## Information Sheet on Ramsar Wetlands

- 1. Country: Portugal
- 3. Ref: 7PT004
- 4. Name and address of compiler: António M. Teixeira, SNPRCN/CEMPA, Rua Filipe Folque, 46,3°, 1000 LISBOA, Portugal. Tel: +351 1 352 30 18, Fax: +351 1 57 4771
- 5. Name of wetlands: Paúl de Madriz (Madriz marsh)
- 7. Geographical coordinates: 40°08'N, 008°38'W
- 8. General location: Região Centro/Coimbra
- 9. Area: 226 ha
- 10. Wetland type: S; Y
- 11. Altitude: 61m (maximum); 8m (minimum)
- 12. Overview: Freshwater marsh permanently innondated in open alluvial plain on the southern edge of the lower Mondego valley. Extensive reed bed areas (*Phragmites*) in association with *Salix* and other marshland species.
- 13. Physical features: Sedimentary soils in alluvial basin; natural area with a permanent water table but innondation levels fluctuate widely during the year. Freshwater only with no tidal influences. There is a small freshwater spring within the wetland, ensuring water availability even in exceptionally dry years. Climate temperate with Atlantic influences.
- 14. Ecological features: Extensive reed beds (*Phragmites*) with *Salix* and other water-tolerant plant species. *Typha latifolia* and *Scirpus lacustris* along ditches and in areas of deeper water within the marsh.
- 15. Land tenure/ownership of: (a) site: Most of the area is private and belongs to a number of distinct owners.
- (b) surrounding area: Privately-owned forest and farmland.
- 16. Conservation measures taken: The wetland is a Special Protection Area (SPA) under Article 4 of the EC Wild Birds Directive (79/409). Further protection under national law is due to come soon.
- 17. Conservation measures proposed: Management plan under way, with plans to get some control of agriculture and water management activities in adjoining areas.
- 18. Current land use: (a) site: No relevant economic activities are now carried out in the wetland.

- (b) surroundings/catchment: Agriculture (rice cultivation), forestry, cattle raising, hunting.
- 19. Disturbances/threats, including changes in land use and major development projects:
- (a) at the site: No immediate threats, except for chemical inputs and water ablation associated to agriculture developments nearby. Illegal hunting, eventually.
- (b) in the surroundings/catchment: Further to 19a, waterfowl hunting may eventually become a problem in some areas around the wetland.
- 20. Hydrological and physical values: This wetland is very important to maintain the water tables in the area. It has also an important role to help prevent flood damage locally.
- 21. Social and cultural values: Important as an amenity site in periods of drought. Also an important waterfowl sanctuary in the lower Mondego area, essential for allowing some shooting pressure in adjacent zones.
- 22. Noteworthy fauna: The area holds important concentrations of breeding mallard *Anas platyrhynchos* and many other wintering waterfowl species. The breeding avifauna includes *Ixobrychus minutus, Cettia cetti, Acrocephalus arundinaceus* and *A. scirpaceus* but no population figures are yet available for any of these species. The otter *Lutra lutra* also occurs in the area.
- 23. Noteworthy flora:
- 24. Scientific research and facilities: There are no research facilities at the site, the closest being based at Coimbra (Mus. Zool. Univ. Coimbra).
- 25. Conservation education: There are plans to set up a small visitors centre at the periphery of the wetland using farm settlement now ruined. Current facilities are provided through the nearest headquarters of SNPRCN at Coimbra.
- 26. Recreation and tourism: Some recreational use at regional level but not really qualifying as "tourism".
- 27. Management authority: SNPRCN/Núcleo de Coimbra, R. Padre António Vieira, 1,  $1^{\circ}$ , 3000 Coimbra, Portugal. Tel: +351 39 22 151, Fax: +351 39 25 352
- 28. Jurisdiction: State jurisdiction/Min. Environment
- 29. Bibliographical references: Grimmett & Jones 1989; Santos 1989; Rufino 1992; SNPRCN 1992.
- 30. Reasons for inclusion: The wetland area qualifies under 1a and 1d; also under 2b and 2c; the area is important also under 3b.
- 31. Map of Site: enclosed.