

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:

12-09-2002

FOR OFFICE USE ONLY.

DD	MM	YY

Designation date

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Site Reference Number

2. Country:

the Netherlands

3. Name of wetland: Lauwersmeer

4. Geographical coordinates: 53°22'N - 06°13'E

5. Altitude: (average and/or max. & min.) NAP -13 – -2 m

6. Area: (in hectares) 5,800

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

A dammed estuary, formerly part of the Waddenzee (closed off in 1969), which has become freshwater, though the estuary structure remains. The surrounding area is mainly open grassland, arable land and scattered farms.

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: O4Tp

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:

National Reference Centre for Agriculture, Nature Management and Fisheries
 PO Box 30, 6700 AA Wageningen, the Netherlands
 tel.: +31 317 474800; fax: +31 317 427561

12. Justification of the criteria selected under point 9, on previous page.

Criterion 6, Average peak numbers of species meeting the 1% threshold (1992/93-1997/98):

Species	Biogeographical population	1% Biogeogr. Population	% at site
<i>Platalea leucorodia</i>	East Atlantic	30	10,4%
<i>Cygnus columbianus</i>	W-Siberia/NW-Europe	170	8,6%
<i>Anser anser</i>	NW/ SW-Europe	2000	1,8%
<i>Branta leucopsis</i>	Russia/ Netherlands	1800	8,1%

<i>Anas strepera</i>	NW-Europe	300	4,6%
<i>Anas crecca</i>	NW-Europe	4000	1,4%
<i>Anas acuta</i>	NW-Europe	600	5,6%
<i>Anas clypeata</i>	NW-/ Central-Europe	400	1,1%

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

Provinces of Groningen and Friesland, ca. 35 km north-east of Leeuwarden and ca. 30 km north-west of Groningen city.

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, which is a former estuary, became a freshwater lake after the building of a dyke in 1969 which disconnected the site from the Wadden Sea. The site plays a crucial role in the hydrology of the region. The excess water from the provinces of Friesland and Groningen is discharged via the Lauwersmeer to the Wadden Sea. When the water level of the Wadden Sea is high the excess water is temporarily stored in the Lauwersmeer. This causes large fluctuations of the water level in the lake. The water quality is, especially in summer, poor because of the inlet of drainage water (from farmland and river Rhine). The average depth of the lake is 2,1 meter.

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

A large part of the superfluous water from the northern part of the country (including polders below sea level) is pumped to the Lauwersmeer from which it is regularly discharged in the Wadden Sea. Part of this water is from river Rhine which is directed to polders to compensate for water shortage during summer.

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

Permanent freshwater lakes 32%, Permanent freshwater marshes 24%, Wet grassland 24%, Crops 13%.

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

Vascular plants on the Red List: Grass-of-Parnassus *Parnassia palustris*; Marsh Helleborine *Epipactus palustris*; Early Marsh-Orchid *Dactylorhiza incarnata*.

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

Note: Species included on Annex II of the EC Habitats Directive and bird species listed on Annex I of the EC Birds Directive have been indicated with an asterisk. In addition to those waterbirds listed under point 12, all waterbirds are mentioned occurring in numbers between 0,1 and 1,0% of their respective biogeographical populations Other non-waterbird species are included on the national Red List for the species group concerned.

Freshwater molluscs: *Anodonta cygnea*;

Freshwater fishes: *Bullhead *Cottus gobio*; Orfe *Leuciscus idus*;

Birds (breeding): *Western Marsh-Harrier *Circus aeruginosus*, *Montagu's Harrier *Circus pygargus*, *Spotted Crake *Porzana porzana*, *Avocet *Recurvirostra avosetta*, *Ruff *Philomachus pugnax*, *Arctic Tern *Sterna paradisaea*, Sand Martin *Riparia riparia*, *Bluethroat *Luscinia svecica*, Whinchat *Saxicola rubetra*, Sedge Warbler *Acrocephalus schoenobaenus*; (non-breeding): Great Crested Grebe *Podiceps cristatus*, Great Cormorant *Phalacrocorax carbo*, *Little Egret *Egretta garzetta*, *Great Egret *Egretta alba* [*Casmerodius albus*], *Eurasian Spoonbill *Platalea leucorodia*, *Bewick's Swan *Cygnus bewickii*, *Whooper Swan *Cygnus cygnus*, White-fronted Goose *Anser albifrons*, Greylag Goose *Anser anser*, *Barnacle Goose *Branta leucopsis*, Brent Goose *Branta bernicla*, Common Shelduck *Tadorna tadorna*, Eurasian Wigeon *Anas [Mareca] penelope*, Gadwall *Anas strepera*, Common Teal *Anas crecca*, Mallard *Anas platyrhynchos*, Northern Pintail *Anas acuta*, Northern Shoveler *Anas clypeata*, Common Pochard *Aythya ferina*, Tufted Duck *Aythya fuligula*, Common Goldeneye *Bucephala clangula*, *Smew *Mergus albellus*, *Osprey *Pandion haliaetus*, *Peregrine Falcon *Falco peregrinus*, Common Coot *Fulica atra*, *Avocet *Recurvirostra avosetta*, Common Ringed Plover *Charadrius hiaticula*, *Eurasian Golden-Plover *Pluvialis apricaria*, Grey Plover *Pluvialis squatarola*, Black-tailed Godwit *Limosa limosa*, Eurasian Curlew *Numenius arquata*, Turnstone *Arenaria interpres*, Little Gull *Larus minutus*, *Caspian Tern *Sterna caspia*.

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

See 21. Current land use.

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

The site is largely owned by Staatsbosbeheer (4501 ha) and Natuurmonumenten (176 ha).

Surrounding area: several private owners.

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

Site: Forestry 1%, Angling 30%, Boating 30%, Tourism and leisure 50%, Residential (scattered) 5%, Motorways and major roads 1%, Farming 10%, Commercial fisheries 30%, Shipping traffic 30%, Conservation and research 95%, Water management 100%.

Surroundings/ catchment: agriculture.

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

Site (A = serious threat covering large part of the area; B = moderate threat or local threat; C = minor threat): Disturbance to birds (B - military training); Extraction industry (mining) (C - gas exploitation); Natural events (B - natural succession and desalinization after reclamation); Recreation/ tourism (B -); Selective logging/ cutting (B - 1996/97 90% of reedland cut); Other (B - water management); Pollution (not Industrial discharge) (A - eutrophication by river Rhine water).

Around the site: plan to build houses and a leisure area near Zoutkamp and a leisure area near Oostmahorn.

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 Act (1994, 5696 ha); Special Protection Area (Birds Directive 79/409/EEC, 2000, 5800 ha); Wetland of International Importance (2/4/2000, 5800 ha).

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

National Park in the process of formation (5900 ha).

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

Most research and monitoring is carried out by the Institute for Inland Water Management and Waste Water Treatment (RIZA, www.riza.nl) of the Ministry of Transport, Public works and Watermanagement. The research is organised in four topics: *Wetland development and restoration*: research and advice on the restoration of wetlands to their natural state; *Water systems*: research and advice on the integrated management of inland waters; *Water pollution control*: research and advice on waste water treatment and emission levels; *Information and measurement technology*: collection and processing of data and research in specialist laboratories. Relevant research is also carried out the Institute for River Research, which is part of the Institute for Hydraulic Engineering (IHE, www.ihe.nl) in Delft, and focuses mainly on floodplain research. The Center for Limnology (NIOO-CL, www.nioo.nl) in Nieuwersluis studies plant-bird interactions in several large freshwater lakes as part of general limnological research programmes. The RIZA studies effects of grazing by large (introduced) herbivores on wetland ecosystems. Also regular bird counts.

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

Visitors centre, excursions, hides, information booklet.

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

See 21. Current land use. Circa 150,000 nights spent a year.

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

Municipalities Zuidhorn, De Marne, Dongeradeel and Kollumerland en Nieuwkruisland.

Functional jurisdiction (conservation purposes): Ministerie van Landbouw, Natuurbeheer en Visserij.

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

Staatsbosbeheer, PO Box 1300, 3970 BH Driebergen, the Netherlands, tel. +31 30-6926111

30. Bibliographical references: (scientific/technical only)

- Beemster N. 1994. Roofvogels in de Nederlandse wetlands: III. Aantalsveranderingen van roofvogels en uilen in de Lauwersmeer in de periode 1969/70-1990/91. (Intern rapport 1994-2Lio) Directie Flevoland Rijkswaterstaat, Lelystad.
- Beemster N., Drost H.J. & van Eerden M.R. 1989. Evaluatie van het beheer in het natuurgebied in het Lauwersmeer in de periode 1982-87 (Flevobericht 303). Rijksdienst voor de IJsselmeerpolders, Lelystad.

- Osieck E.R. & Borggreve C.M. 1999. National Inventory of Ramsar sites in the Netherlands. IKC Natuurbeheer, Wageningen.
- van Rooij S.A.M. & Drost H.J. 1996. Het Lauwersmeergebied-25 jaar onderzoek ten dienste van natuurontwikkeling en beheer. Flevovericht 387. RWS Directie IJsselmeergebied.
- van Roomen M.W.J, Boele A., van der Weide M.J.T., van Winden E.A.J, Zoetebier D. 2000. Belangrijke vogelgebieden in Nederland, 1993-97. Actueel overzicht van Europese vogelwaarden in aangewezen en aan te wijzen speciale beschermingszones en andere belangrijke gebieden. SOVON-informatierapport 2000/01. SOVON Vogelonderzoek Nederland, Beek-Ubbergen.

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