

HIGHLIGHTING *Japan*

VOL.
162
NOVEMBER
2021



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THEME FOR **NOVEMBER:**

**THE CHARMS OF
JAPAN'S ISLANDS**

Japan is exceptional even among island nations for its large number of islands. Many of the islands are characterized by their rich biodiversity and unique culture, and some have been inscribed as UNESCO World Heritage sites for these reasons. In this month's issue, we take a look at some of the beautiful and diverse islands of Japan.



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JAPAN CULTURAL ENVOY

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Shodoshima (top left); Rebun Island (top right); Iriomote Island
Photos: Shodoshima Tourism Association; Christopher Browne; Ministry of the Environment

EDITORS' NOTE

Japanese names in this publication are written in Japanese order: family name first, personal name last.

JAPAN-UK SUMMIT MEETING AND JAPAN-AUSTRALIA SUMMIT MEETING



Japan-UK Summit Meeting

ON November 2, 2021, Mr. Kishida Fumio, Prime Minister of Japan, who was visiting the United Kingdom to attend the 26th session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 26), held summit meetings respectively with the Rt Hon Boris Johnson MP, Prime Minister of the United Kingdom of Great Britain and Northern Ireland and with the Hon Scott Morrison, MP, Prime Minister of the Commonwealth of Australia.

The overviews of the meetings are as follows.

Japan-UK Summit Meeting

At the beginning, Prime Minister Johnson expressed his gratitude to Prime Minister Kishida for attending COP26. Prime Minister Kishida stated that he is determined to lead global decarbonization with Prime Minister Johnson, and that he would like to work closely together toward the success of COP26 and beyond. The two leaders affirmed that they would continue to work together to raise the Japan-UK relationship, which is stronger than ever, to a new stage and robustly advance a “Free and Open Indo-Pacific.”

Prime Minister Kishida stated he would work toward the achievement of the “National Determined Contribution (NDC)” submitted by Japan and had announced at COP26 that (1) in addition to \$60 billion support in public and private finance in the next five years (announced in June), Japan would provide up to \$10 billion of additional support in the coming five years; (2) Japan would double adaptation assistance to \$14.8 billion in the public and private sectors over five years; and (3) Japan would provide new financial assistance of \$240 million for global forestry conservation. He stated that, in order to create a globally decarbonized society, it is neces-



Japan-Australia Summit Meeting

sary to advance a clean energy transition while maximizing the introduction of renewable energy, especially in Asia, and that he would advance the transition from fossil fuels to zero emission thermal power. Prime Minister Johnson welcomed Japan’s announcement for support.

The two leaders welcomed the investment of Japanese companies in the UK and other cooperative ventures between Japanese and British companies, and concurred on further cooperation to strengthen economic relations between the two countries. Prime Minister Kishida also urged the UK to lift its import restrictions on Japanese food products. Prime Minister Johnson responded that he would give the request a positive consideration.

Japan-Australia Summit Meeting

Prime Minister Kishida and Prime Minister Morrison concurred on working together to raise the “Special Strategic Partnership” between the two countries to a higher level, toward the realization of a “Free and Open Indo-Pacific.” Both leaders also reaffirmed the importance of advancing not only bilateral cooperation, but also cooperation between Japan, Australia, India and the U.S., as well as between Japan, Australia and the U.S.

Prime Minister Kishida expressed his respect for Australia’s commitment to net zero emissions by 2050, which was recently announced by Prime Minister Morrison. The two leaders concurred that they would continue to cooperate on global issues such as climate change.

The two leaders also exchanged views on the situation of North Korea, including nuclear and missile-related activities. They confirmed that they would continue to work together on the response to North Korea, including the abductions issue.

Omura Beach on Chichijima Island, one of the Ogasawara Islands
Photo: Courtesy of Ogasawara Village Tourism Bureau



Yellow daylilies on the cliffs of Sado Island
Photo: Courtesy of Niigata Prefectural Tourist Association



THE CHARMS OF JAPAN'S ISLANDS



A cat takes a leisurely stroll on Tashirojima, "Cat Island"
Photo: Courtesy of Tohoku Tourism Promotion Organization



View from the summit of Mt. Misen overlooking islands in the Seto Inland Sea
Photo: chaba/PIXTA

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apan is exceptional even among island nations for its large number of islands. Many of the islands are characterized by their rich biodiversity and unique culture, and some have been inscribed as UNESCO World Heritage sites for these reasons. In this month's issue, we take a look at some of the beautiful and diverse islands of Japan.



The Diverse Islands of Japan



Nagashima Shunsuke, emeritus professor at Kagoshima University
Photo: Courtesy of Nagashima Shunsuke

JAPAN is exceptional even among island nations for its large number of islands. We spoke with Nagashima Shunsuke, emeritus professor at Kagoshima University, about the characteristics of Japan's islands.

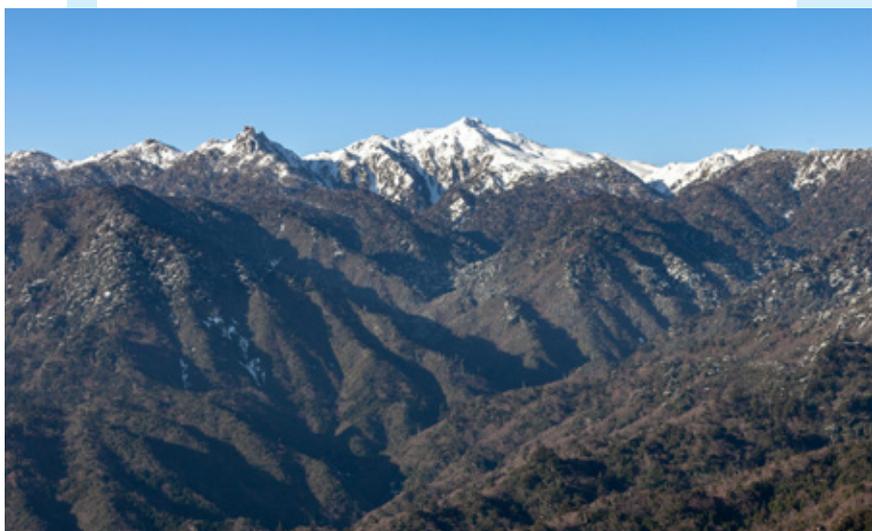
Professor Nagashima, you have visited many islands in Japan and abroad. What characterizes the islands of Japan?

Japan is at a distance from the continent, and the entire country is composed of islands. A major characteristic is that the islands are scattered very widely from east to west and north to south. When many Japanese hear the word “island,” they think of small islands other than Hokkaido, Honshu, Shikoku, Kyushu, and Okinawa Island, but there are many such small islands, and Japan is exceptional even among island nations for its large number of islands.¹

In addition, many of the islands in Japan are characterized by their unique nature and culture, and are rich in diversity. Some islands are internationally acclaimed for their uniqueness and are inscribed as UNESCO World Heritage Sites. For example, Yakushima Island in Kagoshima

Prefecture, a World Natural Heritage Site, has a steep topography that goes straight from coast to mountains about 2,000 meters high. The coast has a subtropical climate, but it snows in winter at the top of the mountain. It is a single island that possesses all the climate characteristics of the long country of Japan from north to south. The World Cultural Heritage Site “Hidden Christian Sites in the Nagasaki Region” in Nagasaki and Kumamoto Prefectures is a group of heritage sites that tells the story of the hidden Christian tradition of secret worship that coexisted with traditional Japanese religions and general society in the Edo period (1603–late 1860s) when the Christian faith was prohibited. The site consists of villages on islands such as the Goto Islands.

In addition to World Heritage Sites, “Raiho-shin: ritual visits of deities in masks and costumes,” which is also inscribed on the UNESCO Representative List of the Intangible Cultural Heritage of Humanity, includes ten annual events, four of which are performed on islands; namely, the “Koshikijima no Toshidon” in Satsumasendai City in Kagoshima Prefecture, “Satsuma-ioujima no Mendon” in Mishima Village in Kagoshima Prefecture, “Akusekijima no Boze” in Toshima Village in Kagoshima Prefecture, and “Miyakojima no Paantou” in Okinawa Prefecture. In all the events, islanders wearing outlandish masks and costumes go round the villages acting as visiting deities, admonishing people for being lazy and cleansing them of evil.



Snow-capped Mt. Miyanoura on Yakushima Island
Photo: Yakushimasaru



The former Nokubi Church built in 1908 on Nozaki Island in the Goto Islands
Photo: © NPFTA

Which islands do you recommend for overseas visitors after COVID-19 subsides?

In Japan, there are many places where you can enjoy beautiful scenery made up of small islands floating in the sea, such as Matsushima in Miyagi Prefecture and Kujukushima in Nagasaki Prefecture, but among these, I especially recommend the islands of the Seto Inland Sea. An early example of a description of the beauty of the Seto Inland Sea and the islands situated there is the writings of Philipp Franz Balthasar von Siebold, who came to Japan to serve as a doctor at the Dutch trading post in 1823. As exchanges between Japan and the rest of the world became more active in the latter half of the nineteenth century, the Seto Inland Sea became widely known overseas as well. When many Westerners visited Japan, they went there to see the scenery for themselves and praised the beauty of the sea and islands in travelogues and other texts. In 1934, these islands were designated as Japan's first (one of three) national park to protect the environment and scenery there. In recent years, the islands of the Seto Inland Sea, such as Naoshima, have become internationally renowned as venues for contemporary art. Since 2010, the Setouchi Triennale has been held every three years with the participation of famous artists from Japan and abroad, with about 1.1 million people attending most recently in 2019.

Islands of the Seto Inland Sea as seen from
Mt. Kiro Observatory in Ehime Prefecture
Photo: Macha/PIXTA



Sado Island in Niigata Prefecture, where I live right now, is likewise an island rich in nature and culture that can be enjoyed by people from overseas. One highlight is Sado's traditional performing arts. Indeed, various traditional performing arts have been passed down by residents for a long time. For example, there is *noh*, which is a form of musical and dance drama with a history of more than 600 years in Japan. There are about thirty *noh* stages on the island, constituting about one-third of all *noh* stages in Japan. There are also about 120 groups performing the *ondegoko*, which involves people wearing *oni* (demon) masks dancing to the beat of *taiko* (Japanese traditional drums).

On Sado Island, you can see these traditional performing arts at festivals and stages throughout the year. Especially well-known is the international art festival Earth Celebration, which has been held every summer since 1988. There, you can enjoy performances by artists from Japan and abroad, such as the world-class *taiko* group Kodo, which is based on Sado Island.

What kind of policies has Japan implemented for the development of remote islands?

Remote islands, which are surrounded by the sea on all sides, small, and distant from the big cities, used to trail far behind the rest of Japan in terms of infrastructure development. It was in response to this that the Remote Island

Development Act was enacted in 1953 and contributed greatly to the development of remote islands. This act strengthened the financial support for remote islands and then improved infrastructure such as electricity, water and sewage services, ports, roads, and bridges, helping to stimulate industries such as fisheries and tourism.

Japan provides support not only to remote islands in Japan, but also to Pacific island countries, doing so in various fields such as infrastructure, energy, and the environment. One example is garbage disposal. In island countries with limited land, there are serious problems such as a shortage of garbage disposal sites and foul smells and waste water from disposal sites. In order to solve such problems, the Japan International Cooperation Agency (JICA) has introduced a garbage disposal method called the Semi-aerobic Landfill System (Fukuoka Method)ⁱⁱ in some countries including the Independent State of Samoa, the Republic of Vanuatu,

and the Republic of Palau, thus helping to reduce waste and foul smells. With the support of JICA, Hachioji City in Tokyo has assisted the Federated States of Micronesia in the Pacific with improving the garbage situation. In addition to providing garbage trucks, the city has dispatched staff to support the maintenance and inspection of garbage trucks as well as actively providing guidance on garbage collection. They have also engaged in initiatives such as public awareness-raising activities

to reduce the use of plastic bags.

What are your thoughts on the future potential of Japanese islands?

Japan is now said to be a “100-year life society,” but as not only Japanese people but also people around the world will continue to live longer in the future, it becomes important to consider how to build “a society where we can live long

healthy lives.” When it comes to addressing this issue, I think islands have great potential as places to promote health. For example, on islands such as Okinoerabujima Island and Amami-Oshima Island in Kagoshima Prefecture, and Kashikojima Island in Mie Prefecture, there are initiatives to restore health through so-called “thalasso-



Noh stage on Sado Island
Photo: Sado Kanko Photo

therapy,” meaning marine therapy activities such as swimming in pools filled with seawater. Moreover, Tokunoshima Island in Kagoshima Prefecture is said to be an island of many childbirths and longevity where the birthrate is extremely high and there are many people aged 100 years old or older. It has been reported that this is potentially due to the island’s unique diet and culture. Islands have the potential to help people have long and healthy lives. Until now, remote islands have been inconvenient to reach from urban areas, and their isolation has been a disadvantage. But today, when remote work is encouraged, this is actually becoming an advantage. When city dwellers visit islands, they are taken far away from the everyday world and come into contact with rich nature and unique culture, which refreshes both mind and body. Once the COVID-19 situation has settled down, I hope many people from Japan and overseas will go to visit the various remote islands in Japan. **▼**

Interview by SAWAJI OSAMU

i According to the *Japan Statistical Yearbook 2021* (Statistics Bureau of Japan), there are 6,852 islands including Hokkaido, Honshu, Shikoku, Kyushu, and Okinawa Island in Japan. According to a calculation by Emeritus Professor Nagashima Shunsuke based on the latest data of the Geospatial Information Authority of Japan, there are more than 14,000 islands with a circumference of 100 meters or more.

ii The “Semi-aerobic Landfill System” (Fukuoka Method) is a waste disposal method jointly developed by Fukuoka City and Fukuoka University. Pipes are installed all around the disposal site to eliminate the waste water that oozes out of the garbage as well as take in outside air into the landfill to stimulate the activities of microorganisms in the garbage, thereby promoting its decomposition.



Performance of the Akusekijima no Boze masked ritual on the island of Akusekijima in Kagoshima Prefecture.
Photo: © K.P.V.B



A mangrove forest on Iriomote Island

Islands of Biodiversity

The Ryukyu Islands are a chain of islands at the southern tip of the Japanese archipelago and extend approximately 1,200 kilometers from south to north. Four of these regions, Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island, were registered as a UNESCO World Natural Heritage site in July 2021.

SASAKI TAKASHI

IN July 2021, Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawa Island, and Iriomote Island were registered as Japan's fifth World Natural Heritage site. Straddling Kagoshima Prefecture and Okinawa Prefecture, these four areas are part of the Ryukyu Islands and are home to extensive subtropical forest. They were inscribed on the World Heritage List because of their rich biodiversity.

Naniwa Nobukazu, national park planning officer at the Okinawa Amami Nature Conservation Office of the Ministry of the Environment, explains about the regions' biodiversity: "The listed regions have a total area of roughly

43,000 hectares, a small zone that is less than 0.5 percent of Japan's land area, yet they are home to 95 globally endangered species, 75 of which are endemic only to this region."

The Ryukyu Islands, including these four regions, split off from the continent some 12 million years ago due to movement of the Earth's crust. Later, changes in the climate caused the islands to separate and join with neighboring islands again and again. As a result, the islands are home to many endemic species, including relict endemic species that became extinct on the mainland and survived only on the island along with new endemic species that have evolved

in their own unique way to adapt to the specific environment of each island.

The four regions currently account for a high proportion of Japan's endangered species. These include the Amami rabbitⁱ on Amami-Oshima and Tokunoshima, the Okinawa railⁱⁱ in the northern part of Okinawa Island, and the Iriomote wildcatⁱⁱⁱ on Iriomote Island, all of which have been designated as Special Natural Monuments.

The natural environment of the four regions that sustain these rare and endangered species is exceptionally rich.

Amami-Oshima has a pristine, tunnel-like mangrove forest that can be explored by canoe. Rare plants such as the Amamikusa hydrangea^{iv} can also be spotted.

Tokunoshima runs a variety of eco-tours led by local guides. One is the Night Tour, where visitors can go by car in the mountains or along forest trails to observe the Amami rabbit. The Night Tour offers the potential for visitors to sight the Amami rabbit, a nocturnal



Iriomote Island viewed over a small island in the emerald green ocean

primitive animal.

The northern part of Okinawa Island still has many mountains and forests. The lush subtropical evergreen is called “Yambaru” and there are many places to see.

Over 90 percent of Iriomote Island is covered in subtropical jungle forest. A distinctive summer sight is the well-known common putat^v, a type of powderpuff tree, which blooms at night and scatters its petals in the morning. A canoe ride through a mangrove forest to see the flowers in bloom is a popular activity.

With the registration of the four regions as a World Natural Heritage site, Naniwa and others involved with environmental conservation in the area are now focused more than ever on promoting ecotourism and preserving the endangered and endemic species of these island regions. **7**

i (*Pentalagus furnessi*)
 ii (*Gallirallus okinawae*)
 iii (*Prionailurus bengalensis iriomotensis*)
 iv (*Cardiandra amamiohsimensis*)
 v (*Barringtonia racemosa*)



Amamikusa hydrangea, endemic to Amami-Oshima Island



Okinawa rail, endemic to the northern part of Okinawa Island



Iriomote wildcat, endemic to Iriomote Island



Amami rabbit, endemic to Amami-Oshima Island and Tokunoshima Island

Omura Beach, Chichijima Island



The Ogasawara Islands

“Galapagos of the Orient”

The Ogasawara Islands, located in the Pacific Ocean approximately 1,000 kilometers from central Tokyo, have been dubbed the “Galapagos of the Orient” due to the presence of many flora and fauna species that have evolved there independently.

YANAGISAWA MIHO

THE Ogasawara archipelago comprises some thirty islands located roughly 1,000 kilometers from central Tokyo. As there is no airfield, the only means of access to the islands is by ferry, which takes around 24 hours from the Port of Tokyo. Although administratively Ogasawara is a part of the Tokyo Metropolis, only two of the islands are inhabited, Chichijima Island and Hahajima Island.

The rest are all unpopulated.ⁱ

The Ogasawara Islands were formed not by breaking off from the mainland but owing to seabed uplift caused by volcanic activity. The flora and fauna that inhabit the islands have evolved independently over a long period of time after having come ashore on the wind and driftwood and adapted to the environment of the islands, resulting in the Ogasawara Islands being dubbed the

“Galapagos of the Orient.” In recognition of their unique and rich ecosystems, the Ogasawara Islands were inscribed on the World Natural Heritage list in 2011.

The total area of the islands in the archipelago is just 105 square kilometers in a subtropical climate zone. The sea area is home to marine animals like dolphins, whales, and sea turtles. The land area is home to many endemic species, including flora such as the camellia *himetsubaki*ⁱⁱ and the peony *muninno-botan*ⁱⁱⁱ, birds such as the Bonin white-eye^{iv}, insects such as the weevil *himekatatomushi*^v, and land snails such as the *katamaimai*^{vi}. Land snails, in particular, expanded their habitat to various



A sunset viewed from the Weather Station observation deck on Chichijima Island



Hiking on Mt. Asahi-yama, Chichijima Island

locations on the islands and adapted to the environment of each location. As a result, some extraordinary speciation^{vii} occurred, with the evolutionary process continuing even today.

“The islands of Ogasawara are home to more than a hundred species of land snails. As if that were not impressive enough, more than 90 percent are endemic to Ogasawara,” says Wakamatsu Yoshiki of the Ogasawara Nature Conservation Office of the Ministry of the Environment, as he explains why the islands are special.

According to Wakamatsu, the extinction rate of land shellfish species on the Ogasawaras is lower than that of other oceanic islands, most likely because they were not settled until around 1830 and there has been little environmental change caused by development. As a result, “By researching extant species, researchers can follow species’ evolutionary line and transitions from the past to the present,” says Wakamatsu.

One of the places to enjoy the abundant nature of Ogasawara is Omura Beach (also known as Maehama), which is located near the port that connects Chichijima Island to the mainland. Even without diving in, visitors can see the coral and fish swimming in the crystal clear water there. The Weather Station observation deck overlooking the sea

on the west side of Chichijima Island is also popular as a place from which to watch the magnificent sunset over the Pacific Ocean. On a clear day, the view extends all the way to Hahajima Island. When it comes to observing the flora and fauna on Chichijima Island, a hike up Mt. Asahi-yama is recommended, with a well-maintained trail to the summit (267 meters above sea level) making the hike accessible even to children. Before the impact of COVID-19, tourists from overseas were a common sight. There are many special locations, such as Samegasaki Cape on Hahajima Island, where whale watching can be enjoyed even from the land at certain times of the

year, and Mt. Chibusa (463 meters above sea level) where a treasure trove of native vegetation can be enjoyed.

The stunning natural environment of the Ogasawara Islands has also earned them the nickname “Japan’s paradise.” The flora and fauna unique to the Ogasawara Islands are a part of their charm. **17**

-
- i There are some officers in a facility of the Japan Self-Defense Forces in Iwo-to Island, and facilities of the Japan Self-Defense Forces and the Meteorological Agency in Minamitorishima Island.
 - ii (*Schima wallichii*)
 - iii (*Melastoma tetramerum*)
 - iv (*Apalopteron familiare hahasima*)
 - v (*Ogasawarazo rugosicephalus rugosicephalus*)
 - vi (*Mandarina mandarina*)
 - vii The formation of new and distinct species in the course of evolution



Scenic View from Mt. Chibusa on Hahajima Island



Rebunshiogama, one of about 300 species of flowering alpine plants on Rebun Island

Rebun Island

A Magical Island of Flowers

Known as the “Island of Flowers,” Rebun Island, a remote island in the far north of the Sea of Japan, is home to approximately 300 species of flowering alpine plants. Christopher Browne, who lives and works on the island, and photographs its natural scenery through the four seasons, tells us about Rebun Island’s charm.

SATO KUMIKO

BEYOND a field of alpine flowers steeped in pink, the outlines of a mountain peeking through a sea of clouds; towering green cliffs rising out of an indigo blue sea and a mass of dainty blue flowers in bloom. These are the scenes caught in scores of beautiful photographs taken on Rebun Island. The photographer is Christopher Browne, originally from the United States, but a resident of Rebun Island since 2010.

Rebun Island lies roughly sixty kilometers west of Wakkanai City, which is on the northernmost tip of Hokkaido, the northernmost of Japan’s four main islands, and has a population

of around 2,400 (as of October 2021). The island measures approximately 7.9 kilometers from east to west, 25.8 kilometers from north to south, and the total area is about 81.3 square kilometers. The western part of the island has been designated part of the Rishiri-Rebun-Sarobetsu National Park. Rebun Island is also called the “Island of Flowers” because as many as 300 species of wild flowers bloom gloriously in a variety of colors from late May to August. Located at a latitude of 45 degrees 30 minutes north, Rebun Island has a cool climate where the annual average temperature does not rise above seven degrees centigrade. This is why alpine plants, which are normally only seen in mountainous regions at least 2,000 meters above sea level, flower at low elevations here. The species endemic to the island include the Rebun-atsumori-so orchidⁱ, the Rebun-kinbai-so globeflowerⁱⁱ, and the Rebun-usuyuki-so edelweissⁱⁱⁱ.

Browne moved to Rebun Island in 2010. Since 2013, he has worked as an assistant English teacher at the island school

ⁱ (*Cypripedium macranthos* var. *rebunense*)

ⁱⁱ (*Trollius ledebourii* var. *polysepalus*)

ⁱⁱⁱ (*Leontopodium discolor*)



The yellow Rebutin-kinbai-so globeflower (*Trollius ledebourii* var. *polysepalus*) is endemic to Rebutin Island



Mt. Rishiri viewed over a field of pink common bistort flowers

while continuing to photograph the seasons on the island.

“It was summer, in August 2005, when I first visited Rebutin Island. I clearly remember how refreshed I felt walking along woodland paths through patches of wildflowers here and there, a strong scent of pine trees on the air.”

This was the experience that triggered his desire to move to Rebutin Island.

There are six hiking trails on Rebutin Island where walkers can observe various alpine plant colonies. Browne

recommends the Momo-iwa Rock Observatory Route: “You can see the beautiful Mt. Rishiri (elevation of 1,721 meters) towering above the adjacent Rishiri Island from the Momo-iwa observation point. In May and June, a sea of clouds sometimes appears. The species of flower in bloom change every two to three weeks, so no matter how many times you visit there is always different scenery to enjoy.” He also recommends the Misaki-meguri trail on which walkers can observe different flowers on the

way to the capes as they climb the hills. “In particular, the scenery around Cape Gorota is excellent,” Browne says.

June and July are the best months to see the flowers on Rebutin Island. This is also the season for sea urchins, a Rebutin Island specialty. It is a good season for a visit to enjoy both the beauty of the flowers and the delicious sea urchins. However, Browne says that autumn, when the season for flowers is over and the grasslands are aglow with the golden plumes of the pampas grass, is no less beautiful than the summer.

By December, the snow falls on Rebutin Island and outside visitors stop coming. Nevertheless, wanting to showcase the nearly unknown beauty of Rebutin Island in winter, Browne has published a photo collection entitled *Rebutin no fuyu* (Rebutin Winter) at his own expense. Donning snow shoes to make his way into snow-bound mountains and forests, in numerous photographs Browne has chronicled the interior of Rebutin Island, a snowy landscape wrapped in silence, and he also takes drone footage. He shows wild white-crested waves breaking against the cliffs and unspoiled natural scenery.

Both the gentle countenance of the Island of Flowers and its rough aspect during its harsh winter are true features of Rebutin Island. This is the new charm of Rebutin Island, presented by Christopher Browne, a resident who loves the island. 

The coastline of Rebutin Island in winter photographed by drone





Feeding time for the cats at the Tashirojima port
Photo: BUCK/PIXTA

CAT ISLAND



A cat takes a stroll along the Tashirojima coast
Photo: Courtesy of Tohoku Tourism Promotion Organization

Tashirojima is a small island off Japan's northeastern Pacific coast inhabited by over a hundred cats, outnumbering the island's fifty-five human residents. Known widely in Japan as "Cat Island," it is home to cats living a leisurely life, as well as the humans who watch over them.

SATO KUMIKO

A Tashirojima cat takes a nap
Photo: Courtesy of Ishinomaki City



TASHIROJIMA is reached by an approximately 40-minute ferry ride from the port of Ishinomaki City in Miyagi Prefecture. Visitors are greeted by many cats as soon as they step off the ferry at the island's Nitoda Port. All the cats are used to being around people, and some will come and rub against the visitors' legs.

Tashirojima is a small island with an area of around 2.9 square kilometers and a circumference of 11.5 kilometers. As of September 30, 2021, more than a hundred cats are said to be living there alongside a human population of fifty-five residents.

Tashirojima has a mild climate with virtually no snowfall due to the warm Kuroshio Current that protects it from the bitterly cold winters of the Tohoku region.

The island's reputation among cat lovers not from the island began with a report in the media about fifteen years ago showing cats relaxing however they liked under the eaves of private homes and here and there on the streets. Before long, "Cat Island" had become popular.

In the center of the island is a shrine dedicated to a cat, Neko-jinja (Cat Shrine), which is not common in Japan. The status of cats as revered guardian deities on Tashirojima has to do with the history and culture of the island.

In the days when sericulture was practiced on the island, cats were kept to protect silk worm cocoons from mice. Tashirojima is also blessed with excellent fishing grounds, and fishermen are said to have cherished cats since ancient times, observing their behavior to predict the weather and the size of the fishing catch. A cat once died after being badly injured by a splinter of rock that was sent flying by a fisherman making fishing gear. The heartbroken fisherman built a small shrine where he reverently buried the cat, and ever since then the fishing has been bountiful.

Tashirojima is in northeast Japan, and the Great East Japan Earthquake of 2011 caused devastating damage to fisheries and residential homes along its coast. Konno Yoshiki of the Ishinomaki City Regional Development Division says, "The island is remote and most of its inhabitants are elderly, so there was uncertainty around whether it would recover. However, I've been told that, thanks to the support of many people, Tashirojima has managed to return to its former tranquility."

In 2018, a second sea-ferry landing facility was constructed near the built-up area, and in the same year, a new car ferry, *Mermaid II*, and high-speed craft the *See Cat* made the island even more accessible.

"We often hear tourists say they are soothed by the sight of the cats roaming freely on the island," says Konno. However, he asks that visitors to Tashirojima respect the rule of not feeding the cats to ensure they remain healthy. Their needs are taken care of by the island's residents and the staff of Shima no Eki, a tourist facility that sells light refreshments and souvenirs.

From mid-April to the end of October, accommodation is available at the Manga Island camping resort, located atop a hill with a fine view. Manga Island has six unique cat-themed lodges, with interiors designed by renowned Japanese manga artists and shared places decorated with the artists' illustrations of cats.

If you ever have a chance to visit Japan's Tohoku region, crossing over to Tashirojima to relax and play with the cats amid refreshing sea breezes is highly recommended. 🐾



Tashirojima cats
Photo: G•G/PIXTA



More Tashirojima cats
Photo: BUCK/PIXTA



Neko-jinja enshrines a cat as the island's guardian deity



One of six cat-themed lodges at the Manga Island camping resort
Photo: Courtesy of Ishinomaki City



Sunset on Sado Island

Photo: Courtesy of Niigata Prefectural Tourist Association

The Island of Gold Seeking to Become a World Heritage Site

Development of gold and silver mines on Sado Island, the largest island in the Sea of Japan, began in earnest in the middle of the sixteenth century, and Sado was once the leading production site of gold in Japan. The island, where traces of this history remain, is now seeking to be recognized as a World Heritage site.

SASAKI TAKASHI

SADO Island lies in the Sea of Japan off the western coast of Niigata Prefecture, northern Honshu. This is the largest remote island in the Sea of Japan, with a land area of approximately 855 square kilometers. There are over fifty mines on this island, which produced large amounts of gold and silver for around 400 years. The complex of ruins is known as the Sado Island Gold and Silver Mines and has become a World Heritage candidate (listed on the Tentative List).

Usami Ryo, chief of the World Heritage Preservation Unit in Sado City's World Heritage Promotion Division, offers an explanation of Sado Island, which flourished as the island of gold. "Sado Island first appears in documents at the end of the twelfth century as an island where gold dust could be collected. After that, large veins of gold and silver were discovered one after the next from the sixteenth through the seventeenth century, and full-blown mining operations began. Among these, the gold and silver veins at the Aikawa Gold and Silver Mine stretched out for about 3,000 meters east to west, 600 meters north to south, and down to a depth of 800 meters, and it is said that there was a combined length of about 400 kilometers of mining tunnels."

Over about 400 years up until 1989, when the Aikawa Gold and Silver Mine finally closed, roughly 78 tons of gold and 2,330 tons of silver were mined from Sado. This gold and silver supported the finances of the Tokugawa Shogunate during the Edo period (1603-late 1860s), and after the shogunate came to



Coastal scenery

Photo: Courtesy of Niigata Prefectural Tourist Association



Japan's first Western-style vertical shaft for precious metal mining

Photo: Courtesy of Tohoku Tourism Promotion Organization



The Aikawa Gold and Silver Mine. Excavation work has "split" the mountain

Photo: Courtesy of Sado Kanko Photo



Namban shrimp
Photo: Courtesy of Niigata Prefectural Tourist Association



Yellow daylilies
Photo: Courtesy of Niigata Prefectural Tourist Association



Toki (Japanese crested ibis), a Special National Monument
Photo: Courtesy of Sado Kanko Photo

an end, the mines were operated directly by the new government and played a part in the modernization of Japan.

“The Sado Complex of Heritage Mines, Primarily Gold Mines” were listed on the World Heritage Tentative List because gold mines from various periods are preserved in good condition.

On the island, in addition to remnants of the mines themselves, there are several exhibition facilities, including Kirarium Sado (Sado Gold and Silver Mine Information Facility), which explains the mines using large-scale video screens. The facilities aim to accurately convey the evolution of mining technology, as well as the history of the mines.

The Sohdayu Tunnel, a mine shaft excavated in the early Edo period, has been faithfully reproduced, using life-size models of people engaged in mining work. The nearby museum displays a variety of gold coins made at this time, including *oban* and *koban* coins. This same museum is popular for its Challenge Corner, where visitors can try to pull a 12.5 kilogram pure gold bar (worth approximately ¥90 million at today’s gold price) out of a narrow hole. Those who are successful receive a souvenir.

Usami says, “Kirarium Sado uses technology such as projection mapping that helps visitors to easily visualize how people of the time mined for ore using a variety of means.”

There is also the beautiful nature of Sado Island. Some 1,700

species of plants native to both northern and southern Japan grow here due to the effects of seasonal winds and ocean currents, and the island is referred to as a microcosm of the vegetation found on the Japanese islands. Rare species the *toki* (*Nipponia nippon*), also known as the Japanese crested ibis, lives in this rich natural environment, and is both a Special National Monument and an internationally protected bird.

Sado is also an island with abundant food resources. In 2011, the entire island was recognized as a Globally Important Agricultural Heritage System (“Sado’s Satoyama in Harmony with Japanese Crested Ibis, Japan”), together with the Noto peninsula becoming the first such GIAHS sites in Japan. The *koshihikari* variety of rice produced on the island is rated highly, and other local specialties include the indigenous Hige chicken and Sado beef. There are several sake breweries on the island as well, all of which produce sake of extremely high quality. The island is surrounded on all sides with ocean waters where cold and warm currents cross, making it an island of favorable conditions for fishing, and you can taste a wide variety of marine products here. The yellowtail, squid, Pacific bluefin tuna, crab, and shrimp are superb.

There is a saying: “You won’t understand Sado until you’ve come three times.” This island of gold, seeking to become a World Heritage site, is packed with charms that cannot be fully savored in a single visit. **17**



Mining work remains from the Meiji period (1868-1912) at the Aikawa Gold and Silver Mine
Photo: Courtesy of Sado Kanko Photo



Exhibits at Kirarium Sado
Photo: Courtesy of Sado Kanko Photo



Model of a gold coin (Kirarium Sado)
Photo: Courtesy of Sado Kanko Photo



Itsukushima Shrine, an example of the *shinden-zukuri* style of architecture
Photo: ©Shintani

A SACRED ISLAND WHERE NATURE IS IN HARMONY WITH CULTURE

Itsukushima, also known as Miyajima, lies in Hiroshima Bay in the Seto Inland Sea. The island offers a harmonious blend of history and culture centering on the Itsukushima Shrine, and nature centering on Mt. Misen, which serves as a backdrop to the shrine.

FUJITA MAO

ITSUKUSHIMA in Hatsukaichi City, Hiroshima Prefecture, also known as Miyajima (hereinafter Miyajima), is located in Hiroshima Bay in the Seto Inland Sea. The island has been widely regarded as one of the three most scenic spots in Japan, along with Matsushima in Miyagi Prefecture and Amanohashidate in Kyoto Prefecture. Miyajima is an oval-shaped island around 30 kilometers in circumference and has an area of 30.2 square kilometers. As of October 2021, the island is home to a population of about 1,400. The main means of transportation from mainland Honshu to Miyajima is by ferry, taking around ten minutes to travel the 1.8 kilometer route. In 1952, the entire island of Miyajima was designated as part of the Seto Inland Sea National Park, and fourteen percent

of the island including Itsukushima Shrine and the primeval forests of Mt. Misen behind the shrine were registered as World Heritage sites in 1996.

“Miyajima is a special place in that the island itself has been worshipped as a deity since ancient times. Until the beginning of the thirteenth century, there was no land where people could live. Itsukushima Shrine, built on the seashore, appears to float mysteriously, and it has been worshipped by the leaders of the day as well as many others,” says Saito Naoki, Section chief of the Public Information Planning Department of the Miyajima Tourist Association.

It is said that the main building of Itsukushima Shrine was constructed in 593 by Saeki Kuramoto, a member of a powerful clan that ruled the area around the shrine. The impressive vermilion-lacquered O-toriiⁱ (Grand Torii Gate) and the main building jutting out into the sea that we see today are said to have been restored in 1168 by Taira no Kiyomori (1118–1181), who established the first samurai government. The restoration

ⁱ Since September 28, 2021, the O-torii (Grand Torii Gate) of Itsukushima Shrine has been undergoing extensive conservation and repair work. The timeline for completion has not yet been determined, but it is expected to take another one or two years.



The vermilion-lacquered O-torii (Grand Torii Gate)
Photo: ©Shintani



Mt. Misen
Photo: ©Shintani



View from the summit of Mt. Misen overlooking islands in the Seto Inland Sea
Photo: chaba/PIXTA



An adult male Miyajima dragonfly (*Orthetrum poecilops*)
Photo: Courtesy of Sakamoto Mitsuru

was carried out using the *shinden-zukuri* architectural style for aristocratic residences, said to have emerged in the tenth century. In this style of architecture, the main house (*shinden*) is connected to the subsidiary buildings by a corridor, and a large pond is established in front of the shinden.

Taira no Kiyomori also brought the culture of the Kyoto aristocracy to Miyajima, such as *bugaku* (court dances and music) and *kangen* (music for instrumental ensembles), which he incorporated into the shrine's rituals.

Later, craftsmen and merchants came to live alongside the Shinto priests and Buddhist monks on the island. However, Miyajima remained a sacredly revered island and an agrarian culture did not develop. As a result, the natural environment of Miyajima is untouched to this day, and its pristine forests remain. Contrasting with the shrine and the sea in the foreground is the backdrop of Mt. Misen, covered with primeval forest extending over 160 hectares (around 5.3% of the whole island). Like Itsukushima Shrine, Mt. Misen is also registered as a World Heritage site. It takes around 20 minutes by

ropeway to reach the mountain station. The island is inhabited by fauna such as deer and monkeys, and has coastal wetlands that are home to creatures such as the endemic subspecies the Miyajima dragonfly (*Orthetrum poecilops*). Activities have been underway to protect the Miyajima dragonfly since the 2011 registration of the wetlands under the Ramsar Convention.

“Prior to the impact of COVID-19, tourists from overseas arriving on the island by high-speed boat after visiting the Peace Memorial Park in Hiroshima City would say that Miyajima was like another world because of its quiet, nature, and peacefulness. They are amazed by the spectacle of the giant boulders spread about the peak of Mt. Misen and by the stunning 360-degree panoramic view of the many islands of the Seto Inland Sea from its summit.”

Enjoy the natural beauty of Miyajima and the Seto Inland Sea by feeling the history of Itsukushima Shrine, climbing mountains, going sea kayaking, and watching the glow of the sunset over the sea. The timeless abundant appeal of Miyajima has earned it a longstanding place in the hearts of many people. 

Island of Olives and Soy Sauce



The view from Shodoshima Olive Park overlooking the windmill on Shodoshima, Kagawa Prefecture
Photo: Courtesy of Shodoshima Tourism Association

The Seto Inland Sea is the largest inland sea in Japan and is home to over 700 islands, large and small. Among them is Shodoshima, which boasts stunning scenery and is known as a major production area of soy sauce and olives.

KATO KYOKO

SHODOSHIMA in Kagawa Prefecture is the second largest island in the Seto Inland Sea, after Awaji Island in Hyogo Prefecture. The island has a circumference of more than 100 kilometers and a population of around



26,000 (as of September 2021). Transportation between Shodoshima and the mainland is almost exclusively by ferryboat, taking about 60 minutes by ferry or about 35 minutes by high-speed boat from Takamatsu Port in Kagawa Prefecture.

“Shodoshima has flourished as an important port of call for maritime traffic since ancient times,” says Shodoshima Tourism Association director Shiode Shingo. “As well as being surrounded by beautiful sea, the island’s interior is home to one of the most magnificent gorges in Japan, Kankakei Gorge, with its dramatic scenery created by precipices and unusual rock formations, and to Hoshigajyo Mountain, which at 817 meters above sea level is the highest mountain in the Seto Inland Sea. The appeal of Shodoshima is the abundance of natural features that such large islands can offer.

One of Shodoshima’s main industries is soy sauce production, which dates back to the first half of the seventeenth century. Production of salt, a soy sauce ingredient, flourished and although production capacity for the other ingredients of soybeans and wheat was small in scale, it was easy to ship in supplies. Moreover, products could easily be transported to the commercial center of Osaka, and this is said to have led to the island becoming a major soy sauce production area.

To this day, many Shodoshima soy sauce breweries still produce soy sauce in the traditional way using wooden vats.

“Unlike today’s tanks made of materials such as stainless

Spectacular view of Kankakei Gorge created by unusual rock formations and precipices
Photo: Courtesy of Shodoshima Tourism Association



Olives of Shodoshima, Japan's largest olive-producing region
Photo: Courtesy of Shodoshima Tourism Association



Tenobe Somen drying in the sun
Photo: Courtesy of Shodoshima Tourism Association

steel, wooden vats allow yeast and other microorganisms found in the brewery to penetrate the soy sauce, so each brewery produces a different flavor, even if they make it in exactly the same way,” explains Shiode.

Other Shodoshima specialties are *tsukudani*, made by cooking kelp and other ingredients in the island’s specialty soy sauce, and *tenobe somen*, traditional ultra-thin dried noodles made from only wheat, salt, sesame oil, and water.

Another well-known product of Shodoshima today is olives, which have been cultivated since the early twentieth century. The island’s temperate climate, with relatively little rainfall and an average annual temperature of 15 degrees Celsius, makes it ideal for olive cultivation. Shodoshima is now the largest producer of olives in Japan, earning it the nickname “Olive Island.” The Shodoshima Olive Park is an olive-themed park with some 2,000 olive trees and featuring a white windmill built as a symbol of friendship between Shodoshima and its sister island of Milos in Greece. The spectacular view created by the greenery of the olive groves against the backdrop of blue sky and blue sea make it the most popular sightseeing spot on the island.

The most notable feature of Shodoshima olives is that “the olives are entirely hand-picked,” says Shiode.

“Because they are grown on narrow slopes, the work can’t be mechanized, so each olive is individually picked by hand and the fruit doesn’t get damaged. Selecting only the best fruit and pressing it on the island while still fresh produces a high-quality olive oil. I recommend olive oil and salt with the local specialty tenobe somen noodles.”

There are some who have moved from the city to this island full of charms. One such person is David Carroll from Australia. After coming to Japan in 2016 with his Japanese wife, David had been living in Nagoya City, Aichi Prefecture, the central

city of the Chubu region, where he taught English. He fell in love with Shodoshima after visiting the island on vacation, eventually moving there with his wife in 2019. “We decided to move to Shodoshima because it’s a very beautiful island. You can enjoy all the beauty of nature here on one small island—beautiful forests, mountains, and crystal clear sea waters,” says David.



David Carroll at his hamburger restaurant in Shodoshima
Photo: Courtesy of David Carroll

David opened a hamburger restaurant on the island, and it has become popular with locals and tourists alike. When his busy work schedule allows, as a pastime he enjoys fishing and touring the island by motorcycle. “There’s an abundance of nature and the food is wonderful. The people are kind too. We can enjoy a truly perfect lifestyle here,” says David.

Shodoshima is a beautiful island that is ideal for those who want to enjoy the sea, the mountains, and the food in a mild climate. 🍷

Revision of Japan's Corporate Governance Code and Guidelines for Investor and Company Engagement

Japan's Corporate Governance Code and the Guidelines for Investor and Company Engagement ("Engagement Guidelines") were revised in June 2021 with the aim of increasing mid- to long-term corporate value and promoting engagement between investors and companies.

SAWAJI OSAMU

IN recent years, the Japanese government has been promoting corporate governance reform as part of its growth strategy. The focus of that reform is the Corporate Governance Code and Japan's Stewardship Code, outlined below.

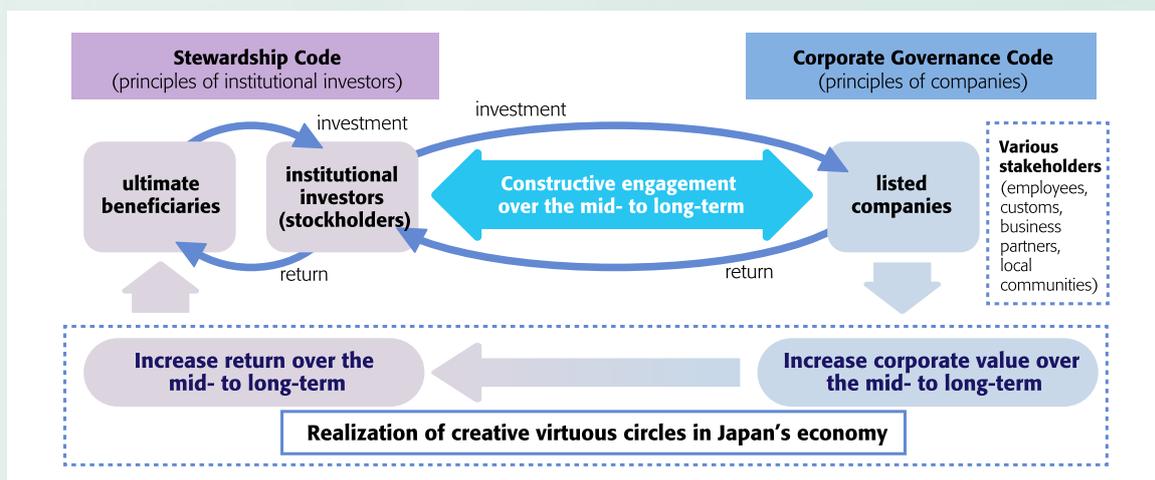
- **Corporate Governance Code:** A code of principles that requires listed companies to promote initiatives to increase mid- to long-term corporate value by appropriately cooperating with a wide range of stakeholders (shareholders, employees, customers, business partners, local communities, etc.). The Corporate Governance Code is a part of the Securities Listing Regulations set forth by the Tokyo Stock Exchange, with listed companies required to promote initiatives based on the Code in accordance with each company's specific circumstances.
- **Stewardship Code:** A code of principles that requires institutional investors (pension funds, trust banks, life insurance companies, etc.) to promote the sustainable growth of their investee companies through constructive engagement with companies from a mid- to long-term perspective. Acceptance of the Code by institutional investors is voluntary. As of the end of October, 2021, 320 domestic and foreign institutional investors have

announced their acceptance.

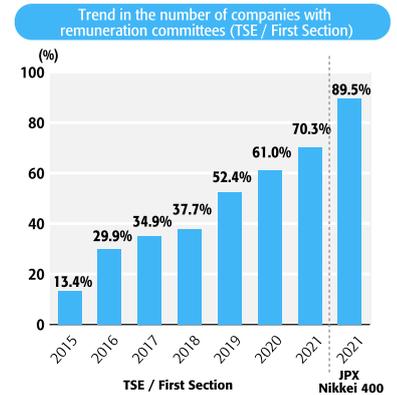
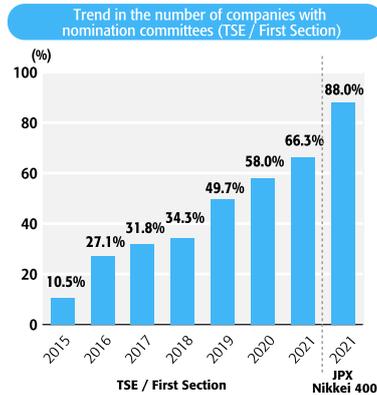
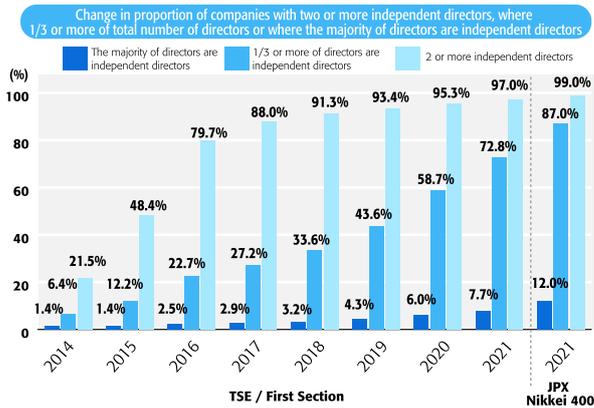
While these Codes contain no legally binding or punitive provisions, in cases where listed companies or institutional investors that have accepted the Codes do not comply with a principle of the Codes, they are required to fully explain their reasons. It is expected that listed companies and institutional investors will conduct constructive engagement and that individual companies will implement initiatives aimed at increasing mid- to long-term corporate value based on these Codes.

COMPILATION AND REVISION OF THE CODES

The Stewardship Code was established in 2014 by a council of experts, for which the Financial Services Agency serves as the secretariat. The Corporate Governance Code was established in 2015 by the Tokyo Stock Exchange based on discussions by a council of experts, for which the Financial Services Agency and the Tokyo Stock Exchange serve as the joint secretariat. The Stewardship Code was revised in 2017 and the Corporate Governance Code was revised in 2018. Also in 2018, the Financial Services Agency established the Engagement Guidelines. The Guidelines are intended to be a supplemental document to the Stewardship Code and the Corporate Governance Code, summarizing the agenda items for engagement that should



Promoting Constructive Engagement: Stewardship Code and Corporate Governance Code



be the focus of discussions by listed companies and institutional investors in order to promote constructive engagement between both parties. Agenda items include investment strategy policy and enhancing board independence.

The Corporate Governance Code and the Engagement Guidelines were revised further in June 2021, in order to encourage companies to demonstrate a higher level of governance in response to changes such as the COVID-19 spread and ahead of the Tokyo Stock Exchange's market restructuring in April 2022.

The revision addresses the following three pillars:

(1) Enhancing Board independence

- Increase in the number of independent directors from at least two to at least one-third of the board for Prime Market¹ listed companies (where necessary, a majority of the board members should be elected as independent directors)
- Establish a nomination committee and a remuneration committee (appointment of independent directors enough to have them form a majority of the committee members for Prime Market listed companies)
- Disclose a skill matrix of board members conforming to the company's business strategy
- Appoint independent directors having managerial experiences at other companies

(2) Promoting Diversity

- Disclose a policy and voluntary measurable targets in respect of promoting diversity in senior management by appointing females, non-Japanese and mid-career professionals
- Disclose human resource development policies ensuring diversity, including the status of implementation

(3) Attention to Sustainability and ESG (Environment, Social, Governance)

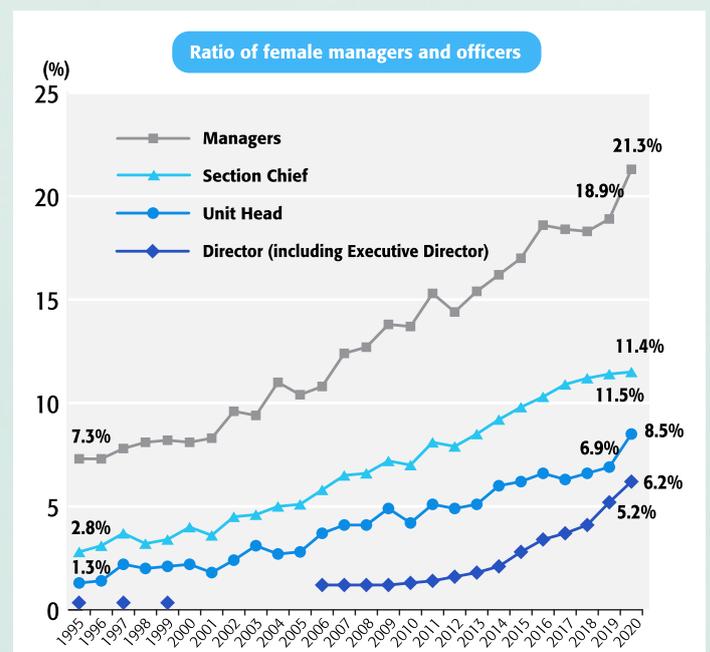
- Enhance the quality and quantity of climate-related dis-

closure based on Task Force on Climate-related Financial Disclosures (TCFD)ⁱⁱ recommendations or equivalent international frameworks at Prime Market listed companies

- Develop a basic policy and disclose initiatives on the company's sustainability

Based on these revisions, by making listed companies implement initiatives in accordance with their specific circumstances, it is expected to achieve sustainable corporate growth, increase mid- to long-term corporate value, and provide an enhanced return from institutional investors to their ultimate beneficiaries, contributing to economic growth in Japan and globally. [1](#)

Note: This article has been created with the consent of the Financial Services Agency and on the basis of materials published by the Agency.



i In April 2022, the Tokyo Stock Exchange will restructure its market segments from the four current divisions of 1st Section, 2nd Section, Mothers, and JASDAQ (Standard and Growth) to the three segments of Prime Market, Standard Market, and Growth Market. According to the Tokyo Stock Exchange, the Prime Market is positioned as "the market oriented to companies that center their business on constructive dialogue with global investors."

ii The Task Force on Climate-related Financial Disclosures (TCFD) was established by the Financial Stability Board (FSB), which includes organizations such as central banks, financial authorities, and international organizations. The TCFD aims to "develop a framework for providing voluntary and consistent climate-related financial disclosures that would allow investors, lenders, and other stakeholders to assess significant climate change-related risks."

Docking station and SPICE being lowered into the sea

Underwater Robots for Inspection of Pipelines

An underwater robot has been developed to locate and inspect pipelines for offshore oil fields.

SAWAJI OSAMU

OCEANS cover approximately 70 percent of the Earth's surface and the subsea contains various untapped natural resources. One such resource is oil. After World War II, production of crude oil from offshore oil fields increased with the development of oil fields in the world's oceans. According to the Offshore Energy Outlook published by the International Energy Agency (IEA) in 2018, crude oil production from offshore oil fields ranged from 26 million to 27 million barrels per day (average from 2000 to 2016), accounting for approximately 30 percent of global crude oil production.

The "vital path" of offshore oil fields are the pipelines laid on the seabed to transport crude oil. There is a danger that pipelines will cause severe marine pollution if damaged, so maintenance and inspection are extremely important. In recent years, however, crude oil has

been extracted from the seabed at depths beyond the 300 meter maximum limit of human divers. The challenge was to establish a reliable and efficient method of pipeline inspection at sea depths that are difficult for human divers to reach.

Kawasaki Heavy Industries, Ltd. has risen to this challenge by developing the SPICE (Subsea Precise Inspector with Close Eyes), an autonomous underwater vehicle (AUV) equipped with a robot arm for performing subsea pipeline inspections. Measuring 4.5 meters long, 1.2 meters wide, and 0.9 meters high, SPICE moves freely in the sea like a drone flying on land, autonomously approaching pipelines for inspection using a sonar device that detects objects underwater through sound waves. Moreover, it has the durability to perform inspections in ultra-high pressure environments of 3,000 meters depth.

"The robot arm inspects the external

appearance of the pipeline and checks for metal corrosion while maintaining a stable and close distance between the inspection sensor attached to the end of the arm and the pipeline. No other AUV in the world can perform this type of operation," says Okaya Noriyuki of Energy Solution & Marine Engineering



SPICE performing an inspection test using a simulated pipeline in the ocean of Okinawa

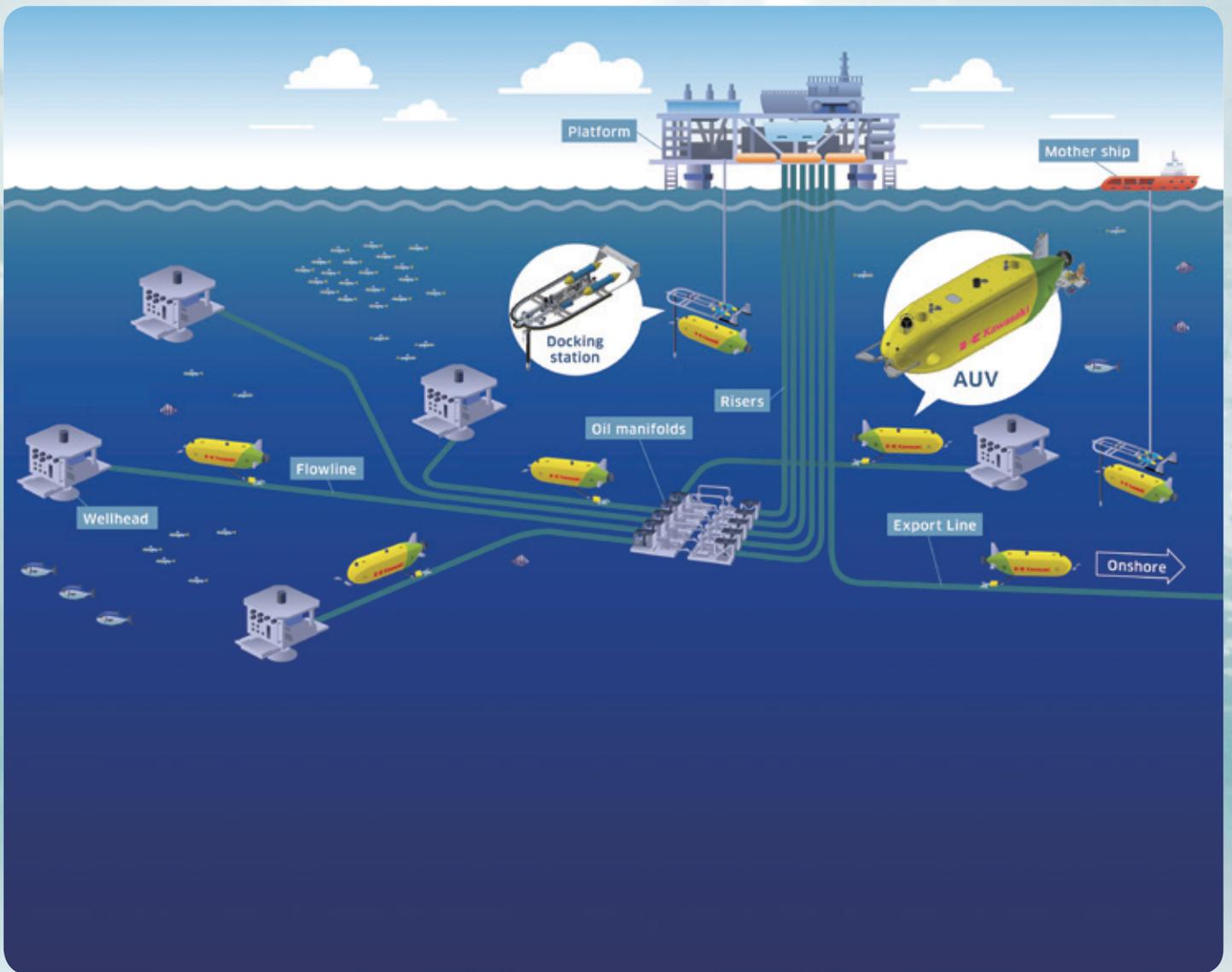


Illustration of SPICE inspecting a pipeline in an offshore oil field. Pipelines consist of a flowline that runs from the wellhead to the oil manifolds (integrated device), risers that run from the oil manifolds to the offshore platform (derrick), and an export line to transport the crude oil collected on the platform to the shore.

Company, Kawasaki Heavy Industries, Ltd. “Wireless communication doesn’t work in the ocean, so the entire operation is performed automatically.”

In the past, pipelines at depths that divers are unable to reach were inspected using remotely operated vehicles (ROVs). However, ROVs are operated and powered through a cable from the mother ship at sea, with the reach of the cable limiting the range within which they are able to move and conduct inspections. Cables also affect the motion of ROVs, so they are said to require a very high level of skill to maneuver.

SPICE, on the other hand, does not require a cable connecting it directly to the mother ship, so it can move over a wider area than ROVs. Around 20 kilometers of pipeline can be inspected during a single dive. Also, SPICE averages a speed of two knots during an inspection (one

knot is approximately 1.85 kilometers per hour), making it two to four times faster than an ROV.

Another key feature of SPICE is that it can work continuously for long periods because it can be recharged in the sea. SPICE is lowered from the mother ship still attached to its docking station, from where it launches itself automatically to perform operations such as pipeline exploration and inspection. When it needs to recharge, SPICE automatically returns to the docking station, resuming operations once the recharge is complete. It can operate for around eight hours on a single charge.

“SPICE can significantly reduce the time required to inspect pipelines. This can not only reduce the cost of inspections, but also the carbon dioxide emissions associated with the operation of the mother ship,” says Okaya.

Since commencing development of AUVs in 2013, Kawasaki Heavy Industries, Ltd. has been developing and verifying technologies such as automatic docking, underwater battery charging, and pipe tracking using robotic arms. In 2017, the company began to develop SPICE, an AUV that combines these technologies for pipeline inspection, winning its first order for the robot in May 2021 from a British company. In the future, SPICE will be used for inspecting sub-sea pipelines in the North Sea and other oceans of the world.

“Looking forwards, our intention is that SPICE may also be used for maintenance of offshore wind power generation facilities,” says Okaya.

The day is not far off when Japan’s underwater robot SPICE will be active around the world quietly supporting the world’s energy supply. 

An English Indigo Dyer on Awaji Island

Sally Hancox from England creates indigo-dyed fabrics on Awaji Island in the Seto Inland Sea while working to promote the island's charms.

SATO KUMIKO

AWAJI Island in Hyogo Prefecture is located in the eastern part of the Seto Inland Sea and has an area of 592 square kilometers. It is blessed with a mild climate throughout the year and a peaceful rural landscape.

Sally Hancox moved to Minami Awaji City on Awaji Island while she was pregnant with her first child in 2015. Then in 2019, she moved to the island's Sumoto City, where she and her husband, Okada Junichi, run the indigo dyeing studio AiAii.

Family life beside the sea:

Sally Hancox (right) and husband Okada Junichi with their children, against the backdrop of the Seto Inland Sea. "Our house is just a stone's throw from the sea, where you can enjoy swimming in the summer. Our children also enjoy the freedom of playing in the sea and in the mountains every day," says Hancox.

Hancox came to Japan in 2010 on a working holiday after graduating from university in the UK, where she had studied illustration and weaving. She'd always had an interest in different cultures, and spent her time in Osaka studying Japanese while working as an artist, including creating murals. During this time, Hancox married Hyogo Prefecture native Okada, whom she had met at an art event. They began their married life in London, but when they decided to start a family the couple began yearning for a lifestyle of natural green spaces with a view of the ocean. They looked at various potential locations in Okada's native Japan, before finally settling on Awaji Island.

Hancox resumed her artistic endeavors, this time in the peaceful living environment of Minami Awaji City.

"I was drawn to indigo dyeing partly



Indigo-dyed merchandise drying in the sun



The building housing the indigo dyeing studio AiAii, decorated with murals painted by Hancox



The studio shop with indigo-dyed merchandise created by Hancox and husband Okada Junichi

because I had been creating art with textiles. To me, indigo dyeing evokes Japan more than anything else,” says Hancox. She opened AiAii, an indigo-dyeing studio and store, in 2019, after being accepted by Sumoto City as a Local Vitalization Cooperator, part of a nationwide municipal government program promoting cooperative initiatives within local communities.

AiAii operates out of a renovated fifty-year-old house. The exterior walls are decorated with Hancox’s mural artwork, featuring plants with blue leaves reminiscent of indigo dye. On display in the store are indigo-dyed clothing and accessory merchandise that she made with her husband. Hancox creates her indigo-dyed fabrics using traditional Japanese tie-dyeing techniques, in which cloth is folded or tied and dyed to create unique patterns.

About a year before she opened AiAii, Hancox started to gradually replace the chemical dyes she had been using previously as a material for indigo-dyeing with

a natural dye called *sukumo* produced using the traditional Japanese method of fermenting indigo leaves. She obtains *sukumo* from across the Onaruto Bridge in Tokushima Prefecture, the home of indigo dyeing, adding lye and other ingredients in her workshop to create a natural dye. (See “Dyeing by Natural Color,” *Highlighting Japan*, October 2020.)

Hancox promotes the charms of Sumoto City in Japan and abroad by sharing information on social networking services. She also holds indigo dyeing workshops at AiAii.

“We encourage workshop participants to bring their own second-hand clothes to re-dye,” says Hancox. “It’s better for the environment and also creates new value and beauty. Fashion shouldn’t be disposable.”

In the spring of this year (2021), Hancox was able to start growing indigo in a borrowed field in Sumoto City, sowing the seeds then harvesting the leaves at the end of summer. “We realize it’s not

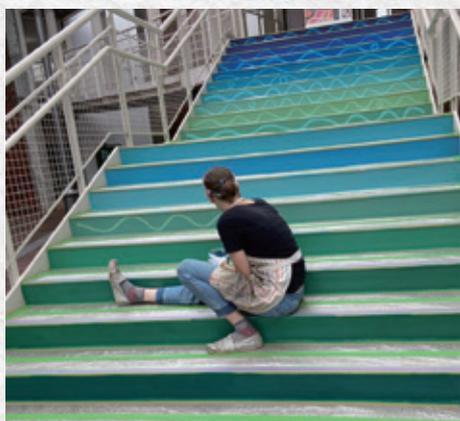


Hancox with participants from overseas at an indigo dyeing workshop (Photo pre travel restrictions relating to COVID-19)

going to be easy, but we want to try making *sukumo* from indigo leaves we grow ourselves,” says Hancox.

The couple’s first harvest of indigo leaves is presently fermenting.

Even if it takes time and effort, Hancox’s dream now is to create “Sumoto Blue” fabrics dyed with indigo grown in Sumoto. 🍷



Hancox on the steps of a commercial facility which she painted as a Local Vitalization Cooperator for Sumoto City



Fermenting indigo leaves to produce the base for the natural dye *sukumo*



Hancox (right) and husband Okada Junichi making dye with *sukumo*

A Musician Connecting the Shamisen with Contemporary Music Overseas

Every year the Agency for Cultural Affairs, Government of Japan, appoints a number of “Japan Cultural Envoys” to engage in cultural activities overseas. The undertaking aims to deepen understanding of different aspects of Japanese culture among people of the world and build and strengthen networks between Japanese and foreign artists and experts. In this first installment of a new series introducing such Japan Cultural Envoys, we meet Honjoh Hidejiro, a shamisen player.

YANAGISAWA MIHO

THE shamisen is a traditional Japanese instrument with three strings stretched over a long neck and resonating body, and which is played with a plectrum called a *bachi*. The instrument is played solo or in ensembles with other Japanese instruments, and provides an essential musical accompaniment to traditional performing arts such as *bunraku* puppet theater, kabuki theater and *Nihonbuyo* (Japanese classical dance). In recent years, the shamisen has also been played in non-traditional genres.

One shamisen virtuoso is pursuing the instrument’s potential by working to produce modern shamisen music while



Honjoh Hidejiro with Necmi Kiran, a saz (Turkish long-necked guitar) player and conductor

Source: Website of the Ministry of Foreign Affairs of Japan (www.tr.emb-japan.go.jp/itpr_ja/00_000269.html)

commissioning composers of contemporary music in Japan and abroad to create new compositions. His name is Honjoh Hidejiro.

Honjoh Hidejiro toured eight countries (Turkey, the USA, Italy, France, the UK, Germany, the Czech Republic, and Russia) from March to October of 2018 as a Japan Cultural Envoy¹ appointed by the Agency for Cultural Affairs, Government of Japan, working on ambitious collaborations with many local performers and putting special effort into creating new compositions. He commissioned composers in each country to write ensemble works for shamisen and bassoon, as well as shamisen concertos with orchestra, and he worked enthusiastically on the performances of these pieces.

“When I became a Japan Cultural Envoy, I wanted to take on challenges that I wouldn’t be able to take on normally. It was harder than I expected to commission new works by local composers, work on adjusting the completed works, and perform them. It isn’t an overstatement to say that it was incredibly demanding. But I didn’t want to stop at just introducing the shamisen. I think I was able to push through because, above all else, I wanted to persist with my aggressive attitude of accumulating important experiences.”



Honjoh Hidejiro (second left) performing with players of traditional instruments in Ankara, Turkey

Source: Website of the Ministry of Foreign Affairs of Japan (www.tr.emb-japan.go.jp/itpr_ja/00_000269.html)

The timbre of the shamisen, which is completely different from that of European stringed instruments, was met with surprise at his destinations. Not all of the commissioned composers understood the characteristics of the shamisen. Once the initial composition was submitted, Honjoh Hidejiro exchanged honest opinions with the composer before completing the work. During this process, he took care not to say, “I can’t do that.”

“I felt more things would be possible if we respected one another. While discussing the composed works, we adjusted them, performed them, and brought them to completion.”

In total, twenty-one new works were created as Honjoh Hidejiro stoically continued his challenge.

¹ The Agency for Cultural Affairs has been appointing people committed to cultural activities such as artists, cultural specialists and so on, as “Japan Cultural Envoys.” This undertaking aims to deepen the international community’s understanding of Japanese culture and to build and strengthen networks between Japanese and foreign artists and experts. <http://www.culturalenvoy.bunka.go.jp/en/about.html>



Shamisen player Honjoh Hidejiro

Photo: Courtesy of Honjoh Hidejiro

The shape and construction of the shamisen are similar to the banjo and guitar, but a special feature of the shamisen is the *sawari*. Honjoh Hidejiro explains: “There is a protruding device at the top of the neck that comes in contact with the thickest string and which can be raised or lowered. This is called the ‘sawari,’ and adjusting it helps to create the shamisen’s unique buzzing sound. The shamisen produces an extremely expansive sound with just three strings.”

Unlike Western instruments that produce melodies with many sounds, the

shamisen seeks to express limited single tones by playing a single sound and letting it fall quiet. While this means that Honjo Hidejiro’s collaborators had to create compositions for an ensemble of musical instruments with completely different characteristics, he says that the performers from the various countries described it as “an extremely exciting experience.”

“The shamisen is a traditional instrument so there are classic compositions that should be passed down, but there is the potential also for the shamisen to

connect with the diverse contemporary music world. We live in a world where various sounds can be produced digitally, but I hope to continue to expand the potential of music with sounds produced by traditional instruments,” he says.

Touring several countries as a Japan Cultural Envoy was a journey that aimed to realize that dream. As the result of the journey, Honjoh Hidejiro is further expanding his collaborations with people from around the world and creating still bigger dreams. **7**

Courtesy of KITO YUZU



GI JAPAN PRODUCTS



Kito Yuzu

木頭ゆず

Kito Yuzu

KITO Yuzu have been selectively bred for over half a century from the varieties indigenous to Naka Town in Tokushima Prefecture. “Kito Yuzu” are yuzu characterized by a thick peel that is not easily damaged, and a beautiful appearance. Their quality is rated highly by markets in both Japan and the EU.

Only yuzu with a diameter greater than 4 cm and without scratches or other marks is selected for shipping to greengrocers.

Naka Town is surrounded by mountains with an elevation higher than 1,000 m. Over 90% of the region is mountainous. The area is characterized by a cool climate, drastic change in temperature between day and night, and high summer rainfall. It is therefore a suitable area for producing yuzu that exhibit a vivid color, are highly aromatic, and are resistant to disease.

In this region from long ago, the word “vinegar” signified “yuzu vinegar”*, as yuzu trees grew in the gardens of each household and on the ridges of the fields. Full-fledged production of “Kito Yuzu” from selected seedlings began in 1961.

Various uses have been found for the highly acidic yuzu, including as flavoring for cuisine.

* Yuzu vinegar differs from grain vinegar, black vinegar (produced from unpolished rice, etc.), brewed vinegar and fruit vinegar in that it is an unfermented fruit juice. It is produced by adding salt, etc. to freshly squeezed yuzu juice. This is preserved and then used to dress seasoned vegetables and flavor fish and hotpot dishes.

Text and images courtesy of Ministry of Agriculture, Forestry and Fisheries: <https://gi-act.maff.go.jp/en/register/entry/42.html>



Tokushima Prefecture

Naka Town

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