



marine protected areas  
in the Eastern Baltic Sea



## Management plan for the marine part of the Väinamere Limited Conservation Area (2009 – 2018)

### Summary

#### General description of the area

The Väinameri Sea (“the Sea of Straits”) is a shallow (average depth 5m) sea part with an approximate area of 2200 km<sup>2</sup>, where a large number of small islands (ca 600 of Estonian 1500 sea islands are situated here) and bays are located. It stretches between the islands of West Estonia (Saaremaa, Hiiumaa, Muhu, Vormsi) and the mainland. In the Väinameri Sea there are smaller waves, bigger fluctuations of water temperatures, less salinity (5-6‰) and transparency (2-5 m), and a thicker and steadier ice cover than in the open sea. The nature of Väinameri region is very diverse, therefore several protected areas have been established here. Väinamere Limited Conservation Area with the total area of ca 173 828 ha (including 165 498 ha marine area) includes most of the Väinameri Sea. Väinamere LCA is divided between 4 West-Estonian counties: Lääne, Hiiu, Saare and Pärnu county.

Väinamere Limited Conservation Area <sup>1</sup>(LCA) was established in 2007 for protection of bird species listed in Annex I of the Birds Directive and migratory bird species, and for protection of species listed in Annex II and habitats listed in Annex I of the Habitats Directive. Väinamere LCA belongs to the Natura 2000 network as Väinamere SPA/SCI; is an internationally important bird area (IBA) and is part of the West-Estonian Archipelago Biosphere Reserve.

The managing authority for Väinamere LCA is Hiiu-Lääne-Saare region of the Environmental Board. State Forest Management Centre is responsible for visitor management.

The area is relatively sparsely inhabited (ca 7 inhabitants per km<sup>2</sup>, if Haapsalu town excluded) but a popular tourism/recreation area with increasing coastal developments, holiday villages, health resorts, recreational boat traffic.

There are 7 ferry ports (Heltermaa, Rohuküla, Virtsu, Kuivastu, Sviby, Triigi, Sõru) that function also as small scale cargo and yacht/recreational tourism ports, and ca 15 small ports and lots of small boat landings. There are several dumping sites in the northern part of Väinameri.

There are plans to restore Väinameri shipping line for ships with max draught 6m and also the permanent connection (bridge) to Saaremaa is still under consideration. From natural resources *Furcellaria lumbricalis* is used industrially in Kassari Bay (for

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<sup>1</sup> Limited conservation area is a protected area with a soft protection regime where all activities are allowed that do not harm species and habitats for which protection the area is established. The main tool for ensuring the protection is environmental impact assessment of the planned activities.

producing agar) and health resorts are using curative seamud (Haapsalu bay, Voosi kurk, Käina bay).

Coastal fishery has been historically important (catch 10 000 t/y) but nowadays decreasing (only ca 400 fishermen, catch 100-300 t/y).

### **Conservation values of the area**

Väinameri has quite diverse benthic flora and fauna. 47 plant species and 58 benthic invertebrate species have been found here as well as marine habitat types protected according to the EU Habitats Directive – sandbanks slightly covered by the seawater (1110), estuaries (1130, Matsalu bay), mudflats and sandflats not covered by seawater at low tide (1140), coastal lagoons (1150\*), large shallow inlets and bays (1160) and reefs (1170).

Väinameri Sea is an important migration stop for waterfowl. As it is located directly on East-Atlantic flyway of birds then at least 500 000 waterbirds make a stop here each year during spring migration, a little bit less in autumn and during moulting. 22 waterbird species form internationally important concentrations in Väinameri area, including 7 priority sp: Bewick's Swan (*Cygnus columbianus bewickii*), Whooper Swan (*Cygnus cygnus*), Greylag Goose (*Anser anser*), Barnacle Goose (*Branta leucopsis*), Northern Pintail (*Anas acuta*), Common Pochard (*Aythya ferina*) and Greater Scaup (*Aythya marila*) (>10% from total flyway population are staging in Väinameri area).

More than 50 waterbird species are nesting on the coast and islets of the Väinameri Sea, including Cormorant (*Phalacrocorax carbo*), Greylag Goose, Barnacle Goose, Gadwall (*Anas strepera*), Caspian Tern (*Sterna caspia*), Arctic Tern (*S. paradisaea*), Little Tern (*S. albifrons*), Sandwich Tern (*S. sandvicensis*) and Common Tern (*S. hirundo*) whose numbers fulfil international IBA criteria. On the coast and islands of the Väinameri Sea ca. 20 pairs of White-tailed Eagles are nesting.

Both, the Grey Seal (*Halichoerus grypus*) as well as the Ringed Seal (*Phoca hispida botnica*) can be met in the Väinameri Sea but the area is especially important for the endangered Ringed Seal. Currently (2009) there are about 1000 Ringed Seals and 4000 Grey Seals in Estonia. For protection of both seal species special protection areas are established where restrictions for visitors are set to avoid disturbance of animals in sensitive periods.

Due to the low salinity, the freshwater fish species are dominating in the Väinameri Sea. The protected fish species (listed in Annexes of the Habitats Directive) occurring here are Bullhead (*Cottus gobio*), River lamprey (*Lampetra fluviatilis*), Spined loach (*Cobitis taenia*), Mud loach (*Misgurnus fossilis*), Common whitefish (*Coregonus lavaretus*), Salmon (*Salmo salar*), Asp (*Aspius aspius*) and as rare occasional visitors the Sea lamprey (*Petromyzon marinus*), Twaite shad (*Alosa fallax*) and Sturgeon (*Acipenser sturio*).

**The main management measures** proposed in the management plan include:

1. General measures (marking borders, installing signs about restrictions; administration and surveillance; recommendations for EIA for economic activities).
  - a. Measures for habitats
  - b. Monitoring of distribution and status of HD Annex I habitat types every 6 years.

- c. Monitoring of *Furcellaria* – necessary for setting limits for commercial use. Carried out every year (or every second year).
2. Measures for birds
  - a. Awareness raising – adding bird-related info to info stands;
  - b. Strengthening surveillance;
  - c. Establishment of new reserves if the current protection regime is not sufficient to avoid negative impacts on bird populations,
  - d. Using less disturbing research/monitoring methods;
  - e. Restrictions for fast boats and scooters during nesting period;
  - f. Oil monitoring, not allowing transport of hazardous substances on Väinameri sea;
  - g. Ensuring the good water quality in Kasari river basin, decreasing pollution load;
  - h. Not allowing dredging during nesting period;
  - i. Restoration and management of coastal meadows on islets;
  - j. The main measure ensuring the protection is EIA.
  - k. Monitoring of protected bird species (Monitoring of staging and wintering waterbirds; monitoring of beached waterbirds; monitoring of breeding birds of small islets);
  - l. Monitoring of bird by-catch;
  - m. Necessary further investigations: Studies on impacts of disturbance; foodbase of birds and impacts of hazardous substances.
3. Measures for fish
  - a. Awareness raising – adding info about protected fish species to info stands;
  - b. Ensuring the good water quality in Kasari river, decreasing pollution load;
  - c. Specifying fishing regulations for Soonlepa bay (the borders of the restricted area should be specified as the current borders do not exactly correspond to the spawning area of whitefish);
  - d. Monitoring
    - i. Yearly monitoring of fish communities in the frame of the state monitoring of fish resources;
    - ii. Yearly monitoring of the Spined loach;
    - iii. Additional studies to find out if bullheads in the coastal sea belong to a separate group/subspecies.
4. Measures for seals
  - a. More attention should be paid to development and application of seal-safe fishing gears in the whole Estonia. It is possible to get support from EU Fishery Fund for that. Using seal-safe fishing gear would enable the further decrease of bycatch of seals in Väinamere region. Seal-safe fyke nets should be made obligatory in Väinamere LCA.
  - b. In general the protection of seals in Väinamere region is ensured through protection regimes of the existing protected areas and species protection areas.
  - c. The main measure ensuring the protection in Väinamere LCA is EIA/Natura 2000 assessment for planned activities.
  - d. Continuous monitoring of the status of the Ringed and Grey seal populations and by-catch monitoring.
  - e. Awareness raising/informing about restrictions.
  - f. Strengthening surveillance in areas designated for protection of seals.
5. Measures related to visitor management
  - a. Installing info stands introducing the nature values of Väinameri sea and informing about the restrictions.