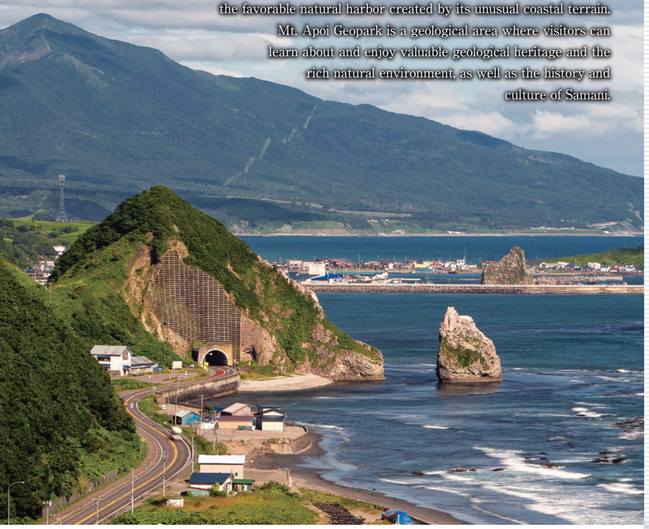
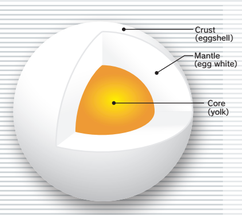
Mt. Apoi Geopark

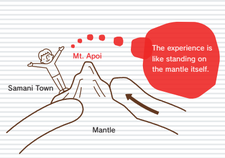
A Story of Gifts from Deep Inside the Earth Connecting Land and People Together



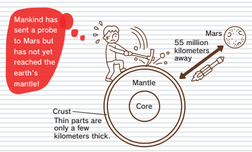
Samani Town in the eastern Hidaka region of Hokkaido is home to mountains and gorges made of peridotite with a purity and variety found in few places worldwide, as well as endemic alpine plant communities that thrive in the area's distinctive soil. The town also has a long history and a rich culture based on its development as a trading hub, thanks to the favorable natural harbor created by its unusual coastal terrain.
Mt. Apoi Geopark is a geological area where visitors can learn about and enjoy valuable geological heritage and the rich natural environment, as well as the history and culture of Samani.

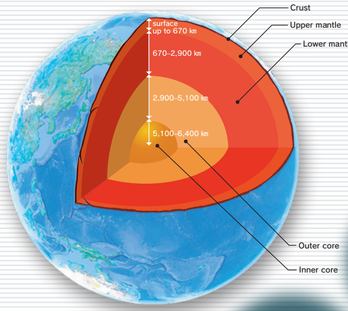


The earth is like a boiled egg, and we live on its shell (the earth's crust). Mt. Apoi is like a mass of egg white (the mantle, which is made of peridotite) that has been pushed onto the surface.



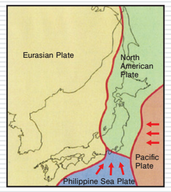
Although mankind has technology to send a probe as far as Mars, nobody has ever bored through the earth's thin crust beneath our feet to reach the mantle far below. In this way, Mt. Apoi is part of the area's valuable geological heritage providing a window into an unknown world even more mysterious than Mars.





Geology

So, how was Mt. Apoi's peridotite – which is more distant from us than Mars – made? It is all related to the Earth's dynamic movement.
The earth's surface is covered with a dozen or so huge slabs of rock called tectonic plates, each of which moves at a speed of several centimeters per year. These plates come into contact at their boundaries and slide past one another. Mt. Apoi was formed as a result of the collision of gigantic tectonic plates some 13 million years ago.



Current tectonic plate location

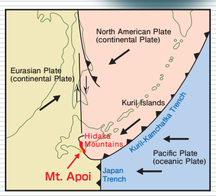
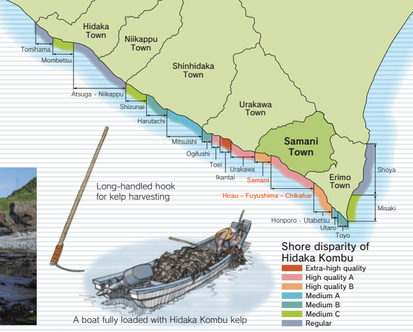


Plate location 13 million years ago

Human

The key product of Samani's fishing industry is Mitsuishi Kombu kelp (Laminaria angustata), which is known as Hidaka Kombu throughout Japan. From July to September, when kelp harvesting is at its peak, the beaches of Samani are a hive of activity. Hidaka Kombu is spread out on the gravel and sun-dried as soon as it is harvested.
Hidaka Kombu prices depend on where it was harvested. All Samani shores are ranked as high quality. The high quality of the local kombu kelp is attributed to the presence of Mt. Apoi and its peridotite, which is rich in iron, magnesium and other minerals. The nutrient-rich water that flows from the mountain into the sea may contribute to the fine quality of the local kelp.

The waters off the Hidaka coast are known as fertile fishing grounds where the warm Tsugaru current, which branches off the Tsushima current flowing northward along the Sea of Japan coast, meets the cold Oyashio (or Kuril) current flowing southward from the eastern side of the Kuril Islands along the eastern coast of Hokkaido. As a result, salmon, Alaska pollock, squid and other fish are caught off the Samani coast (Mt. Apoi Geopark). The coastal waters are also thriving fishing grounds for octopuses, flounders, sea urchins, whelks and the like, as well as kombu kelp and other types of seaweed.



A boat fully loaded with Hidaka Kombu kelp

Ecology

Although Mt. Apoi is only 810 m high, approximately 80 species of alpine plants grow on its slopes – including 20 or so endemic subspecies and varieties. Such a large concentration of endemic species in one region is rare throughout the world, and as a result, Mt. Apoi's colonies of alpine flora are one of only six special natural monuments of Japan found in Hokkaido.


Hidakaso
Callianthemum miyabeanum


Ezokozorina
Hypochoeris crepidioides


Sami-yukiwari
Primula modesta var. samanimontana

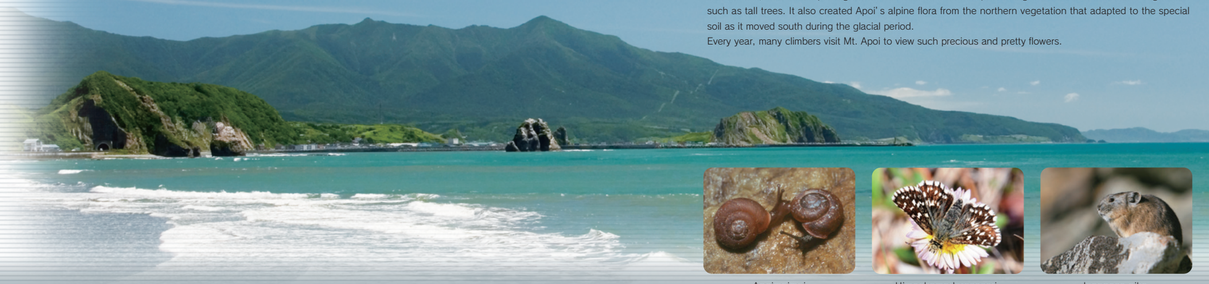

Apoiazumagiku
Erigron thunbergii subsp. glabratus var. angustifolius


Apoitachitsubosumire
Erigron thunbergii subsp. glabratus var. angustifolius


Apoimantema
Silene repens var. apoiensis


Samaniotogiri
Hyericum samaniense

Mt. Apoi's valuable alpine vegetation is nurtured by the cool coastal climate, and is also greatly influenced by the Apoi peridotite. Soil created from the peridotite contains large quantities of element (nickel, magnesium and the like) that inhibit plant growth. This acts as a barrier, preventing the incursion of lowland vegetation such as tall trees. It also created Apoi's alpine flora from the northern vegetation that adapted to the special soil as it moved south during the glacial period.
Every year, many climbers visit Mt. Apoi to view such precious and pretty flowers.



Apoimaimai
Paragnia apoiensis

Himechamadaraseseri
Pyrgus maroc

Japanese pika
Ochotona hyperborea yesoensis

GEO STORY

ACCESS

By bus

- Sapporo → JR Hokkaido Bus[Exp. Bus "Eimo"] 1 round trip / day (3 hr. 45 min.) → Urakawa Terminal → JR Hokkaido Bus (25 min.) → Samani
- Sapporo → Donan Bus[Exp. Bus "Pegasus"] 5 rounds trip / day (3 hr. 45 min.) → Urakawa Town Office → JR Hokkaido Bus (30 min.) → Samani
- New Chitose Airport → JR Hokkaido Bus[Exp. Bus "Hidaka-Yushun"] 1 round trip on weekends and holidays (3 hr.) → Samani
- New Chitose Airport → Donan Bus(30 min.) → Numanotata Sta. → Bus Line from Tomakomai
- Tomakomai → Donan Bus / JR Hokkaido Bus(Transfer at Shizunai and/or Urakawa)(4.5 hr. – 5.5 hr.) → Samani
- Tomakomai → JR Hokkaido Bus[Exp. Bus "Tomamo"] 1 round trip / day (3 hr. 20min.) → Samani
- Tomakomai → JR Hokkaido Bus[Exp. Bus "Tomamo"] 1 round trip / day (3 hr. 20min.) → Samani

※If traveling from New Chitose Airport to Samani, you can also take buses from the Ayashi Bus Terminal in Sapporo.

By car

- Obihiro → Tokachi bus (2hr. 20min.) → Hiroo → JR Hokkaido bus, 3 rounds trip / on weekends and holiday(2hr.) → Samani
- Sapporo-Nishimi IC → Tomakomai-Higashi IC → Hidaka Expressway (60km) → Hidaka-Asuga IC → Hidaka-Asuga IC → Samani
- New Chitose Airport → National highway (25km) → Numanotata-Higashi IC → Hidaka Expressway (52km) → Hidaka-Asuga IC → National highway (76km) → Samani
- Tokachi-Obihiro Airport → Prefectural road / National highway (32km) → Tsai → National highway (12km) → Toyoni → National highway (Tomma Road / Nozuka Pass) (63km) → Nishi-Horobetsu, Urakawa Town → National highway (9km) → Samani

Mt. Apoi Geopark Visitor Center

The Mt. Apoi Geopark Visitor Center provides information to maximize enjoyment of the geopark through exhibits, videos, and commentary on Samani's geological and geomorphological characteristics, natural environment, history, culture, and industry. It also provides real-time information on alpine plants and brown bears among other things, to make climbing Mt. Apoi a safe and pleasant experience.

Open	April – November (Inquire for visits between December and March.)
Closed	Open every day during the season
Hours	9:00–17:00
Admission	Free
Inquiries	Tel.: 0146-36-3601 E-mail: apoi.gvc@iris.ocn.ne.jp

Mt. Apoi Peridotite Plaza

This plaza showcases polished specimens of peridotite and other rocks from the Hidaka Mountains, which are used for practical training by university students, and other purposes.

Samani Folk Museum

This small folk museum at the base of Cape Enrumu showcases historical artifacts relating to Samani, which thrived from relatively early in Hokkaido's short history. Its old documents from Tojuin Temple (collectively designated an Important Cultural Property of Japan) are particularly noteworthy.

Open	All year round
Closed	Mondays and year-end/New Year holidays
Hours	10:00–16:30
Admission	Free
Inquiries	Tel.: 0146-36-3335 E-mail: samanikyoudokan@future.ocn.ne.jp

Samani Library

A collection of approx. 93,000 books, as well as magazines, a multimedia space, and a seminar hall. Countless books on Samani and Mt. Apoi Geopark's natural history can be found here.

Open	All year round
Closed	Mondays, last weekday of every month and year-end/New Year holidays
Hours	10:00–18:00/Sundays 10:00–17:00
Inquiries	Tel.: 0146-36-4181 E-mail: library-302@air.ocn.ne.jp

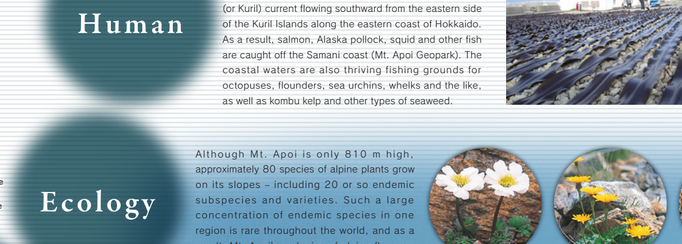
LEARN

Lodging facilities

Apoi Sanso Hotel

Apoi Sanso Hotel is located near the Mt. Apoi trailhead. It is known for its views of Mt. Apoi and the Pacific Ocean, and for its warm hospitality.

Number of guestrooms	19
Capacity	59 guests
Inquiries	Tel.: 0146-36-5211 E-mail: samani@apoi-sanso.co.jp



Iwateya
(Japanese-style inn)

Number of guestrooms	5
Capacity	5–6 guests
Tel.	0146-36-2105

Kanpaku
(Japanese-style inn)

Number of guestrooms	7
Capacity	25 guests
Tel.	0146-36-5533

Business Hotel Plaza Misuzu

Number of guestrooms	6
Capacity	9 guests
Tel.	0146-36-2159 or 36-4450

Ajikatamura
(Japanese-style inn)

Number of guestrooms	10
Capacity	20 guests
Tel.	0146-36-2363

Mt. Apoi Survey & Research Support Center

An inexpensive accommodation facility for researchers and students involved in research related to Mt. Apoi Geopark (Samani Town). Meals are not provided but cooking facilities are available. Rock cutters and polishing machines are also available for use at all times.

Number of guestrooms	5 private rooms, 1 hall
Capacity	55 guests (including hall)
Tel.	0146-36-2120 (Samani Commerce, Industry and Tourism Dept.)

STAY

Restaurants

Benkei / Enraku
Genre: Sushi, Chinese cuisine, Izakaya
Tel.: 0146-36-2159
Closed: Monday

Avion
Genre: Restaurat
Tel.: 0146-36-3283
Closed: Monday

Ominaeshi
Genre: Japanese cuisine
Tel.: 0146-26-7878
Closed: Wednesday

Kuina
Genre: Ramen restaurant
Tel.: 0146-36-4755
Closed: Thursday

Hyakuryo
Genre: Restaurant
Tel.: 0146-36-2417
Closed: Irregular holidays

Senryu
Genre: Ramen restaurant
Tel.: 0146-36-3533
Closed: Irregular holidays

Sobadokoro Ajiyoshi
Genre: Soba noodle
Tel.: 0146-36-4514
Closed: Irregular holidays

Ajikatamura
Genre: Restaurant
Tel.: 0146-36-2363
Closed: Sunday

Kurumaya Drive-in
Genre: Restaurant
Tel.: 0146-36-4177
Closed: Irregular holidays

Shushin
Genre: Restaurant
Tel.: 0146-36-2511
Closed: Tuesday

Niku-doraku
Genre: grilled meat restaurant
Tel.: 0146-36-2051
Closed: Monday

Yakiniku Chiba
(Reservation is required)
Genre: grilled meat restaurant
Tel.: 090-2323-5846
Closed: Monday and Tuesday

Kiminoya
Genre: Restaurant, Izakaya
Tel.: 0146-36-4262
Closed: Irregular holidays

Ikko
Genre: Restaurant
Tel.: 0146-36-5100
Closed: Irregular holidays

Inakaya
Genre: Izakaya
Tel.: 0146-36-3418
Closed: Monday

Ippuku
Genre: Izakaya
Tel.: 0146-36-5550
Closed: Sunday

Hoshi-no-Aya (Apoi Sanso Hotel)
Genre: Restaurant
Tel.: 0146-36-5211
Closed: Open every day

Recommended food

Samani Tourist Information Center
(Former Samani Sta.)

The Information Center is also where you can buy Hidaka Kombu and other kelp products as well as various geopark souvenirs.

Closed	Wednesday and Thursday during Nov. to Mar. year-end/New Year holidays
Open	8:30–16:30 Weekdays during Nov. to Mar. 10:00–16:00
Tel.	0146-36-2551

Seaside marine product market

Whelks of the highest quality and other Samani seafood delicacies are sold at reasonable prices.

Kashibe Suisan Ltd.

Open	8:30–17:00 Sunday 9:00–15:00
Closed	Irregular holidays
Tel.	0146-36-4823

Takomamma boiled octpus paste/ Tsubumeshi (rice cooked with whelks)

Paste made from the eggs of locally caught octopuses, and rice cooked with whelks are popular with tourists.

Marusan Kudo Store (Convenience Store)

Open	8:30–20:00
Closed	Open daily
Tel.	0146-36-2355

Specially-made Oyaki
(Japanese-style waffles)

Sweet bean-paste sandwiched between flour waffles and cooked to perfection

Nakamura Oyaki (confectioner)

Open	10:00–17:00
Closed	Sundays
Tel.	0146-36-4948

FOOD

Visit the Mt. Apoi Geopark website for information on the geopark and Samani Town.

https://www.apoi-geopark.jp/english/

Mt. Apoi Geopark Mascots

Mt. Apoi Geopark has two mascots: Karan-kun, born out of local pendotite, and Apoi-chan, an alpine plant fairy. Representing the area's hard stone, Karan-kun (the term karan means pendotite in Japanese) is strong-willed with a keen sense of justice, but a bit scatterbrained. Apoi-chan is bright like the sun, always kind and reliable.

Mt. Apoi Geopark Promotion Council in Samani
Postal code: 058-8501
Secretariat: Commerce, Industry and Tourism Department, Samani Town
1-21 Odori, Samani Town, Hokkaido Pref.
Tel.: 0146-36-2111 (switchboard) 0146-36-2120 (Direct phone)
Fax: 0146-36-2662
E-mail: apoi-geopark@samani.jp

A total of 35 sites in 5 areas

Area A
Horomankyo Area

A1	Geological	Power Station No. 2
A2	Geological	River Beach near the Old Quarry
A3	Geological	Japanese White Pine Monument
A4	Geological	Fudo-no-sawa
A5	Geological	Dam of Power Station No. 2
A6	Geological	Horoman-gawa Inari Shrine
A7	Geological	Horoman Dam (dam of Power Station No. 3)

Area B
Mt. Apoi Area

B1	Ecological	Rest Spot No. 4
B2	Ecological	Alpine Plant Restoration Test Site
B3	Geological	Fifth-stage mountain lodge
B4	Geological	Sixth to seventh stages
B5	Geological	Umanose flower fields
B6	Ecological	Mt. Apoi
B7	Ecological	The former Horoman flower fields
B8	Geological	Mt. Apoi to Mt. Yoshida
B9	Geological	Mt. Yoshida
B10	Geological	Mt. Pinneshiri

Area C
Samani Coast Area

C1	Geological	Shiogama Tunnel and Rosoku-iwa
C2	Geological	Oyako-iwa and Sobira-iwa
C3	Geological	Cape Enrumu
C4	Geological	Mt. Kannon
C5	Historical	Tojuin Temple
C6	Geological	Byobu Cliff in Hirau
C7	Geological	Old quarry behind Samani Elementary School
C8	Historical	Okada District cise (traditional Ainu dwelling)

Area D
Hidaka Yabakei Area

D1	Geological	Ana-iwa in Fuyushima
D2	Geological	Fault at the Higashi Fuyushima Tunnel
D3	Geological	Metagabbro at the Kotoni Tunnel
D4	Geological	Taisho Tunnel
D5	Geological	Geological fold at the Ruranbetsu Tunnel
D6	Historical	Samani Mountain Path and Wasuke Jizo
D7	Geological	Former Plate Boundary at the Fuyushima Ooma

Area E
Shintomi Area

E2	Geological	Lenticular sandstone at the Samani Dam
E3	Geological	Chert in Shintomi
E4	Geological	Limestone blocks in Matsuokazawa

Sites refer to the Geopark's highlights, which include Geological, Ecological and Historical sites.

Check out the sites using a smart phone or tablet PC. Free app "Geopark"

This free app shows pictorial map information and present location using the GPS function of the mobile device. The app displays an overview and photograph of each site, tourist spot, restaurant, accommodation facility and the like in Mt. Apoi Geopark.

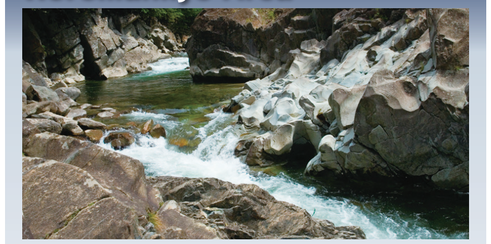
The Geopark app can be downloaded free of charge from the Apple App Store or Google Play Store, or via the QR code below.

App Store 【iPhone】

Google Play 【Android】

This map data is based on topographic maps published by Geospatial Information Authority of Japan with its approval. (Approval Number JYOU-SHI No.419-GISMAP40298 2017)

A gorge of peridotites
Horomankyo Area



The Horomankyo Gorge, which is made up of peridotites, stretches approximately 8 km to the east of Mt. Apoi where unspoiled mixed coniferous and broad-leaved forests extend along the mountainside. In particular, the predominant spread of Kitagoyo (P. parviflora var. pentaphylla) trees here at the northern limit of their habitat creates unique scenery that led to the area's designation as a Natural Monument of Japan in 1943. Locally known as a favorable late-October autumn foliage spot. The area is also home to hydroelectric power facilities that paved the way for the development of electricity sources in the Hidaka region in the early years of the Showa period (1926-1989), thus creating an air of industrial heritage. Although the forest road here is narrow and unpaved, the presence of evacuation spaces at key points allows vehicular passage.
The Horomankyo Gorge, which is located within the 10km² Horoman peridotite complex, provides insights into the world of the earth's deep mantle. The area is dotted with sites that allow researchers to observe various types of peridotite.


Kitagoyo evergreens (a Natural Monument of Japan) and autumn leaves


Man-made Lake Horoman


Hydroelectric power plant with a history of over 70 years

Endemic alpine plants supported by peridotite
Mt. Apoi Area

Mt. Apoi is relatively easy to climb because no heavy gear is required. However, climbers need a certain level of fitness to negotiate the 700 m-long medium-gradient approach to the trailhead, which is at an elevation of 80 meters about a kilometer inland.
After the trailhead is a stretch of mixed coniferous and broad-leaved forests that are home to a variety of herbaceous plants. Near the fifth-stage mountain lodge is the forest limit, where a dwarf stone pine zone extends over rugged peridotite ground. Colorful alpine plants also begin to stand out in this area. The trail here provides panoramic views of the Pacific Ocean on clear days, and the Umanose area also affords spectacular views of the Hidaka Mountains and other sights.
It takes between 2.5 and 3.5 hours to reach the summit, and 4.5 to 6 hours for the round trip. Mt. Apoi — a rich habitat for flowers — is made up of peridotites from deep in the earth's mantle. Climbers flock there year after year to enjoy its precious natural environment.


Mixed coniferous and broad-leaved forests extend to the fifth stage of the mountain


A natural rock garden on the ridge


Exposed peridotite along the ridge

A trading center known for its unusually shaped coastal rocks
Samani Coast Area

In contrast to the geology of the towering Apoi Mountains, the area to their west is characterized by gently sloping terrain, with Samani Town center located on the coastline. Along with the Apoi Mountains, rocky peaks of varying sizes flanking the sea characterize the region's landscape. The unique scenery here is associated with numerous legends of the Ainu, who have lived in harmony with the natural environment for hundreds of years. One of these rocky mountains is Mt. Kannon, thought to have previously been the site of a chashi (fort). At a height of only 100 meters or so, this peak overlooks Samani Fishing Port and has an observatory that affords sweeping views of rock formations in the sea as well as Mt. Apoi and other local icons.
Cape Enrumu on the coast east of Samani Fishing Port is an island connected to the mainland by a sandbar. The 1799 establishment of the Samani Kaisho outpost office by the Edo shogunate at the base of Cape Enrumu provided significant support for Samani's development. The observation platform here is an ideal spot from which to view Mt. Apoi Geopark.


Oyako-iwa – the subject of a sad Ainu legend


Tojuin Temple – one of the Three Government Temples of Ezo and a structure that has witnessed the history of Hokkaido' s development


Platy joints at Cape Enrumu, a land-tied island

Geosite of colliding plates, and an ancient route
Hidaka Yabakei Area

Hidaka Yabakei is a 7 km stretch of precipitous cliffs along the coast of the Pacific Ocean, into which the foot of Mt. Apoi plunges. It is believed to mark the place where the Eurasian Plate and the North American Plate once collided. Part of the boundary (the Hidaka Main Thrust) between the plates remains in this area.
Located at the southern end of the Hidaka Mountains along with National Route 336 (also known as the Golden Road) in Erimo Town, this area used to be notoriously difficult to pass. The Samani Mountain Path was built on the cliffs around 200 years ago to facilitate passage, and is now used as a footpath. At the bottom of the cliffs, high-quality Hidaka Kombu kelp (also known as Mitsuishi Kombu or Laminaria angustata Kjellman) thrives on nutrients from the region's peridotite. Surf boats harvesting kelp, and locals sun-drying the crops are typical summer scenes in this area.

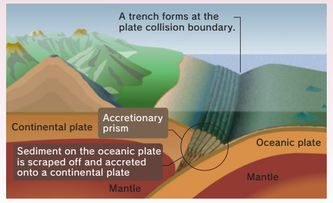

Ana-iwa sea cave in Fuyushima


Frozen Ohonai Waterfall in winter


Wasuke Jizo statue at the Samani Mountain Path east trailhead

Rocks from far-off southern seas
Shintomi Area

The Japanese archipelago is an aggregation of accretionary prisms. These are formed from the surface layer of an oceanic plate that is scraped off and accreted onto a continental plate when the two collide, and the former subducts beneath the latter in a trench on the ocean floor. Sandstone and mudstone or sediment from the overriding plate as well as limestone, chert and basalt from southern seas thousands of kilometers away are mixed and undergo deformation, forming a rough aggregate of different rocks known as a mélange.
Limestone is distributed extensively in and around the Shintomi Area, and has long been mined there. This rock is also known to derive from accretionary prisms because outcrops in the area have a typical mélange structure without continuous bedding.



SITE MAP