

## Safety and Precaution Information

### Beware of Volcanic Gas

Volcanic gasses (hydrogen sulfide and sulfur dioxide) are occasionally released in the vicinity of Owakudani. These gasses are highly toxic and can cause physical harm. Strong smells and/or irritation of your eyes, nose or throat are signs that you are in danger. Find shelter or leave the area immediately.

People that should avoid outdoor activity at the park:

- Allergic asthma
- Bronchial disorders
- Respiratory (pulmonary) complaints
- Heart complaints
- Using heart pacemaker equipment
- Poor physical health

If any of the following apply, please take time to consider whether you should avoid outdoor activity at the park or have taken sufficient measures to protect yourself: persons with allergic asthma, bronchial disease, respiratory (pulmonary) complaints, pacemakers or other form of poor physical health, pregnant women, newborn babies or small children, allergy sufferers, the elderly, people with sensitivities leading to asthmatic episodes, etc.

\* When the gas density becomes high, an announcement will be made, so please follow the instructions of the announcement.

### Volcanic gas concentration warning levels

Category	Sulfur dioxide	Hydrogen sulfide	Safety measures
Warning	0.2ppm or more	5ppm or more	Warning information broadcasted
Caution	5ppm or more	10ppm or more	Evacuate indoors/nature trails closed
Danger	10ppm or more	50ppm or more	Evacuation of Owakudani

### Please be careful of strong winds!

Owakudani has an elevation of 1,040m. There are many foggy days, and even during the summer, cloudy or rainy days are chilly, so long sleeves and rain apparel are necessary. Also, since there are often days with strong winds, it is recommended to bring winter clothes or extra layers of clothing.

### Staying safe while at Owakudani

A message from the Hakoneyama Volcanic Disaster Prevention Committee  
The Hakoneyama Volcanic Disaster Prevention Committee consists of representatives of government, police and other related organizations in the Hakone area. The committee works to put safety measures in place related to volcanic activity both in Owakudani and throughout the municipality of Hakone.



## Owakudani Nature Trail

The Owakudani Nature Trail can be walked in groups lead by two guides along about 700m of path in both directions from the vents to the black egg steamer. Walk in the normally off-limits active zone of a volcano and feel up close the living breath of Mt. Hakone. Come try this precious experience!

### How to Participate

#### [Schedule]

4 tours per day (40 minutes per excursion) of up to 30 people can enter this area.  
\* Advance application required. A helmet is worn (available to borrow)

#### [Eligibility]

Elementary school students or older. Groups of 10 or more not allowed.  
\* Able to walk freely (able to run to safety in case of an emergency)

#### [Safety Measure Fees]

500 yen per person (raised funds used for safety measures)  
\* Pay at the Owakudani Information Center at least 20 minutes before the start of the tour.  
\* Persons with asthmatic respiratory or cardiac issues or otherwise in poor health cannot participate.

#### [How to Apply]

Advance application via the HAKONE JAPAN website is required.  
\* For details, visit the Hakone Tourist Association website [hakone-japan.com](http://hakone-japan.com).  
\* Sponsor: Owakudani Park Safety Committee

### Safety Measures

- Round-the-clock measurement of volcanic gas and earth slides.
- Installation of seven shelters able to withstand launched cinders up to 30cm in diameter.
- Provision of emergency supplies including gas masks and goggles to store in the shelters as preparation for emergencies.
- \* Research institutes including the Hot Springs Research Institute of Kanagawa are constantly monitoring Hakone volcanic activity enabling tours to be conducted safely.
- Depending on the volcano conditions, guided entry may be cancelled.
- Tours may also be cancelled for meteorological conditions including rains, strong winds, fog, lightning, snow or earthquakes of JMA seismic intensity 3 or higher.
- Check the website [hakone-japan.com](http://hakone-japan.com) for information about availability or closures.

## Fuji-Hakone-Izu National Park

# 大涌谷

Experience volcanoes in dynamic Hakone



## Owakudani Parking



<http://www.kanagawa-park.or.jp/owakudani/>

**[Hours]** 9:00 to 16:20 (Feb - Nov) / 9:00 to 16:00 (Dec/Jan) (Exit by 16:40)  
When late, you may not be able to get your car out. Return to the parking lot on time. Especially for those riding the ropeway, pay careful attention to the time.  
\* In bad weather the parking lot may be closed early.

**[Fee]** Large 1,580 yen, Normal 530 yen, Motorcycle 110 yen

**[Address]** 1251-1 Sengokuhara, Hakone Town, Ashigarashimo District

\*Reservations not accepted

## Hakone Geomuseum

<http://www.hakone-geomuseum.jp/>

Learn about the wonders of the Hakone Volcano with many geocolumns, experiential exhibits and rock samples. Then, discover the living breath of the volcano in the field at Owakudani.

**[Hours]** 9:00 to 16:00 (open year-round)

\* Subject to closure or changed hours depending on weather, etc.

**[Admission]** 100 yen \* Children younger than school age free

**[Address]** 1F Owakudani Kurotamago-kan 1251 Sengokuhara, Hakone Town, Ashigarashimo District

**[Inquiries]** Hakone Geomuseum TEL: 0460-83-8140

## Local Facilities

- Owakudani Kurotamago-kan ..... TEL : 0460-84-9605
- Hakone Ropeway Owakudani Station ..... TEL : 0460-84-8437
- Hakone Tozan Cable Car Sounzan Station ..... TEL : 0460-82-2117
- Hakone Tozan Train Gora Station ..... TEL : 0460-82-2049
- Izu-Hakone Bus ..... TEL : 0465-22-3166
- Hakone Sightseeing Cruise Togendai Business Office TEL : 0460-84-8618
- MoE Hakone Visitor Center ..... TEL : 0460-84-9981
- Kanagawa Prefectural Natural Environment Conservation Center Hakone Branch ..... TEL : 0460-84-9121

Area roads suffer from traffic that can last over an hour on weekends, Mondays, Golden Week, summer vacation, autumn leaves season and other times. To avoid traffic, we recommend coming early with extra time.

\* During winter, roads subject to freezing and snow. Use winter tires when visiting Owakudani in winter.

\* Beware of strong winds. The parking lot is subject to winds that can cause issues during opening and closing.

## Operations: Kanagawa Prefectural Park Association

6F Kannai First Bldg. 3-8-8 Ougi-cho, Naka Ward, Yokohama City  
URL <http://www.kanagawa-park.or.jp/>

[Inquiries]

### Owakudani Information Center

1251 Sengokuhara, Hakone Town, Ashigarashimo District, Kanagawa Prefecture  
TEL: 0460-84-5201

[Hours] 9:00 to 16:00

URL <http://www.kanagawa-park.or.jp/owakudani/>



# OWAKUDANI

## Owakudani Park Entry Hours

9:00 to 17:00

\* The gate may be closed before 16:00 depending on traffic conditions.

**Parking Lot Hours** 9:00 to 16:20 (Feb - Nov)  
9:00 to 16:00 (Dec/Jan)

\* Persons using the parking lot must enter during the hours of operation.

\* Vehicles must leave the parking lot by 16:40.

\* Vehicles must leave the gate by 17:00.

**Ropeway Hours** 9:00 to 17:00 (Feb - Nov)  
9:00 to 16:15 (Dec/Jan)

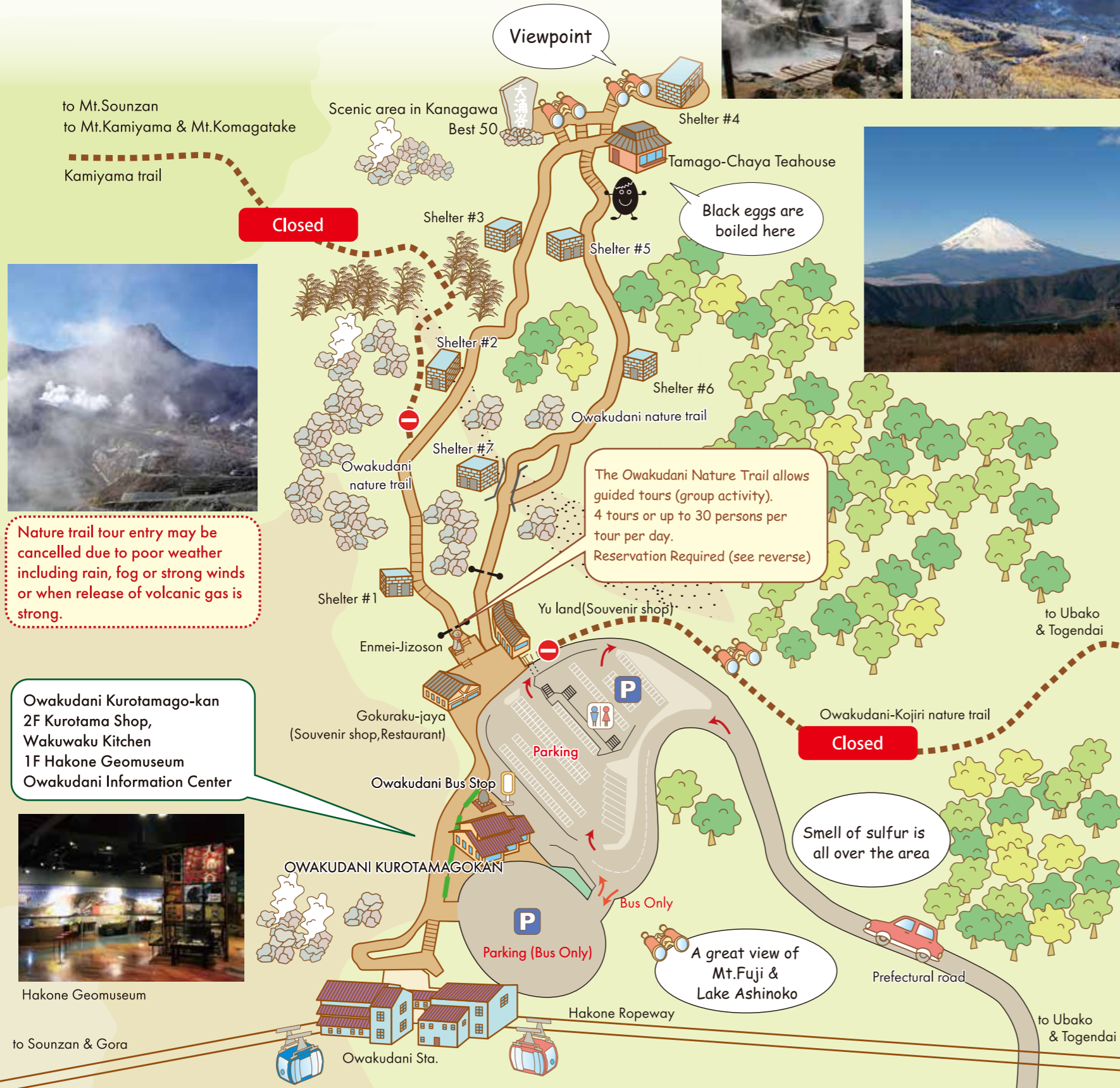
\* Operating hours are subject to change. Check the website, etc., before visiting.

## Feel the earth breathing!

Surrounded by the lush greenery of Hakone, Owakudani can feel like a completely different dimension as the desolate landscape of wilted woods and bleached earth stretches before you.

This is just another form of our living planet. Come feel the breath of the Earth.

Mt.Kanmurigatake  
(Elevation 1,409m)



### Discover Owakudani 1

## OWAKUDANI

Owakudani ("The Great Boiling Valley") was formed approximately 3,000 years ago as a result of the eruption and subsequent collapse of Mt.Kamiyama (elevation: 1,438m). To this day there are still volcanic fumes of hydrogen sulfide being emitted. As a result, timber has wilted and rocks have turned to clay, exposing a bronze-colored hillside. You can see the boiling pools, steam-spewing vents, and the many other activities of the dynamic volcano.



Plants with strong resistance to high ground temperature and acidic soil inhabit the area of volcanic smoke emission.



Venting



Pieris shrubs and pampas grasses

### Plants resistant to acidity

Plants resistant to acidity grow close to the vent zones



*Hydrangea hirta*



*Hydrangea paniculata*



*Fallopia japonica*



*Cladonia thielophila*

### Discover Owakudani 2

## The Origins of Hakone Volcano

Hakone Volcano is characterized by a caldera of 11 km in diameter. Lake Ashinoko is a caldera lake formed in the western part of the caldera, and the local Sengokubara area covers a flat expanse of land on the caldera floor. The caldera developed gradually through two periods of intensive eruption that took place approximately 200 thousand years ago and 80 thousand to 60 thousand years ago. The Kamiyama and Komagatake mountains are volcanic edifices that developed at the center of the caldera central cones, and Owakudani is located on the northern flank of Mt. Kamiyama.

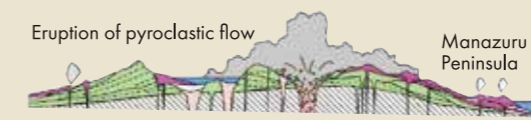
#### (1) 400 thousand – 230 thousand years ago

Hakone was a volcanic cluster consisting of several volcanoes.



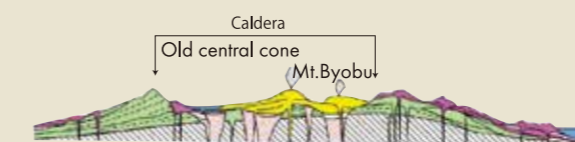
#### (2) 230 thousand – 130 thousand years ago

Major eruptions occurred one after another, forming many small calderas.



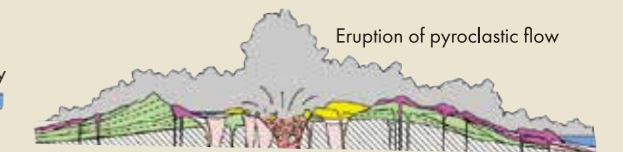
#### (3) 130 thousand – 80 thousand years ago

Small calderas gathered forming a larger one as you see today. Some lava domes, such as Mt. Byobu, were formed in them.



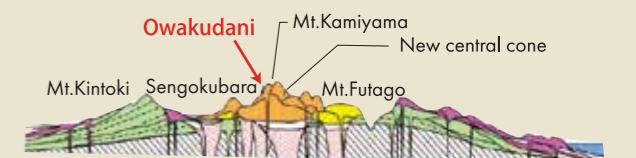
#### (4) 80 thousand – 60 thousand years ago

Again, major eruptions occurred one after another, forming some more small calderas.



#### (5) 60 thousand years ago – today

The central cones were formed in the new calderas.



Material provided by: Geological Society of Japan  
Drawing: Masashi Nagai