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:

31.10.98

For office use only.

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05/12/84	7IT038
Designation date	Site Reference Number

2. Country:
Italy

3. Name of wetland:
Torbiere d'Iseo (or Torbiere del Sebino)

4. Geographical coordinates:
45° 38' 30" North; 10° 01' 30" East

5. Altitude: (average and/or max. & min.). 200 m a.s.l.

6. Area: (in hectares) 325 ha

7. Overview: (general summary, in two or three sentences, of the wetland's principal characterstics)
It is a unique example, at both a regional and national level, of a "secondary" wetland environment because of its size (surface area of 200 Ha of neolacustrine excavation), situation and history.
It is characterised by a group of habitats which have disappeared or become rare on the Padana Plain and it is a "Hot spot" of biodiversities with the presence of species which are endangered or at risk at least at a regional level.
It is the breeding habitat for species which are rare or localised at a national level, a wintering area of regional importance and a feeding ground for transalpine migration (it is at the entrance to the Vallecamonica, a valley which penetrates deep into the Alpine range).

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:

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

1a - lb - **lc** - 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* X- 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 ínformation 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 poìnt 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)
Lombardia – Brescia.

14. Physical features: (e.g. geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth; water permanence; fluctuation in water level; tidal variations; catchment area; downstream area; climate
Refer to point 16.

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

16. Ecological features: (main habitats and vegetation types)
The peatland of the Torbiere d'Iseo forms part of the group of inter-moraine palustrine formations which cover the southern foot of the Alps in contact with the plain. They result from excavation of a non-uniform origin: a lacustrine paleosurface ("Lame") - separated from Lake d'Iseo by a chain of barely visible moraines, and a large perilacustrine strip ("Lametta"). In both cases a hydric-marshy vegetation has evolved following the normal sequence of peat vegetation and ploughing in.
From the 1700s up to the first half of the 1900s the Lame was excavated down to varying depths to extract the peat (from 0.5 m to 3 m). The peat in the Lametta has been extracted only recently. The Torbiere d'Iseo represents, in addition to an area of important biological interest, an archeological site of regional interest and a historical record of "technological archeology". The Torbiere d'Iseo is seen today as a body of water interrupted by weirs (with woodland in places) and islands, both of which are remains of the peat excavations. The vegetation lanscape is divided into a series of environments, each differing from one another according to the water conditions.

- Free water.
- Water with submerged, floating and emergent vegetation, characterised by *Nymphaea alba, Nuphar lutea, Lemna trisulca*.
- Border vegetation with large *Carex riparia, Carex acutiformis* and *Carex pseudocyperus*.
- Palustrine and perilacustrine vegetation characterised by *Phragmites australis, Tipha latifolia, Cladium mariscus* and formations of *Carex elata* and *Thelipteris palustris*.

- Semi-submerged vegetation on the islands left over from the excavations, with thin sand fill layers, completely colonised with *Eleocharis*.
- Vegetation in shallow trenches characterised by *Cladium mariscus,Utricularia vulgaris and Phragmites australis* (the latter being invasive).
- Hydric vegetation of tall grasses, distinctively submediterranean (with a large quantity of *Holoschenetalia* species) which is rare in the Lombardy Region, characterised by *Cyperus longus*.
- Cultivated hydric meadows with tall vegetation (on the edges or in woody expanses, the latter being markedly dynamic), ruderal vegetation and/or areas no longer used.

There are some uncommon species to be found locally such as *Hottonia palustris* (covering about 100 m2), *Oenanthe aquatica* (in some isolated spots), *Ludwigia palustris, Menyanthes trifoliata* (no longer seen in recent years), *Allium angulosum, Orchis simia, Butomus umbellatum* and other species included in the regional list of protected species.
There is a spontaneous process of re-naturalisation in course in the abandoned excavations.

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

CR: *Oenanthe aquatica.*
VU: *Allium angulosum, Butomus umellatus, Orchis incarnata, Hippuris vulgaris, Hottonia palustris, Ludwigia palustis, Menyanthes trifoliata.*
LR: *Thelipteris palustris, Carex riparia, Ceratophyllum demersum, Gratiola officinalis, Lemna trisulca, Nuphar lutea, Nymphaea alba, Ranunculus flammula, Ranunculus lingua, Rorippa amphibia, Sagittaria sagittifolia,Schoenoplectus lacsutris.*

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

Acrocephalus melanopogon, Alcedo atthis, Ardea purpurea, Ardenola ralloides, Aythya nyroca, Botaurus stellaris, Childonias niger, Cicus aeruginosus, Circuc cyaneus, Cyrcus pygargus, Egretta alba, Egretta garzetta, Ixobrychus minutus, Lanius collurio, Luscinia svecica, Milvus migrans, Nycticorax nycticorax, Pandion haliaetus, Phalacrocorax carbo, Porzana parva, Porzana porzana, Acrocephalus arundinaceus, Acrocephalus scirpaceus, Acrocephalus palustris, Actitis hypoleucos, Anas acuta, Anas clypeata, Anas crecca, Anas penelope, Anas querquedula, Anas strepera, Anas platyrhynchos, Ardea cinerea, Aythya ferina, Aythya fuligula, Branta canadensis, Bucephala clanula, Cetia cetti, Cuculus canorus, Cygnus olor, Chlidonias hybridus, Emberiza schoeniculus, Falco pergrinus, Falco subbuteo, Fulica atra Gallinago gallinago, Gallinula chloropus, Jynx torquilla, Larus cachinnans, Larus canus, Larus ridibundus, Locustella luscinioides, Locustella naevia, Mergus albellus, Mergus serrator, Merops apiaster, Motacilla flava, Netta rufina, Panurus biarmicus, Podiceps cristatus, Rallus aquaticus, Remiz pendulinus, Tachybaptus ruficollis, Todorna ferruginea, Trolodytes troglodytes, Upupa epops, Losa phallux, Utilus rubilio, Euciscus souffia, Ustropota-mobius pallipes, Argaritifera margaritifera, Eucorrhinia pectoralis.

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

Small archeological site.

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

a) Public property.
b) Private property.

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

a) Nature reserve.
b) 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

Excessive vegetation growth (both in water and on surrouding strips).
Invasion of exotic species (*Amorpha fruticosa, Phytolacca americana, Ailanthus altisima, Solidago canadensis* etc.).

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)

Important nature reserve at a regional and national level.
Approved management plan, which is regularly applied.

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

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

A research project is underway which aims to increase the diversity and number of breeding and wintering species by means of various activities related to the habitat.
Considering the favourable trend after the establishment of the Nature Reserve, which caused a 60% increase in the number of aquatic breeding species, it appears realistic to assume that a further increase in the ornithological and environmental importance of the area will occur after the completion of the project.
The interventions related to the vegetation will determine an increase in the habitat diversity with a consequent upgrading, restoration and formation of essential habitats for breeding, wintering and feeding of the species currently present and other new species.
It is believed that the conservation and maintenance of the innermost zones of reed thickets will not only stabilise the presence of important breeding and wintering species but also increase the current population and encourage new species.
Considering the rapid decay in quality of the waters and beds, it is felt essential to carry out a series of projects aimed at restoring a correct hydraulic regime, permitting an adequate change and circulation of the internal waters.
To achieve a functional didactic-cultural exploitation of the area, it would be worthwhile constructing a birdwatching tower, enabling observations to be made without disturbing the birdlife, and an interdisciplinary visitors' centre.

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

Guided tours for students and general public.
Research area for specialists.
Visitors' centre (planned).
Tower for birdwatchers.
Nature trails.
Information leaflets.

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

Nature-cultural tourism.

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

29. Management authority: (name and address of local body directly responsible for managing the wetland)
Consortium for the Management of the Torbiere del Sebini, Provaglio d'Iseo (BS).

30. Bibliographical references: (scientific/technical only)

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- Diamanti G., *Fitocenosi a Nymphaea alba e a Phragmites australis: produttività, fenologia e aspetti demografico-strutturali* (*Nymphaea alba* and *Phragmites australis* phytocenosis: productivity, phenology and demographic-structural aspects).
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