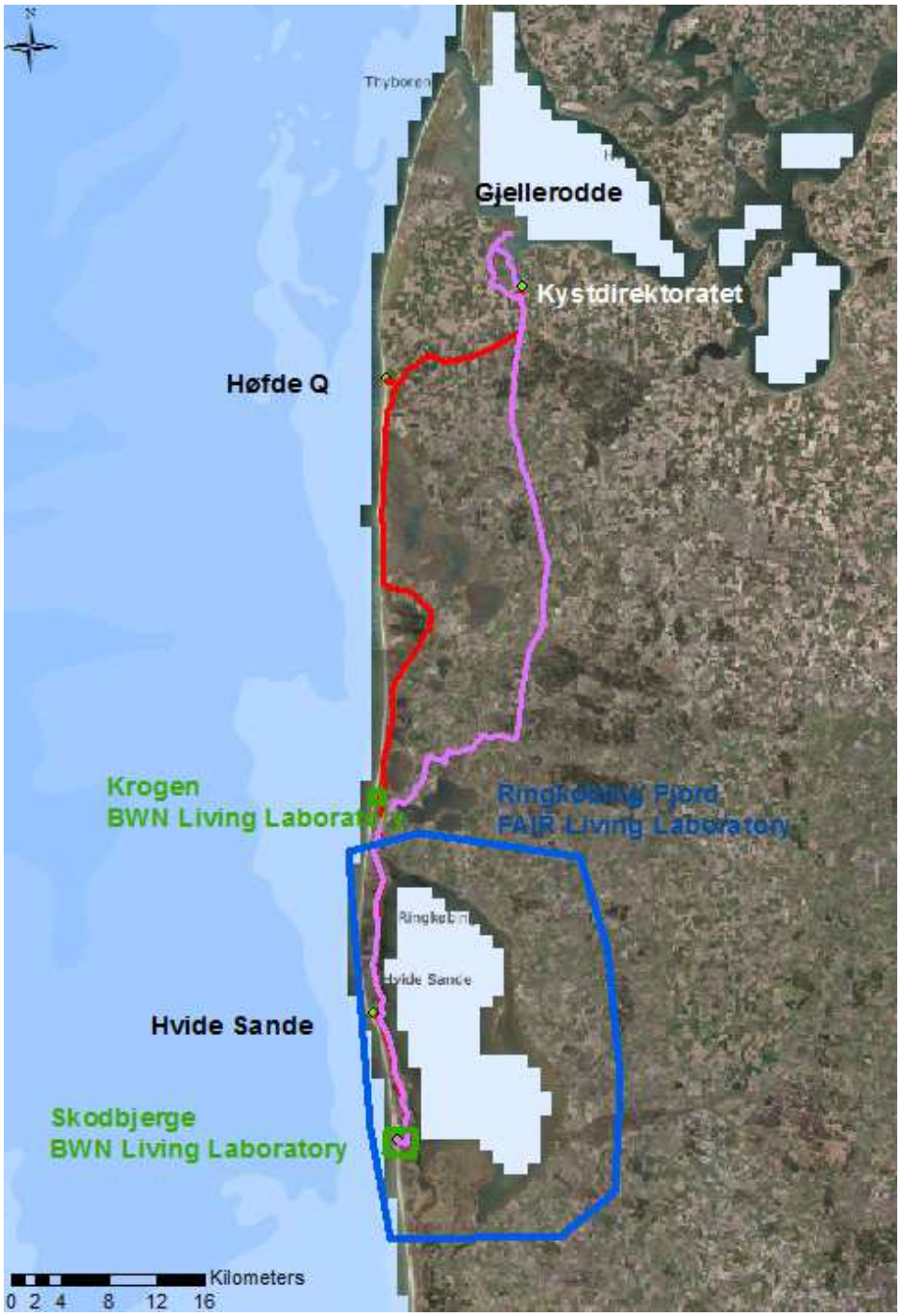
Field trip – Information folder

WP3 meeting in Lemvig June 12th 2018

Time	Description of event
12:30	Bus leaves from Kystdirektoratet, Lemvig
13:00	Arrival Høfde Q, Fjaltring Carlo and Per will talk about the history and the first coastal protection along the Danish West Coast
13:30	Bus leaves
14:30	Arrivel Hvide Sande Sluice A walk to and around the sluice
15:15	Bus leaves
15:30	Arrivel Skodbjerge, Sønder Klitvej We will begin with a cup of coffee and a piece of cake Thereafter, we will take a walk around the Living Laboratory Skodbjerge – Per will talk about the area, the commen agreement and the BWN project and the work the Coastal Authority are doing in the BWN project in the area
16:45	Bus leaves Skodbjerg – Søndervig – Hovvig – Stadil – Gjellerodde Strand Carlo and Per will talk about the landscape and the history around Nørre Vorsborg
18:35	Arrivel at Gjellerodde Strand We will take a walk around Gjellerodde while Per is talking about the area
19:15	Bus leaves to Kystdirektoratet
19:30-?	Helene is grilling for us at the Kystdirektoratet

Maps with our rute

While we are driving you can look at pictures in the app – Collector for arcgis



The red line indicates the drive out and the purple line the drive back.

1. Stop - Høfde Q
2. Stop - Hvide Sande
3. Stop - Skodbjerge
4. Stop - Gjellerodde
5. Stop - Kystdirektoratet

Information about the stops on the fieldtrip

Høfde Q (Groyne Q)

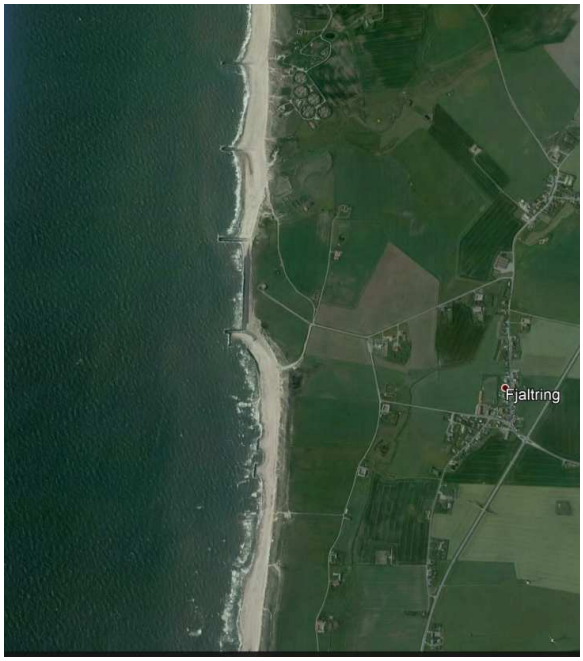
The history behind the groynes along the Danish West Coast.

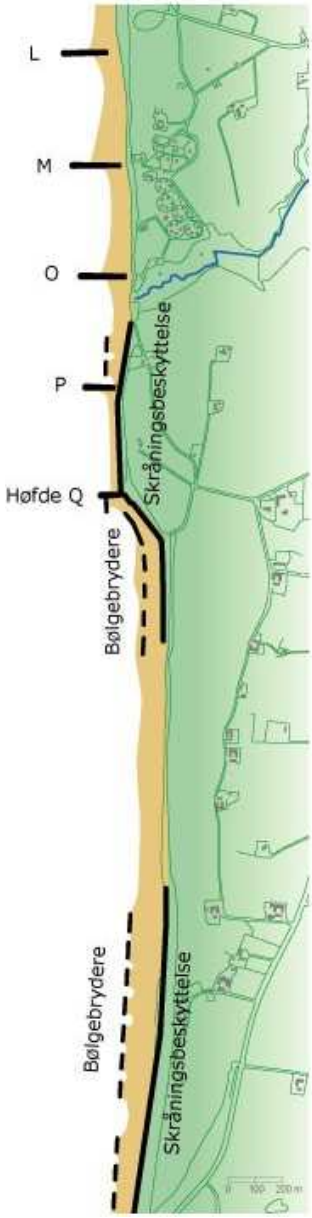
The North Sea waves and currents break down (erodes) the Jutland west coast. In order to prevent flooding and loss of buildings and farmland, the state has since 1875 carried out coastal protection on the West Coast.

Groynes 1-12 at Ferring were built in 1875-83. The groynes A-K from Bovbjerg to Trans were built in 1909-37, while groyne Q at Fjaltring was founded in 1934. The L-P groynes were later built in 1959-62.

The Danish Coastal Authority is no longer constructing new groynes, but is now protecting the coast with revetment and sand nourishment. Sand nourishment was put into service in Denmark in the 1970s and it is now pumped annually around 2.5 million. m³ of sand on the west coast. The expense is paid by the state and the affected coastal municipalities.

Revetment and sand nourishment at Fjaltring has since 1986 halted the natural decline of the coast and provides a more natural coast for the benefit of both locals and tourist.

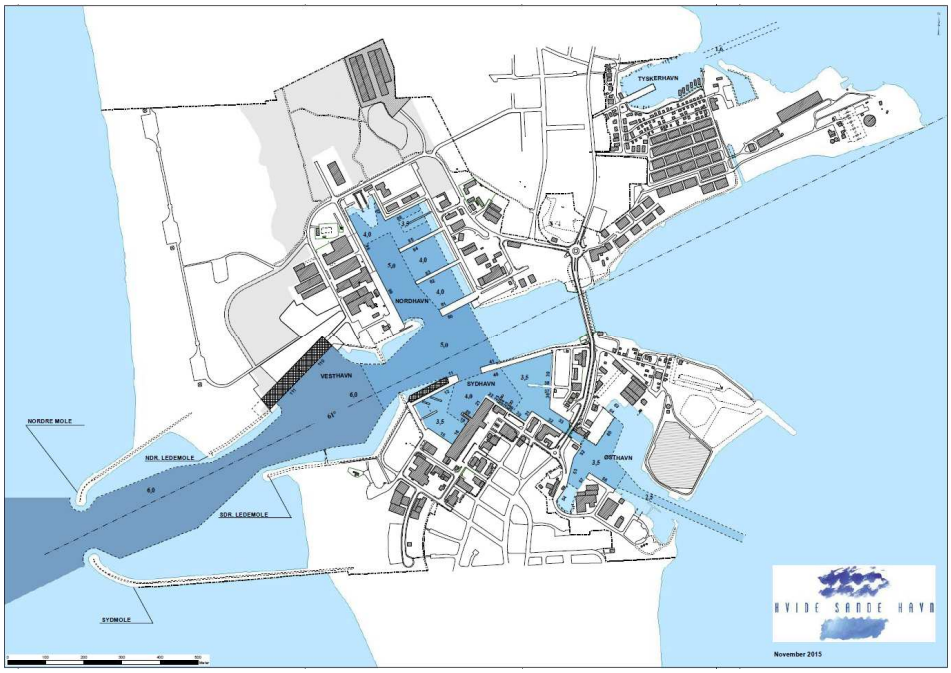




Hvide Sande port and Sluice

The text is copied from the homepages of Hvide Sande Port

https://hvidesandehavn.dk/en/about-the-port/



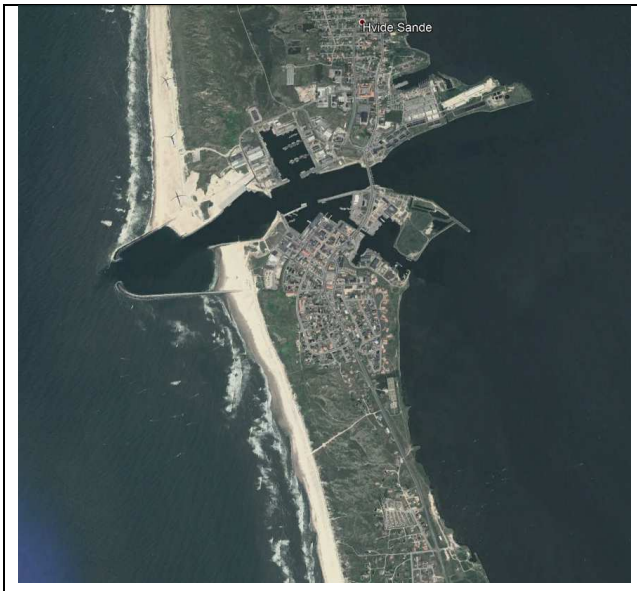
The sluice gates at Hvide Sande were constructed from 1928-31. The drainage sluice had the purpose of regulating the water level in Ringkøbing Fjord and the lock to ensure the navigation of Ringkøbing Port. Hvide Sande town and port came into existence spontaneously – not according to any plan – when local fishermen saw an opportunity to exploit the new opportunities that had materialized.

The sluice in Hvide Sande is owned by the state, which is responsible for maintenance and in close cooperation with the sluice committee is responsible for locking practices. However, daily operations are undertaken by Hvide Sande Port.

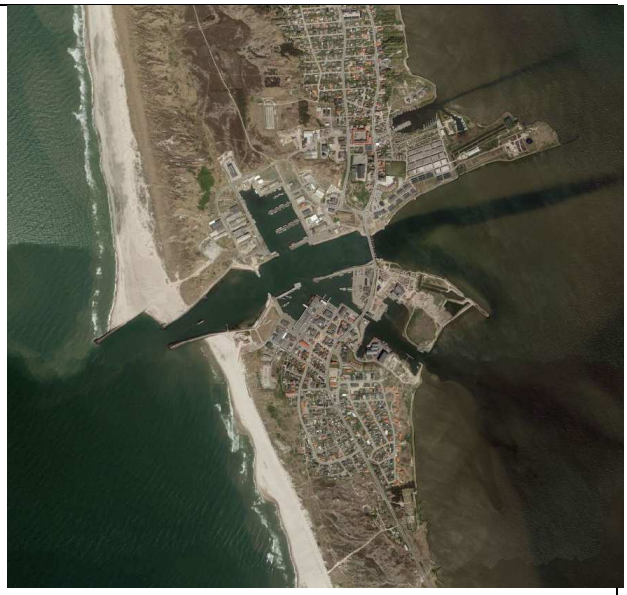
The Port of Hvide Sande thus developed because the town developed and vice versa. This fact is the reason for all development initiatives in Hvide Sande and ensures local ownership as well as the necessary roots in the local community. Today the port has evolved from being one of Denmark's most important fishing ports into also being a 'port business' that offers many different 'goods.'

The Port of Hvide Sande is a dynamo and growth centre for the town and its hinterlands. Connected transport solutions – and thereby infrastructure – have taken on crucial significance. The sea route towards the west and the main road towards the east are two sides of the same coin, and the Port of Hvide Sande is working determinedly to support this.

To make sure that the Port of Hvide Sande was ready for the future the port was rebuilt in 2012. The reason for the rebuilding was that the ships are getting larger and therefor need deeper water.



Hvide Sande Port today



Hvide Sande Port 2010

Around the port there is a large sediment transport from north to south. Some of the sand is deposited in the port and the channel into the port. To reduce the cost for dredging a coastal retried is carried out north of the port on a regular basis. The sand that is removed north of the port is taken down south as a bypass

The area around Hvide Sande and Ringkøbing Fjord is one of the Pilotsites in another interreg project FAIR.

The Living Laboratory Skodbjerge

The living laboratory Skodbjerge is located along the Danish North Sea Coast and has been chosen as living laboratory. It was because it is located on the stretch of the coast where the Danish Coastal Authority is responsible for the coastal protection through a Common Agreement between the stat and the local municipality.

Skodbjerge is fairly well protected by dunes, several dune enhancements and a vast hinterland only disturbed by a smaller number of vacation homes congregated in a couple of areas. Through the hinterland a recreational path runs. It is intended for cyclists and pedestrians. The hinterland is not in need of extensive protection given that it is a natural landscape with an untouched advancement. A main road runs parallel to the coast line.

For more information about Skodbjerge look into the system description at our webpages:

http://eng.kyst.dk/pages/webside.asp?articleGuid=270636

Through the Building with Nature project different aspects of the modification elements in the pathway will be analyzed at Skodbjerge.

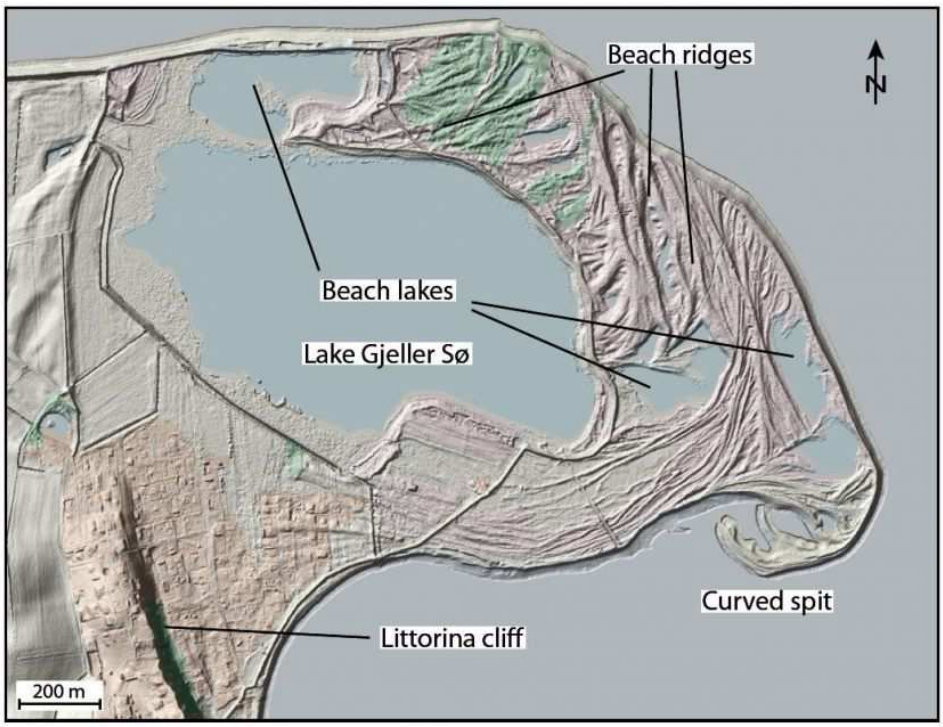
The development of a shoreface nourishment will be analyzed in the software program MorphAn. Another element of the project is that it will be attempted to set up a 2D model that models acute erosion. In the Skodbjerge area there will also be looked at aeolian transport from the beach into the dunes. Last but not least, the storm data in the area will be used to make a classification of storms.

Gjellerodde

The text is copied from the homepages of Geopark Vestjylland ©

https://www.geoparkvestjylland.com/ln-int/denmark/40-gjellerodde

Coastal landscape. Cuspate foreland



Gjellerodde is a coastal area located north of Lemvig. It represents a good example of a cuspate foreland. It is likely that the area was a submarine shoal in the Littorina Sea (9.000-6.000 years ago). At that time the relative sea level was locally about 2 m higher than today and material eroded from the nearby coast formed a submarine shoal. The relative rise of the land in the area since the Littorina transgression has elevated the shoal and sand spits have developed from the west and south. The spits eventually merged and enclosed lake Gjeller Sø.

The area contains impressive examples of beach ridges that illustrate the gradual growth of the spits. There are several small lakes that have been enclosed by the advancing sand spits, of which lake Gjeller Sø is by far the largest. A recurved spit is presently developing in the extreme south-eastern corner of the area. This recurved spit is in the process of enclosing a new lake.

Gjellerodde is a very illustrative example of spit formation and coastal deposition, resulting in the development of a cuspate foreland. It is therefore important that the coastal processes are not disturbed by human activities. The area is part of NGI 75 (area of National Geological Interest) and has been selected as a National Coastal Landscape. Gjellerodde has been selected as a Natura 2000 site and a Ramsar area. The south-eastern corner has been designated as a Natura 2000 habitat site. Most of the area consists of protected nature in the form of heaths, tidal meadows and bogs.

Nature management takes place by controlled burning and sheep grazing. The area is easily accessible and is a favoured tourist destination. It would be a good location to communicate geopark information.