# Hagi Geopark

In 2018, an area of approximately 1,100 square kilometers around Hagi was designated a Japanese National Geopark, making it one of 43 geoparks around the country. These parks are created to promote and educate about conservation of nature and sustainable development. The natural areas preserved as part of the park include craggy cliffs, striking rock formations, and other evidence of the geological and volcanic activity that has shaped the landscape of the region over tens of millions of years.

The Hagi area has been a site of volcanic activity for a very long time. The tumultuous eruptions and volcanic upheaval that formed the landscape determined the location of necessary resources like fresh water, fertile soil, and fishing grounds. The city, built on a river delta on the Japan Sea, was shaped by three distinctive periods of geological activity. Between 100 and 30 million years ago, there was a huge upsurge in magma beneath the Amurian plate. Beginning 20 million years ago, magma beneath the seabed slowly emerged over a period of 8 million years. From 2 million to 8,800 years ago, the area around Hagi was formed by island arc magma.

## Highlights of Hagi Geopark:

## Hagi Castle Town Area

Both Hagi Castle Town and the livelihoods of its residents have been shaped by geologic events that happened millions of years ago. The town was built in the delta of the Abu River, which carried sediment down from the volcanic mountains, and the sea pushed sand up into the river's mouth, creating a triangular piece of land surrounded by water. The Mōri family built Hagi Castle in 1604 on the easily defensible promontory at the end of that triangular land, a dormant volcano called Mt. Shizuki.

The local pottery, called Hagi ware, is made from local clay with unique properties that come from the composition of local volcanic granite. The nooks and crannies of the seabed that make fine habitats for fish are also the direct result of volcanoes. And the sandy, loamy soil of the delta is well suited to growing *natsumikan* citrus, a signature crop of the Hagi area that has been grown there since the late 1800s.

Google Maps link: here

#### Kasayama Area

Mt. Kasayama is Hagi's youngest volcano at 112 meters high. The history of the mountain begins around 11,000 years ago, when lava flowed out of a large fissure, creating a plateau. Around 8,800 years ago, an eruption of pyroclastic fragments created the cinder cone and crater at the top of the mountain, and some 7,000 years ago, sea levels rose and Kasayama became an island. Over time, the island was gradually reconnected to the mainland by a sandbar. The crater at the summit is accessible from the Mt. Kasayama Observatory. Mt. Kasayama is a part of the Abu Volcano Group, a group of volcanoes in the Abu area that were all formed by single eruptions.

At the southern base of Mt. Kasayama is the saltwater Myōjinike Pond. In the woodland near the pond are *kazaana*, or "wind holes," fissures in the rock-strewn forest floor from which cool air blows. During the winter, denser cold air settles deep into the fissures, and as the weather grows warmer, the air expands and blows out of the cracks, cooling the area around it.

Access: 40-minute walk from Koshigahama Bus Stop, 20 minutes by bus from JR Higashi Hagi station or Hagi Bus Center. 20 minutes by taxi from the Hagi Bus Center. Google Maps link: <u>here</u>

#### Susa Area

Located 38 kilometers northeast of Hagi Castle Town, Mt. Kōyama forms a promontory that juts out into the Japan Sea between Susa and Esaki Bays. Both bays have deep harbors, and the area is well known for its seafood, particularly *kensaki-ika*, a type of squid that thrives on the seaweed that grows abundantly on the craggy volcanic seabed.

The Susa Hornfels is one of the many outstanding geological features in the Mt. Kōyama area. The beautifully banded 12-meter-high cliff of stratified mudstone and sandstone extends out into the ocean on the eastern side of Mt. Kōyama. The cliff was formed roughly 15 million years ago, when layers of sand and mud on the seafloor solidified into stone and were subsequently thrust upward by volcanic activity.

Access: 10 minutes by taxi from JR Susa station. Susa Hornfels Google Maps link: <u>here</u>

### Dragon's Causeway Area

The Dragon's Causeway, or *Ryū-ga-tōtta-michi* (literally, the "Path the Dragon Took")

is a river formation that takes its name from its resemblance to the mythical creature. The 14-kilometer-long valley was formed approximately 400,000 years ago from a great pool of molten lava that flowed down the Tama River valley. The lava flow created several outstanding geological features, including the columnar jointing at Tatamigafuchi, which is referred to as the "Belly of the Dragon," and at Ryūrinkyō Ravine, or the "Scales of the Dragon."

Access: 20 minutes by taxi from JR Susa station Tatamigafuchi Google Maps link: <u>here</u> Ryūrinkyō Google Maps link: <u>here</u>