Tour Guide Hakodate - Odate - Kakunodate

Travel Time from Odate Station





Three Major Night Views of Japan (Hakodate City) 2 hours 50 min

Nebuta Festival in August (Aomori City) 1 hour 15 min





Cherry Blossoms in Hirosaki Castle (Hirosaki City) Lake Towada (Kosaka Town) 40 min 1 hour





Akita Dog Torigata Kaikan Hall (Tea-house Japanese Garden) (Hachiko's birth town)

Kiritampo Hot Pot (Local dish)



Odate Candy Market in February

Magewappa Woodcraft (Traditional craft)



Snow Monsters on Mt. Moriyoshi (Kitaakita City) Cherry Blossoms at Kakunodate Old Samurai 1 hour 30 min House (Semboku City) 2 hours 30 min

Let's explore the wind cave to enjoy the cool in summer!



Nagabashiri Wind Caves Eco-Museum

Address: 362-6 Nagabashiri, Odate City, Akita Prefecture Phone : 0186-51-2005 Open : April - November 9:30-16:30

- (Closed during the winter months) Closed : Mondavs (or Tuesday if Monday is a holiday) * Open seven days a week from June to August Entrance fee : Free Management : Odate City Museum (Ph. 0186-43-7133)

kvodokn@citv.odate.lg.ip URL: http://odate-city.jp/museum/nagabashiri Walking trail: 20-30 min/trail



*The museum is air-conditioned with the cool air of the wind cave. It contributes to alleviating global warming

英語 ENGLISH

Mysterious Cold Spot of Japan **A Refreshing Experience**

A little place called Odate

60 min by car from Aomori Station 40 min by car from Hirosaki Station 23 min by bus from Odate Station 15 min by car from Ikarigaseki IC 15 min by car from Odate-kita IC

To Hirosaki • Ikarigaseki IC Nagabashiri Wind Caves Alpine Plant Communities

Japan Natural Monument Nagabashiri Wind Caves Alpine Plant Communities

Designated in 1926 Additionally designated in 1931



The Nagabashiri wind caves are located at the base of Mt. Kunimi, which is 454 meters high. The temperature in the wind caves stays low between zero and five degrees Celsius, even during the summer months. Because of this, there are many alpine plants distributed around the wind caves, which are designated as a national natural monument. Koji Sasaki, later known as the "King of the wind cave, "recognized the value of the wind caves and built wind cave storage cellars more than 100 years ago. In the era when there was no electricity, the wind cave cellars were very useful. Mainly Tsugaru(Aomori) apples shipped out to metropolitan areas were stored in the wind cave cellars. It has the advantages of storing for a long time and arranging shipping schedule.

Wind Cave Alpine Plants

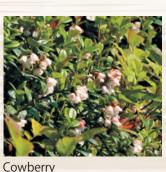
The flowering season is from May to July.





Prickly Wild Rose





Fireweed

Bunchberry

Why Do Alpine Plants Grow at Low Altitude?

The alpine plants around the wind caves are considered to be the remaining ones that have survived since the last glacial period (about 70,000~10,000 years ago). These plants were widely distributed in lowlands in the era where it was cooler than now. It is likely that the plants could only live around the wind caves which blow cold air or high mountains due to the global warming later.

Use of Cold Air – Ancestors' Wisdom



Wind Cave Storage Cellar (Natural refrigeration)

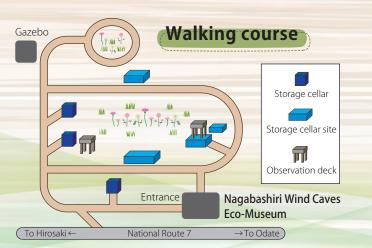
In the wind cave storage cellars, agricultural products such as apples, seeds of cedars, and silkworm eggs were stored. There were about 20 wind cave storage cellars throughout Mt. Kunimi.



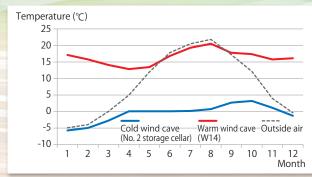
King of the Wind Cave, Koji Sasaki (1869-1932)

When he visited Nagabashiri in 1902, he heard the story of the haunted house (wind

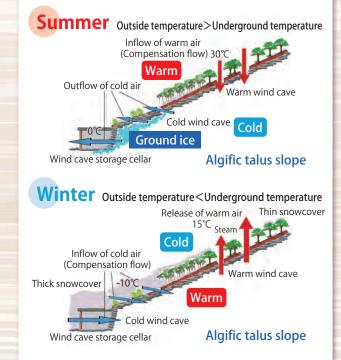
cave) from the owner of the inn and encountered the wind cave. Later, he investigated and tested it repeatedly and built seven wind cave storage cellars. He made his best efforts to manage the cellars and protect the alpine plants.



Mystery of Low Temperature



Theory of Air Convection



Wind caves are often found on rocky slopes (talus), where air can easily enter gaps. In the summertime, air inside the slope is cooled by underground ice and becomes dense. It then flows out as cold air through gaps below. This pulls in outside air through the top of the slope to compensate for the air leaving at the bottom. In the wintertime, the process is reversed as air inside the slope is warmed underground, becomes lighter, and then flows out above as warm air, which pulls in outer air through the base of the slope.