are important for national park management in Japan. In principle, national parks are mainly managed by MOE, while quasi-national parks are managed by prefectural governments. However, in the Japanese Natural Park System, it is not only MOE but also local governments which assume the role of national park management. For instance, prefectural governments have responsibility for establishing trails and picnic sites and for administering some licensing procedures.

3.6 Partnerships

National parks are managed in cooperation with local communities, including local authorities and local residents.

3.6.1 Park Volunteer Activities

In order to accept and utilize voluntary help and services from the public in natural parks, The Park Volunteer Program has been instituted. Applicants apply to the Regional Environmental Affairs Offices to be enrolled as park volunteers and must also attend an orientation course before taking part.

Many volunteers conduct various activities for the parks such as environmental interpretation activities and visitor assistance, facility maintenance, etc. Approximately 2,000 volunteers served in 36 districts in national parks in 2005. They are making various contributions based on plans developed according to regional circumstances.

3.6.2 The Natural Park Leader System

To promote appropriate utilization of the natural resources, The Natural Park Leader System was established in 1957. About 3,000 people whose activities in natural parks constitute a good example for visitors are commissioned to be Natural Park Leaders by the Director-General of Nature Environment Bureau of MOE. They are expected to encourage and facilitate appropriate use by other visitors to the parks. These are unpaid positions and the term is two years.

3.6.3 The Natural Parks Foundation

The Natural Parks Foundation conducts beautification activities and maintenance of utilization facilities. The capital resources of this foundation derive from the usage fees from the users of park facilities such as parking lots. There are 21 offices (20 in national parks and 1 in a quasi-national park). They hold conferences with local community to promote smooth communication.

3.6.4 Council Meetings

Council meetings are held to deepen understanding about visitor centers. Concerned organizations and municipality representatives attend.

3.6.5 Establishing Foundations for Regional Administration

Foundations have been established to manage national parks in accordance with regional conditions. For instance, the Shiretoko Nature Foundation and the Oze Preservation Foundation were established to manage park facilities and wildlife in parks.

4. Recent Topics

4.1 Nature Restoration Projects

The Law for the Promotion of Nature Restoration was enacted in 2003 in order to restore nature that had been destroyed in the past. Based upon this law, nature restoration projects have been promoted in national and quasi-national parks in order to revitalize wetlands, coral reefs and forests.

Nature Restoration Projects emphasize partnership, flexible management and long-term activity. A council is set up to deepen cooperaton among various sectors. The councils decide on the goals of restoration after due consultation. Nature restoration projects require flexible management based on scientific assessment of the natural environment. It takes a long time to restore nature because support by humans is limited to an ancillary role.

Status of Implementation of the Nature Restoration Projects[National Parks]Kushiro Marsh (Wetland Restoration)Sonin Islands (Non-native species)Sarobetsu (Wetland Restoration)Aso (Secondary Forest Restoration)Tatukushi (Coral Reef Restoration)Sekisei Lagoon (Coral Reef Restoration)Sarobetsu (Wetland Restoration)

[Quasi-national Parks]

Tanzawa-Oyama (Forest Restoration)Hyonosen (Wetland Restoration)Yahata Marsh (Wetland Restoration)Takegashima (Coral Reef Restoration)Amami-oshima (Coral Reef Restoration)Fakegashima (Coral Reef Restoration)

4.2 Landscape Conservation

The Japanese National Park System provides minimum criteria for imposing restrictions on matters such as facilities design, height and color of facilities, etc. in order to protect the landscape of national parks.

Following these criteria created by MOE, national park offices and prefectures which manage the parks set up further criteria on their own.

In accordance with recent introductions of wind power generation throughout the country, some local governments and private businesses are very enthusiastic about promoting wind power even in national parks.

Surely, wind power, as an alternative energy resource, contributes as a countermeasure against global warming. However, there were concerns that wind power stations could destroy landscape or hurt wildlife, as with bird strikes.

MOE, therefore, set up a committee consisting of experts from relevant fields to study how wind power generation in national and quasi-national parks affects their landscape and wildlife. Based upon the study by the committee in 2004, MOE finally defined construction criteria for wind power generation in national and quasi-national parks. MOE, since then, has dealt with individual cases, taking the various criteria into consideration. Derelict buildings, such as closed hotels, in national parks raise problems as well. Getting rid of such deserted buildings is one of the critical issues.

The Landscape Law was enacted in 2004, in response to growing interest in preserving natural and cultural landscapes. The Landscape Law stipulates that local governments set up criteria for matters such as building heights and exterior appearances in order to create and maintain beautiful landscapes.

In general, the national government decides on guidelines for preserving landscapes in national and quasi-national parks. However, considering the importance of local community initiatives, the national government makes efforts to coordinate with local governments to meet the criteria of the law, especially when local government takes the initiative in making plans.

4.3 Animal Conservation

In comparison with vegetation protection, measures concerning animal conservation have been inadequate in natural parks, because the Japanese Natural Park System initially aimed to protect landscapes and plants regarded as important constitutients of landscapes. Capturing animals was restricted only in special protection zones, while the collection of plants was prohibited in total special zones.

MOE set up a committee to study how to protect animals in national and quasi-national parks in response to growing interest in preserving biodiversity. As a result, a bottom line on animal conservation was set up. The main role of national parks is to protect animal habitat. Some species, which require urgent conservation and high efficiency conservation activities, are preferentially protected against capture. Three species of sea turtles and six species of insects were protected against capture in specific areas in January 2006. Now MOE has begun studying conservation measures for protecting insects which live in secondary grasslands and are extremely threatened.

Some animals are rapidly increasing and affecting the ecosystem. For instance, increasing numbers of Japanese deer are changing natural environments where they live. Expanding feeding grounds, declining snowfall and absence of natural enemies has led to the growth of the deer population. They need high habitat density and exert great effects on the natural environment. In fact, wetland vegetation, alpine plants and forest vegetation have all been damaged by them.

MOE takes responsibility for protecting the ecosystem from such increasing animal populations in national parks. Local governments owe it to local communities to protect agriculture and forestry from the damage caused by such population increases. MOE and local governments are required to make efforts cooperatively.

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Under the sea, an outbreak of crown of thorns starfish between the 1960s and the 1980s damaged coral reefs. The large outbreak was brought under control after the central governement and local governments carried out extermination efforts. However, the starfish are still found in high densities around Okinawa and the Amami Islands. They are continuously monitored and exterminated. Serious damage is caused as well when coral is attacked by *Drupella fragum*, found under the sea around the Japanese mainland.

4.4 Invasive Species

There are many problems which greatly affect ecosystems and landscapes in national parks. One particular problem is alien species. The alien species, which originate abroad, when they arrive and begin reproducing themselves here, drive away native species, prey on rare species, and destroy native habitat.

The problem is especially serious in islands such as the Bonin Islands. The Bonin Islands, which form part of Ogasawara National Park, have never been connected to the Japanese mainland. However, in the 19th century goats were brought for the first time to the Bonin Islands aboard whaling ships from America. The goats, which survived in the wild, were a severe blow to native species and vegetation. Today the Tokyo Metropolitan Government has carried out extermination of the goats and regeneration of native vegetation.

Other measures have been taken in Ogasawara National Park. MOE has made efforts to getting rid of Green Anoles (*Anolis carolinensis*) that prey on rare insects, while the Forestry Agency has taken charge of getting rid of alien trees (*Bischofia javanica*) that crowd out native trees, in order to protect the forest ecosystem.

MOE has promoted many programs in other places as well. For instance, plants originally inhabiting flatlands, which were unintentionally brought through visitors' shoes, are being removed from Nikko National Park.

In Shiretoko National Park, raccoons, which were originally imported here as pets, but were later abandoned by their owners, are being strictly monitored to prevent their intrusion on the park. In Shikotsu-Toya National Park, *dicentra*, which some flower lovers brought in and planted, is being exterminated.

The Invasive Alien Species Act was established in 2004 in order to halt proliferation of introduced foreign species which actively threaten native habitat. This law prohibits cultivating, transfering, and importing the invasive non-native species.

This law, however, covers only plants and animals which are brought from beyond the border, and does not cover transfer of plants and animals within the country. In order to deal with this problem, releasing animals and planting in special protection zones of national and quasi-national parks is, in principle, prohibited starting in January 2006.

4.5 Human Waste in Alpine Environments

Mountain climbing, among other activities, is very popular in national parks. However, scarce water and electricity, and extremely severe winter conditions in the mountains make it difficult to install public lavatories with a conventional disposal system. In fact, human waste from lavatories improperly disposed of has had an impact on ecosystems and water sources.

Now private businesses have actively developed new technologies which enable effective disposal of human waste even under difficult conditions. For instance, Bio-toilets using sawdust, lavatory incineration and lavatory airlift have already come into practical use. MOE in addition has commissioned an outside party to examine how effective such new technology is, and continuously is providing useful relevant information.

In most cases, visitors to the mountains use lavatories which are attached to mountain lodges. In the case of privately owned mountain lodges, in particular, proprietors have to shoulder a heavy financial burden.

MOE, therefore, established a system in which lodge proprietors can receive half of the disposal cost as a grant through local governments so that they can easily install or expand environmentally sound purification facilities. Some local governments, furthermore, contribute their own aid to reduce the financial burden on lodge proprietors.

You find some places in which visitors are encouraged to bring their own portable toilet with them and then take it back home. Recently, in some areas climbers have started climbing down with human waste transferred into tanks from lavatories.