

Information Sheet on Ramsar Wetlands\

Categories approved by Recommendation 4.7 of the Conference of the Contracting Parties

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

May 2001

2. **Country:** Portugal

3. **Name of wetland:** Paul do Taipal (Taipal Marsh)

4. **Geographical coordinates:** 40° 10' 52" N 8° 41' 14" W

5. **Elevation:** (average and/or maximum and minimum)

maximum - 25 metres ; **minimum** - 3 metres

6. **Area:** (in hectares) 233 ha

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

Freshwater permanently marsh flooded in a small alluvial plain, with extensive reed beds and many aquatic openings. The wetland is surrounded by agricultural land, with rice fields downstream.

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 Zk(a)

inland: L M N O P Q R Sp Ss Tp Ts

U Va Vt W Xf Xp Y Zg Zk(b)

human-made: 1 2 3 4 5 6 7 8 9 Zk(c)

Please now rank these wetland types by listing them from the most to the least dominant:

Ts, Tp, 3, Xf, 9, M, N

9. **Ramsar Criteria:** (please circle the applicable criteria; see point 12 below)

1 2 3 4 5 6 7 8

A1 - B2 – B3 – B4 – B6 – B7 – B8

Please specify the most significant criterion applicable to this site:

B2 – B3 – B4

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:**

Anabela Simões, Cristina Lopez & Lino Nossa

Delegação de Coimbra do ICN

Mata Nacional do Choupal, 3000 Coimbra

Phone: + 351.239.499020

Fax: + 351.239.499029

E-mail: rnpa.santosmf@icn.pt

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).

The site includes a representative example of a natural marsh on this biogeographic region. It has great bird diversity and habitats of major importance for migrating birds as wintering (e.g. *Anas clypeata* – the wetland supports 1% of its Mediterranean population) and resting areas (e.g. *Limosa limosa*, transaharian passerines and palearctic birds). The area is also important as breeding site for *Ardea purpurea* and for some species that are threatened in most part of their biogeographical region in Europe (e.g. *Ixobrychus minutus*). Taipal Marsh has the higher number of *Gallinago gallinago*, *Circus aeroginosus* and *Hirundo rustica* at national level. It also supports a significant proportion of indigenous fish species *Rutilus macrolepidotus*, *Barbus bocagei* and *Cobitis maroccana* in all stages of their life cycle and it is an important growth area and migration path for *Anguilla anguilla*, *Mugil cephalus* and *Lisa Ramada*.

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

Taipal Marsh is near Montemor-o-Velho, Lower Mondego (NUT III), in the Center Region (NUT II) of Portugal.

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)

Taipal Marsh is a freshwater natural wetland on an alluvial basin on the right bank of Mondego River, with no tidal influences. This wetland is permanently flooded with inundation levels that change throughout the year. A flood-gate was built in the wetland's main ditch to afford a minimum level of water. There are some freshwater springs within the wetland, ensuring water availability even in exceptionally dry years.

There is a network of channels, used in the past for drainage of the marsh for agriculture. Now this network is closed.

According to recent analyses, the water of the Taipal Marsh is in good conditions, namely in what refer to temperature, dissolved oxygene, ammonia, nitrates, conductivity and hardness.

The soils are of alluvial origin, with particles carried in by Mondego River.

The climate is temperate with mediterranean characteristics, with a moderate dry season in the summer (Köppen's classification method).

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

The area is very important for the local regulation of the underground water table and may act also as a buffer zone, contributing to increase protection of adjoining farmland areas against erosion caused by winter floods. By removing nutrients, such as nitrogen and phosphorus, Taipal Marsh acts as water purifier and improves water quality.

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

The dominant feature of the wetland is an extensive reed bed (*Phragmites australis*) with *Typha latifolia* and *Scirpus lacustris* in deeper water areas. Diversity is enhanced by a network of pounds and drainage channels running along the wetland (hydrophytic species number reach about 200). *Nymphaea alba* and *Nuphar luteum* occur in quiet waters. Riparian formations include *Salix* sp., *Alnus glutinosa*, *Populus nigra* and other water-tolerant species.

Taipal Marrsh has a high ecological value, with a variety of important habitats (EEC Directive 92/43/EEC "HABITATS") namely: Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoeto-Nanojuncetea* (3130), Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation (3150), Rivers with muddy banks with *Chenopodietum rubri* p.p. and of Bidention p.p. vegetation (3270), Mediterranean tall humid grasslands of the *Molinio-Holoschoenion* (6420), Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels (6430), *Salix alba* and *Populus alba* galleries (92A0) in the wetland, and, Semi-natural dry grasslans and scrubland facies on calcareous substrates (*Festuco-Brometalia*) (important orchid sites) (6210*), *Quercus faginea* and *Quercus canariensis* Iberian woods (9240), European dry heaths (4030) at the slopes around the marsh.

* Priority habitat

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

The channels support a locally important variety of hydrophytic species (over 200 species). There are no unique, rare, endangered or biogeographically important plant species.

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

Birds Directive (Annex I)

Ardea purpurea (S), *Ardeola ralloides* (C), *Egretta garzetta* (S), *Ixobrychus minutus* (S), *Nycticorax nycticorax* (C), *Ciconia ciconia* (S/W), *Platalea leucorodea* (W), *Plagadis falcinellus* (W), *Circaetus gallicus* (S), *Circus aeruginosus* (S), *Hieraetus pennatus* (W), *Milvus migrans* (S), *Pandion haliaetus* (W), *Porzana porzana* (S), *Philomachus pugnax* (M), *Himantopus himantopus* (S), *Alcedo atthis* (S), *Luscinia svecica* (W), *Sylvia undata* (S).

(W – wintering; S – summering; M – migrating; C – casual)

Abundant Birds Species:

Nesting – *Anas platyrhynchos*, *Ixobrychus minutus*, *Circus aeruginosus*.

Migrating or wintering – *Anas acuta*, *Anas clypeata*, *Anas crecca*, *Anas strepera*, *Anas penelope*, *Gallinago gallinago*, *Egretta garzetta*, *Bubulcus ibis*, *Hieraetus pennatus*.

Vertebrates Red Book (Portugal)

Fish – *Rutilus macrolepidotus*.

Birds – *Ardea purpurea*, *Ardeola ralloides*, *Nycticorax nycticorax*, *Ciconia ciconia*, *Platalea leucorodea*, *Anas querquedula*, *Anas strepera*, *Accipiter gentilis*, *Accipiter nisus*, *Circus aeruginosus*, *Pandion haliaetus*, *Gallinago gallinago*, *Philomachus pugnax*, *Streptopelia turtur*, *Locustella luscinioides*, *Ficedula hypoleuca*, *Pyrrhula pyrrhula*.

Mammals – *Rhinolophus ferrumequinum*, *Nycctalus lasiopterus/noctula*, *Miniopterus schreibersii*, *Tadarida teniotis*.

Other Important Species

Fish – *Barbus bocagei*, *Cobitis maroccana*.

Amphibians – *Triturus boscai*, *Triturus marmoratus*, *Discoglossus galganoi*, *Hyla arborea*.

Reptiles – *Lacerta lepida*.

Mammals – *Lutra lutra*.

Appendix I – List of fauna.

Appendix II – Scientific reports with some census data.

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

The Taipal Marsh is one of the last of this kind of wetland in the biological corridor of the Mondego valley. Conventional agriculture (corn and rice fields) is the main use of the land around the wetland. Traditional fishing is practiced in a marsh lateral ditch.

20. **Land tenure/ownership of:**

(a) Site

The marsh area is public, managed by Central Administration (Instituto da Conservação da Natureza). Farmland areas around the marshland are privately owned in small plots.

(b) Surrounding area

Agricultural and forest areas around the site are privately owned.

21. **Current land use:**

(a) site

Educational activities, reed cutting, agriculture (rice fields, irrigations crops), forestry, some traditional fishing in a lateral ditch and minor residential areas.

(b) surroundings/catchment

Agriculture (rice fields, irrigation crops), forestry, cattle-raising (for milk production), industry, quarrying, residential areas.

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

Present:

Illegal hunting and shooting.

Water and soil pollution by domestic sewage, industrial and cattle-raising effluents and agricultural run-off.

(b) around the site

Present:

Urban and industrial expansion.

Water and soil pollution by domestic sewage, industrial and cattle-raising effluents and agricultural run-off.

There is a highway on the site's North boundary .

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)

There is no national conservation status for the site. The site is a Special Protected Area (233 ha) under EEC Birds Directive 79/409/EEC (Decreto-lei n° 384-B/99 on 23th of September). Management practices include growth control of natural vegetation. There is no Management Plan for the site.

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

It is running the process of classification of the site at national level and inclusion on the National Natural Network of Protected Areas as a Nature Reserve. A management plan is being prepared.

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

There are no research facilities on the site. Scientific projects are currently being made by Faculdade de Ciências da Universidade de Coimbra, Instituto Botânico, Instituto do Mar, and ICN.

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

Current facilities are provided through the nearest quarters of ICN at Coimbra.

There is a field station for bird watching.

Education for conservation is mostly done by ICN, mainly through guided visits in the marshland. School visits occur frequently.

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

There are no recreation/tourism activities.

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

Legal competencies are shared by a number of different ministries.

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

Ministério do Ambiente e do Ordenamento do Território – Secretaria de Estado do Ambiente e Conservação da Natureza

Instituto da Conservação da Natureza

R. da Lapa, 73

1200 Lisboa

phone: +351.21.3938900

fax: +351.21.3901048

Delegação de Coimbra do Instituto da Conservação da Natureza

Mata Nacional do Choupal

3000 Coimbra

Phone: +351.239.499020

Fax: +351.1.239.499029

E:mail: rnpa.santosmf@icn.pt

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

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Primeira abordagem aos resultados obtidos.

Trabalho realizado no âmbito de uma parceria ICN/Escola Secundária Martinho Árias, relativa ao Programa Galileu.

Source.



Appendix I

Appendix II