### Know, Protect, and Enjoy the Western Area

To maintain a healthy relationship with wild animals

Go to page 5 for details



Never feed or show food to wild animals



When observing animals, park your car correctly!



Keep a distance of at least 10 m from wild animals



Don't stare into a monkey's eyes



Observe the animals quietly

### For safe and enjoyable driving

Go to page 13 for details



Drive slowly while watching out for oncoming traffic



Beware of animals crossing while driving





There are no public restrooms on the Seibu Rindo Western Forest Path





On the Seibu Rindo Western Forest Path, mobile phones Driving at night is dangerous rarely have reception



and not recommended

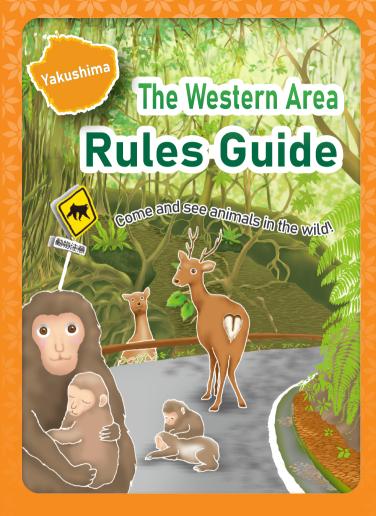
#### Contact

Yakushima Ranger Office, Ministry of the Environment 2739-343, Anbo-maedake, Yakushima-cho, Kumage-gun,

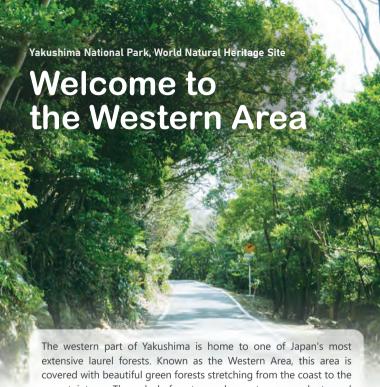
Tel: 0997-46-2992



Also available online!



Yakushima Ranger Office, Ministry of the Environment



mountaintops. These lush forests are home to many plants and animals, and the area is registered as a World Natural Heritage site.

The Seibu Rindo Western Forest Path is a narrow road that runs north-south through the region. This road, winding through rich vegetation, is also called the "Green Tunnel" and is an excellent place to observe wild monkeys and deer.

This booklet has compiled a list of rules for observing wild animals in the Western Area.

We kindly ask for your understanding and cooperation to preserve the magnificent nature of the Western Area and maintain a healthy relationship with its wild animals.





Yakushima macaques

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### The part of the island that includes the Western Area is a **World Heritage site!**

The part of the island containing the Western Area was designated as the Kirishima-Yaku National Park in March 1964 (Yakushima National Park since 2012). It was registered as a World Natural Heritage site in December 1993. The Western Area is strictly protected as a Special Protection Zone, where the collection of plants, the capture of animals, and the installation of structures are regulated.

Various activities may require permits under the Natural Parks Law or applications to landowners. If you have any questions, please get in touch with the Ministry of the Environment, the Forestry Agency as the land manager, or the Kagoshima Prefectural Government.

# 1

## What is the Western Area like?

The western part of Yakushima is home to one of Japan's most extensive laurel forests and is commonly called the Western Area

### The "trees with shining leaves"

Laurel trees are deciduous trees that keep their lush green leaves even in winter.

To protect themselves from the cold and dryness of winter, their

leaves develop a waxy cuticle layer on their surface, giving them a glossy, shiny appearance. Thus, they are described as "trees with shining leaves" in Japanese. Laurel forests, mainly composed of laurel trees, used to be widely distributed in the lowlands of western Japan, but nowadays, forests of such a substantial size have become scarce.



Camellia japonica

### Rich vegetation unique to Yakushima

The Western Area is the only Yakushima area uninterruptedly covered with natural green forests from the coast to the mountaintops. The temperature difference between the coastal areas and the summits, nearly 2,000 meters above sea level, is about 12 °C. The summits are almost as cold as Sapporo.

As a result, vegetation typical of Tropical Islands grows near the coast. However, as the elevation increases, it changes to a cedar forest zone with cedars and firs more commonly found in colder areas, and the mountaintops become a grassland of Yakushima-dake bamboo.

### Why the Western Area became a World Natural Heritage site

Although Yakushima is located south of the Japanese archipelago, one can observe natural vegetation native to all parts of Japan on this single island.

One reason Yakushima was registered as a World Natural Heritage site is that the diverse natural vegetation, or "vertical distribution of vegetation," from the coast to the mountaintops has been preserved continuously. The Western Area is a rare place to observe this vertical distribution.



Vertical distribution of vegetation

### Endangered species Yakushima white pines

The Yakushima white pine, a relative of the Japanese white pine, grows naturally only on the islands of Yakushima and Tanegashima. Due to its high resin content and softness, it has been used since ancient times for shipbuilding (log boats) and construction.

Approximately 2,500 Yakushima white pines are left, and there is concern over their extinction. The Western Area is the primary habitat for Yakushima white pines.



Yakushima white pines (Photo; Kenshi Tetsuka)



Follow the rules for wildlife-friendly observation!



1 Never feed or show food to wild animals

# Feeding wild animals is ILLEGAT

Activities such as feeding, approaching, or following wild animals in Special Zones, etc., within National Parks could impact their ecology and are subject to regulations under the Natural Parks Law. Offenders may face fines of up to 300,000 yen.

In addition, the "Yakushima Town Monkey Feeding Prohibition Ordinance" prohibits feeding monkeys, with violators subject to fines of up to 50,000 yen.

### Impacts on behavior

Animals that have learned the taste of human food may start approaching and attacking people to be fed. Some monkeys may suddenly approach you or display aggressive behavior upon seeing your food. It is strictly forbidden to give or even show food to them.



Animals that have become dependent on human food may begin to ravage farmland.

### Impacts on health

Human food can harm wildlife, and human diseases can be passed on to wild animals through food.

### Impacts on the Ecosystem

The natural world comprises complex connections that we cannot even fathom. Altering the behavior of wild animals such as monkeys and deer will disrupt this interconnectedness.

# 2 First, park your car properly

When observing wild animals on the Seibu Rindo Western Forest Path. park in a safe space or otherwise avoid obstructing other traffic.

# 3 Do not get closer than 10 meters

Are you getting too close to wild animals? It is common for people to miss the signs that animals are uncomfortable when looking at them through camera lenses or smartphone screens. If you get too close, they may run away or, in some cases, attack you.





Monkeys are sensitive to human gaze and behavior. It's important not to stare into a monkey's eyes or tease them. Monkeys may perceive such actions as threats or attacks, which could lead them to flee or retaliate.



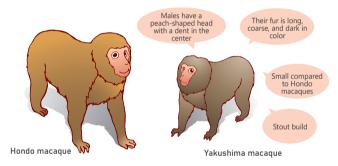
# 5 Observe quietly

Even when animals are lying on the side of the road, grooming themselves or seeming relaxed, they are attentive to human behavior. By observing guietly, you can take a closer look at animals' natural behaviors

## Yakushima macaques

### A subspecies of the Japanese macaque

There are approximately 450 species \* of monkeys worldwide, but only the Japanese macaque is naturally distributed in Japan. Japanese macaques live from the Shimokita Peninsula in Aomori Prefecture to Yakushima and are divided into two subspecies: the Hondo macaque and the Yakushima macaque. As the name suggests, Yakushima macaques are found only in Yakushima.



### Their lifespan is about 25 years

Most babies are born in spring. They suckle their mother's milk for about six months after birth, then gradually feed on forest plants. They become independent at four to five years old. Female monkeys begin bearing offspring at about six years of age and live their entire lives in the troop they were born into.

Male monkeys, on the other hand, begin to leave their birth troop at about age four. After that, they join another troop or live in a male-only troop. There also appear to be macagues that live alone.

### Forest fruits are their favorites

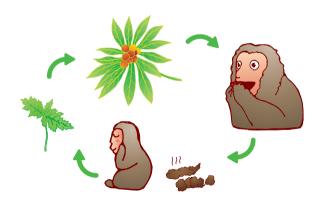
Yakushima macaques love forest fruits. They feed on various fruits, including red bayberries and Inubiwa (Ficus erecta) in early summer and acorns in fall and winter. They eat leaves as much as fruits and utilize about 100 species of plants. In addition, they often eat mushrooms and insects.

### Monkeys sow seeds all over the forest

The fruits that monkeys eat are more than just digested and lost. The monkey's droppings contain many seeds, and given the right conditions, they eventually sprout.

Plants cannot move independently, so having their fruits eaten by the monkeys provides a vital opportunity to transport their offspring to distant locations.

For this reason, many plants have evolved to produce sweet pulp and prominent colors, making them more appealing to monkeys and birds for consumption.



\*Ref: Reichorui Zukan [Invitation to Primatology], Japan Monkey Centre, Information Design Associates Kyoto, 2018.

# 3

### Yaku sika deer

### Subspecies of the sika deer

There are about 50 species of deer worldwide, but only the sika deer is naturally distributed in Japan. The sika deer is further divided into seven subspecies, including the Ezo sika deer (in Hokkaido), the Honshu sika deer (in Honshu), and the Kyusyu sika deer (in Kyushu). The Yaku sika deer is the smallest subspecies of the sika deer and is found only in Yakushima and neighboring Kuchinoerabu-jima.



Yaku sika deer Weight: Approx. 19 - 37 kg



Honshu sika deer Weight: Approx. 49 - 80 kg



Yezo sika deer Weight: Approx. 80 - 150 kg

### Courting and parenting

In fall, the deer's mating season, males emit loud "feee-yo" calls. In forests, they can be seen chasing after females or engaging in antler-to-antler combat with other males. The females give birth to their first fawn in early summer when they are three to five years old. Juvenile male and female deer stay with their mothers until age two. The female fawns continue to have relationships with their mothers afterward, whereas the male fawns seem to become estranged.

### Different coat patterns in summer and winter?

Deer change color between summer and winter furs. Their long winter fur is shed in spring, revealing a lighter body color with a fawn-like pattern. As fall progresses, their hair grows longer and becomes darker. Especially in male deer, the body color becomes prominently dark.



### Interesting facts about antlers

Antlers, which only grow in males, regenerate anew every year. In early spring, the old antlers shed, and the new ones, covered with short, velvety hair, start growing. The skins peel off by autumn, transforming into "bleached antlers" resembling white bones.



At one to two years, male deer develop bump-like protrusions, where small antlers, just a few centimeters, begin to grow. The antlers grow more significantly with each shedding, typically branching into impressive three-tined antlers when the deer is five or older. Yaku sika deer often remain three-tined even after growing up, and four-tined antlers are rare.

### The plants they like and the plants they dislike

The deer are herbivores and generally prefer soft plants, consuming almost all types of plants except those that are highly poisonous. They also feed on fallen leaves frequently.

As a result, in the Western Area, where the deer density is high, plants disliked by the deer remain abundant. We are currently studying the distribution of deer and their impact on the forests while considering countermeasures.



Yaku sika deer feeding



## Life in the Past in the Western Area

The Western Area was once inhabited by humans, and there used to be settlements in coastal areas.

### People made a living by making charcoal and farming

The Western Area traditionally belonged to the Nagata Settlement. It is said that the second and third sons of the families who could not inherit their family lands within the Settlement began farming and living outside the Settlement

The exact period is unclear, but considering the symbols of houses and place names on a map from 1922, it is believed to be from the late Meiji era to the early Taisho era. People made a living mainly by making charcoal and farming, making camphor from camphor trees, and growing shiitake mushrooms





### Forestry company employees also lived there

From 1951 to 1965, a private company owned part of the Western Area and harvested wood for pulp.

As a result, the existing forests near the coast in the Western Area are secondary forests that have had some human intervention.

Around 1960, propane gas became popular in Yakushima, gradually reducing the island's need for charcoal. It seems that there have been no inhabitants in the Western Area since the 1940s. The Seibu Rindo Western Forest Path was opened in 1967.

# **Conservation efforts**

1964	A part of Yakushima was designated as the Kirishima-Yaku National Park.
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1975	Nationally designated as the Kuniwaridake Wildlife Protection Area. (Transferred from the national government to the prefectural
1773	government in 1984)

In response to growing public opposition to logging, some logging plans 1982 were suspended, and 611 hectares on the right bank of the Segiri River were designated as the Segiri River Academic Reference Forest Reserve.

The Segiri River Basin was incorporated into the Kirishima-Yaku 1983 National Park

The Forestry Agency designated a 15,185-ha area containing 1992 the Western Area a forest ecosystem reserve.

A part of Yakushima, including the Western Area, was 1993 registered as a World Natural Heritage site.

Opposition by local residents and researchers led to 1997 reconsideration within the "Yakushima Circumferential Road Development Study Committee," and plans to widen the Seibu Rindo Western Forest Path were canceled. 1999 Heisei 11 (1999)

The area along the Seibu Rindo Western Forest Path was 2002 designated as a National Park Special Protection Zone.

Kagoshima Prefecture purchased 418 hectares of privately 2005 owned land for nature conservation.

The Yakushima region was separated from the Kirishima-Yaku 2012 National Park, giving rise to the Yakushima National Park.

> The Forestry Agency designated a 62-ha area near the Segiri River, adjacent to the World Heritage site, as a protected forest area for the rare population of Yakushima white pines.

### Initiatives by local residents and researchers

### [Research]

- Population survey of Yakushima white pines (by the Yakushima White Pines Study Group)
- ·Long-term research on Yaku sika deer, Yakushima macagues,

### and forests (by researchers)

#### [Other]

- · Yakushima Studies Society (a society of islanders and researchers) Outdoor observation meetings (Researcher-led outreach activities)
- ·Volunteer cleaning activities

2014





place where you can drive through a World Heritage Site.

Nagata Yakushima Anbo

Western Area of Yakushima is the only

For safe and fun driving

Rthings

you should know

Watch out for oncoming traffic

The road will get very narrow.

When passing other cars, use the refuge areas. Even during the day, keep your lights on to make your presence known.

### Watch out for animals crossing

Animals may suddenly jump out onto the road. Drive slowly, paying attention to the road ahead.

### No public restrooms

There are no public restrooms on the Seibu Rindo Western Forest Path. The nearest public restrooms are at Nagata Inaka Beach and Ohko-no-taki Waterfall. Please go to one in advance.

### Almost no cell phone reception

There are many places in the Western Area without cell phone reception and no pay phones. Drive safely to prevent accidents.

### Be careful when driving at night

Nighttime driving on the Seibu Rindo Western Forest Path is not recommended due to safety concerns. A road closure might occur during a heavy rain or storm so check road information beforehand



 In the Western Area, the curve mirrors are numbered from 1 to 80 in order from north to south. (Near the approach path to Yakushima Lighthouse: No. 3 / Near Segiri: No. 80)  It takes about one hour by car from Nagata Inaka Beach to Ohko-no-taki Waterfall. What should I do in these situations?

# The Western Area



- Monkeys and deer on the road won't move away from me.
- A Keep going slowly without stopping the car.

If you stop, they will feel safe and become even more immobile, so keep moving slowly. They rarely flee, even when the horn is honked.

- Q What if a monkey threatens me?
- Slowly look away, remain calm, and keep your distance without showing your back!

If a monkey stares at you with its mouth half open, it is threatening you. Monkeys can read humans' facial expressions, so you should not appear scared!

- What if I find a dead monkey or deer?
- A Never touch it with bare hands.

There is a risk of disease transmission. If dead animals block the road, contact the Kagoshima Prefecture Yakushima Office (28 0997-46-2213).

- l've had a traffic accident on the Seibu Rindo Western Forest Path.
- A Don't panic and secure your safety.

Cell phone signals are notably weak in the Western Area and its surroundings. Seek help from passing cars or walk to a location where you can call the police. It is essential to remain calm. Record the location of the accident using your navigation system, smartphone, etc. using the number on the curve mirror as a reference, and take multiple photos of the situation.