



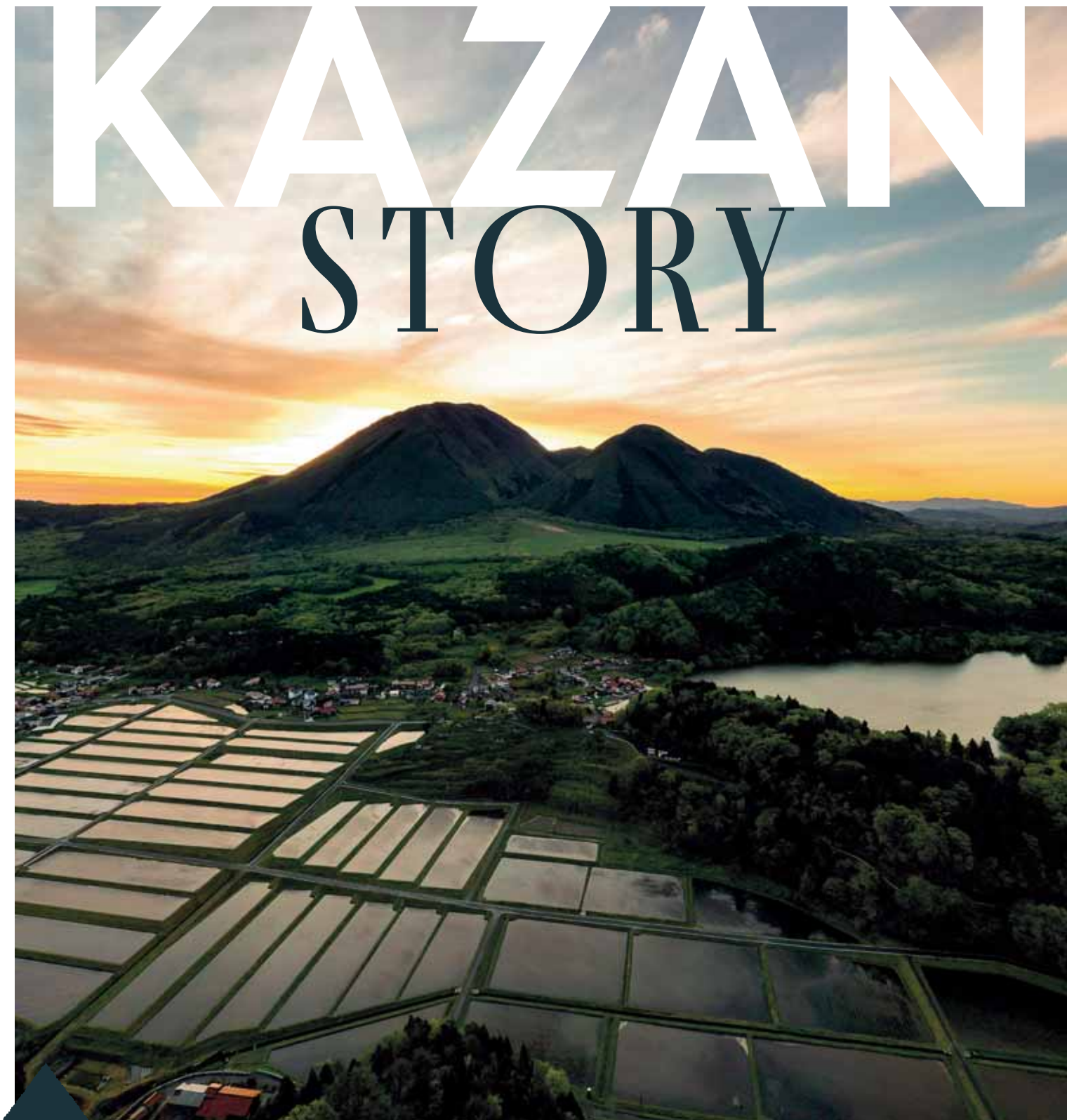
Japan Heritage Oda City

Eternal History told through Iwami's Volcanoes

— Trip of Discovery to the “Jomon Forest” and “Silver Mine” —

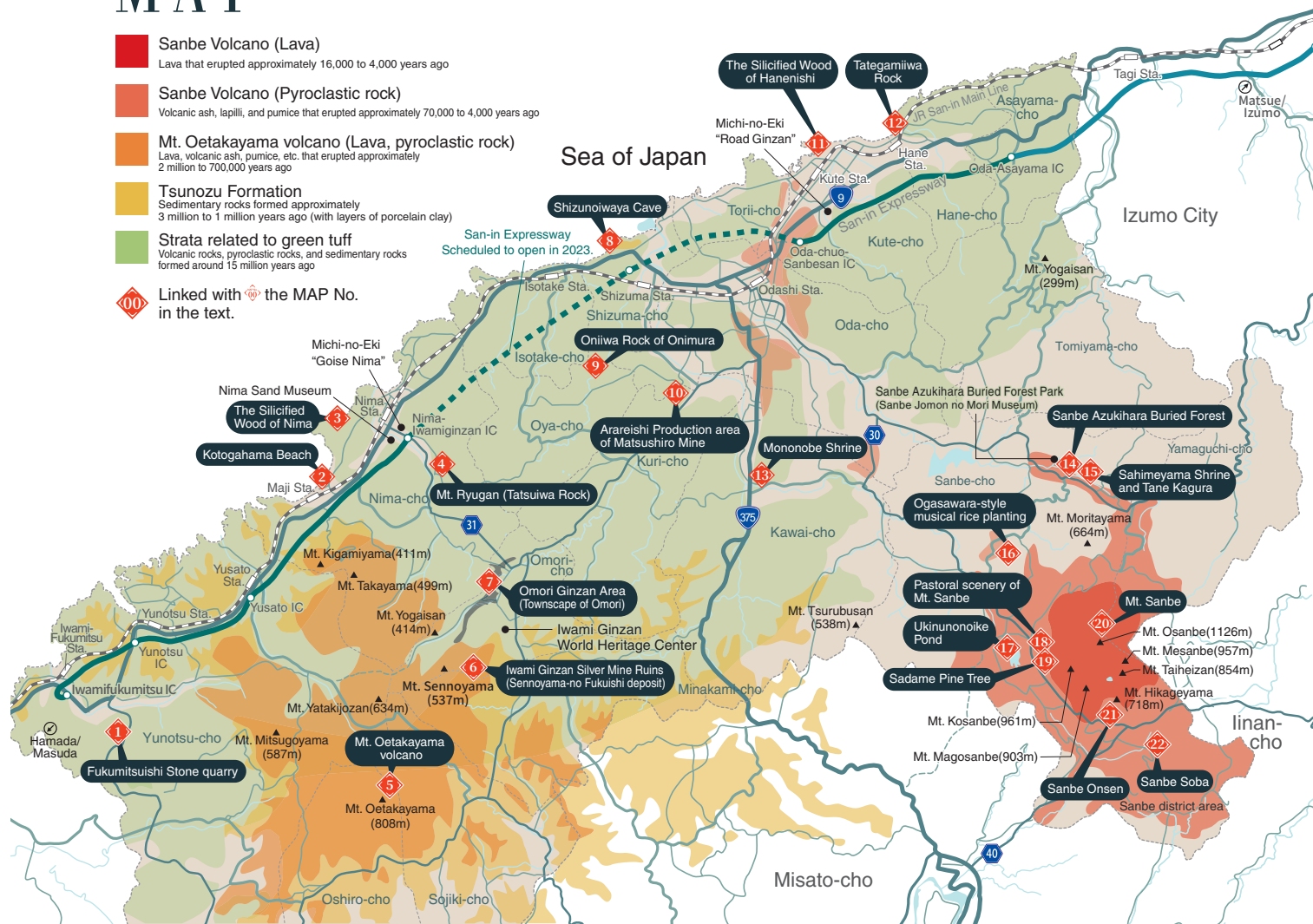


KAZAN STORY



MAP

- **Sanbe Volcano (Lava)**
Lava that erupted approximately 16,000 to 4,000 years ago
- **Sanbe Volcano (Pyroclastic rock)**
Volcanic ash, lapilli, and pumice that erupted approximately 70,000 to 4,000 years ago
- **Mt. Oetakayama volcano (Lava, pyroclastic rock)**
Lava, volcanic ash, pumice, etc. that erupted approximately 2 million to 700,000 years ago
- **Tsunozu Formation**
Sedimentary rocks formed approximately 3 million to 1 million years ago (with layers of porcelain clay)
- **Strata related to green tuff**
Volcanic rocks, pyroclastic rocks, and sedimentary rocks formed around 15 million years ago
- 00 **Linked with the MAP No. in the text.**



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Oda City Japan Heritage
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Walking to Oda City Japan Heritage Sites

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As you descend the stairs to an underground room, you encounter several huge trees towering in front of you. These trees from the Jomon period (14,000 to 300 BCE), which were buried deep underground by the eruption of Mt. Sanbe, have been preserved through the ages to appear just as they were so long ago. Japan is a land of volcanoes. Although volcanic eruptions threaten the lives of the people, they have brought various blessings to "Iwami no Kuni Oda" (Oda in the Iwami Province). The ore deposits of the Iwami Ginzan Silver Mine, which once made "Cipangu (Japan)" famous around the world, were also born of the magma from those eruptions. And the bountiful land nurtured by the volcano has enriched the lives of its inhabitants. "Iwami no Kuni Oda" where the history of volcanoes lives on in the roots of daily life. Here, a journey of discovering the bounty of the land of fire awaits you.



POINT 1 Sanbe Volcano where a Jomon Forest remains



Mt. Sanbe is a symbol of Oda City and is one of the mythical mountains that appears in the Kunibiki (Land-Pulling) Myth. The peaks created by the volcano became objects of worship, and the volcanic ash that flowed down at the foot of the mountain preserved a forest from the Jomon period. In addition, the graceful scenery of the grassland was created by the activities of the people who made good use of the volcanic ash soil.

POINT 2 Mt. Oetakayama volcano that gave birth to the Iwami Ginzan Silver Mine



In the 16th century, silver from the Iwami Ginzan Silver Mine had a great influence not only on Japan, but also on the world during the Age of Discovery. The driving force that allowed this mine to achieve such historical magnificence was the "Fukuishi" (volcanic silver ore) produced by the action of the Mt. Oetakayama volcano. The magnificence of the Iwami Ginzan Silver Mine is also the origin of the history and culture of Oda City.

POINT 3 Volcanoes with green tuff movement



The great crustal movement that split the edge of the Asian continent, expanded the Sea of Japan, and formed the Japanese archipelago, was accompanied by intense volcanic activity. The green tuff that is characteristic of the volcanic ejecta thrown up during that activity is distributed widely in Oda City, giving rise to various mineral and rock resources and a richly varied landscape.



About Japan Heritage

Certain things that tell the story of Japan's culture and traditions through the historical charm and unique characteristics of a region are recognized by the Agency for Cultural Affairs as "Japan Heritage." The purpose is to help revitalize regional communities through the comprehensive community-led development and utilization of various groups of tangible and intangible cultural properties of great attractiveness that are indispensable for telling such stories, including strategically disseminating information on these cultural properties not only in Japan but also overseas.

Ancient Jomon Forest reborn in modern times

During the Jomon period, when people lived off the blessings of the mountains and the sea, the Japanese archipelago was covered in forests with huge trees. There is a place that conveys the magnificence of those ancient forests in the present day. The Sanbe Azukihara Buried Forest was miraculously preserved through the eruption of Sanbe Volcano and several fortuitous coincidences. When you look up at the giant trees towering imposingly above you, you may even feel as if you have slipped back in time to a primeval landscape.



A mysterious forest towering underground

MAP No. 14 Sanbe Azukihara Buried Forest

A Jomon period forest with huge trees. The Sanbe Azukihara Buried Forest is a valuable site that gives us a view of an ancient Jomon Forest. This forest lays buried under the ground for about 4000 years.

The excavated forest comprises mainly cedar trees, many of which are massive, with trunks around 2 meters thick. In the underground exhibition room, where the site has been partly excavated, several giant trees stand, still rooted to the ground just as they were when the forest still lived. Even broken off as they are, the tall, straight trunks of these Japanese cedars exceed 10 meters in height, and it is estimated that the height of these trees when they were alive was more than 40 meters. If you look up at the trees, you can imagine the scenery of the forest as it would have been seen by the Jomon people. Untouched by human development, a great forest grew up here over hundreds to thousands of years.

The eruption of Sanbe Volcano played a role in preserving this forest to the present. Although the trees were hit by debris and pyroclastic flows generated by volcanic activity, thanks to a combination of topographical coincidences, they were not knocked down or burnt up, but were buried deep underground and miraculously preserved to the present day.

Sanbe Azukihara Buried Forest Park
(Sanbe Jomon no Mori Museum)
〒694-0003
58-2 Tane, Sanbe-cho, Oda City, Shimane
TEL 0854-86-9500



Yes Yes

An active volcano where you can feel the breath of the earth

MAP No. 20 Mt. Sanbe

Yes Yes



Mt. Sanbe appears in the Kunibiki (Land-Pulling) Myth and is a beloved symbol of the region both in the past and present. With its abundant fields of natural flowers, it is also known as a popular place for observing nature, and many people come here for mountain climbing and camping.

This mountain was formed by repeated volcanic eruptions. The volcanic activity began about 100,000 years ago and continued until about 4,000 years ago. Large eruptions in the early period created a caldera with a diameter of 4.5 km, and in subsequent eruptions from the Jomon period onward lava erupting inside the caldera created several peaks, of which Mt. Osanbe (1126 m) is the highest. Notable for its distinct string of peaks, each named like members of a family—man, woman, child, grandchild—as well as for the quality of its grassy plains that spread out on the gentle slopes at the base of the mountain, this landscape has been designated as a national park.





Pastoral scenery of Nishinohara

Sanbe Volcano that has nurtured a bountiful way of life

Blessed with a bounty of spring water, the river that flows from Mt. Sanbe brings rich harvests to the fields in the basin, and people have revered and cherished the mountain as the land where the god of agriculture dwells. And yet, the volcanic ash soil of Mt. Sanbe may not have been very fertile soil. Nevertheless, the people here have made good use of the land for things like raising cattle and growing buckwheat. That history has led to the stunning natural environment of today.



Pastoral scenery of Higashinohara



Pastoral scenery of Kitanohara

Development at the base of the volcanic land formation

MAP No. 18 Pastoral scenery of Mt. Sanbe

The beautiful scenery of the grassland spreads out at the foot of the tightly packed cluster of peaks. Sometimes you can even see cows grazing. The grasslands are also a treasure trove of rare flowering plants such as pasque-flowers, yu-suge lilies, and Japanese gentians.

The landscape of expansive grasslands was born from many years of raising cattle and horses. This land of volcanic ash soil was scarce in water and could not be used for crop farming. It was the Yoshinaga domain, established within the territory of the Iwami Ginzan Silver Mine in the first half of the Edo period, that encouraged the use of this land for raising cattle and horses. The breeding of cattle, important as a labor force for agriculture and transportation of goods, was also an economic promotion measure. The grasslands were also used for a time as training grounds for the former Japanese Army. The current scenery has been formed over a long history.

Yes Yes



A lake formed by an eruption

MAP No. 17 Ukinunonoike Pond

Mt. Osanbe and Mt. Kosanbe rise above the serene water of Ukinunonoike Pond. On days when there is no wind, a mirror image of the mountains (called "Sakasa Sanbe") is reflected on the surface of the lake. This pond that lies in the lower part of Nishinohara is a natural lake with an area of about 13.5 ha. The lake was formed by volcanic ejecta from Sanbe Volcano blocking the exit of the valley, and it is the source of the Shizuma River that flows into the plains of Oda City. The lake is also important as a water source for irrigating fields, and the Nibehime Shrine on the shore of the lake is a place of worship for the farmers of the basin. Only a small amount of water flows into the lake, and most of the water seems to be supplied by spring water percolating up from the bottom of the lake.

The name is said to derive from an old legend about a giant serpent and a young woman, in which the clothes of the young woman who entered the water floated on the surface of the lake. It is also one of the possible sites of the "Ukinuma Pond" mentioned in the Manyo poem by Kakinomoto no Hitomaro.

Yes Yes



The source of Sanbe Onsen

A hot spring resort that has prospered since the Edo period

MAP No. 21 Sanbe Onsen

Sanbe Onsen, where the light brown muddy water warms your body, is a blessing from the heat of the volcano. From the spring source, located between Mt. Magosanbe and Mt. Hikageyama, more than 3,000 liters of hot water gushes out every minute, the largest volume of natural hot spring water in the Chugoku region. The spring type is a sodium-chloride spring and the spring source temperature is around 37°C. The hot water, which is colorless and transparent immediately after it gushes out of the earth, eventually turns cloudy due to iron and other minerals. After soaking in the free-flowing hot spring water for a while, tiny bubbles of carbon dioxide envelop your body, slowly warming you up.

The heat source of Sanbe Onsen is magma that remains underground. The magma is not believed to be hot enough to cause an eruption, but it warms the groundwater that seeps down into the earth and sends it back to the surface as a hot spring.



The shrine of the god of literary and martial arts, the repose of souls, and victory

MAP No. 13 Mononobe Shrine

Umashimaji-no-Mikoto is revered at Mononobe Shrine and it's said to be the founding father of the Mononobe clan, a local ruling family in the Yamato kingdom, is located in Kawai-cho, Oda City, where the Shizuma River flowing from Mt. Sanbe joins the Oshihara River. The shrine is majestic and has the largest Kasuga-zukuri style main shrine structure in Japan. Along with its association with the Mononobe clan, Mononobe Shrine also includes within its precinct the Ipeisha Shrine, said to enshrine one of the legendary sacred bottles that gave Mt. Sanbe its name; and thus, it is a shrine that has venerated Mt. Sanbe since ancient times. The rice planting festival held in July involves a ceremony in which a young girl represents Sanbaisan, the goddess of the fields, who is invited down from Mt. Sanbe. The little goddess Sanbaisan is also associated with Sanohime (the "Princess of Agriculture"), represented in the old name of Mt. Sanbe, "Mt. Sahime."

Iwami no Kuni Ichinomiya Mononobe Shrine
〒694-0011
1545 Kawai, Kawai-cho, Oda City, Shimane
TEL 0854-82-0644

Yes Yes



Cultivation of Sanbe Highlands

MAP No. 22 Sanbe Soba



Sanbe Soba

Sanbe Soba emits a mellow aroma as you bite into the thinly sliced noodles. The unique flavor that will impress even soba connoisseurs has been sustained by farmers and soba shop owners who have carefully protected the native Sanbe variety that has been passed on since the Edo period.

Buckwheat can grow even in soil with poor moisture and nutrients, and because it matures in a short period of time, it has long been actively cultivated in the Sanbe region, which has volcanic ash soil. The dramatic temperature variation of the highland climate nurtures the flavor, and in the Meiji era, it was counted as the only soba production area in western Japan. In 2020, it was registered as a Geographical Indication (GI) for the protection of local products, and its national reputation is growing once more.

Wasabi, which is an indispensable condiment in Japan, is also a special product of Mt. Sanbe. High-quality wasabi is cultivated using the abundant spring water dotted around the foot of the mountain.





Expressing faith in the mountain

MAP No. 15 Sahimeyama Shrine and Tane Kagura

The old name of Mt. Sanbe, Mt. Sahime, is mentioned in the ancient record of Izumo Fudoki, compiled in 733, and is regarded as one of the stakes of the Kunibiki (Land-Pulling) Myth. The mountain's old name is still retained by Sahimeyama Shrine, located in Tane, Sanbe-cho, Oda City. This shrine is said to have been built in 891 and is dedicated to Mt. Sanbe, which was an object of worship in ancient times. The enshrined deities are Onamuchi-no-Mikoto, Sukunahikona-no-Mikoto, and Suseribime-no-Mikoto. At the shrine's annual festival and agricultural Shinto ritual Omoto festival held every seven years, the Tane Kagura performance is presented. It is an elegant Kagura dance of the traditional Rokuchoshi (six-chord) style that has been designated as an intangible folk cultural property of Oda City. Kagura has also gained popularity through performances at events such as the Kagura Festival.

Sahimeyama Shrine
〒694-0003
305 Tane, Sanbe-cho, Oda City, Shimane



Tane Kagura Heritage Museum regular performance
〒694-0003
Tane, Sanbe-cho, Oda City, Shimane
TEL 0854-88-9950
(大田市観光協会)

P Yes **fi** Yes



Event to pray for a good harvest

MAP No. 16 Ogasawara-style musical rice planting



The Ogasawara-style musical rice planting is a traditional folk performance of the Chugoku region that has a history dating back to the Warring States period. It is a gorgeous performing art in which performers wear colorful costumes and play large drums, smaller hand drums, flutes, etc. It is also an agricultural Shinto ritual to pray for a bountiful harvest. In the Mt. Sanbe region, this tradition has been handed down in the Ikeda and Koyahara districts of Sanbe-cho, and efforts are being made to carry on the tradition at the Ikeda Elementary School, which serves both districts. At the rice planting festival held at Mononobe Shrine in July, the rice planting musical dedication of Koyahara is performed, which reveals a part of the faith in Mt. Sanbe, the source of water. In Oda City, the Ogasawara-style musical rice planting performance of Oshiro-cho has been designated as an intangible folk cultural property of the city, and in Minakami-cho, the Hanataue rice planting festival has been passed down through generations.



An old pine over 400 years old

MAP No. 19 Sadame Pine Tree



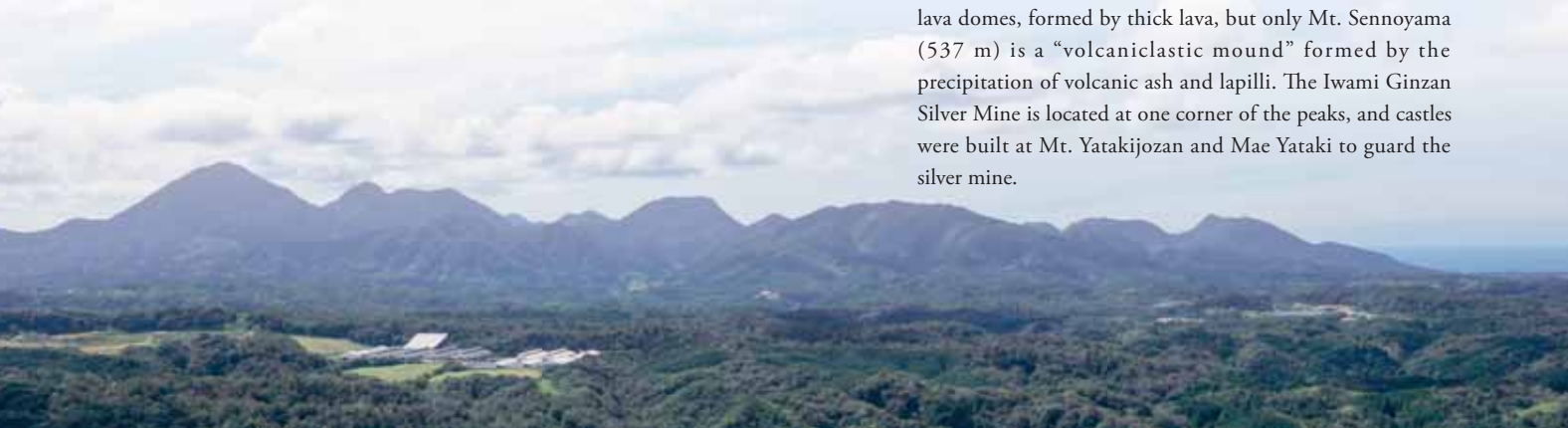
P Yes **fi** Yes

If you follow the road leading to Mt. Sanbe from the west (the Mt. Sanbe Park Line), as the grassy plains of Nishinohara spread out before you, you will be greeted by an old pine tree known as the Sadame Pine Tree that has stood there for hundreds of years. This pine tree is said to have been planted as a milestone marker during the Iwami land survey conducted by Nagayasu Okubo, the first magistrate of the Iwami Ginza Silver Mine. Originally, there were two trees, one on either side of the road (the other died in 2007). Its exposed roots are wrapped around several large rocks, indicating that it was originally planted on top of a mound. When it snows heavily, Nishinohara becomes transformed into a field of snow. In the past, when snowstorms occurred, it was sometimes difficult for travelers to know which way to go. Thus, pine trees were planted as road markers at intervals of several hundred meters, starting from the Sadame Pine Tree, and have served to watch over travelers.



Iwami Ginzan Silver Mine Site created by a volcano

Iwami Ginzan Silver Mine is said to have been developed by Kamiya Jutei, a merchant of Hakata. From the 16th century to the beginning of the 17th century, the silver ore called “Fukuishi” was the driving force behind the huge volume of silver production at that time. This ore was created by a volcano. The economic power of the silver that came from this volcano affected not only Japan but also East Asian and European societies and left a great mark on world history.



The volcano that created Iwami Ginzan Silver Mine



MAP No. 5 Mt. Oetakayama volcano

In springtime, Mt. Oetakayama (808 m) becomes home to many Gifu butterflies (Japanese *Ichthyoplia*) that flit about among the flowers, including many rare flowering mountain grasses such as Misumisou (Hepatica) and Izumokobaimo (*Fritillaria ayakoana*), and this sight attracts many climbers to the mountain. The north side of this mountain range is lined with steep peaks, forming an eye-catching group of mountains within the gently sloping terrain known as the Iwami Highland. These mountains were formed by repeated volcanic activity occurring from about 2 million years ago to about 600,000 years ago, and are collectively known as Mt. Oetakayama volcano. The area has a cluster of more than 30 lava domes, formed by thick lava, but only Mt. Sennoyama (537 m) is a “volcaniclastic mound” formed by the precipitation of volcanic ash and lapilli. The Iwami Ginzan Silver Mine is located at one corner of the peaks, and castles were built at Mt. Yatakijozan and Mae Yataki to guard the silver mine.



A place that prospered as a mining town

MAP No. 7 Omori Silver Mine Area

Established as a mining town for the Iwami Ginzan Silver Mine, Omori-cho is lined with rows of houses with red roof tiles along the valley where the Ginzan River flows. The townscape, which has the layout of the Edo period, retains the atmosphere of the past, even as the people conduct their modern lifestyles. In the Edo period, the Omori Magistrate's Office (Omori Daikansho) was located here, and it was the political and economic center of the Iwami Ginzan Silver Mine territory under the direct control of the shogunate.

In addition to the Fukuishi silver ore that was formed by volcanic activity and brought about the prosperity of the Iwami Ginzan Silver Mine, the green tuff created by volcanoes during the formation of the Japanese archipelago was widely used as building material in the townscape, and the stone walls and other structures made of carefully cut stones create an orderly scene. Quarrying was carried out even within the townscape, and the remains of those stone quarries that can still be found in various places create a unique atmosphere.

P Yes I Yes



Remnants of mine tunnels still visible today



Fukuishi

Iwami Ginzan Silver Mine, the source of radiance



MAP No. 6 Iwami Ginzan Silver Mine Ruins (Sennoyama-no Fukuishi deposit)

Full-scale development of the Iwami Ginzan Silver Mine began in the 16th century, and its mass production of silver had an impact on politics and economics both in Japan and overseas. As the reason for its success, the significance of the unique silver ore called “Fukuishi” cannot be overlooked. Fukuishi is silver ore derived from rocks that were formed by the accumulation of volcanic ash and volcanic lapilli. The area where Fukuishi was distributed, from near the summit of Mt. Sennoyama to the eastern side of the mountain, was called the Fukuishi deposit. Fukuishi was often distributed over large areas, and the rock itself was not particularly hard, so it could be excavated quite efficiently. The ore was a combination of minerals that allowed the silver to be easily extracted using a smelting technique called cupellation, introduced in the 16th century. This led to the mass production of silver from the 16th century to the first half of the 17th century.

P Yes I Yes



A beach of singing sand

MAP No. 2 Kotogahama Beach

Kotogahama Beach is a 1.4 km stretch of white “singing sand” that makes a sound when you step on it. The sound is produced by the uniform grains of quartz sand rubbing against each other, but if the sand becomes dirty it will immediately stop producing the sound. So the singing sand is also proof that the beach is pristine. The beach is located in a semi-circular bay with two capes of green tuff bedrock protruding on either side. It is thought that this shape lessens the power of the waves, so that the sand is continually washed by the waves within the bay. Some say the bay itself may be a volcanic crater. Behind the beach stand rows of houses in the Maji district. The beauty of the singing sand, which is said to be the best in Japan, has been preserved by the local residents who have cherished this beach that is so closely connected to their lives, such as in the holding of traditional Bon Odori dances.

P Yes I Yes



Narisuna (singing sand)

The blessings of volcanoes that have nurtured life

The volcanic activity that gave birth to the Japanese archipelago so very long ago also brought Oda City a wealth of resources and a richly varied landscape. Rocks formed from the volcanic ash that piled up thickly after the eruptions were used as stone material in daily life, and the trees buried in the eruption became silicified (petrified) wood. Gypsum, of which this area was one of Japan's largest production sites in modern times, is yet another product of the volcanoes. The "Arareishi (aragonite) of Matsushiro Mine" imparts the memory of the times when the area was also a mining town.



One of the most unique forms in the world

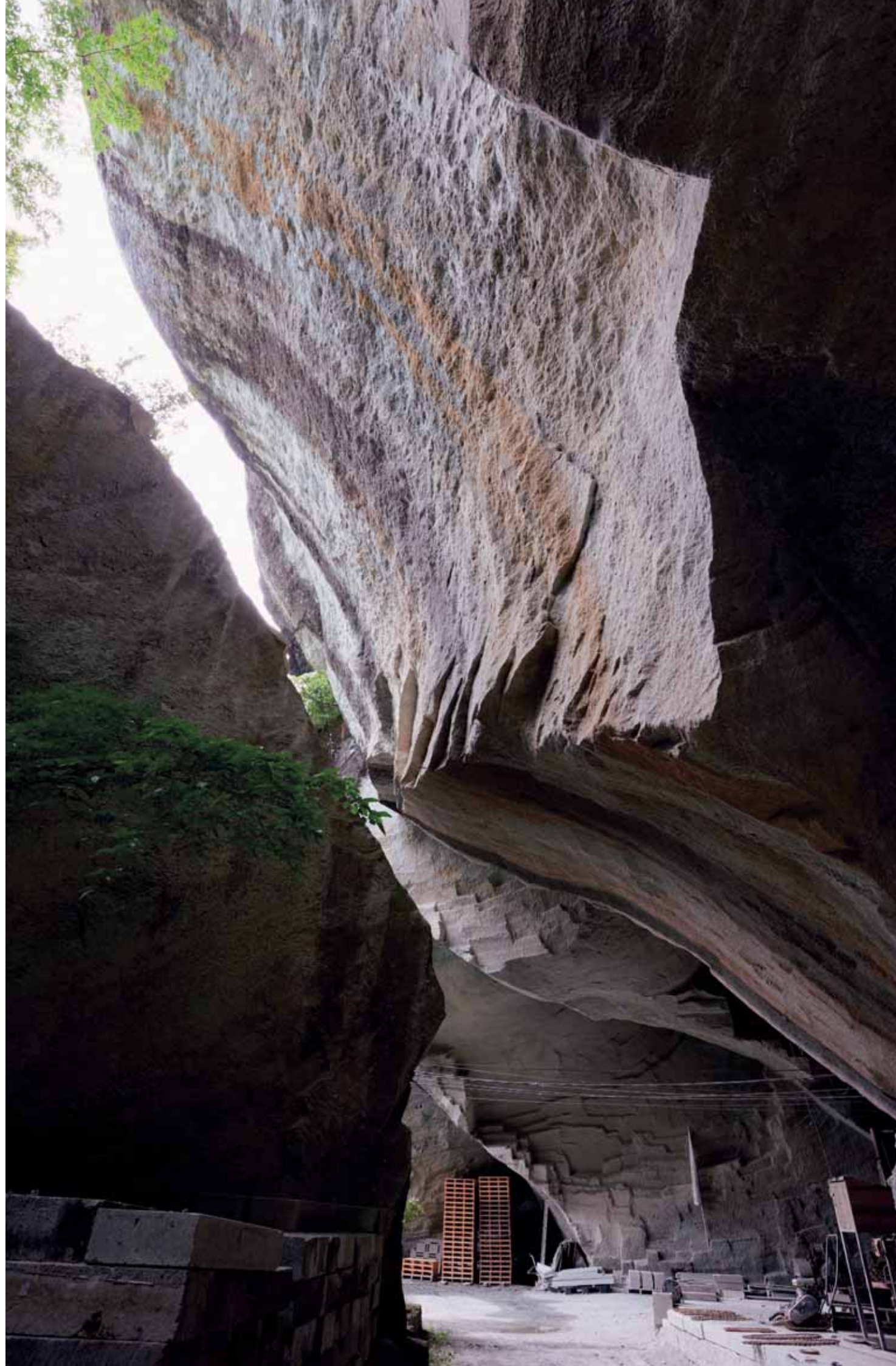
MAP No. 10 Arareishi Production area of Matsushiro Mine

The aragonite from the Matsushiro Mine, which occurs as spherical clusters of translucent crystals, sometimes as large as a volleyball, is unique in its shape and size, the likes of which cannot be found anywhere else in the world. Aragonite is a mineral composed of calcium carbonate, and its composition is the same as limestone (calcite), which is the primary raw material of cement.

The Matsushiro Mine, which produced aragonite, was also a mining site for gypsum from the Meiji era to the 1960s. Shimane Prefecture once boasted Japan's largest production volume of gypsum, with mines in Oda City and Izumo City supporting production, and Matsushiro Mine being one of the main mines. Aragonite occurs near gypsum deposits and was prized as an ornamental object due to its unique shape. The site is now designated as a national natural monument under the name of "Arareishi Production area of Matsushiro Mine," but the mine shafts have been closed and are currently inaccessible.



Matsushiro Mine Site



Get to know the culture of stone



Fukumitsuishi Stone quarry

These quarries, which were hand-dug into the rock at an angle, have a history that dates back to the Muromachi period (1330s—1570s), and in the underground space behind them, the Fukumitsuishi Stone quarry continues to this day. The stone that is mined is known as green tuff, which has a pale green tint and a warm touch. More than 15 million years ago, there was intense volcanic activity due to the crustal movement that formed the Japanese archipelago. At that time, volcanic ash, pumice, and other minerals were deposited on the seabed, creating the stone called "Fukumitsuishi." Soft and easy to process, it was used for many purposes and was distributed mainly in the Iwami region. In Iwami Ginzan Silver Mine in particular, it has been used in large quantities for stonework such as tombstones.

In the past, tuff was quarried all over the country, but only a few quarries are still in operation today, making Fukumitsuishi stone a valuable resource.

Fukumitsuishi Stone quarry
 〒699-2514
 107-1 Fukumitsu, Yunotsu-cho, Oda City, Shimane
 TEL 0855-65-2998
 (NPO Iwami Monozukuri Kobo)



*As this is a guided tour, advance reservation is required.



A giant rock associated with the legend of an ogre

MAP No. 9 Oniwa Rock of Onimura



Yes

This huge rock that rises over the roadside spreads out at the top like an umbrella and has a row of five holes on its side that look like they have been scooped out. According to legend, the holes are the marks of an ogre's fingers, and thus the name of the rock is Oniwa (Ogre Rock). As the rock is composed of tuff formed by submarine volcanic eruptions, the action of the salts contained in it has accelerated the weathering, forming its peculiar shape and the holes in its side. This kind of weathering can often be seen on the coast, but it is rare to see such a clear example like Oniwa in a place so far from the sea, and it is believed that the rock contains a lot of salts that make it easy to dissolve. Nearby are the remains of the Onimura Mine, which once produced gypsum. It was mined from deposits formed in connection with the volcanic activity that created this rock.



Fossilized trees

MAP No. 11 The Silicified Wood of Hanenishi



The Silicified Wood of Hanenishi, a national natural monument, is a large fossil tree that stands out for its peculiar appearance. It juts out diagonally from the coastal cliff face and one end continues to the bedrock on the seabed. This fossil, presumed to be a tree of the fagaceous family, was buried by a volcanic eruption just a little less than 15 million years ago. The silicified tree was swept away by the wave of debris that accompanied the eruption and was buried near the coast at the time. It is known that there are many silicified trees lying on the seabed around the Silicified Wood of Hanenishi, and you can imagine how the wave of debris would have knocked down and carried away the trees of the forest. It is said that when the nearby Kute fishing port was built in the early Showa era, many silicified trees were pulled up from the seabed. One such fossil, a particularly large specimen, is placed in the schoolyard of Kute Elementary School.

Stratified sea cliff

MAP No. 12 Tategamiwa Rock

The cliff along the coast reaches a height of 80 meters. The clear strata and the island rock that looks like it has been cut off from the cliff are impressive sights. It can be seen clearly from the train windows on the San-in Main Line, and is a prominent landmark of the eastern part of Oda City. The light-colored layers are tuff, made up of volcanic ash and pumice, and the darker layers are composed of conglomerate. These layers were formed on the coast about 15 million years ago. The strata indicate that there were repeated volcanic eruptions nearby.

Up until 1950, there was a lake called Lake Hane to the west of the rock. The lake was used as a port until the middle ages, and the ruins of an ancient temple on the shore tell the story of ancient trade activity. In other regions, there are many similar examples of such rocks called "Tategamiwa" that serve as landmarks for harbors and for praying for a safe voyage. This Tategamiwa Rock has likely also served as a landmark for the port.



Cave shrine

MAP No. 8 Shizunoiwaya Cave

Shizunoiwaya, written of by Oishi-no-Suguri-no-Mahito in the ancient *Manyoshu* anthology, is the legendary place where the deities Onamuchi-no-Mikoto and Sukunahikona-no-Mikoto lived for a time when creating the land, and Shizunoiwaya Cave is said to be the location of that place. The cave has two mouths and is 45 meters deep and 13 meters high. Long ago, it was a place of worship, and Shizuma Shrine used to be enshrined within the cave. A torii gate still stands at one mouth of the cave. The bedrock of the cave was formed by the deposition of volcanic ejecta about 15 million years ago, and the faults and dikes are intricately intermeshed, revealing the intensity of the crustal movements that formed the Japanese archipelago. The wide space within the cave was formed when waves eroded the fragile parts of the rock cracked by the faults.



15-million-year-old tree

MAP No. 3 The Silicified Wood of Nima



On the wave-cut platform of the Nima coast, where you can see the vivid green tuff, two large tree fossils (silicified wood) lie exposed. They have been designated as natural monuments of the prefecture under the name "The Silicified Wood of Nima." If you look closely at the silicified wood lying on the wave-cut platform, you will notice veins of small, tightly packed quartz crystals running through the cracks. Quartz

is a mineral made up of silicon dioxide, and this component is what turned the trees into stone. More than 15 million years ago, the trees were buried in volcanic ash. Hot spring water then seeped into the wood and silicon dioxide that had been dissolved in the water solidified inside the trees, turning them into hard rocks. Although they retain the appearance of trees, their components have been almost entirely replaced, and they are now masses of silicon dioxide minerals such as quartz and agate.



A rocky mountain towering over the road

MAP No. 4 Mt. Ryugan (Tatsuiwa Rock)



Mt. Ryugan is a peculiar rock with huge, ragged peaks that reach up to the sky and overlap like waves. Located at the summit are the ruins of Iwami Castle, one of the mountain castles that guarded the Iwami Ginzan Silver Mine. This rock is the part of a volcanic conduit where magma split the ground and rose up when the volcano erupted about 15 million years ago. When the magma stretched out and hardened in the direction it was rising, streaks called "flows" were formed, and as weathering progressed along these streaks, these shapes that stretch up toward the sky were created. The rock has several holes formed by weathering, the insides of which are a reddish color, likely due to deposits of iron oxide sediment, which makes them look like dragons' mouths. The largest rock wall is covered with trumpet vine, which is one of the city's natural monuments, and you can see vermilion flowers in the summer and vivid red leaves in late autumn.

