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.	
2. Country: Denmark	Designation date	Site Reference Number
3. Name of wetland: Vadehavet (Wadden Sea) International No. 356; National No. 27		
4. Geographical coordinates: 55°16'N, 08°32'E (the is	sland of Mandø)	

5. Altitude: (average and/or max. & min.) 0-5 m 6. Area: (in hectares) 150,482 hectares

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

The Danish Wadden Sea is a part of a coherent tidal area stretching from Ho Bugt north of Esbjerg in Denmark to Den Helder in The Netherlands covering about 10,000 km² including barrier islands (about 1,000 km²), of which the Danish part constitutes about 10%.

The Danish Wadden Sea area is characterised by tidal mud- and sandflats between the mainland and the islands. The tidal amplitude varies from 1.5 metres in the northern part to about 2.0 metres in the south.

The entire Wadden Sea is one of the world's most productive wetlands with an outstanding rich bottom fauna including vast mussel beds. The area is an important nursing habitat for several fish species of the North Sea.

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: $\underline{A} \cdot \underline{B} \cdot C \cdot D \cdot \underline{E} \cdot \underline{F} \cdot \underline{G} \cdot \underline{H} \cdot I \cdot J \cdot K$ inland: $L \cdot M \cdot N \cdot O \cdot P \cdot \underline{Q} \cdot R \cdot Sp \cdot Ss \cdot \underline{Tp} \cdot \underline{Ts}$ $\cdot U \cdot Va \cdot Vt \cdot W \cdot Xf \cdot Xp \cdot Y \cdot Zg \cdot Zk$ man-made: $1 \cdot 2 \cdot \underline{3} \cdot 4 \cdot 5 \cdot \underline{6} \cdot 7 \cdot 8 \cdot 9$

Please now rank these wetland types by listing them from the most to the least dominant: A; B; G; H; Tp; Ts; E; F; 3; Q; 6

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

 $1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8$

Please specify the most significant criterion applicable to the site: 1

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:

Sten Asbirk, Danish Forest and Nature Agency, Haraldsgade 53, 2100 Copenhagen, Denmark. Tel: +45 39 47 20 00, fax: +45 39 27 98 99, e-mail: sta@sns.dk Palle Uhd Jepsen, Danish Forest and Nature Agency.

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 1: The Wadden Sea is a unique example of a natural wetland type in the Atlantic biogeographic

<u>Criterion 1:</u> The Wadden Sea is a unique example of a natural wetland type in the Atlantic biogeographic region.

<u>Criterion 2:</u> Several species of birds occurring in the Wadden Sea are on the Danish red list, e.g. *Charadrius alexandrinus, Calidris alpina, Philomachus pugnax, Gelochelidon nilotica,* and *Sterna albifrons.* Also the fish species the houting *Coregonus oxyrinchus* is on the Danish red list as well as on the global red list.

<u>Criterion 4:</u> The Wadden Sea is an internationally important moulting area for Eider (*Somateria mollis-sima*) and Shellduck (*Tadorna tadorna*).

<u>Criterion 5:</u> The Wadden Sea is the most important staging and wintering site for waterbirds in Denmark especially for dabbling ducks and waders. Every year more than 10 million migrating waterbirds on the East Atlantic Flyway are passing the Wadden Sea on spring and autumn migration.

<u>Criterion 6:</u> The site regularly supports more than 1% of the individuals in the populations of the following species (count data 1996-99):

Brent Goose (*Branta bernicla*) 6,723 – 2,2% of the W Sibiria/W Europe population Shellduck (*Tadorna tadorna*) 30,330 – 10,1% of the Northwestern Europe population Wigeon (*Anas penelope*) 44,577 – 3,6% of the W Sibiria & NW/NW Eur population Eider (*Somateria mollissima*) 28,574 – 1,9% of the Baltic/Denmark/Netherlands population Oystercatcher (*Haematopus ostralegus*) 42,477 – 4,9% of the Europe and NW Africa (win) population Grey Plover (*Pluvialis squatarola*) 2,860 – 1,7% of the Eastern Atlantic (wintering) population Bar-tailed Godwit (*Limosa lapponica*) 31,775 - 27,6% of the Western Palearctic (wintering) population Knot (*Calidris canutus*) 20,295 – 5,9% of the NE Can/Grl/Iceland/NW Eur population Dunlin (*Calidris alpina*) 209,198 – 15% of the N Sibiria/Europe/W Africa population Avocet (*Recurvirostra avosetta*) 4,785 – 7,1% of the W Europe/W Med (breeding) population Curlew (*Numenius arquata*) 6,022 – 1,7% of the Europe (breeding) population

<u>Criterion 8:</u> The site is a nursing place for several fish species of the North Sea.

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

The Wadden Sea lies along the most South western coast line of Denmark. Larger towns close to the Wadden Sea are Esbjerg, Varde, Ribe and Tønder. The County administrations are established in Åbenrå (South Jutland County) and Ribe (Ribe County). Eleven municipalities are bordering the Wadden Sea and include the islands of Fanø, Mandø and Rømø.

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)
 No specific information.

15. Hydrological values: (groundwater recharge, flood control, sediment trapping, shoreline stabilisation etc) No specific information.

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

See point 7. The area comprises the following main waterbird habitats:

- Reclaimed marshland behind sea dikes with a combination of arable land, permanent pasture and freshwater canals
- Coastal saltmarshes dominated by luxuriant vegetation
- Tidal and intertidal flats comprising about 60% of the Wadden Sea, flooded at high tide and more or less dry at low tide
- Sandbanks, dry at normal high water
- Sloughs and gullies between the islands and the tidal flats
- Open waters west of the islands with deeps and shallow areas (less than 10 m depth) extending 8-15 km out into the North Sea.

17. Noteworthy flora: (indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc) No specific information.

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

Breeding area for aquatic and salt marsh birds, among others: *Somateria mollissima, Circus cyaneus, Haematopus ostralegus, Recurvirostra avosetta, Charadrius alexandrinus, Limosa limosa, Calidris alpina, Philomachus pugnax, Gelochelidon nilotica, Sterna sandvicensis, Sterna albifrons.*

The whole Wadden Sea is one of the world's most productive wetlands with an outstanding rich bottom fauna and vast mussel beds, and it is a nursing place for several fish species of the North Sea. The Danish Wadden Sea holds a large population of Common Seals.

19. Social and cultural values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.) Hunting has been restricted to relatively few sites inside the Ramsar area. The fishery is regulated.

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

Territorial waters, private, the State represented by the Ministry of Environment, the Ministry of Food, Agriculture and Fisheries, the ministry of Transport, the Ministry of Defence, and the Counties of Ribe and Sønderjylland.

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

Increasing pollution of the Wadden Sea by the discharge of nutrient water from rivers and smaller streams and by the influence of polluted water from the North Sea south of Denmark.

Potential threats are:

Deposit of harbour-sludge from Esbjerg, containing heavy metals.

Drainage and cultivation of permanent grassland areas behind the sea dikes.

Increasing impact from recreational activities on the beaches of the wetland areas.

Disturbance by hunting on saltmarshes (high tide roosts for waterbirds) and in areas behind the sea dikes. Over-exploitation of natural resources (mussels etc.)

Deepening of the shipping lane from the North Sea to Esbjerg. Oil spills.

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: The entire territorial waters of the Wadden Sea, Skallingen (1,200 hectares), Ribe Holme (170 hectares), areas on Fanø (1,200 hectares), areas on Rømø (1,650 hectares) and Margrethe-Kog (1,100 hectares).

The island of Langli and adjacent waters in Ho Bugt are a scientific reference zone where all activities are prohibited or strictly regulated throughout the year. In 1988 the reclaimed marshland behind the sea dikes in Tøndermarsken was conserved by law (2,500 hectares) in order to preserve traditional agricultural use of the polders for the benefit of flora and fauna.

In 1982 a Ministerial Order on the protection of the natural status of the Danish part of the Wadden Sea was issued by the Minister of Environment. In 1992 the Ministerial Order was revised and the provisions on the wildlife reserve were incorporated. These provisions included a zoning system in order to regulate hunting and public access. The new scheme has improved the conservation status of the Wadden Sea and the protection of waterbirds.

The whole area is designated EU Bird Protection site No. 49, 51, 52, 53, 55, 57, 60, 65, 67, and the main part of the area is designated EU Habitat Protection area No. 78 and 90.

Denmark, Germany and The Netherlands cooperate to protect the entire Wadden Sea. A Common Wadden Sea Secretariat, situated in Wilhelmshaven in Germany, is currently working on these matters.

24. Conservation measures proposed but not yet implemented: (e.g. management plan 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.)

A joint trilateral monitoring programme is carried out by Denmark, Germany and The Netherlands, including among others monitoring of breeding, staging, and migrating birds, seals, mussels, phytoplankton, eelgrass, macroalgae, contaminants and nutrients, recreational activities, and the spatial extension of salt marshes, beaches and dunes and other general parameters such as coastal protection measures, flooding and land use.

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

There are visitors centres at Højer Sluse, Vester Vedsted, Esbjerg (Fiskeri- og Søfrtsmuseet), and Blåvandshuk with information booklets on the area, books, video shows etc. and facilities for school visits. Guided tours for tourists etc.

27. Current recreation and tourism: (state if wetland is used for recreation/tourism; indicate type and frequency/intensity) Many tourists, especially from Denmark and Germany, visit the area.

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: Ribe County and Sønderjylland County.

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

 Ribe County
 Sorsigvej 35

 6760 Ribe

	Alholtvej 1	
Tel: 79 88 60 00	6840 Oksbøl	
Fax: 75 42 49 11	Tel: 76 54 10 20	
E-mail:ribeamt@ribeamt.dk	Fax: 76 54 10 46	
	E-mail: d57@sns.dk	
Oxbøl State Forest District.		
Sønderjylland County	Lindet State Forest District	
Skelbækvej 2	Skovridervej 1	
6200 Aabenraa	6510 Gram	
Tel: 74 33 50 50	Tel: 74 82 61 05	
Fax: 74 33 51 51	Fax: 74 82 61 22	
E-mail: <u>amtet@sja.dk</u>	E-mail: d66@sns.dk	

30. Bibliographical references: (scientific/technical only)

• Common Wadden Sea Secretariat 2002: Esbjerg Declaration. Ministerial declaration of the ninth trilateral governmental conference on the protection of the Wadden Sea. Policy assessment report. 277 pp.

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- Laursen, K. (ed.) 2001: Overvågning af fugle, sæler og planter 1999-2000, med resultater fra feltstationerne. Danmarks Miljøundersøgelser. Faglig rapport fra DMU nr. 350. 103 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.
- Rasmussen, L.M. et al. 2000: Breeding Birds in the Wadden Sea in 1996 results of a total survey in 1996 and of numbers of colony breeding species between 1991 and 1996. Wadden Sea Ecosystem No. 10. Common Wadden Sea Secretariat, Wilhelmshaven, Germany. 122 pp.

Please return to: Ramsar Convention Bureau, Rue Mauverney 28, CH-1196 GLAND, Switzerland Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • e-mail: ramsar@hq.iucn.org