

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.

DD	MM	YY

Designation date

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Site Reference Number

2. Country:

Denmark

3. Name of wetland: Ringkjøbing Fjord

International No. 141; National No. 2

4. Geographical co-ordinates: 56°00'N, 08°15'E

5. Altitude: (average and/or max. & min.) 0-4 m

6. Area: (in hectares) 27,720

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

Ringkjøbing Fjord is a big shallow, brackish inlet, surrounded by extensive areas of salt meadows. Most of the area (21,670 hectares) consists of salt/brackish water; a smaller part is moorland and salt meadows (6,050 hectares).

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:

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: The site is an important habitat for the globally and nationally red listed plant species *Luronium natans*.

The site is an important breeding area for the red listed bird species *Botaurus stellaris*, *Anas querquedula*, *Anas acuta*, *Numenius arquata*, *Calidris alpina*, and *Philomachus pugnax*.

Criterion 4: Outside the Wadden Sea the site is Denmark's most important locality for surface-feeding ducks during migration.

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

Teal (*Anas crecca*) 6,999 – 1,8% of the Northwestern Europe population

Pintail (*Anas acuta*) 2,000 – 3,3% of the Northwestern Europe population

Pink-footed Goose (*Anser brachyrhynchus*) 8,000 – 23,5% of the Svalbard/NW Europe population

Bewick's Swan (*Cygnus bewickii*) 900 – 5,3% of the W Siberia/NE & NW Europe population

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

The site is an inlet on the migratory route along the West coast of Jutland with connection to the North Sea through a lock system. The northern boundary of the area is a line through the inlet from the south limit of Hvide Sande city to the south limit of Ringkøbing city. The administrative region is Ringkøbing County.

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 site is a 294 km² shallow estuary (mean depth 1.9 meter) and is connected to the North Sea through a sluice. Geological the estuary is a bar-built estuary that was earlier open to the North Sea and thus has been influenced by high salinity and the changes in water levels. Since 1931, when the sluice was established, the water level has been controlled by man in intervals between 0.1 meter and 0.35 meter above normal sea water level, though in rainy periods the water level can reach up to 0.7 meter. Also the salinity is controlled by use of the sluice, and it has varied from 4 to 15‰. The nutrient load from the catchment area has only partly decreased since the mid 1980s. The total phosphorus load has decreased about 30% since the mid 1980s due to improved wastewater treatment from household and industries. The total nitrogen load, that main derives from open land areas, does not show a statistical significant decrease compared to the level in the mid 1980s despite regional and national efforts to reduce the nitrogen load. Due to the high loads of nutrients the water quality has been poor with an autotroph biomass up to 2,000 µg C/l until 1995 when it was decided to restore a high salinity. The increase in salinity lead to an improvement in the water quality with a 95% decrease in plankton biomass.

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

The catchment area is 3,477 km² and the estuary receives up to 2,000 mio. m³ freshwater pr. year, on average 1,500 m³, as runoff from the catchment area and nearly 70% delivered through the Skjern Å river system.

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

Shallow, brackish inlet, surrounded by salt marshes and meadows. The main submerged vegetation before

1995 (salinity between 4-8‰) was *Potamogeton pectinatus*. After 1995 the coverage of *Potamogeton pectinatus* decreased due to increase in salinity. *Ruppia maritima*, *Ruppia cirrhosa* and *Zostera marina* adapted for higher salinity have not yet colonized the estuary adequately, partly due to fluctuations in salinity. But the submerged vegetation's depth-limit has increased from 0.75 meter before 1995 to 1.5 meter in 2000 as a response to the improved water quality.

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

Luronium natans is both on the national and the global red list.

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

The site is a resting and feeding area for waterbirds:

Wigeon (*Anas penelope*) 9,500

Shoveler (*Anas clypeata*) 375

Dark-bellied Brent Goose (*Branta b. bernicla*) 1,200

The salt meadows of the Tipperne peninsula are some of the most important breeding areas of coastal waterbird species in Denmark including species on the national red list and abundant species e.g. *Botaurus stellaris* (rare), *Anas strepera* (immigrating), *Anser querquedula* (vulnerable), *Anas acuta* (vulnerable), *Anas clypeata* (abundant), *Circus aeruginosus* (abundant), *Limosa limosa* (abundant), *Numenius arquata* (rare), *Calidris alpina* (rare), *Philomachus pugnax* (vulnerable), *Recurvirostra avosetta* (abundant), *Sterna sandvicensis* (abundant), *Sterna hirundo* (abundant), and *Sterna paradisaea* (abundant).

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

Recreational fishing and hunting areas.

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

24,000 hectares of the area is state-owned and protected as a nature reserve by a ministerial order, the rest is privately owned.

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

(a) grazing, reed harvesting, 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

Since the establishment of the sluices at Hvide Sande in 1931, the mean water level and salinity have dropped in Ringkøbing Fjord. After the regulation of the Skjern River in the 1960's increased sedimentation in the southern part of the fjord has occurred.

The water quality deteriorated through the 1980's. This led to a decline of the flora and fauna, and all underwater vegetation disappeared in 1979. The water quality has improved since, and new vegetation has appeared locally. From 1995 it has been decided to restore a high salinity of the water. However, the salinity has not been kept at a stable level, and all the submerged vegetation has again nearly disappeared during 1996-99.

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: In 1985 the fjord and the state-owned areas (about 24,000 hectares) were protected as a nature reserve by a Ministerial Order. The scientific sanctuaries Tipperne and Klægbanken have already been protected since 1928 with restrictions on hunting and public access.

The whole area is designated EU Bird Protection site no. 43, and the whole area is inside the EU Habitat Protection area No. 62.

Most of the area is a Wildlife and Nature reserve.

The Skjern River project, aiming at the reestablishment of the selfpurification effect of the former Skjern River Delta has improved the water quality (see point 14 and 22). The western part of the project was finished in 2001. It has had the consequence that former agricultural fields within the RAMSAR area have been transformed to reed-beds and meadows. It is planned to manage these areas so as to improve the habitat for breeding waders and migrating waterbirds in general.

The site is on the Montreux Record: By Notification 1994/7 the Ramsar Convention directed the attention to Ringkøbing Fjord, and the Bureau invited Denmark to submit information on the ecological situation of the fjord to the Standing Committee of the Ramsar Convention. In 1994 the Danish Ministry of Environment informed the Standing Committee about the current situation and ecological conditions of the fjord.

Changes in the operation of the North Sea sluices and the restoration project for the River Skjern and catchment are anticipated to enhance the ecological character of the fjord including important breeding and staging sites for waterbirds on islands and adjacent marshlands.

In September 1996 the Ramsar Bureau on invitation of the Danish Forest and Nature Agency visited Ringkøbing Fjord in order to assist in a procedure, with the view to eventual removal of the fjord from the Montreux Record.

The Management Guidance Procedure made the following recommendations in order to have the site removed from the Montreux Record:

1. a revised Information Sheet for the site should be submitted to the Ramsar Bureau
2. an eventual extension of the Ramsar Site should be considered to include the River Skjern restoration project area, e.g. after a successful implementation of the project
3. efforts should be made to strengthen exchange of information between different actors
4. an integrated monitoring project should be incorporated into a management plan for the river
5. monitoring of the site should, if possible, include resumption of regular aerial waterbird surveys
6. experiences gained from Ringkøbing Fjord should be used as a case study for use at other sites, and
7. the STRP should be invited to review the report at a coming meeting in order to provide further guidance to the Danish authorities and the Ramsar Bureau on the removal of the site from the Montreux Record.

So far, the recommendations under 1, 3, 4, 5, and 6 have been fully implemented. Concerning the recommendations under 2 Denmark has designated the River Skjern restoration project area as the EU Habitat Protection Area No. 61. Together with the EU Habitat Protection Area No. 62, the EU Bird Protection Site no. 43, and the Ramsar Site No. 152 at Ringkøbing Fjord the whole area is now included in the NATURA 2000 Network. Concerning the recommendations under 7 the STRP will be invited to review a future report when the ongoing restoration projects and initiatives have been fully implemented and the effects monitored and reported.

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

All the necessary permissions have been given to restore better freshwater conditions in the Tipperne reserve in order to improve the breeding conditions for waders and ducks.

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

Monitoring of waterbirds is currently carried out from the field station on the Tipperne peninsula. The field station is run by the Ministry of Environment.

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

There are two exhibitions in the area, several observation towers, and an information brochure. Nature education and tour information see <http://www.ringamt.dk/> (in Danish and German)

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

Tourists are visiting the area in relatively large numbers. About 40,000 persons per year are visiting the exhibition about the area at the Northern Barn, established by the County.

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: Ringkøbing County.

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

Ringkøbing County
Østergade 41
Postboks 152
6950 Ringkøbing
E-mail: ringkjoebing_amt@ringamt.dk
Tel: 96 75 30 00
Fax: 96 75 30 80

Oxbøl State Forest District
Åholt
Åholtvej 1
6840 Oksbøl
Tel: 76 54 10 20
Fax: 76 54 10 46
E-mail: d57@sns.dk

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.
 - 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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