

# 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:

1999

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Designation date

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Site Reference Number

## 2. Country:

Italy

## 3. Name of wetland: Stagno di S'Ena Arrubia

## 4. Geographical coordinates: 39°50'N 008°34'E

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

## 6. Area: 223 hectares

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

It is a good representative example of a natural wetland, characteristic of Mediterranean biogeographical region. This wetland is a typical brackish lagoon with one relatively narrow connection to the sea. It supports a good assemblage of rare, vulnerable or endangered species of animals and important habitats.

## 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 . 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:

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**Please provide additional information on each of the following categories by attaching extra pages (please limit extra pages to no more than 10):**

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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).

It supports an important number of rare or endangered species of animal, over 40 endangered bird species, with many specimens (over 10.000 birds).

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

It is located in the West of Sardinia Region, close to Oristano town. This land belongs to Arborea village.

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**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)

It is a brackish lagoon with an artificial connection to the sea and it received the fresh water by well watered of Arborea's field via three irrigation canal. This wetland originated via fluvial erosion and sea regression-intrusion and after this depression was filled up by marine intrusion and separated to the sea by a near artificial littoral cordon. It is 40 - 120 cm depths.

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

The natural and artificial control on the of depth water change permitted to avoid the coastal erosion and the flood control.

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

- Embryonic shifting dunes. It represents the first stages of dune construction, constituted by raised sand surfaces of the upper beach. Plants: Agropyrum junceum, Anthemis maritima.
- Coastal lagoons. It is characterised by varying salinity and water volume, partially separated from the sea by sandbanks. Salinity may vary from brackish water to hypersalinity depending on rainfall, evaporation and the addition of fresh seawater. Plants: fresh water species: Potamogeton crispus, Cladophora sp., Myriophyllum spicatum e Zanichellia palustris; brackish and deep water species: Ruppia cirhosa, Potamogeton pectinatus, Ulva sp.; few brackish but not deep water: Potamogeton natans e Potamogeton crispus Chara sp.; many brackish and temporary water species: Althenia filiformis, Ruppia maritima, Lamprotamnion sp.
- Vegetated sea cliffs of the Mediterranean coasts with endemic Limonium sp. It is a vegetated cliffs and rocky shores of the Mediterranean.
- Mediterranean salt meadows. It consists of various Mediterranean communities: tall rush saltmarshes dominated by Juncus acutus, Aster tripolium; short rush, sedge and clover saltmarshes characterised by Hordeum marinum, and humid meadows behind littoral with Ranunculus aquatilis, Carex divisa.
- Mediterranean halophilous scrubs. It is characterised by perennial vegetation of marine saline muds mainly composed of srubs. Plants: Salicornia europaea, Suaeda maritima, Atriplex halimus, Arthrocnemum fruticosum, Arthrocnemum glaucum, Hordeum marinum, Aeluropus litoralis.
- Shifting dunes along the shoreline with Ammophila arenaria. It is characterised by a mobile dunes forming the cordons of dune system of the coast of the Mediterranean. Plants: Ammophilion arenariae.

- Wooded dunes with Pinus pinea. It is characterised by a coastal dunes colonised by Mediterranean pines of artificial origin.
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**17. Noteworthy flora:** (indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc)

Plagius flosculosus, important paleoendemism of Sardinia.

Polygonum scoparium, schizoendemism produced by P. equeisetiforme cycle.

Stachys glutinosa, paleoendemism.

Limonium densiflorum, Corsica-Sicily-Algeria e Sardinia subendemism.

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

Hyla sarda: endemic specie.

Emys orbicularis: endangered specie.

Testudo hermanni: endemic specie.

Tachybaptus ruficollis: endangered specie, over 10 specimens.

Podiceps cristatus: very endangered specie, over 10 specimens.

Podiceps nigricollis: very endangered specie, over 10 specimens.

Phalacrocorax carbo: abundant specie, over 1.000 specimens.

Phalacrocorax aristotelis: endangered specie, few specimens.

Botaurus stellaris: rare and very endangered specie, few specimens.

Ixobrychus minutus: rare and very endangered specie, few specimens.

Bubulcus ibis: very endangered specie, over 10 specimens.

Egretta garzetta: endangered specie, over 50 specimens.

Egretta alba: endangered specie, over 40 specimens.

Ardea cinerea: endangered specie, over 50 specimens.

Ardea purpurea: very endangered specie, few specimens

Phoenicopterus ruber: very endangered specie (site very important for the migration), over 1.000 specimens

Anser anser: few specimens (site important for the migration).

Anas penelope: endangered specie, over 10 specimens.

Anas strepera: endangered specie, over 100 specimens.

Anas crecca: endangered specie, over 900 specimens.

Anas platyrhynchos: over 900 specimens (site important for the migration).

Anas acuta: endangered specie, over 60 specimens.

Anas querquedula: rare and very endangered specie, few specimens.

Anas clypeata: endangered specie, over 200 specimens.

Netta rufina: rare and very endangered specie, few specimens.

Aythya ferina: rare and very endangered specie, over 500 specimens.

Aythya fuligula: endangered specie, over 10 specimens.

Circus aeruginosus: endangered specie, over 5 specimens.

Pandion haliaetus: rare and very endangered specie, few specimens.

Rallus aquaticus: endangered specie, over few specimens.

Gallinula chloropus: abundant specie, few specimens.

Porphyrio porphyrio: rare in Europe, very endangered specie, few specimens (site important for nest building).

Fulica atra: abundant specie, over 100 specimens.

Himantopus himantopus: very endangered specie, over 100 specimens, (important site for nest building).

Recurvirostra avosetta: rare in Europe, very endangered specie, over 100 specimens (site important for nest building).

Vanellus vanellus: endangered specie, over 400 specimens.

Gallinago gallinago: over 10 specimens (site important for the migration).

Numenius arquata: endangered specie, over 10 specimens.

Tringa totanus: very endangered specie, over 10 specimens.

Larus ridibundus: abundant specie, over 40 specimens.

Larus genei: endangered specie, over 20 specimens.

Larus audouinii: rare and very endangered specie, few specimens.

Larus cachinnans: abundant species, over 50 specimens.

Sterna albifrons: very endangered specie, few specimens, (site important for nest-building).

Alcedo atthis: endangered specie, few specimens.

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

The site is important for the fisheries production and for the naturalistic tourism (birdwatching).

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

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

a) The principal human activities in this wetland are the fishing, the outdoor recreation and the education and scientific research.

It is near an important agriculture centre.

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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

a) The principal problems affecting the site's ecological character are: an excessive human disturbance, an increment of the tourism activity, the construction of the new buildings or the new road, the water supply for agriculture use.

b) The principal problems that affecting the ecological character of the area around the site are:, the construction of the new buildings or the new road, the used of chemical pollutants in agriculture.

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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)

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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.)

This wetland is considered by government of the Sardinian Region as a protected area for animals. It is inspected by the "Ispettorato forestale" of Sardinia Region administration's.

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

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

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

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

"Ispettorato forestale" of Sardinia Region administration's.

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

"Ispettorato forestale" of Sardinia Region administration's.

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

- A.Mocci Demartis - Censimenti invernali del Fenicottero (*Phoenicopterus ruber roseus*) in Sardegna nel quadriennio 1990-93 e rapporti con la prima nidificazione massiva del 1993. Boll. Soc. Sarda Sci. Nat., 30: 83-95. 1995
- A.Tursi, S.Cocito, G.Costantino, P.Orru' - Biocenosi bentoniche della Riserva marina del Sinis-Isola di Mal di Ventre. Oebalia, suppl. XVII:531-537. 1992
- Biotopi di Sardegna. Guida a dodici aree di rilevante interesse botanico. C. Delfino, Sassari 1988
- AA.VV. Censimento invernale degli Uccelli acquatici nelle zone umide della Sardegna. Comitato Regionale Faunistico - .R.A.S. 1993
- Arrigoni P.V. Censimento dei Biotopi. Soc. Bot. Ital., 1(20-31). Camerino 1971
- B.Corrias - Le piante endemiche della Sardegna. Boll. Soc. Sarda Sci. Nat., Gallizzi.Sassari 1981
- B.Corrias, S.Diana Corrias - Piante rare in Sardegna. Considerazioni fitogeografiche e problemi connessi con la loro salvaguardia. Lavori soc. ital. Biogeogr. n.s., 7: 198-211. 1977
- B.Lanza - Ipotesi sulle origini del popolamento erpetologico della Sardegna. La. Soc. ital. Biogeograf. VIII:723-744. 1983
- C.Brambilla, G.Caneva, G.De Marco, L.Mossa - Analisi fitosociologica della seriazione psammofila costiera nella Sardegna meridionale. Ann. Bot. (Roma), 40: 69-96. 1982
- Corbetta et altri- Gli stagni di Oristano . Natura e montagne. 1974
- costiera della Sardegna. Boll. Museo Ist. Biol. Univ. Genova, vol. 52. 1986
- E.Meschini, S.Frugis - Atlante degli uccelli nidificanti in Italia. Suppl. Ric. Biol. Selvaggina, XX: 1-344. 1993
- F.Cassola - Censimento dei Biotopi Soc. Bot. Ital., 2(20-35) - Camerino. 1979
- F.Corbetta, G.G.Lorenzoni - La vegetazione degli stagni del golfo di Oristano(Sardegna). In: Scritti in memoria di Augusto Toschi. Ric. Biol. sulla selvaggina, 7 (suppl.): 271-319. 1976
- F.Corbetta, G.G.Lorenzoni - proposta di costituzione del Parco Naturale degli stagni di Oristano. Atti III Simposio Naz. Conserv. Natura. 1973
- F.Valsecchi - Aree di rispetto botanico in Sardegna. Boll. Soc. Sarda Sci. Nat., 9: 39-46. 1971
- F.Valsecchi - Attuali conoscenze sulla vegetazione della Sardegna. Lav. Soc. Ital. Biogeogr., n.s., 8: 3-16. 1973
- F.Valsecchi - La vegetazione dello stagno di s' Ena Arrubia nel Golfo di Oristano. Boll. Soc. Sarda Sci. Nat., 10:89-110. 1972
- F.Valsecchi, S.Diana Corrias - Le attuali conoscenze sulla vegetazione degli stagni costieri della Sardegna. Lav. Soc. ital. Biogeogr. n.s., 4: 1-12. 1979
- G.De Marco, L.Mossa - La vegetazione Psammofila costiera della sardegna meridionale. Lav. Soc. ital. Biogeogr. 8: 171-188. 1983

- H.Schenk - Analisi della situazione faunistica in Sardegna. Uccelli e Mammiferi. SOS Fauna. Animali in pericolo in Italia. Tipografia Succ. Gavini-Mercuri Camerino. 1976
- H.Schenk, A.Torre - Distribuzione, consistenza numerica e conservazione degli Uccelli marini nidificanti in Sardegna, 1978-1985. Atti 1° Simposio sugli Uccelli marini del Mediterraneo, Alghero: 427-439. 1986
- I.Camarda - Le aree costiere di rilevante interesse botanico nella redazione dei piani paesistici della Sardegna. Coll. Phytosociol., 19: 309-323. 1989
- I.Camarda - Un sistema di aree di interesse botanico per la salvaguardia della biodiversita' floristica della Sardegna. Boll. Soc. Sarda Sci. Nat. 1995
- L. Desole - Distribuzione geografica del genere Ephedra in Sardegna .Seconda nota. Ephedra distachya L. (Dallo stagno di Platamona al Golfo di Oristano).Studi Sassaresi. Sez. 2, 27 . 3-31. 1949

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