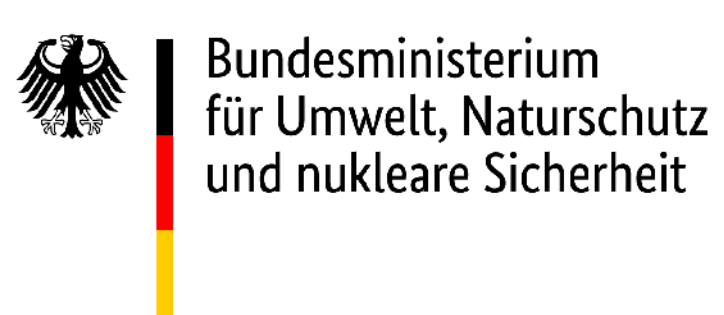




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# SANDKÜSTE ST. PETER-ORDING

## HOW TO REEVALUATE AND ADAPT WADDEN SEA NATURE WITH RESPECT TO CLIMATE CHANGE?

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The coastal landscape of St. Peter-Ording is located in and next to the Wadden Sea National Park and is unique on the mainland coast of Schleswig-Holstein. Due to the variety of coastal habitats, St. Peter-Ording is a real hotspot for biodiversity. At the same time the coastal landscape is the basis for the recreation of many people and protects the hinterland from flooding. However, parts of these coastal habitats are threatened by habitat loss and climate change. In order to be able to preserve these natural values, the project "Sandküste St. Peter-Ording" implements extensive nature conservation measures and creates important prerequisites for adaptation to the consequences of climate change.

### Reevaluation and restoration of coastal habitats

#### Habitat loss

The loss of the natural dynamics, habitat fragmentation, the dispersal of invasive species and the impacts of climate change endanger the coastal nature of St. Peter-Ording, especially the older dune habitats and the dune forest.

#### Dune restoration

In the project, we restore and reevaluate older dune areas by reconnecting the remaining habitats as well as by removing invasive species and recreating small, sandy spots for rejuvenation of the dune vegetation.

#### Forest conversion

In the dune forest, conversion measures are initiated so that the current pine forest, which is atypical for dunes, can develop into a climate-adapted, species-rich and dune-typical oak forest.



### Nature-based climate adaptation solutions

#### Flood protection dune

In St. Peter-Ording, the dune Maleens Knoll ensures flood protection over a coastal stretch of over 1200 m and secures the town of St. Peter-Ording from floodings. The dune currently offers sufficient protection against storm surge events.

#### Dune stability

However, future sea level rise may cause higher storm surges. Therefore, we investigate whether the rising sea level may affect dune stability using physical experiments and computer modelling. Based on these results, options for nature-based solutions will be developed and weighed up. If more coastal protection is necessary, it should be in harmony with nature conservation and local development.

### Geomorphology of the St. Peter-Ording Sand

#### Function of the sand bar

The St. Peter-Ording Sand is a prominent part of the coast landscape with high relevance for nature conservation, coastal protection and tourism likewise.

#### Past and future development of the sand

However, the Sand is subject to a constant change by wind and wave forcing. We therefore analyse the development of the foreshore barrier system in the past to understand the underlying geomorphological processes. Based on these results, the potential future development will be estimated to discuss implications for potential climate adaptation measures.



### Interested in volunteering?

Our project frequently offers volunteering activities in St. Peter-Ording.



Interested? Please contact us for more information!

### More information needed?

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