

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: Filsø

International No. 140; National No. 1

4. Geographical coordinates: 55°42'N, 08°15'E

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

6. Area: (in hectares) 4,270 hectares

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

Lake Filsø in south-western Jutland is the remaining part of a greater (about 3,000 hectares in 1800), shallow freshwater lake and wetland area, which had been drained and reclaimed for agricultural purposes since 1858. Today the main part of the area (about 1,200 hectares) is still used for intensive farming. The existing wetland (about 150 hectares) is currently under active nature management. The remaining part of the site consists of heathland and dry grass-land.

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:

O, W, 3, M, 9

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: 4

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, Nature and Wildlife Section.

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 lake is one of the only remaining freshwater lakes in West Jutland. A large number of submerged plant species has been recorded, including a number of species on the Danish red list e.g. *Crassula aquatica* and *Elatine hydropiper*.

Breeding waterbirds from the Danish red list includes e.g. *Botaurus stellaris*, *Anas querquedula*, and *Numenius arquata*.

Criterion 4: The lake and surrounding meadows and pastures facilitate important staging and breeding possibilities for waterbirds. The adjacent farmland is intensively used as foraging areas for waterbird species such as Pink-footed Goose, Greylag Goose and Whooper Swan. The site is one of the most important staging areas in Denmark for the Pink-footed Goose.

Criterion 6: Lake Filsø regularly supports more than 1% of the individuals in the populations of the following species (count data from 1994-97):

Whooper Swan (*Cygnus cygnus*) 500 - 1,3% of the NW Mainland Europe population

Bewick's Swan (*Cygnus bewickii*) 300 - 1,8% of the W Siberia/NE & NW Europe population

Pink-footed Goose (*Anser brachyrhynchus*) 25,000 - 73,5% of the Svalbard/NW Europe population

Grey-lag Goose (*Anser anser*) 20,000 - 10% of the NW Europe/SW Europe population

Pintail (*Anas acuta*) 1,500 - 2,5% of the Northwestern Europe population

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

The site is located 0-10 km from the North Sea on the migratory route along the West coast just between Ringkøbing Fjord (Ramsar Site No. 141) and the northern part of the Wadden Sea (Ramsar Site No. 356). The nearest town is Varde approx. 20 km to the south-east. The administrative region is Ribe 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)

Lake Filsø was originally a coastal lagoon with an open connection to the North Sea. For about 3,000 years ago the open connection was closed by drifting sand and accumulation of gravel in combination with a relative land rise. Today the connection to the sea is a narrow and regulated river. The irrigated farmland is drained by a pumping-system discharging the nutrient rich water into the river. The water from the drainage system is not affecting the water in the lake.

The water depth in the lake is about 0.75 meter in average. A lock in the river ensures a stable water level. One major stream from the catchment (about 90 km²) flow into the lake and discharge a decreasing amount of nutrients from adjacent farmland.

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

The pumping scheme within the farmland (mainly downstream the lake) is discharging surface water. Currently the hydrological function of the remaining lake should support the selfpurification of the surface water from the catchment. The lake will to a certain extent function as a sediment trap (sand and silt from the catchment). The sediment contains nutrients from adjacent farmland. However, the amount

of nutrients is decreasing due to the current effect of the Action Plan for the Aquatic Environment. The outlet from the lake and farmland into the North Sea is often blocked by sand accumulated along the coastline.

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

Farmland is the dominating feature of the site (1,200 hectares). The lake covers an area of 90 hectares, and including adjacent meadows, pasture and reedbeds (about 150 hectares) and shrub (about 200 hectares) the habitats represent the most important wetland areas of the site. The remaining part of the site consists of heathland and dry grass-land.

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

A large number of submerged plant species has been recorded, including a number of species on the Danish red list e.g. *Crassula aquatica* and *Elatine hydropiper*. Their distribution in the lake is very limited.

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

Breeding area for aquatic birds including species on the Danish red list and abundant species e.g. *Botaurus stellaris* (rare), *Anser anser* (abundant), *Anas querquedula* (vulnerable), *Circus aeruginosus* (abundant), and *Numenius arquata* (rare).

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

In general the public has no access to the area. However, from a viewpoint the huge number of waterbirds, especially geese, in the lake and on farmland habitats can easily be observed. There is no commercial fishing in the lake, but interested people have the opportunity to obtain a fishing licence for angling in the river. This activity is in particular popular among tourists visiting the area. Søvigssund, Søndre Landkanal and Henne Mølleå are canoeing areas.

There is hunting for geese and other waterbirds as well as hunting for red deer.

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

(a) Private (b) Private on the east, north and north-east sides; the State represented by the Ministry of Environment has extensive coniferous plantations to the south-west and south.

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

(a) Meadows and pasture adjacent to the lake is leased to neighbour farmers for cattle grazing. A small scale income is gained from reed harvesting. The main industry is crop farming on the 1,200 hectares of arable land.

(b) Farmland and extensive forestry.

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

(a) In the past reclamation and drainage significantly adversed the site from an outstanding lake ecosystem to farmland. Due to the implementation of a wetland restoration scheme, accomplished in 1993, and grassland management the ecological quality of the lake and adjacent waterlogged areas is currently improving.

(b) The Action Plan of the Aquatic Environment is foreseen to currently improve the water quality of the catchment. Changes in land use in adjacent areas to watercourses will minimise the discharge of nutrients. Further, sewage plants in towns and villages have significantly reduced the discharge of pollutants, especially phosphorus.

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 lake, other waterlogged areas and the heathland are covered by a nature conservation scheme from 1958, about 860 hectares. The management practice of the wetlands is focusing on the improving of the ecological character of the site.

The whole site is included in the EU Bird Protection Site No. 56, and it is part of the EU Habitat Protection Area No. 73.

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

It is considered by the Ribe County and the Danish Forest and Nature Agency to revise and extend the conservation area. A management plan is currently under preparation covering the wetlands and the heathland.

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

The Ribe County is currently monitoring water quality, aquatic vegetation, fish stocks, breeding birds and the effect of management measures. The birdlife is included in a monitoring programme conducted by the Ministry of Environment by staff from the Tipperne Field Station.

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

The site is described in various information brochures for tourists and in books about the countryside.

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

The site is not used for recreation/tourism apart from sport fishing in the river.

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.

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

Ribe County

Sorsigvej 35

6760 Ribe

Tel: 79 88 60 00

Fax: 75 42 49 11

E-mail: ribeamt@ribeamt.dk

Oxbøl State Forest District.

Ålholtvej 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.
 - Ribe Amt 1998: Filsø – miljøtilstand. Ribe Amt. 56 pp.
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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**