

Shiretoko World Heritage Conservation Center

Opening hours: 8:30 – 17:30 (April 20 – October 20)
9:00 – 16:30 (October 21 – April 19)
Days closed: Every Tuesday (October 21 – April 19 only)
New Year's holiday
Address: 186-10 Utoronishi, Shari-cho, Shari-gun, Hokkaido
Telephone number: 0152-24-3255

Shirakami-Sanchi World Heritage Conservation Center

[Nishimeya-kan]

Opening hours: 8:30 – 17:00
Days closed: Every weekend, national holiday, and New Year's holiday
Address: 61-1 Aza Kanda, Oaza Tashiro, Nishimeya-mura, Nakatsugaru-gun, Aomori
Telephone number: 0172-85-2622

[Fujisato-kan]

Opening hours: 9:00 – 17:00 (April – December)
10:00 – 16:00 (January – March)
Days closed: Every Tuesday (April – December)
Every Monday and Tuesday (January – March)
New Year's holiday
Address: 63 Aza Satokuri, Fujikoto, Fujisato-machi, Yamamoto-gun, Akita
Telephone number: 0185-79-3001

Yakushima World Heritage Conservation Center

Opening hours: 9:00 – 17:00
Days closed: Every Saturday (December – February only)
New Year's holiday
Address: 2739-343 Ambomaedake, Yaku-cho, Kumage-gun, Kagoshima
Telephone number: 0997-46-2992



Ministry of the Environment
Government of Japan

March 2016

Published by:
Nature Conservation Bureau, Ministry of the Environment
1-2-2 Kasumigaseki, Chiyoda-ku, Tokyo 100-8975
<http://www.env.go.jp/en/>
World Natural Heritage in Japan:
<http://www.env.go.jp/nature/isan/worldheritage/>

Edited by: Japan Wildlife Research Center

Design: artpost inc.

Photos: Kazuhiro Asuka, Satoshi Chiba, Seiya Kudo, Hiroshi Nagano, Ikuo Nakamura, Ayumu Maruta, Naonobu Minagawa, Keiji Miyakawa, Hidetaka Omori, Hiroshi Takahashi, Kanehiro Yamada, amanaimages Inc., Egyptology and Tourist Promotion Office of Embassy of Egypt, Japan Wildlife Research Center, PIXTA Inc. Shiretoko Rausu-cho Tourist Association, Shiretoko Shari-cho Tourist Association
Illustrations: Haruyoshi Kawai, Yoshitaka Minowa, Tadaaki Okata, Mari Otaguro, Toyomi Tanaka

Shiretoko
知床

World Natural Heritage in Japan

Shirakami-Sanchi
白神山地

Yakushima
屋久島

Ogasawara Islands
小笠原諸島

What is World Heritage?

Qu'est-ce que le Patrimoine Mondial ?



Shirakami-Sanchi (Aomori, Akita)
Area: Approx. 17,000ha
Inscription: 1993

Shiretoko (Hokkaido)
Area: Approx. 71,100ha
Inscription: 2005



Ogasawara Islands (Tokyo)
Area: Approx. 7,900ha
Inscription: 2011



Yakushima (Kagoshima)
Area: Approx. 10,700ha
Inscription: 1993



Origin of the World Heritage Convention

In the 1960s, as part of a plan to rescue historical monuments from the flooding produced by the construction of the Aswan High Dam on the Nile River, the United Nations Educational, Scientific and Cultural Organization (UNESCO) initiated an international safeguarding campaign to preserve the Nubian Monuments by dismantling and reassembling them. This action prompted the idea of protecting world cultural assets through international cooperation. In 1965, the United States of America suggested an international framework to support listing and protection of the world's superb natural and scenic areas and historic sites.

In the wake of such movements, the Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) was adopted at a UNESCO General Conference in November 1972. Japan became a party to the Convention in 1992.



The Abu Simbel temples

Outline of the World Heritage Convention

Official name	Convention Concerning the Protection of the World Cultural and Natural Heritage
Objectives	The World Heritage Convention aims to identify, protect, conserve, present and transmit to future generations cultural and natural areas around the world considered to be of outstanding value. The Convention also supports to establish systems for international cooperation.
Secretariat	UNESCO World Heritage Centre (Paris)
What is World Heritage?	World Heritage properties are the sites of Outstanding Universal Value (i.e. of particularly important value for all humankind) that are evaluated by the World Heritage Committee* as assets to be inscribed on the World Heritage List and be conserved into the future. There are natural properties, cultural properties, and mixed properties that have both natural and cultural values.

* An intergovernmental body established under UNESCO, consisting of representatives of 21 countries elected from the State Parties. A Committee term is limited to a maximum of 6 years (some countries voluntarily shorten their terms to 4 years)

State Parties: 191 countries (as of Mar 2016)	
Number of the World Heritage properties	
Total	1031 (19)
Natural heritage	197 (4)
Cultural heritage	802 (15)
Mixed heritage	32 (0)
* Figures in parentheses are numbers for Japan.	

Treasures that should be passed down to future generations as irreplaceable assets shared by all humankind

Requirements for Inscription on the World Heritage List as a Natural Property

The Outstanding Universal Value of the property is evaluated in accordance with the following three conditions:

- 1 The property must meet more than one of the four evaluation criteria (see table below)
- 2 The property must fulfill the condition of integrity (e.g. include all the elements necessary to demonstrate outstanding universal value; contain adequate areas; show little influence of development; and maintain its primary natural value).
- 3 The property must be adequately protected and managed in order to maintain its outstanding universal value over the long term.

Those properties that fulfill the above conditions can be inscribed on the World Heritage List, as they are the only places in the world that have such significant value.

Criteria for Natural Heritage

To be inscribed on the World Heritage List as a natural heritage, the property must meet one or more of the four criteria: natural beauty; geology and geomorphology; ecosystem; and biodiversity.

(vii) natural beauty	contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic importance (Yakushima)
(viii) geology and geomorphology	be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features
(ix) ecosystem	be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals (Shiretoko, Shirakami-Sanchi, Ogasawara Islands and Yakushima)
(X) biodiversity	contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of Outstanding Universal Value from the point of view of science or conservation. (Shiretoko)

Protection and Management of World Natural Heritage Properties in Japan

World Natural Heritage properties must be appropriately protected and managed to maintain their values into the future. For this reason, protection and management measures in accordance with the national laws and systems are taken on those properties, through the status of National Parks, Nature Conservation Areas, Forest Ecosystem Reserves, and/or Natural Monuments for which the government has the management responsibility.

Framework for Protection and Management of World Natural Heritage Properties in Japan

On the World Natural Heritage properties, appropriate protection and management is necessary to be implemented on the basis of scientific knowledge and with close cooperation among relevant parties, including local organizations, academic experts, and government bodies that have jurisdiction over protection and management of the natural environment. For each World Heritage property, a Regional Liaison Committee and Scientific Committee are established and operate to develop a Management Plan and advance protection and management efforts for that property.

Structures pour la protection et la gestion des sites du Patrimoine naturel mondial

Sur les sites du Patrimoine naturel mondial, une protection et une gestion adéquates doivent être mises en oeuvre sur la base des connaissances scientifiques les plus récentes et dans le cadre d'une coopération étroite entre les différentes parties concernées (administrations ayant compétence sur la protection et la gestion des environnements naturels, organisations locales, experts académiques, etc.). Pour cela, un Comité de liaison régional et un Comité scientifique sont mis en place et gérés sur chaque site du patrimoine mondial afin d'élaborer le plan de gestion et de promouvoir les efforts de protection et de gestion du site.

Regional Liaison Committee	The Regional Liaison Committee is comprised of the Ministry of the Environment, Forestry Agency, local governments and other relevant parties. The committee serves as a vehicle for liaison and coordination and consensus building for management of the World Heritage property.
Scientific Committee	The Scientific Committee is composed of experts in the natural and social sciences. On the basis of scientific knowledge, the committee provides the advice for appropriate protection and management of the property.
Management Plan	The Management Plan clearly lays out policies and structures promoting the application of various schemes for protection and management. The appropriate protection and management programs are promoted through close cooperation and consultation among relevant stakeholders.

Process for the inscription of the properties on the World Heritage List



Shiretoko

The Shiretoko Peninsula is located in the northeastern part of Hokkaido, and contains sheer cliffs, wetlands and lakes, and steep mountains of about 1,500m formed by volcanic activity. The World Heritage property is an area of approximately 71,100 ha that includes Shiretoko Peninsula, from the central part to the Shiretoko Cape at the tip, and the surrounding ocean.

La péninsule de Shiretoko, située dans la partie nord-est de Hokkaido, se compose de montagnes escarpées d'environ 1.500 m dues à l'activité volcanique, de falaises abruptes, de marécages et de lacs. Le site inscrit au Patrimoine mondial est une zone d'environ 71.100 ha qui inclut la péninsule de Shiretoko, depuis sa partie centrale jusqu'au cap de Shiretoko, son extrémité, ainsi que la mer qui l'entoure.

Lake Rausu

This is the largest lake in the Shiretoko Peninsula. The deep primeval forests of Erman's birch and Sakhalin fir are dotted with wetlands and snow patches, with the various different alpine plants in each of the seasons. The Lake Rausu Route requires equipment and experience for mountain climbing.



Rausu Visitor Center

The Rausu Visitor Center serves as the gateway to the Rausu side, and displays and explains information related to nature, culture, and usage. It also serves as a central base for the Wildlife Protection Area and for wildlife research.



Shiretoko World Heritage Rusa Field House

The Shiretoko World Heritage Rusa Field House conveys the natural magnificence from the tip of the Shiretoko Peninsula, the connections between the marine and terrestrial ecosystems, and the value of the ocean at Shiretoko, which has been closely involved in the lives of the people there. It also provides lectures on rules and manners.



Whale watching

Mink whales, Baird's beaked whales, sperm whales, killer whales, Dall's porpoises, Pacific white-sided dolphins, and harbor porpoises are mainly observed here. The peak time to see mink whales is from about May to June, and about August to September for sperm whales.



Salmon

Large shoals of salmon swim upstream along the rivers to spawn from the end of September until early November. This is a characteristic species that links marine and terrestrial ecosystems.

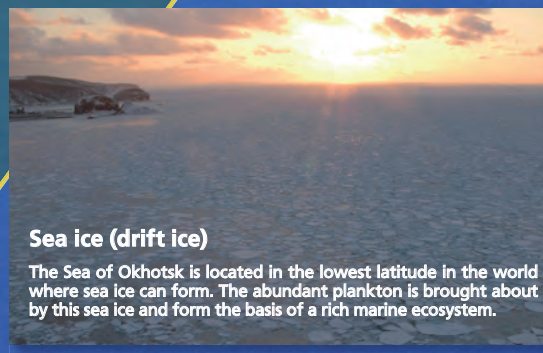


Steller sea lion

Herds of around 100 Steller sea lions which primarily consist of females migrate to the coastal waters of the Shiretoko Peninsula. They mate in the seas adjacent to Russia, and pregnant individuals come here to build up their nutritional reserves in order to give birth. In Shiretoko, they feed mainly on Walleye pollock.

Sea ice (drift ice)

The Sea of Okhotsk is located in the lowest latitude in the world where sea ice can form. The abundant plankton is brought out by this sea ice and form the basis of a rich marine ecosystem.



World Heritage property

- Area A: Area for strict protection
- Area B: Area for conservation and utilization

Rausu Town

Shari Town

Shiretoko World Heritage Conservation Center

Shiretoko World Heritage Conservation Center shows the attractions of nature in Shiretoko, as well as instructs rules and manners for enjoying nature in Shiretoko through virtual experiences using tablets and hands-on displays of educational stuffed animals. It also provides real-time information and the latest information on management of the property. * Refer to the back cover



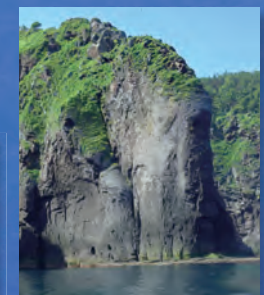
Mt. Rausu

This is the main and the highest peak for the volcanic range on the Shiretoko Peninsula, 1,661 m in elevation. It is one of the 100 Famous Japanese Mountains.



Furepe Waterfall

In this waterfall, underground water flows down from the fissures in a cliff that rises up vertically for approximately 100 m. It is locally known as "Maiden's Tears."



Sea cliffs

On the Shiretoko Peninsula, precipitous cliffs were formed through a combination of volcanic activity and marine erosion. On the western coastline on the Utoro side, a series of cliffs of up to 200 m, various different waterfalls, and uniquely shaped rocks can be seen.

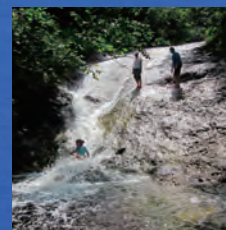
Shiretoko Goko Lakes

Here visitors can see the beautiful scenery of five lakes surrounded by primeval forests dotting the landscape, with the Shiretoko mountain range and primeval forests reflected in the surfaces of the lakes. The periods in which Shiretoko Goko Lakes is open is divided up into three stages: the Bear Aware Season, Ecosystem Aware Season, and the free use period, with visitors being required to apply certain entry procedures or take a lecture depending on the time period to use walks on the ground. Visitors are allowed to freely stroll along the elevated boardwalk on which an electrified fence for repelling bears has been installed. See the Shiretoko Goko Lakes Field House website for details. (<http://www.goko.go.jp/english/>)



Mt. Iou

Along with Mt. Rausu, this is one of the active volcanoes on the Shiretoko Peninsula. It also is one of the rare volcanoes in the world that spews out large quantities of high purity dissolved sulfur. It has an elevation of 1,562 m.



Kamuiwakka Waterfall

Since the water contains sulfur content, it carries the meaning "water of the gods (spirits)" in the Ainu language. Restrictions on private vehicle use apply during busy periods.

Viola kitamiana

This species is endemic to the Shiretoko mountain range. *Viola kitamiana* communities can be seen on the volcanic wilderness of Mt. Iou, Mt. Higashi, Mt. Chienbetsu, and Mt. Minami, as well as on the windswept wilderness in the saddle between Mt. Onnebetsu and Mt. Chinishibetsu.



Yezo sika

This is one of the subspecies of the sika deer that is widely distributed from Vietnam to Far East Asia. They are the largest of the sika deer. In recent years, the increased populations have been causing damage to the forests and grasslands.



Brown bear

The Shiretoko Peninsula is one of the world's highest density regions for brown bears. Since they can make use the bounty of the forests and the sea—including herbaceous plants from the coasts and high mountains, fruit and nuts from forests, and the salmon that swim upstream—they have more than 90 varieties of food resources at their disposal.



Steller's sea eagle

This is a large eagle that only breeds in the far eastern areas of Russia. It is a rare species, with estimated about 5,000 individuals in the world. There are records of more than 2,000 wintering birds in the Shiretoko Peninsula. Red List of the Ministry of the Environment Threatened II (VU) *Species facing a growing risk of extinction



White-tailed eagle

The white-tailed eagle is distributed widely in northern Eurasia, and also breeds on the Shiretoko Peninsula. The nest density in the peninsula is one of the highest in the world, which is a reflection of the ample food resources found there. The number of fledging chicks per clutch is also larger than other areas. Red List of the Ministry of the Environment Threatened II (VU) *Species facing a growing risk of extinction



Blakiston's fish-owl

This is the world's largest owl. It is rare at the species level with only about 1,000 individuals in the world. There are about 140 birds living in Hokkaido, with about one-fourth of these inhabit the World Heritage Site. Red List of the Ministry of the Environment Threatened IA (CR) *Species facing an extremely high risk of extinction in the very near future



※ Caution: During the wintertime, the Trans-Shiretoko Highway is closed.

Shiretoko

Outstanding Universal Value / Valeur universelle exceptionnelle

✓ (ix) Ecosystem / Écosystème

Productive interaction between terrestrial and marine ecosystems with unique sea ice characteristics
Interaction productive entre les écosystèmes terrestres et marins sous l'effet des glaces marines

✓ (x) Biodiversity / Biodiversité

Important area for maintaining the biodiversity due to the fact that northern and southern species coexist, and as a result a wide range of fauna and flora that include many rare and endemic species live here

Région importante pour le maintien de la biodiversité du fait de la coexistence d'espèces septentrionales et méridionales, qui permet une grande variété au niveau de la faune et de la flore, avec en particulier des espèces rares et endémiques

The Sea Ice Sustains an Abundance of Life

The coastal areas of Shiretoko in the Sea of Okhotsk are located in the lowest latitude in the world where sea ice can form. The formation of sea ice promotes upwards and downwards convection in the ocean water by cooling the surface layer of ocean water, which raises the nutritive salts that accumulate at the lower levels of the sea up to the surface level. Once spring arrives, the surface layer is bathed in enough sunlight for photosynthesis, and phytoplankton proliferates explosively using nutritive salts. The vast quantities of plankton produced in this way form the starting point for the food chain that sustains the rich ecosystems of Shiretoko, linking the ocean, rivers and forests.



Sea ice seen from the bottom

Life Supported by Integrated Ecosystems of Ocean, Rivers, and Forests



The ocean of Shiretoko fosters marine life such as plankton, fish, seabirds, dolphins and whales. Salmon species such as chum salmon and pink salmon swim upstream from the ocean and serve as an important food source for brown bears and birds of prey. Fish that remain partially uneaten also provide food for animals like foxes, before finally being returned to the soil where they provide nourishment for the forests. In this manner, a dynamic food web that encompasses the ocean, rivers, and land has formed in Shiretoko. Moreover, at Shiretoko, northern and southern species coexist and intimately interact one another to form a rich ecosystem. It is also a crucial habitat for the survival of globally endangered birds, such as Blakiston's fish-owls, Steller's sea eagles, and white-tailed eagles.

Protection and Management of Shiretoko Protection du Patrimoine Naturel Mondial de Shiretoko

The World Heritage Committee has pointed out challenges confronting Shiretoko. These include countermeasures against Yezo sika (endemic subspecies of sika deer), tourism management, formulation of management plan for marine areas, and for salmon species to reduce impact by dams and develop countermeasures. The River Construction Advisory Committee, Marine Area Working Group (hereafter WG), Sika Deer and Terrestrial Ecosystem WG, Proper Use of Nature and Ecotourism review meetings, and others have been established under the Scientific Committee to address these issues.

Protected Areas in the Property

Shiretoko National Park	
Special Protection Zone :	23,526 ha
Special Zone :	15,110 ha
Onnebetsudake	
Wilderness Area :	1,895 ha

(Under jurisdiction of MOE)

Examples of Efforts / Exemples d'actions



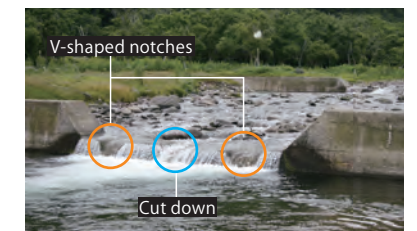
Countermeasures against Yezo Sika Mesures contre la prolifération des cerfs sika d'Hokkaido

In recent years, there has been a sharp increase in Yezo sika within the World Heritage property, leading to effects on the ecosystem that include changes to the vegetation. In order to mitigate their impact, the Ministry of the Environment and others from the national government, as well as the relevant local governments have been controlling the deer population by harvesting, based upon the Sika Deer Management Plan in the Shiretoko Peninsula and advice from the Sika Deer and Terrestrial Ecosystem WG. In areas where population control is being carried out, it has been confirmed that the vegetation is gradually recovering.



Balance between Maintaining Marine Biodiversity and Fishing Activities Maintien de la biodiversité dans les zones marines, équilibre avec les activités de pêche

The Multiple Use Integrated Marine Management Plan, which aims to reconcile the conservation of ecosystems with a sustainable fishing industry, was formulated in 2007 by the Ministry of the Environment and the Hokkaido Prefectural Government. Through this plan, "voluntary restrictions by fishery operators" were incorporated into the management of the World Heritage property and a management style was achieved that strikes a balance between maintaining marine biodiversity and fishing, which is a regular vocation in the region. This management style is highly appraised internationally as the "Shiretoko style," to be a new model for heritage site management techniques.



Improvement of river constructions

Improving River Constructions Amélioration des constructions fluviales

On some of Shiretoko's rivers, salmon and other fish species could not swim upstream to spawn because of check dams, weirs, and other artificially constructed structures (river constructions). Therefore, based on the recommendations of the River Construction WG (currently River Construction Advisory Committee), improvement works were carried out such as by installing fishways for 13 river constructions for which improvements were deemed to be appropriate. As a result, the spawning ranges upstream of the constructions have expanded and the numbers of eggs produced have increased.



The Elevated Boardwalk and the Regulated Utilization Areas Passerelle surélevée, système de zone à utilisation régulée

The walkways at Shiretoko Goko Lakes had problems including such examples as they were often closed on account of the frequent appearance of brown bears and the negative impact on vegetation resulting from visitor congestion. In order to resolve these issues, an elevated boardwalk that could be safely walked without the danger of coming into contact with brown bears was installed. In 2011, regulated utilization system was adopted pursuant to the Natural Parks Law. Visitors are required to apply for permission to go to the aboveground walkways during congested periods. Through these efforts, the impact on vegetation is reduced while also natural landscapes and biodiversity are maintained.



Shiretoko Ecotourism Strategy Stratégie ecotourisme de Shiretoko

In 2013, the Shiretoko World Natural Heritage Site Proper Usage / Ecotourism Investigative Commission prepared the Shiretoko Ecotourism Strategy. It aims at sharing future objectives for promoting tourism to Shiretoko and methods for achieving this among all of the stakeholders. The Strategy invites anyone to freely offer proposals on new tourism uses and the establishment of new rules so that more open local initiatives will be promoted.

Shirakami-Sanchi

Shirakami-Sanchi is the general term for a mountainous region with elevations from approximately 200 m to 1,250 m that straddles the prefectural border between the southwestern part of Aomori Prefecture and the northwestern part of Akita Prefecture. The World Heritage property is an area of approximately 17,000 ha situated in the central part of Shirakami-Sanchi in which the immense beech forest has been remained in primeval state.

Shirakami-Sanchi est le terme générique utilisé pour désigner une région montagneuse avec des altitudes variant entre 200 et 1.250 m, qui s'étend de chaque côté de la limite départementale entre la partie sud-ouest du département d'Aomori et la partie nord-ouest du département d'Akita. Le site inscrit au Patrimoine mondial est une région d'environ 17.000 ha située dans la partie centrale de Shirakami-Sanchi, dans laquelle une immense forêt de hêtres est restée dans son état primitif.

Mt. Shirakami-dake

This mountain with an elevation of 1,235 m is the second tallest mountain in Shirakami-Sanchi next to Mt. Mukaishirakami-dake.



Kurokumanotaki Waterfall

This waterfall has a drop of 85 m. It is counted among the 100 Famous Japanese Waterfalls, and is one of the largest in Aomori Prefecture. It is a roughly 15 minute walk from the parking lot.



Shirakami-Promenade Kuromori-kan (Hall)

This is a general information and rest area that is furnished with an exhibition hall and a break room. It is the starting point for a walkway from which visitors can see a part of the Kuromori (Black Forest). The forest has been protected in order to ensure water for paddy fields since some hundreds years ago.



Tsugaru Pass

Tsugaru Pass is about a 20-minute climb by car from Anmon Ohashi Bridge on the Shirakami Line. Visitors here can look out over the mountain range of the World Heritage property. The Mother Tree, a giant tree with an estimated age of about 400 years, can be reached within a several hundred-meter walk from Tsugaru Pass.



Shirakami-Sanchi Visitor Center

The center provides detailed explanations of the beech forest at Shirakami-Sanchi. In the visual experience hall, visitors can see the four seasons at Shirakami-Sanchi through realistic and lifelike sounds and images on an enormous screen.



Beech forest

In snowy Shirakami-Sanchi, a pure forest of Siebold's beech that well withstands the snow has developed. The site of woods with slender grayish-white beech tree trunks lined up against forest floors covered with dwarf bamboo is a distinctive scene that can only be observed with the beech forests in East Asia. Siebold's beech trees are also known for their high water retention capacity and their importance as habitats for wildlife.



Shirakami-Sanchi World Heritage Conservation Center (Nishimeya-kan)

The center displays materials related to Shirakami-Sanchi and photos of the living things, while also offering environmental education activities such as hands-on camps for children.
* Refer to the back cover



Japanese black bear

The Japanese black bear has a body length of 120-145 cm and weighs 70-120 kg. It is characterized by a white "crescent moon" on the chests, and is the largest land mammal in Honshu. While it is omnivorous, vegetable matter makes up a large portion of its diet.

Dakedai Education Forest

This is a natural forest consisting mainly of Siebold's beech that is optimally suited for a relaxing walk. Visitors can readily savor the atmosphere of the pristine beech forest of Shirakami-Sanchi alongside the forest roads. Some pathways paved with woodchips that incorporate universal design have been installed.



Shirakami-Sanchi World Heritage Conservation Center (Fujisato-kan)

This facility displays materials related to the nature of Shirakami-Sanchi, offers a reading corner and space where visitors can relax while watching DVDs, and holds photo exhibitions as well. There is a nature advisor who provides information and explanations to the visitors, while also carrying out nature observation sessions and environmental education activities aimed at children. *Refer to the back cover

Golden eagle

The golden eagle is a massive eagle with a wingspan of more than 2 m. It inhabits mountainous regions and nests on sheer cliffs. The bird is one of Japan's Natural Monuments and a National Endangered Species of Wild Fauna and Flora.
Red List of the Ministry of the Environment
Threatened IB (EN)
*Species facing a high risk of extinction in the near future



Silene aomorensis

This is an endemic perennial on which lovely white flowers about 2 cm in diameter bloom around June. The species occurs on rocky areas.
Red List of the Ministry of the Environment
Threatened II (VU)
*Species facing a growing risk of extinction



Sibatanozephyrus fujisanus

This is a butterfly whose wing surface has a beautiful metallic luster. Since its larvae only forage on the leaves of Siebold's beech, the species cannot be seen anywhere else besides beech forests.



Anmonnotaki Waterfalls

Anmonnotaki Waterfalls consist of Ichinotaki Waterfall (42 m), Ninotaki Waterfall (37 m), and Sannotaki Waterfall (26 m) in this order from the top, with each one of these projecting a powerful image.



Pseudotschima schmidtianum subsp. senanense var. shiragamiense

This is the only plant to carry "Shirakami" in its Japanese name. It is an endemic species that rarely grows along rocky areas and grasslands.



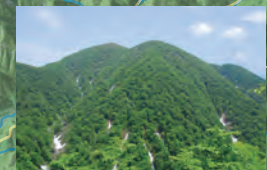
Black woodpecker

The black woodpecker is the largest woodpecker in Japan. The species inhabits Hokkaido and northern Honshu. It is designated as the national Natural Monument.
Red List of the Ministry of the Environment
Threatened II (VU)
*Species facing a growing risk of extinction



Mt. Futatsumori

Visitors can get a commanding view of the World Heritage property from the peak of Mt. Futatsumori at an elevation of 1,086 m. It takes about an hour from the Futatsumori Mountain Trail Entrance (elevation of about 920 m, and has a parking lot and public toilets) to the summit.



Juniko Lakes

There are 33 lakes and marshes in the western part of Shirakami-Sanchi on the Aomori Prefecture side. These were supposedly formed by a major earthquake and subsequent landslide that occurred in the early 1700s. Access roads are closed during winter.



Juniko Eco-Museum Center "Kokyokan"

Here visitors can see high definition images related to nature and exhibitions like dioramas. They can also experience nature through the use of the walkways and observation huts.



World Heritage property

Area A: Area for strict protection
Area B: Area for conservation and utilization



Shirakami-Sanchi

Outstanding Universal Value / Valeur universelle exceptionnelle



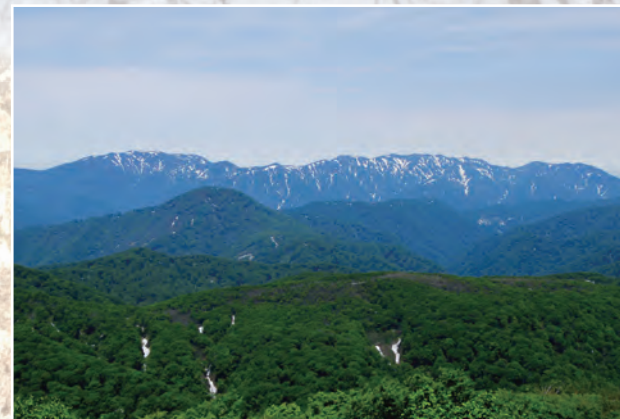
(ix) Ecosystem / Écosystème

The largest primeval beech forest in East Asia which features rich biodiversity

La plus grande forêt primitive de hêtres d'Asie de l'Est, offrant une biodiversité remarquable

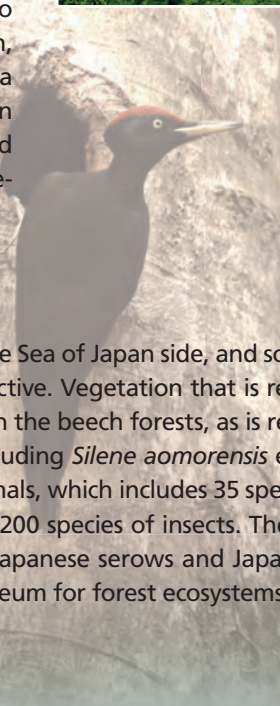
A Surviving Pristine Forest

Shirakami-Sanchi contains the largest primeval beech forest in East Asia, having been untouched by human development. Beech forests were once distributed in the area around the Arctic region when the Earth was warmer than it is now. They were home to a diverse array of vegetation including Siebold's beech, *Silene aomorensis*, and *Hylotelephium ussuriense* var. *tsugaruense*, which are said to be surviving remnants (relicts) from the ice age. When the ice age arrived, the beech forests moved south in response to the cooling of the climate. However, shrubs and herbaceous plants were blocked by mountains stretching from east to west in Europe and many other regions throughout the world, making it impossible for them to move south. Since only beech trees moved south, the vegetation in the beech forests came to be simplified. In Japan, there were no mountains blocking the southward movement of their distribution, and so the species composition of the plant community in the area around the Arctic region was largely maintained. For this reason, in Shirakami-Sanchi a distinctive beech forest close to the one around the Arctic region approximately 30 million years ago has been preserved.



A Forest Museum

During the winter, Shirakami-Sanchi receives the damp air from the Sea of Japan side, and so it receives an extremely large amount of snow from an international perspective. Vegetation that is reflective of the heavily snow-laden environments can be seen on the ground in the beech forests, as is represented by *Sasa kurilensis*. More than 540 species of plants grow here, including *Silene aomorensis* endemic to this region. Shirakami-Sanchi is also home to a diverse array of animals, which includes 35 species of medium to large mammals, 94 species of birds, and approximately 2,200 species of insects. These include rare birds like golden eagles and black woodpeckers, as well as Japanese serows and Japanese black bears. The beech forests of Shirakami-Sanchi could be called a museum for forest ecosystems based primarily around Siebold's beech, a species endemic to Japan.



Protection and Management of Shirakami-Sanchi Protection du Patrimoine Naturel Mondial de Shirakami-Sanchi

The primeval beech forest of the Shirakami-Sanchi World Heritage property is conserved through measures like patrols and management grounded in various laws, ordinances, and rules. At present, no significant problems have surfaced that would threaten its Outstanding Universal Value. However, ongoing monitoring of the natural environment is necessary since the possibility of challenges arising in the future has been pointed out, such as the impact from climate change. Government officials, experts, and local stakeholders are working together to promote conservation efforts.

Protected Areas in the Property

Shirakami-Sanchi
Nature Conservation Area : 14,043 ha

(Under jurisdiction of MOE)

Examples of Efforts / Exemples d'actions



Patrols Patrouilles

Rangers from the Ministry of the Environment and other personnel from government agencies, staff hired by the agencies, and volunteers periodically carry out patrols to ensure that the World Heritage property is being properly conserved. The patrols prevent entry to core area in which trespassing is restricted, felling of and damage to trees, the illegal harvest of plants, the poaching of fish in no-fishing areas, the disposal of trash, and open bonfires. In addition, they educate visitors about etiquette and provide instruction on procedures for visiting the mountains. Joint patrols undertaken by assembling persons involved together are carried out several times a year organized by the Shirakami-Sanchi World Heritage Area Liaison Committee.



Promoting Ecotourism Promotion de l'écotourisme

In 2011, a committee was launched to promote ecotourism in Shirakami-Sanchi. The committee carries out activities to unearth local resources such as by asking local people about how they have interacted with nature in Shirakami-Sanchi since the past and conducting questionnaires related to historical culture, foods, and nature that the people can show off, value, and look on with pride. This is done with the goal of having local residents, local stakeholders, and others come together to work to address ecotourism in the World Heritage property and its surrounding regions. Promoting ecotourism will convey to tourists the appeal inherent in the local area, get them to understand its value and importance, and thereby lead to conservation.



Monitoring Monitoring

It is essential to detect early on potential effects of global warming and air pollution on the beech forest that is so important to the Shirakami-Sanchi World Heritage property. Ongoing monitoring activities are being carried out for a careful watch over the changes at Shirakami-Sanchi by incorporating natural scientific content like climate and vegetation, and social scientific content like the number of visitors to the mountains.

Since a range of resources is required in order to continue with the surveys, they are carried out via coordination with the public, students, researchers, and government agencies.

Programs for Experiencing Nature Programmes de découverte de la nature

There are programs in World Heritage property to teach children about the wonders of nature and connections between humans and nature by having them experience nature.

With the programs, the children go out into nature together with experts of the rivers and mountains who have actually lived by receiving the bounty of nature in Shirakami-Sanchi. The kids hear talks about the traditional dietary culture and hunting from *Matagi*, Japanese traditional game hunter, and are taught knowledge on fishing from river fishermen. Programs are also held for children to learn about the wonders of nature together with rangers from the Ministry of the Environment through forest patrols and surveys of living creatures. Environmental education is promoted in a way that uses Shirakami-Sanchi as living teaching materials.



Learning wisdom of *Matagi*

Ogasawara Islands

The Ogasawara Islands are located about 1,000 km away from Tokyo to the south. They consist of about 30 islands of varying sizes that are surrounded by vertical cliffs and sea whose azure blue color is referred to as “Bonin Blue”*. The World Heritage property encompasses the Mukojima Island Group, the Chichijima Island Group, the Hahajima Island Group, Kita-iwoto Island, Minami-iwoto Island, and Nishinoshima Island, which has a total area of roughly 7,900 ha. For Chichijima and Hahajima Islands, a boundary that excludes settlements and some of the peripheral ocean areas surrounding them constitute the bounds of the World Heritage property.

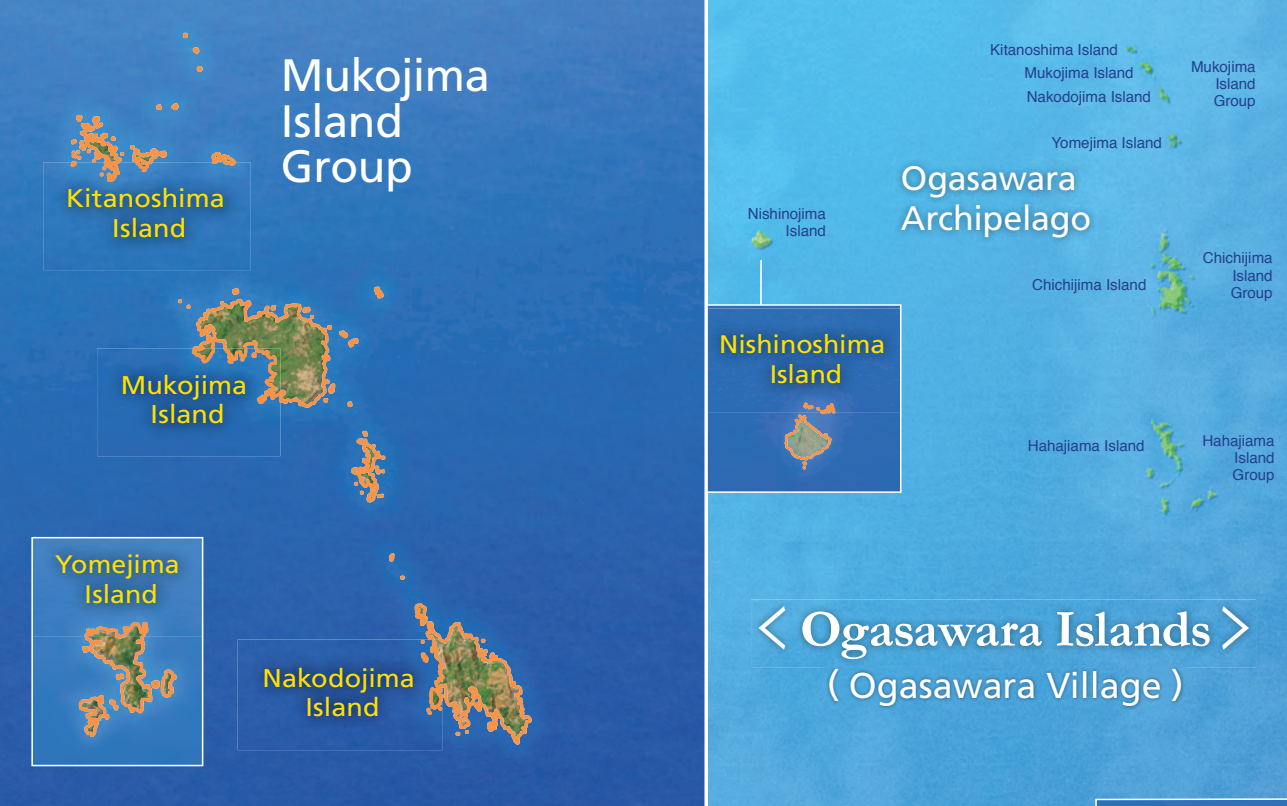
* The Ogasawara Islands did not have any permanent residents until 1830, and so they were referred to as uninhabited islands (Bonin Islands).

L'archipel d'Ogasawara se situe à environ 1.000 km au sud de Tokyo. Il consiste en une trentaine d'îles de tailles variées entourées de falaises abruptes et d'une mer d'un bleu azur qui est parfois appelé aussi « bleu Bonin ». Le site inscrit sur la liste du patrimoine mondial comprend les chapelets d'îles de Mukojima, Chichijima et Hahajima ainsi que les îles de Kita-iwoto, Minami-iwoto et Nishinoshima. L'ensemble a une superficie d'environ 7.900 ha. En ce qui concerne les îles de Chichijima et Hahajima, le périmètre concerné exclut les zones habitées, mais inclut une partie des eaux environnantes.



Bonin flying fox

This is the sole mammal endemic to the Ogasawara Islands that belongs to the Pteropodidae family. The species has been confirmed on Chichijima Island, Hahajima Island, and the Kazan Island Group. It is designated as Natural Monument in Japan. Red List of the Ministry of the Environment Threatened IB (EN)
*Species facing a high risk of extinction in the near future



Hahajima Island Group

Hahajima Island

Mukohjima Island

Hirajima Island

Anejima Island

Meijima Island

Imotojima Island

Kazan Island Group

Kita-iwoto Island

Minami-iwoto Island

< Ogasawara Islands > (Ogasawara Village)



Green anole enclosures

The green anole is an alien species that preys upon insects like *Celastrina ogasawaraensis* and dragonflies. Protection areas surrounded by enclosures to prevent incursions by green anoles have been established at Shinyuhigaoka and Minamizaki on Hahajima Island. Within the enclosures, sticky traps are used to eliminate green anoles so that these insects can live in a sustainable manner.

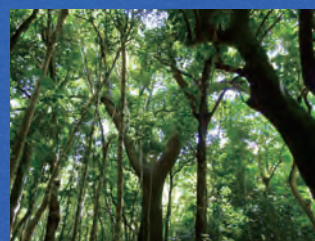


Land snail

More than 90 % of about 100 indigenous species of land snails are endemic to Ogasawara. New species still continue to be discovered to this day, which was one of the key evidences to be inscribed on the World Heritage List.

Subtropical rainforest

Subtropical rainforests were believed to have been distributed over an extensive region when the Ogasawara Islands were uninhabited. They have declined as a result of development, and now they can only be seen in humid environments in certain areas on Hahajima Island. Tall forest where the trees reach 20 m can be seen with its canopy comprised of plants like *Elaeocarpus photiniaeifolius* as well as *Planchonella obovata*. *Morus boninensis*, which has currently become a rare species because it was used as lumber, can also be seen.



Bonin honeyeater

This is the only species of land bird that is endemic to the Ogasawara Islands, and it only inhabits the 3 islands of Hahajima Island and its affiliated Mukohjima and Imotojima islands. Since the bird has few competitors and predators, it makes use of various different places within the forests. Red List of the Ministry of the Environment Threatened IB (EN)
*Species facing a high risk of extinction in the near future



Nummulite

These are large fossils of benthic foraminifera that are unicellular organisms. They get their name from their shape that resembles a coin.



Boninite

This is a unique rock that is only generated in the early period after an oceanic plate has begun to subduct. It was named after “Bonin Islands”, where the largest quantities of the rock have been exposed from anywhere in the world.



Whale watching

More than 23 species of dolphins and whales have been confirmed in the adjacent waters. Humpback whales can be observed here from winter until spring, while dolphin species and sperm whales can be observed year round.



World Heritage property

Sclerophyllous scrub

Sclerophyllous scrubs extend out primarily from Higashidaira on the central mountain of Chichijima Island and on Anijima Island. Endemic plants that grow here have evolved in such ways as changing the shape of their leaves to small and thick in conjunction with the dry climate, or being stunted to avoid strong coastal winds.



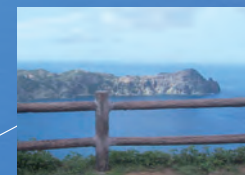
Ogasawara Visitor Center

This is a facility that introduces visitors to history and culture, with its primary focus on the nature in Ogasawara. It offers exhibitions and explanations related to the unique historical path the region has tread as a whaling base and an occupied territory, as well as on the rare plants and animals like the endemic species that can only be found in Ogasawara.



Nagasaki Observation Platform

Visitors can look out over the Anijima Strait where an azure blue sea called “Bonin Blue” stretches out, as well as Anijima Island and more.



Chichijima Island



Submerged karst (Minamijima Island)

Across the entirety of Minamijima Island and Sekimon on Hahajima Island, visitors can see a karst landscape in which limestone has undergone erosion and weathering. The vicinity surrounding Minamijima Island is a unique location in Japan where a submerged karst landscape can be observed.



Feral cat and feral goat fences

Rare endemic plants and the endemic subspecies of Japanese wood pigeon occur on Higashidaira on Chichijima Island. Efforts are being made to create fences to protect endemic species from feral cats and feral goats, as well as to remove these alien species within the fences.

Columba janthina nitens

This is an endemic subspecies of Japanese wood pigeon that inhabits the inner forests on the Ogasawara Archipelago. Their numbers had once decreased due to predation by feral cats, but have been on the rise as a result of countermeasures against feral cats and other conservation activities. The pigeon is designated as Natural Monument in Japan. Red List of the Ministry of the Environment Threatened I A (CR)
*Species facing an extremely high risk of extinction in the very near future



Ogasawara Islands

Outstanding Universal Value / Valeur universelle exceptionnelle



(ix) Ecosystem / Écosystème

Remarkably high rate of endemic species and ongoing evolutionary process on the oceanic islands*

*Oceanic islands: Islands that have never been connected to a continent

Taux remarquablement élevé d'espèces endémiques, et processus d'évolution en cours sur ces îles océaniques*

*Îles océaniques : îles qui n'ont jamais été reliées au continent

A Treasure Trove of Endemic Species

The Ogasawara Islands are located about 1,000 km away from Tokyo to the south. They consist of islands that are surrounded by vertical cliffs and ocean whose beautiful color is referred to as "Bonin Blue".

Since the islands have never bordered a continent in their history, the wildlife species found in Ogasawara are the descendents of animals and plants that arrived there by chance. Some were carried by birds or the wind, while others were washed up by ocean currents or clung to driftwood. Those species have survived by adapting themselves to the environment of the islands. They then became established on the islands and evolved in their own unique ways in a long period of time within an environment far separated from the mainland. As a result, this led to the occurrence of many endemic species which are not to be seen anywhere else, such as *Melastoma tetramerum* and *Hemicordulia ogasawarensis*. Roughly 40% of the vascular plants, about 25% of the insects, and more than 90% of the land snails (roughly 100 species) are endemic to Ogasawara.

Ongoing Evolutionary Process

The evolutionary process on the Ogasawara Islands is presently ongoing. The land snails and plants in particular have repeatedly undergone speciation by changing their morphology in accordance with their environment. This type of evolutionary process is called "adaptive radiation."

What is more, important examples that suggest mechanisms whereby species adapting from the ocean to the land can also be observed. As an example, *Stenomelania boninensis* is thought to have expanded their habitats in coastal to brackish water and then on to purely freshwater environments.



Sclerophyllous scrub



Diverse land snails

Protection and Management of the Ogasawara Islands Protection du Patrimoine Naturel Mondial de Îles d'Ogasawara

Protected Areas in the Property

Ogasawara National Park	
Special Protection Zone :	4,934 ha
Special Zone :	996 ha
Minami-iwoto Wilderness Area :	355 ha

(Under jurisdiction of MOE)

The Ecosystem Conservation Action Plan, which denotes a specific plan of action for resolving ecosystem-related challenges on the Ogasawara Islands, was prepared by the national government, the Tokyo Metropolitan Government, and Ogasawara Village. On the basis of this plan, protection and management efforts are being promoted.

The large number of endemic species on the Ogasawara Islands is highly evaluated internationally. Yet many of those do not know how to protect themselves from the species artificially introduced to Ogasawara later on. The endemic species are being preyed upon by the alien species and deprived of the areas where they live, so their numbers are plunging precipitously. In order to preserve the Outstanding Universal Value of the Ogasawara Islands, it is extremely important that countermeasures be taken against alien species and that the protection of endemic species and other rare species be promoted. In line with the advice of the Scientific Committee, adaptive management is carried out that evaluates the current situation by considering the interaction of wildlife and accordingly adjusting countermeasures.

Examples of Efforts / Exemples d'actions



Green anole (alien species)

Measures for the Restoration of Endemic Insect Species

Mesures pour la restauration des espèces endémiques d'insectes

The invasive green anole is found throughout Chichijima and Hahajima islands. Preying on and reducing populations of rare endemic insect species including the endemic lycaenid butterfly, the green anole has had a devastating impact. In 2013, it was found to have reached the southern areas of Anijima Island, where unique endemic insect fauna remain, raising concerns about its impact on endemic tiger beetles and other endemic insect species.

To protect the ecosystem in the heritage site, enclosures to prevent incursion by green anoles have been set up at Shin-yuhigaoka on Hahajima Island. The intensive control measures within these enclosures have led to the recovery of endemic insects. On Anijima Island, in addition to setting up a fence across the island to keep green anoles from spreading from their habitat on the southern part of the island, adhesive traps have been deployed to capture green anoles in areas where they are numerous. These measures



Fence across the island to prevent spreading of green anoles

Countermeasures against Alien Species for the Restoration of Native Vegetation

Mesures contre les espèces exotiques pour la restauration de la végétation indigène

Counter measures against Alien Plant Species Mesures contre les espèces exotiques

The proliferation of alien plant species like sheoak, white leadtree, and Bishop wood inhibits native plant growth by altering the forest interior, including blocking out sunlight and breezes. These alien plant species also affect the habitat of endemic insect species—for example, by blocking sunlight and generating leaf litter.



Sheoak (alien species)

Countermeasures against Feral Goats Mesures contre les chèvres férales

Feral goats trample and forage on endemic species and other plants, activities that have enormous impact on ecosystems. Feral goats have been successfully eradicated from the uninhabited islands of the Ogasawara, and endemic vegetation is recovering in some locations. Currently, feral goats are found only on Chichijima Island. In Higashidaira area, where numerous endemic plant species are found, enclosures to prevent incursion by feral goats have been set up. All goats have been eliminated from the area within these enclosures. Endemic plant species in this area are expected to recover.



Fence to prevent feral goats



Feeding damage on land snails by rats

Measures to Conserve Endemic Land Snails

Mesures pour la protection des espèces endémiques d'escargots terrestres

On the Ogasawara Islands, alien rodent species like the black rat and alien planarian species like the New Guinea flatworm (invading Chichijima Island) prey destructively on endemic land snails.

Various measures have been taken to prevent land snails from becoming extinct, including use of cage traps and rodenticide to eradicate black rats. At Toriyama, on Chichijima Island, enclosures to prevent incursion by planarians have been set up to protect land snail habitats. Visitors and island residents are encouraged to wash their footwear and to kill planarians with vinegar in order to prevent them spreading. Other measures to protect endangered land snails and increase their numbers include indoor and outdoor captive rearing on Chichijima Island, an example of *ex situ* conservation.



Mud washing mats

Yakushima

Yakushima is situated between the East China Sea and the Pacific Ocean about 60 km to the south of the southernmost tip of the main island of Kyushu. A mountain range, of which Mt. Miyanoura-dake (1,936 m) is the highest peak, is located in the center of the island. On the mountainsides, numerous rivers have carved deep valleys as they flow downward. In its warm and rainy climate, the annual precipitation is more than 4,000 mm in the plains and more than 10,000 mm at the summits. The World Heritage property is an area of approximately 10,700 ha that extends from the central part of Yakushima to the coastal areas to the west.

Yakushima est situé à environ 60 km au sud de l'extrémité sud de l'île de Kyushu, entre la Mer de Chine orientale et l'Océan Pacifique. Une chaîne de montagnes culminant à 1,936 m (Mt. Miyanoura-dake) occupe le centre de l'île. Sur les flancs de ces montagnes s'écoulent de nombreuses rivières qui ont creusé des vallées profondes. Le climat est chaud et pluvieux, et on dit que les précipitations annuelles dépassent 4,000 mm dans les plaines et 10,000 mm dans les zones montagneuses. Le site inscrit au patrimoine mondial est une zone d'environ 10,700 ha qui s'étend de la partie centrale de l'île aux zones côtières situées à l'ouest.

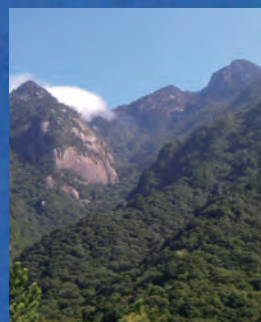
World Heritage property



Ohko-no-taki Waterfall
This is the largest waterfall in Yakushima in which an enormous volume of water stirringly falls down the 88 m drop. It has been chosen as one of 100 Famous Japanese Waterfalls.



Yaku-sika
This is an endemic subspecies of sika deer. They are found throughout the island. The distribution ranges from the evergreen forest close to human habitations to the areas around 1,600 m in elevation.



Western area
The western area of Yakushima is included in the World Heritage property from the coastline, where a vertical distribution of vegetation that was valued for its inscription on the World Heritage List can be seen. It has a primeval warm-temperate evergreen forest stretching for 600 ha that is one of the largest in Japan.



Hananoego and Kohananoego
These are high moors situated at an elevation of roughly 1,600 m in the center of Yakushima and it is an area of the southernmost high moors in Japan. Sphagnum moss grows over its entire surface, and the alpine plants and rows of white Yakusugi trees around its periphery present a beautiful spectacle.



Jomon-sugi Cedar

At present this is the largest confirmed Yakusugi tree. The primeval cedar forest that includes the Jomon-sugi Cedar has been designated as Special Natural Monument in Japan. The round trip to the Jomon-sugi Cedar from the Arakawa Trail Entrance takes 9-10 hours. This tree has a trunk circumference of 16.4 m and a height of 25.3 m, as well as an estimated age of more than 2,700 years.



Yakushima Island Environmental and Cultural Learning Center

The center introduces Yakushima's nature and the lifestyles of people through the use of models, panels, videos images, and displays of genuine articles.



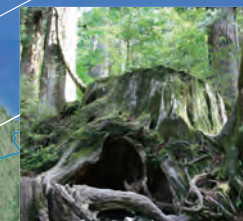
Daio-sugi Cedar

This enormous tree was believed to be the largest Yakusugi tree until people found the Jomon-sugi Cedar. As such, it was given the name Daio-sugi, which means great king cedar. This tree has a trunk circumference of 11.1 m and a height of 24.7 m, as well as an estimated age of more than 3,000 years.



Shiratani Unsuiyko Ravine

This is a recreational forest from which visitors can appreciate the primeval forest of Yakusugi trees. Walking courses have been set up here and visitors can observe mountain streams, pristine forest, and Yayoi-sugi Cedar that is roughly 3,000 years old.



Wilson's Stump

At 13.8 m in circumference, this is the largest stump in Yakushima. It is claimed that the tree was felled roughly 400 years ago. Inside there is a cavity of about 16.5 m² from which a spring wells up. It was named after Dr. Wilson, who made the world aware of Yakusugi trees.



Kigen-sugi Cedar

More than ten species of plants, including rhododendrons, Japanese rowans, wheel trees, and hinoki cypresses grow by adhering to the Kigen-sugi Cedar. This tree has a trunk circumference of 8.1 m and a height of 19.5 m, as well as an estimated age of more than 3,000 years.



Dwarf Bamboo Grassland

Above the cedar forest extends the dwarf bamboo Grassland Zone dominated by endemic *Pseudasasa owatarii*. Plant communities of evergreen and deciduous shrubs like Yakushima rhododendron, Japanese sapphireberry, and Japanese andromedas are scattered.



Yakushima World Heritage Conservation Center

In 2014, the center was renovated to exhibit attractions of World Heritage and National Park.
*Refer to the back cover



Yakusugi Museum

This facility introduces people to Yakushima and Yakusugi trees. It displays items like a Yakusugi tree that is 1,660 years old, a chain saw with a total span of 2 m that was used for felling cedar trees, and a gigantic branch from the Jomon-sugi Cedar that snapped from accumulated snow.



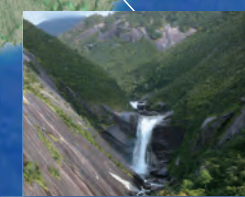
Chrysozephyrus ataxus yakushimaensis

This is a representative butterfly of Yakushima. They are endemic subspecies of *Chrysozephyrus ataxus* that inhabit Honshu, Shikoku and Kyushu islands. They are characterized by lack of the tail protuberances at the hind wings. Their larvae feed on the leaves of Japanese evergreen oak and the Japanese willowleaf oak.



Yakusugi Cedar Land

Visitors can enjoy Yakushima's primeval forest, which includes Yakusugi trees that are thousands of years old. Four walking routes have been built and visitors can observe the 1,800 year old Buddha-sugi Cedar and other large trees, as well as tree stumps and the traces from people checking out wood grains from the domain duties era. They can also take a pleasant walk through the woods while enjoying the clear streams.



Senpiro-no-taki Waterfall

This is a spectacular waterfall with a drop of 60 m. The Tainoko River carved through the enormous granite bedrock in the foothills of Mt. Mochomou-dake to form a massive V-shaped valley.



Torohki-no-taki Waterfall

Here the Tainoko River forms a waterfall that flows directly into the ocean. Such waterfalls are extremely rare, and there are only few locations throughout the entire country, including this waterfall.

* The "trunk circumference" refers to the length measured at a height of approximately 1.3m above the ground.

Yakushima

Outstanding Universal Value / Valeur universelle exceptionnelle



(vii) Natural beauty / Beauté naturelle

Landscape dominated by natural forests of enormous Japanese cedars called “Yakusugi”

Paysage dominé par des forêts naturelles d'énormes cèdres Yakusugi



(ix) Ecosystem / Ecosystème

Island ecosystem that exhibits the conspicuous vertical plant distribution

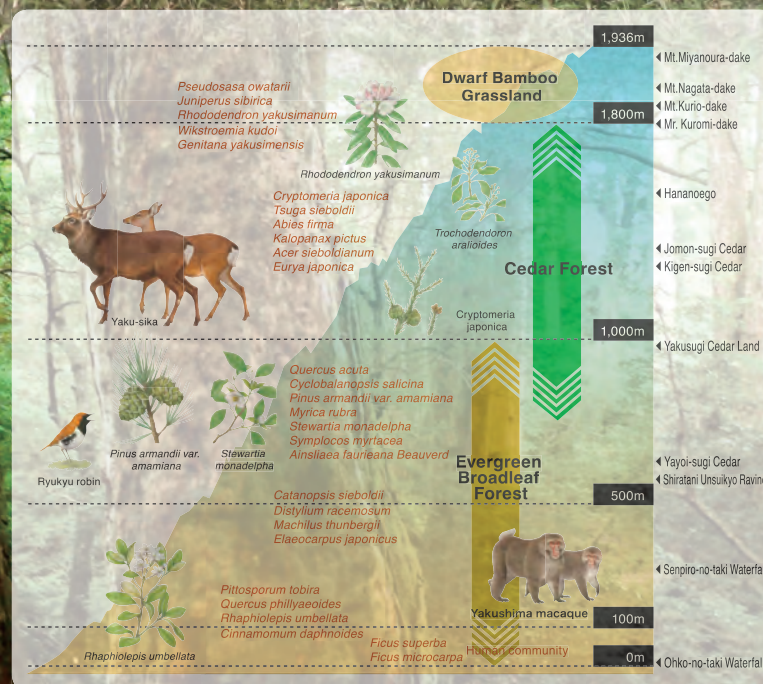
Ecosystème insulaire présentant une répartition verticale des végétaux

From Subtropical to Subalpine Zones

Despite the fact that Yakushima is situated to the south of the Japanese Archipelago, visitors here can see natural vegetation of Japan—which stretches from north to south—on this single island because it contains mountains of about 2,000 m in elevation. The vegetation in Japan is reflected in miniature along a vertical distribution, ranging from coastal vegetation with subtropical elements such as *Ficus superba* var. *japonica*, to evergreen broadleaf forest such as *Catanopsis sieboldii*, to Japanese cedar forest, to cold-temperate bamboo grassland and high moor near the mountain peaks, and to subalpine scrub forest, as elevation increases. A great variety of plants can be observed, including *Gentiana yakushimensis* that is endemic to Yakushima, Japanese cedar at its southern limit in Yakushima, and *Caesalpinia crista* at its northern limit.

A Rain-Shrouded Island

Yakushima is an island with so much rain that it is often described as “rainy 35 days a month”. It has high levels of humidity and receives more than 8,000 mm in annual precipitation, which is nearly five times the average for Japan and nearly ten times worldwide. While Japanese cedar is thought to live about 800 years at most, the cedar trees in Yakushima grow incredibly slowly owing to nutritionally-poor soil. For this reason, they have extremely precise tree rings, contain a great deal of resin, and are resistant to rotting. Many of these cedar trees live more than 1,000 years here to be called “Yakusugi”. Together with the mountain stream vegetation like *Ainsliaea fauriana* and epiphytes that are adapted to the highly humid environment, the old Yakusugi trees present distinctive forest scenery which can not be seen anywhere else in the world.



Protection and Management of Yakushima Protection du Patrimoine Naturel Mondial de Yakushima

In Yakushima, people have received the rich bounty from the mountains and the seas, revere nature, and have coexisted with nature without damaging it. Since prior to inscription on the World Heritage List, these sorts of local ways rooted in the lifestyle and culture unique to Yakushima have been compiled into the Yakushima Environmental Culture Village Concept, and have been shared by local residents, experts, and government agencies.

Following its inscription, the property has faced challenges like the impacts on the natural environment associated with increasing tourists and mountain climbers, as well as damage from Yaku-sika (endemic subspecies of sika deer), browsing on vegetation. Efforts to tackle these issues are being promoted in the aim of striking a balance between environmental protection and local development.

Protected Areas in the Property

Yakushima National Park	
Special Protection Zone :	7,419 ha
Special Zone :	2,109 ha
Yakushika Wilderness Area :	1,219 ha

(Under jurisdiction of MOE)

Examples of Efforts / Exemples d'actions



Climbing trail (former tram route for logging)

Promoting Appropriate Use Such as Measures concerning Mountain Climbers toward the Jomon-sugi Cedar Promotion de l'utilisation adéquate, à commencer par les mesures relatives à l'ascension du Jomon-sugi

Since a high-speed boat connecting the Kyushu mainland with Yakushima put into commission in 1989, the number of visitors entering the island has surged rapidly, with this trend continuing on after its inscription as well. In 2000 there were about 160,000 mountain climbers, but by 2011 this had risen to about 270,000 people. The number of mountain climbers aiming for the Jomon-sugi Cedar in particular has risen to about 90,000 people each year, which has brought about problems like the erosion of mountain trails. For this reason, the Ministry of the Environment and other relevant government agencies have begun carrying out environmental conservation measures in cooperation with local stakeholders. These include maintaining facilities like mountain trails and toilets, introducing portable toilets, instituting restrictions against bringing personal vehicles, and running mountain busses.

In addition, the Yakushima Association for the Promotion of Ecotourism was launched in 2009. It advocates for the institution of ecotours that gives visitors a real feel for the long-held lifestyles and traditions that still remain in the settlements on the island. The association also serves as a means for promoting the decentralization of use that is currently concentrated in the mountainous areas. It is moving forward with the creation of “Yakushima-rules” that compile knowledge and rules for when ecotourism is carried out on Yakushima.

Measures against Yaku-sika Mesures contre les cerfs sika

It has been said on Yakushima that there are 20,000 people, 20,000 monkeys, and 20,000 deer, with the Yaku-sika beloved as a representative wildlife of the island. For unknown reasons, the number of deer captured from about 1967 onward had declined, and as a request from the local residents, conservation measures were started that restricted their capture in 1971. After that the deer population recovered, but this led to agricultural and forestry damage. Even in the World Heritage property and its surrounding environs, the damage from deer browsing on rare and endemic plants has been growing, which has led to concerns that this will impact the forest vegetation.

Therefore, Yaku-sika Working Group was established under the Scientific Committee for the Yakushima World Heritage property in 2010 to promote countermeasures through the combined efforts of the relevant government agencies and experts. In FY2011, Yakushima Ecosystem Maintenance and Recovery Project Plan, and Kagoshima Prefecture Protection and Management Plan for Specified Wildlife (Yaku-sika Deer) were developed. Based on these plans, the Yakushima World Heritage Area Management Plan was newly formulated in 2012 and promotes deer population control to ensure an appropriate density for the protection and management of the World Heritage property. It also engages in the maintenance and restoration of ecosystems through efforts like protecting vegetation.



Yakushima Mountain Worship and Mountain Pilgrimages Les pèlerinages de montagne de Yakushima

The traditional ritual of mountain pilgrimages to Yakushima has existed since long ago, with this having been passed down to the present. Mountains in the World Heritage property such as Mt. Miyanoura-dake, Mt. Nagata-dake, Mt. Kurio-dake, Mt. Tachu-dake, and Mt. Aiko-dake are the focus of these mountain pilgrimages. People pay homage at small stone shrines erected at the summits, and pray to cast away misfortune and for peace and plentiful harvests. On Yakushima the mountains that can be seen from the villages are called maedake, or front-facing mountains, while those mountains towering in the interior that cannot be seen from the villages are called okudake, or inner mountains. A sense of reverence for okudake, where unrelenting nature unfolds and humans cannot easily approach, nurtured the mountain pilgrimage tradition.

The local residents strive to coexist with nature under these values and principles of honoring nature. This should be kept in mind as the fundamental mindset for conserving the natural environment of the Yakushima World Heritage property. In the Yakushima World Heritage Area Management Plan, conservation and management measures are based upon the values and principles of the local residents.

