## **OSMUSSAAR ISLAND**

#### Area 480 ha / Length 4,6 km / Width 1,3 km

Osmussaar is situated at the Estonian North-Western coast, about 7 km off the mainland. It is remnant island of the Baltic Clint, uplifted from the sea about 2000 - 3000 years ago. A landscape reserve was established in 1996 for protection of local geological formations, plant communities and bird fauna. The island together with the surrounding coastal sea is incorporated to Nõva-Osmussaare nature area.



### SETTLEMENT HISTORY

The Osmussaar Island was most likely settled already in the Viking period, from which time the legend comes about burying Odin, the Scandinavian chief God to this island. The connection between Odin and this island is denoted by it's Swedish name - Odensholm.

For centuries the so-called coastal Swedes were the indigene habitants. In 1930ies seven households (about 140 people) were living in Osmussaar Island. The SUMBKÜLA in the central part of the island was called *Bien*. The most remarkable remained building is the limestone chapel from 1766 - Jesu Kapell - now in ruins. Coastal Swedes were evacuated due to the WW2 in 1940 and 1944.

After the World War 2 Osmussaar was a closed border zone, where a small in number Soviet military unit was located. Broken barracks and military contamination will remind us of that period. A remarkable portion of the latter has been cleared away by now. After the Soviet military forces left in 1990ies the island remained unpopulated for a about a decade. From 2001 a household is situated in Osmussaar Island permanently.

#### **GEOLOGY**

Osmussaar Island is geologically very exciting area. The biggest interest among the hobbyists has deserved the cliff, situated in the Northern coast of the island. It is a part of the almost 1200 km long Baltic Clint, that stretches from Öland to Lake Ladoga. The cliff reaches it's highest part at the light-house (7 m) and it gets gradually lower towards South-East. It is put in for UNESCO World Heritage list as one of the best examples of the Baltic Clint.

When hiking along the Western coast of the island one can see extensive shingle fields. These consist of limestone pebble, that have been polished and heaped up by waves to gentle-sloped walls.

In Osmussaar Island and the surrounding coastal sea plenty of dark brown rocks and stones – gneiss-breccia boulders can be found. These have been formed about 540 million years ago when the Neugrund meteorite fell into the sea 10 km North-East from Osmussaar Island. Due to high temperature and high pressure previous seabed substances were transformed into new metamorphic rock. During the meteorite explosion the mass of molten rock was bursting out from the crater. In the course of later glaciations seveal breccia boulders have been scattered by the ice to the surrounds of the island as well as elsewhere to Estonian North-Western coast . The most famous of them are Skarvan, that is situated in the coastal sea and the Twins (Kaksikud), gnarled by the waves. At the North-Eastern coast one can find peculiar stone formations, that are called the "crocodyles" due to their shape. Those prefigure breccia rock that has been petrified in limestone cracks and trenches. Later the soft limestone rock has been eroded and carried away due the impact of waves and earthquakes.



#### FLORA AND VEGETATION

In Osmussaar Island one can find following Habitats Directive Annex I habitat types: coastal lagoons, drift lines, vegetated stony banks, sea cliffs, coastal meadows, juniper formations, xeric calcareous grasslands, alvars, Molinia communities, species-rich fens and old broad-leaved deciduous forests. Alvar meadows are the gem of Osmussaar Island. Alvars cover more than one third of the island's area. Vegetation of dry calcareous alvars is sparse, but extremely species-rich. Hikers may check out alvars when walking along the Western coast, they rise just beyond the sea-waves impact zone.

Junipers, growing close to the coast, take very peculiar form. Due to permanent winds their growth is very low and they are crawling close by ground. The most dominant herb species in the alvars is Helictotrichon pratensis, abundantly are represented also Filipendula vulgaris, Campanula rotundifolia, Galium verum and Phleum phleoides, in some places Antennaria dioica, Veronica spicata and Botrychium lunaria. Among protected species Anthyllis coccinea is the most prominent one.

Next to alvars one can find mostly moist and dry calcareous meadows, swamp meadows, fens and juniper stands. Due to LIFE-NATURE project more than 100 ha of grasslands will be restored in the North-Eastern and middle part of the island.

Icelandic sheep are mostly used for grazing.
29 protected plant species can be found in Osmussaar Island, the rarest among them is undoubtedly Cochlearia danica, growing on the cliff. There are 16 orchid species on the island, e.g. Epipactis palustris, Epipactis atrorubens, Ophrys insectifera, Herminium monorchis a.o. Among Habitats Directive vascular plants Liparis loeselii should also be mentioned.

# **BIRD FAUNA**

Osmussaar Island is situated on the major East-Atlantic waterfowl migration route, therefore millions of birds take their transit here. Island's coast and the cape of Põõsaspea are the best observation places of bird migration in the Northern part of the Baltic Sea. The most exciting time for a bird-watcher to visit the island is from the beginning of April until the end of May and then again in the autumn from Mid-September until the end of October. The most abundant migrators are long-tailed duck, the common and the velvet scoter, the red-throated and the black-throated diver, the barnacle goose and the brent goose, the common goldeneye, the red-breasted merganser, the dunlin, the

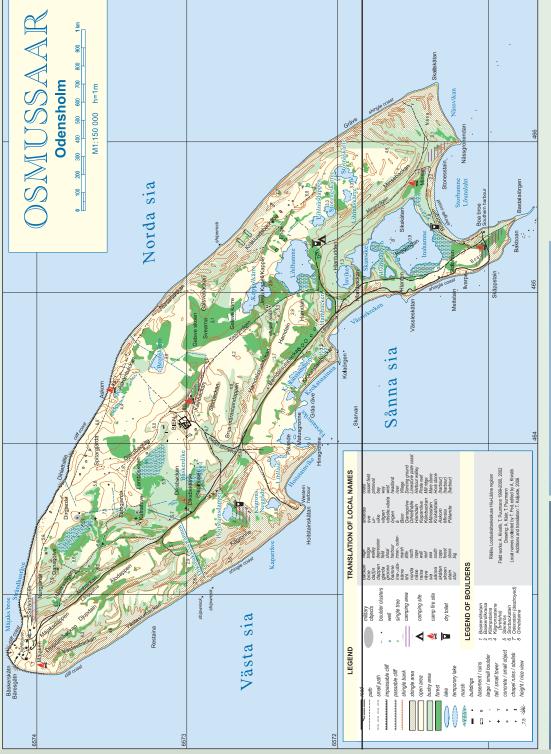


eurasian wigan and the greater scaup. In Osmussaar Island 178 bird species have been met, while 90 breeding species were counted during the latest inventory. Of breeding bird species with all-Estonian importance the following are more abundant: the barred warbler, the red-backed shrike, the red-breasted merganser and the velevet scoter. Of Bird Directive Annex I species, breeding on the island, are the following: the bittern, the marsh harrier, the black grouse, the corncrake, the common crane, the dunlin, the common tern and the arctic tern, the barred warbler and the red-backed shrike.

In midsummer there is an extremely exciting place in the Western coast, called Sanna Sia. In a shallow bay, protected from the winds, numerous waders are stopping from the Mid-July until the end of August (the dunlin, the ringed plover, the lapwing, the wood sandpiper, the knot, the ruff, the spotted redshank, the curlew sandpiper, the common greenshank, the bar-tailed godwit and the grey plover).

In the coastal waters of the island numerous long-tailed ducks are staying for winter (estimated number about 100,000 specimen). The rarest wintering species is the steller's eider, endangered all around the world.









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