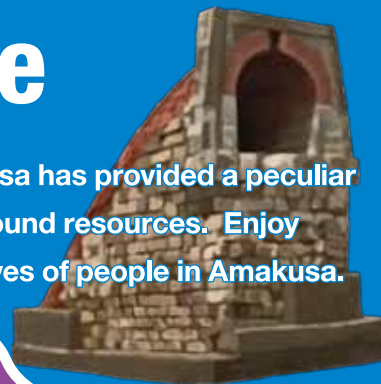


# 5 Underground resources and stone culture

The 100 million year geologic inheritance of Amakusa has provided a peculiar culture and life-style centered around rich underground resources. Enjoy exploring the culture and industry supporting the lives of people in Amakusa.



## ! What are underground resources?

Underground resources are natural elements that, when uncovered, may have use in human life. Many rely on magma activity and are common underground resources of Amakusa such as clay stone, whetstone, hot springs, or materials obtained from stratum deposited such as coal and Shimoura-ishi.



## Stone culture

### 1 Gion Bridge



The Gion Bridge, a national important cultural property, was constructed in 1832. This multi-leg bridge supported by 45 stone pillars with a span of 28.6m in length and a width of 3.3m was constructed of sandstone (called Shimoura-ishi) from the Toishi Formation mined from the Shimoura area in Amakusa-kamishima.

### 2 Semui-bashi of Yamaguchi



The Semui-bashi of Yamaguchi in Hondo area is a single arch bridge with a thin bridge wall spanning 22.73m in length and 3.24m in width. This stone bridge constructed in 1882 of Shimoura-ishi is a Kumamoto designated cultural asset. The bridge is the only one in Amakusa having a plate on which its history was engraved on.

### 3 Arch bridge of Kusuura



The arch bridge of Kusuura, one of Kumamoto Prefecture's designated cultural assets, is an arch type stone bridge (Ishibashi) made from Shimoura-ishi (sandstone) mined in Amakusa Kamishima and was completed in 1878 with a graceful length of 26.33m, and a width of 3.05m.

### 4 Tanasoko castle, stone walls and 'Koguri'



Tanasoko Castle serves as a Nationally Designated Cultural Asset as one of the 'Yamajiro' which symbolizes the medieval times of the Amakusa area. Stone walls which enclose the houses are mainly constructed of andesite stone from Kuratake, creating this peculiar cultural landscape. A waterway called 'Koguri' leads the subterranean water to 'tanada' on the Tanasoko fan.

### The village of stone masons: Shimoura town

Shimoura town, Amakusa-city is the production place of a type of stone known as Shimoura-ishi which provided the basis for a strong stone masonry culture in the area. History tells us that an unemployed man by the name of Matsumuro Gorozaemon began the spread of masonry in Hosi 10 (1760) in the area and his tombstone exists today in the Shimoura area. Shimoura's masonry also played an active part in other areas within and outside of the prefecture, as seen in the stone pavement of the Nagasaki Hollander Slope in Nagasaki, as well as the stone bridges of Amakusa city.



## Industry

### 5 Source of Amakusa whetstone: Amakusa-toishi



Amakusa whetstone (Amakusa-toishi) from Amakusa in the Oyano island has a beautiful grain-pattern of light brown iron hydroxide in an intrusive rhyolite base which originated from magma. Amakusa-toishi has been used as whetstone from ancient times and as a construction stone in recent years.

### 6 Partition net in the Miyajiura Bay



At the times of large tidal action in the Miyajiura Bay of the Shinwa town, a traditional fishing method which captures fish in a partitioned net is performed: a 4m-high net stretched to a length of about 400m is dropped in at one end of the bay at high tide and is closed off at ebb tide catching the fish within.

### 7 Shimoda hot spring



According to legend, the hot spring called 'Shirasagi hot spring' began gushing out from a riverside where an egret (heron) was nursing its wound. The present source of the hot spring is at a depth of 250m, with an acidity of PH7.84", containing sodium hydrogen-carbonate and chloride with a temperature of 51.3 degrees.

### 8 Outcrop of Amakusa pottery stone

At Uchida-sarayama in the Reihoku town, there is one of outcrops of Amakusa pottery stone. "Amakusa pottery stone" is a product derived from intrusive rhyolite. The rhyolite was brought to the western area of Amakusa-shimosima by volcanic activity of the Miocene.

### The clay stone produced in Amakusa is the best quality and quantity in Japan

It is said that the clay stone produced in Amakusa is the best quality and quantity in Japan, and has many uses such as pottery, Japanese and Western tableware and high-pressure insulators. This product has high density and is used in the production of expensive goods of the highest quality, and possesses a color lacking the typical muddiness of other clay stone making it most useful in the production of beautiful high-class white porcelain.



## Coal mining

### 9 Shiki coal mine monument pedestal



In the Amakusa area, coal mine production continued from the middle of the Meiji period to 1975. The only railway in the Amakusa area operated from the mine to the harbor with the purpose of moving coal to waiting barges. The "Shiki coal mine monument pedestal" is a pedestal of the safe prayer bell that once sat at the Hisatsune entrance gate of the Shiki coal mine.

### 10 Eboshi Pithead of the Ushibuka coal mine



The Eboshi pithead is a part of the Ushibuka coal mine where operation started in Meiji 30 (1897) and continued for several years, but now sits in ruins symbolizing the downfall of the high quality coal industry as an energy source of Japan in that era in the Amakusa area.

### 11 Komebuchi pithead of the Ushibuka coal mine

Although the Amakusa area was known for producing anthracite, a coal layer can be uniquely observed near the pithead of the Ushibuka coal mine standing as a reminder of the once booming coal industry in Japan.

### 12 Ruins of the Oniki coal mine

The Oniki area had a large coal mine in the Amakusa area, in operation from the beginning of the Meiji era to the 48th year of Showa(1973). Some remains of the coal mine are found throughout the Oniki area.

### Coal mining in Amakusa

As a coal-bearing formation was distributed over western Amakusa-shimosima, coal mining became a prosperous main industry in the Meiji period. It is said that the coal mined in Amakusa was found to be of a high quality.



## Faith in Christianity

### 13 Onnojyo park



Zonal bores were made in a wall of an outcrop in the Onnojyou park, where 110 stone statues of Buddha were installed. Although in folklore, this zone was thought to have been caused by a large snake passing through, it is in fact the fragile zone of Goryo tuff breccia formed under natural erosion.

### 14 Oe Coast in Amakusa town



The Himenoura Group of the Cretaceous period which includes many shell fossils is distributed at the place where Christian legend remains.