

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:

2. 1. 93

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Designation date

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Site Reference Number

2. Country:

France

3. Name of wetland: Golfe du Morbihan

4. Geographical coordinates: 47° 35' N, 02°67' W

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

0-30 m

6. Area: (in hectares) 23,000 ha

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

The Golfe du Morbihan (literal meaning Little Sea) is a coastal depression linked by an inlet to the ocean. It lies at the confluence of three rivers, the Auray, Vannes and Noyal.

8. Wetland Type (please circle the applicable codes for wetland types as listed in Annex I of the *Explanatory Note and Guidelines* document.)

A, G.

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:

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

1a . 1b . 1c . 1d | 2a . 2b . 2c . 2d | 3a . 3b . 3c | 4a . 4b

Please specify the most significant criterion applicable to the site:

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:

Cf. Section 4 in French original

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).

13. General location: (include the nearest large town and its administrative region)
Région Bretagne (Brittany): Paris, 400 km; Rennes, 100 km; Vannes, 2 km.

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)

This part of the Brittany coast owes its overall aspect to Hercynian faults which developed when the Golfe de Gascogne (Bay of Biscay) opened. It lies at the limit of a low plateau with extremely sharp relief. The Golfe du Morbihan is the result of flooding during a Flandrian transgression into the plateau. At low tide the gulf forms an immense slikke drained by a network of channels which converge on the 900-meter wide inlet carved in the granulite. The inlet is criss-crossed by violent tidal currents (8-10 knots) which prevent it from silting up and closing.

To the north the 90,000 ha catchment is bounded by the Lanvaux moors.

8,000 ha, including 4,300 ha subject to tidal action, are covered by loose muddy sands.

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

Grass-wrack flats play a prime role in the protection of the coast. Their absence allows active erosion to develop leading to a very marked drop in biological potential (this is the basis for the whole of the littoral trophic network because of the substantial level of primary production which leads to an enormous build up of plant litter in the sediment strata).

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

The originality of the Golfe du Morbihan, in terms of ecology, lies in:

- the spread of grass-wrack flats, colonising about 2,100 ha of mud flats with *Zostera noltii* occupying 1,500 ha and *Z. marina* covering 600 ha;
 - the importance of benthic macrofauna, consisting of invertebrates with an average density of 3,800 animals larger than 1 mm per m²;
 - the wintering or stopover during migration of 60,000-130,000 birds, depending on the year.
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17. Noteworthy flora: (indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc)

- rare Atlantic coast halophytes: *Salicornia emerici*,.... *
- very rare estuarine shore species: *Alopecurus bulbosus*;
- rare halophyte phytocenoses: *Pucinellio-salicornietum emerici*,.... *

* see French original for full list lists

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

- birds, see annexed list
 - presence of European otter (Noyalo pond, Duer marsh)
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19. Social and cultural values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.)

The site offers a landscape of exceptional aesthetic quality, with a succession of views varying at a moment's notice depending on the tide and the play of the light.

Prehistoric site with many megaliths: Mane-Lud dolmen, the great menhir, the Merchant's Table, the Gavrinis tumulus, the Er Lannic double cromlech...

The Chateau de Suscinnio, the former residence of the Dukes of Brittany built in the 13th century, is a

monument of undoubted historic interest.

20. Land tenure/ownership of:

(a) site: The Golfe du Morbihan is mostly State-owned maritime area. The coasts are made up of both private and public holdings.

21. Current land use:

(a) site:

- oysterbed concessions covering 2,000 ha and producing 10,000 tons of oysters
 - small-scale catches of cuttlefish *Sepia officinalis*, velvet crab, *Portunus puber*, and shrimp *Palaemon serratus*
 - clam digging
 - tourism.
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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:

- water quality degradation (nitrates and phosphates)
 - uncontrolled digging for shellfish
 - degradation of surrounding wetlands
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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)

- maritime game reserves in the Gulf (25. 07. 1973 and 06. 03. 1989) and on Ile de Méaban (25. 07. 1973)
 - biotope protection decrees for the islets in the Gulf (12. 01. 1982) and the Duer marshes (25. 02. 1992)
 - sites classified according to the 1930 law: Duer marshes, (24. 02. 1965), Larmor-Baden marshes (01. 10. 1990),
 - property bought up by the Conservatoire du Littoral (Coastal Conservation Authority); reserves created by private associations.
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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.)

- Séné marshes nature reserve (600 ha);
 - acquisition by Coastal Conservation Authority of the Séné and Larmor-Baden marshes;
 - classification under 1930 law of the Pointes d'Arzon site.
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25. Current scientific research and facilities: (e.g. details of current projects; existence of field station etc.)

A marine biology station belonging to Rennes University I has been operating on Bailleron Island since 1958.

Research covers mollusc physiology and coastal ecology (mud- and grass-flat productivity, bird/environment relationship)

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

The site is of great pedagogical value. Introductory courses to marine biology and ornithology are organised.

The Falguérec reserve managed by an association is open to the public, and receives 5,000-6,000 visitors annually, including many school groups.

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

Landscape diversity, seascape quality and closeness to the sea are the features exploited to attract tourists,

especially in the western basin (second homes, boat trips, pleasure craft).

There is a project to develop educational leisure activities: creation of a bird sanctuary and a nature reserve.

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

State services

Morbihan Département

local authorities (communes)

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

Many different bodies: communes, land owners and farmers, Morbihan Hunting Federation, departmental association of waterfowl hunters, Morbihan Development Association, Département, Coastal Conservation Authority, Society for the Study and Protection of Nature in Brittany, Tourist Development Board for the Gulf of Morbihan.

30. Bibliographical references: (scientific/technical only) cf annex

Please return to: **Ramsar Convention Bureau, Rue Mauverney 28, CH-1196 GLAND, Switzerland**

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