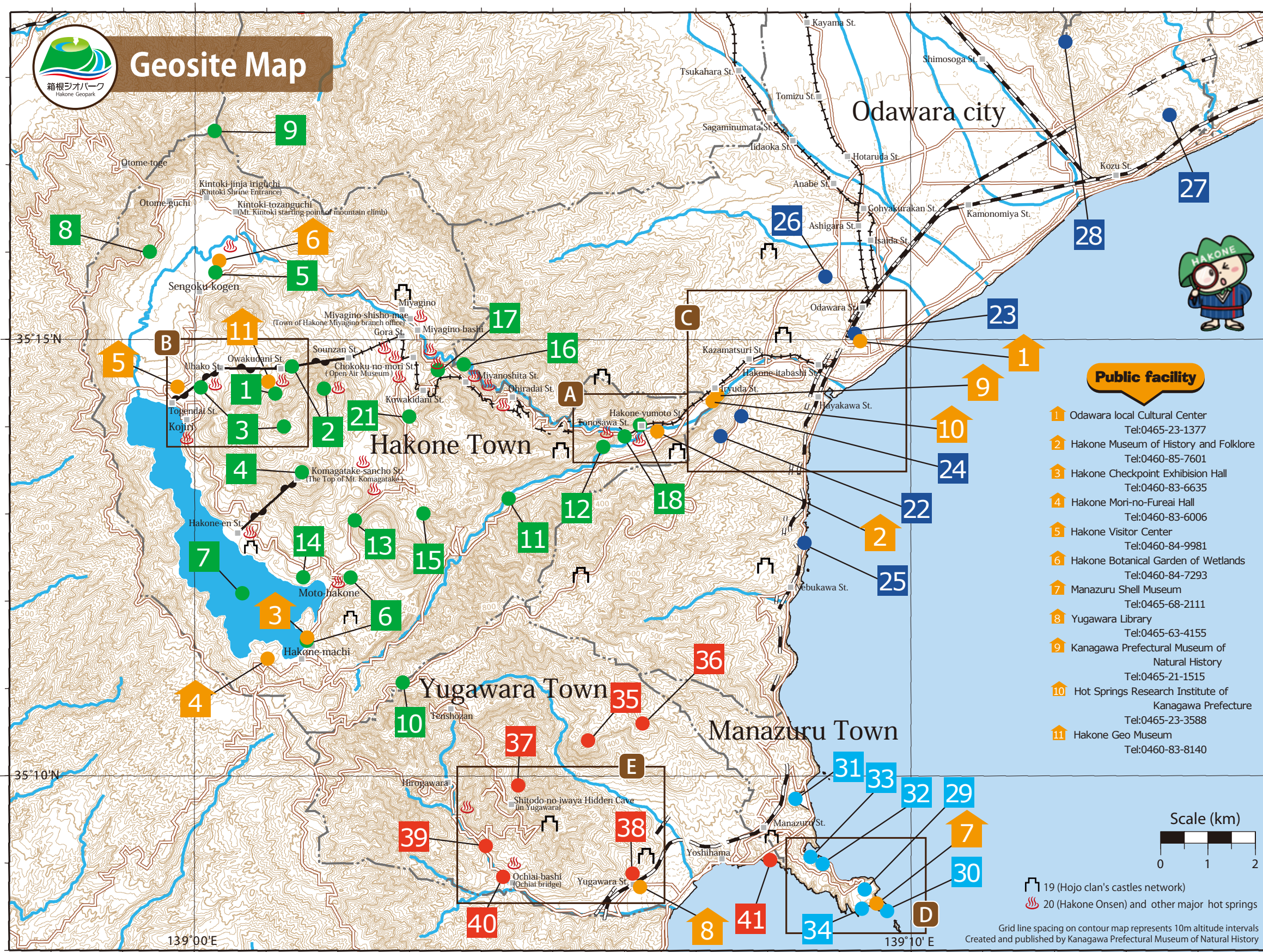


# Hakone Geopark Geosite Map



We here provide a review of the Hakone Geopark from a geological viewpoint—based on resources that describe the nature, history, and culture of the area—to make local residents more aware of and more interested in this area. We also hope that the area provides a great experience for visitors.

## Hakone Geopark All 41 Geosites



### 1 Owakudani (Fumarole Field)

Owakudani was once called the "Valley of Hell", because of the presence of fumarolic gases, but the name was changed to "Owakudani" when the Emperor visited here in 1873. Owakudani was created about 3000 years ago with the collapse of the north side of Mt. Kamiyama. The area contains unique plants, and the hot gases have been used to develop hot springs.



Owakudani

### 2 Mt. Souzan and Owakuzawa Valley

Mt. Souzan and Owakuzawa Valley are landslide zones. In 1910, the Owakuzawa landslides hit areas such as Tonosawa, and 6 people were killed. In 1953, large landslides in the area around Souzan hit the Doryoson temple lodgings, and 13 people were killed. Currently, Kanagawa Prefecture is conducting large-scale earthworks to prevent further landslides.



Owakuzawa

### 3 Mt. Kamiyama and Hummocky Hills

Debris formed by the collapse of Mt. Kamiyama about 3000 years ago blocked the Hayakawa River and Lake Ashinoko was formed. Large rocks, such as Funami-iwa and Kintaro-iwa near Ubako, are chunks of collapsed mountain that surfaced on the debris deposit.



Kintaro-iwa

### 4 Mt. Komagatake

At the base of the Komagatake, one of the central cones, you can see plants such as *Rhododendron tsusii* that thrives in windy rocky areas. The base of Komagatake is covered with greenery, but several lava flows that form the mountain can be recognized if you study the morphology. At the top of the mountain are remains of ancient worship sites, such as "the Bakoseki" rock, where god is said to have descended to earth.



View from the summit

### 5 Sengokuhara Marsh

In the Hakone caldera, there was a lake called Sengokuhara, but the lake was divided into two parts by an eruption of Mt. Kamiyama about 22 thousand years ago, and the Sengokuhara area part became a marsh. You can see examples of plants that grow in such marshlands in the Hakone Botanical Garden of Wetlands.



Sengokuhara Marsh

### 6 Hakone Sekisho (Checkpoint)

The Hakone Sekisho (checkpoint) was one of the most important checkpoints on the steep Hakone section of the old Tokaido (Tokyo to Kyoto and Osaka) Highway. The Hakonemachi Fault, an extension of the Tanna Fault that was the source of the North Izu earthquake of 1930, runs across the base of the peninsula; the fault affected the shape of the central cones.



Hakone Sekisho

### 7 Lake Ashinoko

It is thought that the present shape of Lake Ashinoko developed around 3000 years ago. Its west side is defined by the steep slope of the caldera wall, and its east side by lava flows of younger mountains such as Mt. Kamiyama, etc. Lake Ashinoko has been a sacred lake of Hakone-jinja Shrine.



Lake Ashinoko

### 8 Nagao-toge Pass

You can see the Kamiyama and Kamurigatake mountains from the caldera rim, near the eastern exit of Nagao tunnel. The landscape that the golf courses are on is shaped like a clamshell, formed by the collapse of Mt. Kamiyama about 3000 years ago. To the east of Nagao-toge Pass, you can see an outcrop of a lava flow dipping towards the center of the caldera. The discovery of the outcrop helped reconstruct the geology of Hakone.



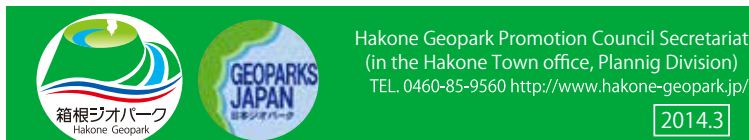
Outcrop at Nagao-toge pass

## A Historical Road Connecting East and West

The Tokaido is the main artery connecting east and west Japan, and has played a major role in Japanese history. During the Warring States Period of the Middle Ages, Odawara-jo and other castles were built. A quarry was opened in this area to meet the demand for stone to build the castles, and mining flourished in the Edo period. Even during the peaceful Edo era, inspection booths (such as the Hakone Sekisho) were placed in this area to protect the city of Edo. The Hakone Geopark, located on the historical Tokaido road, was a region of cultural exchange between east and west.

## A Natural Road Connecting North and South

The Hakone area is located in a boundary zone between the Izu-Bonin Islands (the Izu-Bonin arc) and the main island of Japan (the Honshu arc). The Hakone volcanoes, located at the center of that area, run north to south and form a boundary that divides Japan into east and west. The Hakone volcanoes are part of an arc that connects the Fossa Magna rift area in the Tanzawa mountains in the north to the Izu Peninsula and the Izu-Bonin Islands in the south.



### 13 Motohakone Stone Buddhas

Ancient god-fearing people imagined hell when they passed Shojingaike pond, located on the roadside of Route 1 near Ashinoyu, because of its isolation and the view of the steaming mountain behind the pond. In the 12th century, people inscribed Buddha images on the rocks by the roadside to pray for the safety of travelers on the highway.



Magaibutsu Buddha statues at Motohakone

### 14 Hakone-jinja Shrine

Because the area of Hakone is steep and mountainous, people have been awed by the mountains and have worshipped them as sacred. Minamoto no Yoritomo hid at Hakone-jinja Shrine after being defeated in the war of Ishibashiyama (12th century; before the onset of his administration); as a result, the shrine was increasingly supported by samurai believers, which extended its influence.



Hakone-jinja Shrine

### 15 Hiryu-no-taki Falls

This falls, located west of Hatajuku, is one of the largest falls in Kanagawa Prefecture. The falls has two drops—the upper drop is 15 m, and the lower drop is 25 m. The name Hiryu-no-taki means "falls shaped like a flying dragon". During the Kamakura period, practitioners performed cold-water ablutions by standing under this falls to purify themselves.



Hiryu-no-taki Falls

### 16 Dogashima Valley

Near Miyanoshta, at the bottom of a steep valley formed by the Hayakawa River, you can find rocks that were formed on the sea floor about 4 million years ago, long before the Hakone volcanoes appeared. One of the "Hakone-nanayu" (the seven hot springs) flows from cracks in the rock.



Dogashima Valley

### 9 Mt. Kintokiyama

This stratovolcano was formed by a series of eruptions between 350 and 270 thousand years ago. Initially the mountain was much larger, but the south side collapsed to form its present shape. The volcano's interior is visible from the hiking trail; peculiar plants thrive on the windy rocky surfaces near the top of the mountain.



Mt. Kintokiyama

### 10 Mt. Taikanzan

There is a superb view of Mt. Taikanzan from the southeast rim of the Hakone caldera, at the end of the Toyo Tire Turnpike. From the lookout point on the north side, you can enjoy a panoramic view spanning the Hakone caldera rim of both Yamabushi-toge Pass and Mt. Mikuniyama, Lake Ashinoko and the central cone of Mt. Komagatake, etc.



View from the summit

### 11 Sukumogawa River

Along the bank of the Sukumogawa River, near the Sukumogawa bus stop, you can see many upright tabular rock bodies called "dikes" formed some 250 thousand years ago. The average width of the dikes is 2.9 m, and a total of 215 dikes have been found, showing that the area widened about 650 m in a northeast-southwest direction on account of the intruding magma swarms.



Dikes on Sukumogawa River

### 12 Tamadare-no-taki Falls

You can enjoy the view of this 8-m high and 11-m wide falls at Tenseien Hotel in Hakone-Yumoto. The water that feeds the falls emerges from the boundary between old basement rocks and the newer Hakone lavas. The name of the falls comes from the fine and beautiful Tamadare-beaded hanging screen blind, which it resembles.



Tamadare-no-taki Falls

### 17 Jakotsu-keikoku Valley

The Jakotsu-keikoku Valley, west of Miyanoshta, is known for the salty waters (containing sodium chloride) that feed the Sokokura Onsen. One famous spring is called "Taiko-no-iwaburo" (stone bathtub), because it's said that when Taiko (Toyotomi Hideyoshi) attacked Odawara near Hakone in 1590, he took his warriors with him to the spring to heal their wounds.



Taiko-no-iwaburo

### 18 Shiraishi-jizo & Fukuzumi Ryokan

Strata at the bottom of the Hakone-Yumoto valley were formed by submarine volcanoes around 4 million years ago. These strata include a lot of pumice, giving them their white color and making them soft and easy to carve. Shiraishi-jizo is a Buddha image carved into pumice rocks behind Hakone-Yumoto Station. Rocks of such strata are used on the outer rock walls of Fukuzumi Ryokan, a Japanese-style inn.



Shiraishi-jizo

### 19 Network of Hojo Clan's Castles

The warlords of the Hojo clan constructed the fortresses of Yamanaka (in Mishima city), Ashigara (in Minamishirayama city), and Takanosu (location unknown) in the Hakone mountains, thus utilizing natural topographic features to give protection from threats from the west. Smaller fortresses, such as Tonamine, Yusaka, Goshoyama, and Nebukawa, were also arranged in a network along the main road.



Fujiyama where a fort was built

### 20 Hakone Onsen (Hot Springs)

The history of the Hakone Onsen is very long. Among them, Yumoto Onsen is said to have been developed during the Nara period (8th century). By the early Edo period (17th century), seven hot springs (the "Hakone-nanayu") had been discovered. Now 20 hot springs are present in Hakone. The Hakone Onsen is nicknamed "the department store of hot springs" because of their variety and high quality.



Hakone Onsen at the bottom of Hayakawa River