

# 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.

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**1. Date this sheet was completed/updated:**

18-02-2003

FOR OFFICE USE ONLY.

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Designation date

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Site Reference Number

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**2. Country:**

the Netherlands

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**3. Name of wetland:** Grevelingen

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**4. Geographical coordinates:** 51°45'N - 04°00'E

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**5. Altitude:** (average and/or max. & min.) NAP -18 – 0 m

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**6. Area:** (in hectares) 13,900

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

A former estuary, 18 km in length, which was closed from the sea in 1971. It is now a stagnant saline lake, mostly bordered by dykes with islets, sand-dunes and wet meadows. It adjoins the Voordelta (020) to the west, and Lake Volkerak (026) and Oosterschelde (028) to the east.

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**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: JH4

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**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

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**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).

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

National Reference Centre for Agriculture, Nature Management and Fisheries

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**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 5: The site regularly supports more than 20,000 wintering waterbirds: average peak number 52,420 (1991/92-1995/96).

Criterion 6: Average peak numbers of species meeting the 1% threshold:

Species	Biogeographical population	1% Biogeogr. Population	% at site	Period
<i>Recurvirostra avosetta</i>	W-Europe/ W-Med	225 breeding pairs	1,4%	1993-97
<i>Sterna sandvicensis</i>	W-Europe/ W-Africa	500 breeding pairs	4,2%	1993-97

Species	Biogeographical population	1% Biogeogr. Population	% at site	Period
<i>Podiceps cristatus</i>	NW. Europe (wintering)	1500	8,2%	1993-97
<i>Podiceps nigricollis</i>	Western Palearctic	1000	2,0%	1993-97
<i>Platalea leucorodia</i>	Eastern Atlantic	30	2,9%	1993-97
<i>Branta leucopsis</i>	Russia/ Germany/ Netherlands	1800	7,8%%	1993-97
<i>Branta bernicla</i>	W. Siberia/ W. Europe	3000	1,1%	1993-97
<i>Bucephala clangula</i>	NW/ Central Europe	3000	1,4%	1993-97
<i>Mergus serrator</i>	NW/ Central Europe	1250	5,4%	1993-97

**13. General location:** (include the nearest large town and its administrative region)  
Provinces of Zuid-Holland and Zeeland, ca. 10 km north of Zierikzee.

**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)

Originally the Grevelingen was a tidal area, part of the estuary of the rivers Rhine and Meuse. The connection with the Oosterschelde in the eastern part was closed by the Grevelingendam in 1965. Subsequently, the site was cut off from the North Sea by the closure of the Brouwershavense Gat in 1971. The original plan was to make a stagnant freshwater lake of the Grevelingen. Since 1985 sea water is let in during winter as the result of the general wish to retain the saline character of the lake. The water level is kept on NAP – 0.20 m, but influenced by the wind water levels can still vary.

**15. Hydrological values:** (groundwater recharge, flood control, sediment trapping, shoreline stabilisation etc)  
Superfluous water from one of the surrounding polders is pumped into this lake.

**16. Ecological features:** (main habitats and vegetation types)  
Brackish/saline lagoons 80%, Wet grassland 16%.

**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*; Parsley Water-dropwort *Oenanthe lachenalii*; Marsh Helleborine *Epipactis 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: *Assiminea grayana*; *Leucophytia bidentata*; *Ovatella myosotis*; *Tenellia adspersa*; *Cerastoderma glaucum*;

Freshwater fishes: Orfe *Leuciscus idus*;

Birds: (breeding): \*Western Marsh-Harrier *Circus aeruginosus*, \*Avocet *Recurvirostra avosetta*, Common Ringed Plover *Charadrius hiaticula*, Kentish Plover *Charadrius alexandrinus*, \*Mediterranean Gull *Larus melanocephalus*, Herring Gull *Larus argentatus*, \*Sandwich Tern *Sterna sandvicensis*, \*Common Tern *Sterna hirundo*, \*Little Tern *Sterna albifrons*; (non-breeding): Little Grebe *Tachybaptus ruficollis*, Great Crested Grebe *Podiceps cristatus*, \*Horned Grebe *Podiceps auritus*, Black-necked Grebe *Podiceps nigricollis*, Great Cormorant *Phalacrocorax carbo*, \*Little Egret *Egretta garzetta*, \*Eurasian Spoonbill *Platalea leucorodia*, \*Bewick's Swan *Cygnus bewickii*, 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 Goldeneye *Bucephala clangula*, \*Smew *Mergus albellus*, Red-breasted Merganser *Mergus serrator*, \*Peregrine Falcon *Falco peregrinus*, Common Coot *Fulica atra*, Eurasian Oystercatcher *Haematopus ostralegus*, \*Avocet *Recurvirostra avosetta*, Common Ringed Plover *Charadrius hiaticula*, Kentish Plover *Charadrius alexandrinus*, \*Eurasian Golden-Plover *Pluvialis apricaria*, Grey Plover *Pluvialis squatarola*, Dunlin *Calidris alpina schinzii*, \*Bar-tailed Godwit *Limosa lapponica*, Eurasian Curlew *Numenius arquata*, Common Redshank *Tringa totanus totanus*, Turnstone *Arenaria interpres*;  
Mammals: \*Root vole *Microtus oeconomus arenicola*.

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**19. Social and cultural values:** (e.g. fisheries production, forestry, religious importance, archaeological site etc.)  
See 21. Current land use.

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**20. Land tenure/ownership of:** (a) site (b) surrounding area  
Large part of the site is owned by Staatsbosbeheer (8370 ha); the remainder is state ownership (Dienst der Domeinen, Ministerie van Financiën).  
Surrounding area: the water (Voordelta, Volkerakmeer and Oosterschelde) is state owned, on land several private owners.

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**21. Current land use:** (a) site (b) surroundings/catchment  
Site: Boating 80%, Tourism and leisure 10%, Commercial fisheries 80%, Conservation and research 100%, Water management 100%.  
Surroundings/ catchment: –

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**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): Industrialization and urbanization (C - wind turbines); Recreation/ tourism (B - ); Pollution (not Industrial discharge) (C - ). The ecological character of the site has changed after the increase of salinity (by which the extensive seagrass fields have disappeared). Numbers of piscivorous species like *Podiceps cristatus* and *Mergus serrator* have dropped in recent years.  
Around the site: –

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**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)  
Special Protection Area (Birds Directive 79/409/EEC, 2000, 13900 ha); Wetland of International Importance (2000, 13900 ha). Staatsbosbeheer has compiled a management plan (which is updated on a regular basis) that focusses on habitats and species conservation.

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**24. Conservation measures proposed but not yet implemented:** (e.g. management plan in preparation; officially proposed as a protected area etc.)  
Proposed Site of Community Interest (Habitats Directive 92/43/EEC, 13683 ha).

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**25. Current scientific research and facilities:** (e.g. details of current projects; existence of field station etc.)  
Most of the topics studied at in the Wadden Sea (ecology of seals, birds (numbers, distribution, foraging, breeding), fish, invertebrates, seagrass, sediment) are also studied and monitored in the Delta by the Institute for Coast and Sea (RIKZ, Middelburg, [www.rikz.nl](http://www.rikz.nl)) and Center for Marine and Estuarine Ecology (NIOO/CEMO, [www.nioo.nl](http://www.nioo.nl)) in Yerseke. The long term studies also include the effects on the ecosystem of the closure of the Oosterschelde with a half-open dam, and monitoring the macrobenthic fauna of the estuarine area in the Delta region, in particular related to environmental impact assessment of land reclamation schemes (SLUFTER) and deepening of the Westerschelde. The RIZA ([www.riza.nl](http://www.riza.nl)) studies effects of grazing by large (introduced) herbivores on wetland ecosystems.

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

etc.)

Visitors centre, excursions, hides, information booklet.

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

See 21. Current land use. Number of visitors not known.

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

Territorial: Dienst Domeinen (Ministerie van Financiën); Functional jurisdiction (conservation purposes): Ministerie van Landbouw, Natuurbeheer en Visserij.

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**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 and Natuur- en Recreatieschap de Grevelingen, Haven 1, 4316 PC Zonnemaire, the Netherlands, tel. +31 111-691553

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**30. Bibliographical references:** (scientific/technical only)

- Beijersbergen J. & van den Berg A. 1980. De Grevelingen. De vogels van een afgedamde zee-arm. Kerckebosch, Zeist.
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  - Slob G.J. 1989. 15 jaar vogelontwikkelingen in het afgesloten Grevelingenbekken. Staatsbosbeheer, Goes.
  - Visser 1995, Het Grevelingenmeer, natuurlijk ingericht. Flevobericht 378, Directie IJsselmeergebied, Lelystad
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