

Information Sheet on Ramsar Wetlands

Categories approved by Recommendation 4.7 of the Conference of the Contracting Parties.

NOTE: It is important that you read the accompanying *Explanatory Note and Guidelines* document before completing this form.

1. Date this sheet was completed/updated:

January 2002

FOR OFFICE USE ONLY.

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Designation date

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Site Reference Number

2. Country:

Denmark

3. Name of wetland:

Horsens Fjord and Endelave.

International No. 152; National No. 13

4. Geographical co-ordinates: 55°51'N, 10°10'E

5. Altitude: (average and/or max. & min.) 0-34 m

6. Area: (in hectares) 42,580 hectares

7. Overview: (general summary, in two or three sentences, of the wetland's principal characteristics)

Shallow fjord and waters with shoals and sandbanks, salt marshes and lagoons. Three fairly large islands with cultivated land and scattered habitation.

8. Wetland Type (please circle the applicable codes for wetland types as listed in Annex I of the *Explanatory Note and Guidelines* document.)

marine-coastal: **A** · **B** · C · D · **E** · F · G · **H** · I · **J** · K

inland: L · M · N · O · P · Q · R · Sp · Ss · Tp · Ts
· U · Va · Vt · W · Xf · Xp · Y · Zg · Zk

man-made: 1 · 2 · 3 · 4 · 5 · 6 · 7 · 8 · 9

Please now rank these wetland types by listing them from the most to the least dominant:

A, E, B, H, J.

9. Ramsar Criteria: (please circle the applicable criteria; see point 12, next page.)

1 · **2** · 3 · 4 · 5 · **6** · 7 · 8

Please specify the most significant criterion applicable to the site: 6

10. Map of site included? Please tick *yes* -or- *no* (Please refer to the *Explanatory Note and Guidelines* document for information regarding desirable map traits).

11. Name and address of the compiler of this form:

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Please provide additional information on each of the following categories by attaching extra pages (please limit extra pages to no more than 10):

12. Justification of the criteria selected under point 9, on previous page. (Please refer to Annex II in the *Explanatory Note and Guidelines* document).

Criterion 2: On the island of Vorskø many species of mushrooms on the Danish red list are found. On the island of Endelave the orchid *Orchis morio* on the Danish red list grows. The site is also an important breeding site for waterbirds, some of which are on the Danish red list, e.g. *Calidris alpina*, and *Sterna albifrons*.

Criterion 6: The site regularly supports more than 1% of the individuals in the populations of the following species:

Eider (*Somateria mollissima*) 22,150 (1991-93) – 1,5% of the Baltic/Denmark/Netherlands population

Goldeneye (*Bucephala clangula*) 3,444 (1996) – 1,2% of the NW/Central Europe population

Greater Scaup (*Aythya marila*) 5,545 (1996) – 1,8% of the Northern/Western Europe population

13. General location: (include the nearest large town and its administrative region)

The site is located along the East coast of Jutland with fjord area and sea territory East of the town of Horsens. Administrative regions are Vejle and Århus Counties.

14. Physical features: (e.g. geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth
Water permanence; fluctuations in water level; tidal variations; catchment area; downstream area; climate)

The fjord landscape is formed by glacial deposits. The average water depth is 5 meters and the residence time of water in the fjord is about 20 days. As to tidal variations the amplitude is about 0.4 meters. The catchment area is around 500 km². The fjord is heavily eutrophicated and dominated by phytoplankton blooms.

15. Hydrological values: (groundwater recharge, flood control, sediment trapping, shoreline stabilisation etc)

The shorelines are fairly stable except for the southern part of the island of Endelave where erosion of the coastline is constantly taking place due to wave action as a result of the prevailing south-west winds.

16. Ecological features: (main habitats and vegetation types)

The site consists of marine coastal ecosystems. There are three fairly large islands with cultivated land and scattered habitation. One of the most important plant community on the islands and along the East coast of Jutland is saltmarsh. The saltmarshes have a fine zonation with *Salicornia europaea* and in a few places *Spartina alterniflora*. Furthermore there are heaths, moors, meadows, and deciduous forests. The invasive plant species *Heracleum pubescens* has been introduced to Endelave.

17. Noteworthy flora: (indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc)

On Vorskø many species of mushrooms on the national red list are found. On Endelave the orchid of *Orchis morio* on the national red list grows.

18. Noteworthy fauna: (indicating, e.g., which species are unique, rare, endangered, abundant or biogeographically important; include count data, etc.)

The site is resting, feeding, breeding and moulting area for waterbirds:

Dark Bellied Brent Goose (*Branta b. bernicla*) 300 (1998)

Common Scoter (*Melanitta nigra*) 2,230 (1991-93)

Bar-tailed Godwit (*Limosa lapponica*) 4,630 (1995)
Golden Plover (*Pluvialis apricaria*) 4,859 (1999)
Dunlin (*Calidris alpina*) 1,075 (1999)

Breeding area for aquatic and salt marsh birds including *Phalacrocorax carbo*, *Circus aeruginosus*, *Recurvirostra avosetta*, *Calidris alpina*, *Sterna paradisaea*, *Sterna sandvicensis*, *Sterna albifrons*, and *Cephus grylle*.

Vorsø has one of the biggest and most stable colonies of Cormorant in Europe. Minor colony of Cormorant on Svanegrund. Møllegrunden is the most important locality for Common Seal in the southern part of the Kattegat.

19. Social and cultural values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.)

On Hjarnø there is a protected area with 10 larger and smaller “stone ships” from the Viking period. On Endelave another archaeological site is found.

20. Land tenure/ownership of: (a) site (b) surrounding area

Territorial waters, private, the State represented by the Ministry of Environment. Part of Endelave is owned by the municipality of Vejle.

21. Current land use: (a) site (b) surroundings/catchment

(a) mainly farmland, grazing on salt marshes (b) mainly farmland

22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects: (a) at the site (b) around the site

Since the 1930s sedimentation around the islands and shoals has increased as a result of the disappearance for a number of years of eel-grass (*Zostera spp.*) North of Alrø Island, as a result of the construction of a causeway connecting the island to the mainland, sedimentation of silt is taking place. In the past years the grazing of the saltmarshes on Endelave has been reduced due to smaller numbers of grazing cattle. The taller vegetation is negative for the birds nesting and feeding there.

23. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes which have been made: management practices; whether an officially approved management plan exists and whether it has been implemented)

Nature conservation: Øvre on Endelave 168 hectares.

The whole area is identical with the EU Bird Protection Area No. 36 and the EU Habitat Protection Site No. 52 is inside the Ramsar site.

Parts of the Ramsar site are Wildlife and Nature reserves. There is no public access to Vorsø, Horskær, Søby Rev, Hov Røn, Møllegrunden and Svanegrund in the breeding season of birds and seals. By a Ministerial Order, hunting from motor boats has been prohibited in Horsens Fjord west of the island of Alrø in order to reduce hunting pressure on and disturbance of waterbirds.

24. Conservation measures proposed but not yet implemented: (e.g. management plans in preparation; officially proposed as a protected area etc.)

No specific information.

25. Current scientific research and facilities: (e.g. details of current projects; existence of field station etc.)

Vorsø is a scientific sanctuary and breeding habitat for Cormorant and Grey Heron. The field station has research facilities and serves as a base for monitoring waterbirds and environment conditions.

26. Current conservation education: (e.g. visitors centre, hides, information booklet, facilities for school visits etc.)

On Vorsø there is an exhibition at the field station, an observation tower in the middle of the Cormorant

colony, and an information booklet of the island.

Vejle County has published informations brochures about Hjarnø and Endelave.

27. Current recreation and tourism: (state if wetland is used for recreation/tourism; indicate type and frequency/intensity)

Endelave Harbour has a capacity for about 60 boats. There are local plans for enlarging the harbour.

Rabbit hunting is a popular activity on Endelave, often with help from ferrets.

Both on Hjarnø and Endelave there are camping facilities.

28. Jurisdiction: (territorial e.g. state/region and functional e.g. Dept of Agriculture/Dept. of Environment etc.)

Nature Conservation and administration of the Ramsar Convention and EU Bird and Habitat Directives: Ministry of Environment.

The legislation on Agriculture and Fisheries: Ministry of Food, Agriculture and Fisheries.

The Nature Conservation Scheme: Vejle County.

29. Management authority: (name and address of local body directly responsible for managing the wetland)

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Lyseng Allé 1
8270 Højbjerg
Tel: 89 44 66 66
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Damhaven 12
7100 Vejle
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Silkeborg State Forest District
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Randbøl State Forest District
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30. Bibliographical references: (scientific/technical only)

- Clausen, P. et al. 2001: Jagt- og forstyrrelsesfrie kerneområder for vandfugle: Status 1999. Danmarks Miljøundersøgelser. 84 pp. Arbejdsrapport fra DMU nr. 146.
 - Højager, S. 1993: Endelave. Nogle notater om flora og fauna. 2. Reviderede udgave. Gejrfuglen 1993. 80 pp.
 - Miljø- og Energiministeriet, Skov- og Naturstyrelsen 1996: EF-fuglebeskyttelsesområder og Ramsarområder. Kort og områdebeskrivelser, status 1995. [With an English summary]. 273 pp.
 - Miljø- og Energiministeriet, Skov- og Naturstyrelsen 1999: Birds of Danish SPAs – trends in occurrence. 119 pp.
 - Ministry of Environment and Energy, The National Forest and Nature Agency 1996: Danish Report 1996 on the Ramsar Convention, Denmark and Greenland. 105 pp. + 4 appendices.
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