



United Nations  
Educational, Scientific and  
Cultural Organization



San'in Kaigan  
UNESCO  
Global Geopark

A beautiful pocket beach of singing sand,  
and small sand dunes

# Kozomi Kaigan Coast course



San'in Kaigan Geopark Walk Model Course

First edition 2016.3.31

The Kozomi Kaigan Coast is a beautiful beach between capes, turning into a crowded beach resort in summer. To its west, the Ushigome Kaigan Coast is also a popular coast, like a private beach. Behind these beaches are small sand dunes, whose southern part is wetlands used for paddy fields.

To preserve these beautiful natural assets, please leave the sand, animals and plants as they are. Keep out of dangerous places and do not go off-limits. What you can bring home with you are happy memories, photos and local souvenirs!



**Kozomi Kaigan Coast Course**


Start! ※Estimated walking time

① Roadside Station Shinwa no Sato Shirousagi	20 min.	↓	about 1,000m
② Kozomi Kaigan Coast	6 min.	↓	about 300m
③ Akajima Reef	4 min.	↓	about 200m
④ Kitano Tenmangu Shrine	3 min.	↓	about 130m
⑤ Andesitic dike	1 min.	↓	about 60m
⑥ Profile of the sand dunes	6 min.	↓	about 300m
⑦ Back slough of the sand dunes	22 min.	↓	about 1,100m
① Roadside Station Shinwa no Sato Shirousagi	Total traveling time: 1 hour Total distance: about 3.1 km		

**Legend**



# Kozomi Kaigan's many places of interest

**① Roadside Station**  
Shinwa no Sato Shirousagi




The roadside station is located just in front of the Hakuto Kaigan Coast, which is famous for the myth of the white rabbit of Inaba. Its 2nd floor is directly connected to a pedestrian overpass leading to the coast. The facility is always filled with the hustle and bustle of surfers, swimmers, and visitors to Hakuto Shrine.  
Phone: 0857-59-6700  
Open throughout the year: 8:00–22:00 (or 8:30–22:00 from Dec. 3 to Feb. 28)

**② Kozomi Kaigan Coast**




The sand grains of the Kozomi Kaigan Coast are uniform in size and look brilliant because of a high content of transparent quartz grains washed frequently by the waves. Walking on the beach when it is dry, you can hear the sand make high, clear squeaking sounds. In the middle of the shoreline is the estuary of the gentle and small Kozomi River, where you can find ripple patterns containing iron sand.  
(See Geo-Column ①.)

**③ Akajima Reef**




The reef off the cape tip at the western end of the Kozomi Kaigan Coast is called "Akajima." On the Akajima Reef, you can find a rugged layer containing different-sized angular rocks covered with andesitic lava, which formed about 18 million years ago, when the Japan Sea expanded. Although the lava was originally dark colored, it partly looks red due to oxidization. Capes located between west of the Hakuto Kaigan Coast and east of the Mizushiri Kaigan Coast are formed with the same lava as this.

**④ Kitano Shrine**



This shrine is located on a cape in the west of the Kozomi Kaigan Coast. Dedicated to Sugawara no Michizane, deified as the god of learning, the shrine was called "Tenjin" or "Tenmangu" in olden times, and was renamed "Kitano Shrine" in the early Meiji era. The deity is the guardian of the Kozomi area. At the annual festival in April, local people used to parade carrying a festival float and sakaki branches while visiting all houses in the area.

**⑤ Andesitic dike**




The cape in the west of the Kozomi Kaigan Coast is formed with andesitic lava dating back about 18 million years. Views of the cape from the east and west show that a 20-meter-wide andesitic dike traverses the cape from east to west. (See Geo-Column ②.)

**⑥ A profile of the sand dunes**



The Ushigome Kaigan Coast provides you with a view of a profile of the Kozomi sand dunes. A close look at the layers of minute sand grains shows that the upper sloped layer, which is almost parallel to the sloped surface of the sand dunes, cuts into the lower horizontal layer. This suggests that the winds eroded the former sand dunes, where sand grains flew in and accumulated to form the current sand dunes. Here, you can learn that the sand dunes thus have developed through the repeated cycle of erosion and accumulation.

**⑦ Back slough of the sand dunes**



Wetlands spreading to the south of the Kozomi hamlet are currently used for paddy fields. In winter, after rice is reaped, the gates on the tide-stopping weir across the Kozomi River are closed, so the wetlands are covered under water, and look like a pond, where waterfowls, such as wild ducks and herons, come flying. (See Geo-Column ③.)

**Our recommendation:**  
Hakuto gravel layer outcrop




The layers found here contain large, round stones (gravel). Such layers, called "gravel layers," are thought to have been formed by volcanic eruptions that were carried in a water flow and accumulated in an alluvial fan on the skirts of the volcano.

**Our recommendation:**  
Katanosaki Observatory Plaza (Hakuto no Oka)



This observatory plaza, located on the Keta Cape at the eastern end of the Kozomi Kaigan Coast, offers you a view of not only the Kozomi and Hakuto Kaigan Coasts but also the shoreline of the Tottori Sand Dunes and the mountains over the dunes.

**Our recommendation:**  
Mizushiri Pond



Located in the south of the Mizushiri Kaigan Coast to the west of the Kozomi Kaigan Coast, the Mizushiri Pond formed as a lagoon that resulted from an enclosed bay's separation from the sea due to the development of the sand dunes in the Mizushiri Kaigan Coast. After being reclaimed to make paddy fields in the Taisho era, the pond is currently in its original state as a pond. The pond provides various migratory birds, such as wild ducks, with a wintering place.

## Geo-Column ①

### What are the black sand grains?

In the middle of the Kozomi Kaigan Coast is the estuary of a small stream, which has large sedimentation of black sand grains at the bottom. This black sand is iron sand. A dig of sand on the Kozomi Kaigan Coast reveals alternative layers of black iron sand and white sand. Iron sand is a ferruginous mineral called "magnetite" that has been separated from rocks in which it is originally contained, due to weathering.



The sands in the rivers or on the coasts in the San'in Kaigan Geopark area contain a large amount of iron sand, so they were used as a raw material for iron-making with foot-operated bellows. In wartime, iron sand was mined on the Kozomi Kaigan Coast too.

### Quiz Answer

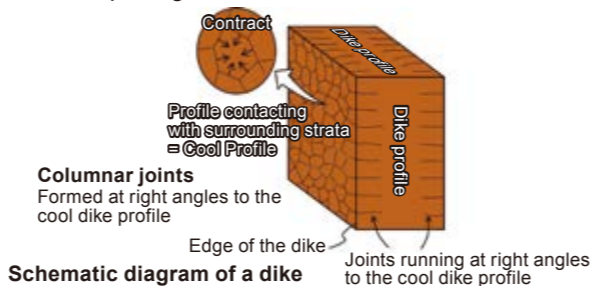
In the second year of the Bunkyo era (1862)  
\* The year is mentioned in the inscription on a side of the stone lantern. A stonemason named Kawaroku, who worked around the end of the Edo period, created this stone lantern using Aoya Stone (basalt) quarried out in Aoya in present-day Tottori City.

## Geo-Column ②

### A dike as magma's path

Magma erupts through underground joints onto the ground surface. Dikes are magma that was cooled into rock in the underground joints before reaching the ground surface and erupting. A close look at the dike on the Ushigome Kaigan Coast shows joints running at right angles to the dike edge (indicated with the dashed lines drawn on the photo).

These joints formed because magma contracted while being cooled into rock. Seen from a three-dimensional perspective, the dike comprises pentagonal and hexagonal column-like fractures called "columnar joints," as shown in the figure below. This dike traverses the cape from east to west, and also outcrops at the western end of the Kozomi Kaigan Coast. Moreover, just above the dike at the cape ridge is Kitano Shrine.



## Geo-Column ③

### Farming in the back slough

The lowlands to the south of the Kozomi hamlet formed from a dried-up lagoon, which had resulted from an enclosed bay's separation from the sea due to the development of the sand dunes. Because the sand dunes held back the water flow from the mountains, the lowlands were wet and unsuitable for farming. Therefore, in the early Showa era, the wetlands were improved by filling them in with sand from the Kozomi sand dunes so that local people would be able to use the lowlands for farming. Since these farmlands are located at a very low altitude, local farmers face the risk of having their farmlands flooded with the sea water that flows backward along the Kozomi River during a storm surge or high tide. To reduce the risk, a tide-stopping weir has been built at the estuary of the Kozomi River. In winter, after rice is reaped and when the Japan Sea is rough, the gates on the weir are always closed, stopping the water from flowing out and making the farmlands look like a pond.

