

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 Cagliari

4. Geographical coordinates: 39°13'N 009°03'E

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

6. Area: 3,466 hectares

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

It is a representative example of a near-natural wetland, characteristic of Mediterranean biogeographical region. This wetland is a typical saline lagoon with various connections to the sea. It includes a reedy dune system utilised as a salt-exploitation. It supports a good assemblage of rare, vulnerable or endangered species of plants and 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):

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 animals (over 70 endangered bird species), with many number of specimens (over 30.000 birds).

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

It is located in the South of Sardinia Region, close to the Chief Towns of the Region, CAGLIARI. This land belongs to ASSEMINI, CAPOTERRA and ELMAS.

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 divided into three parts. 1) Lagoon of Santa Gilla (1.500 hectares), which has natural and artificial connection to the sea. It is 1.20m average depth, and it has two principal affluent, Rio Mannu e Rio Cixerri. 2) Saline lagoon of Macchiareddu (1.350 hectares), which is an important salt exploitation site, is separated from the sea by a littoral cordon. 3) Lagoon of Capotera (100 hectares)

This wetland is in the south of Campidano trough, originated by fluvial erosion (sea regression and sea intrusion) and by subsidence of Tirreniana platform in the Quaternary. This depression is filled up by marine intrusion and separated from the sea via a littoral cordon. The platform is constituted of one 5-m depth Miocenic carbonaceous sandstone bed and siliceous stones rest on plastic clay bed.

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.

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, Ammophyla arenaria, Anthemis maritima.
- Annual vegetation of drift lines. This is a formation of representatives of annuals and perennials plants, growing on drift material and gravels rich in nitrogenous organic matter. Plants: Cakile maritima and Salsola kali.
- 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. Plants: Limonium dubium, Limonium densiflorum, Limonium glomeratum.
- 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 scrubs. Plants: Salicornia europaea, Suaeda maritima, Atriplex halimus, Arthrocnemum fruticosum, Arthrocnemum glaucum, Hordeum marinum, Aeluropus litoralis.
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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 dubium, "tirrenico sardo-corso" endemic.

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

Limonium glomeratum, endemovicariante species.

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 60 specimens.

Podiceps cristatus: very endangered specie, over 300 specimens.

Podiceps nigricollis: very endangered specie, over 200 specimens.

Phalacrocorax carbo: abundant specie, over 1500 specimens.

Phalacrocorax aristotelis: endangered specie, over 10 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 40 specimens.

Egretta garzetta: endangered specie, over 600 specimens.

Egretta alba: endangered specie, over 30 specimens.

Ardea cinerea: endangered specie, over 200 specimens.

Plegadis falcinellus: endangered specie, few specimens.

Platalea leucorodia: endangered specie, over 30 specimens.

Phoenicopterus ruber: very endangered specie (site very important for the migration of this), over 3000 specimens

Anser anser: over 20 specimens (site important for the migration).

Tadorna tadorna: very endangered specie, over 150 specimens (site important site for nest building).

Anas penelope: endangered specie, over 150 specimens.

Anas strepera: endangered specie, over 80 specimens.

Anas crecca: endangered specie, over 1500 specimens.

Anas platyrhynchos: over 1000 specimens (site important for the migration).

Anas acuta: endangered specie, over 150 specimens.

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

Anas clypeata: endangered specie, over 80 specimens.

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

Aythya ferina: rare and very endangered specie, over 100 specimens.

Aythya nyroca: rare and very endangered specie, over 15 specimens.

Aythya fuligula: endangered specie, over 20 specimens.

Mergus serrator: endangered specie, over 15 specimens.

Circus aeruginosus: endangered specie, over 15 specimens.

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

Rallus aquaticus: endangered specie, few specimens.

Gallinula chloropus: abundant specie, over 90 specimens.

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

Fulica atra: abundant specie, over 10.000 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).

Glareola pratincola: rare and very endangered specie, few specimens (site important for nest building).

Charadrius dubius: endangered specie, few specimens.

Charadrius hiaticula: endangered specie, over 50 specimens.

Charadrius alexandrinus: endangered specie, over 300 specimens.

Pluvialis squatarola: endangered specie, over 50 specimens.

Vanellus vanellus: over 5.000 specimens (site important for the migration).

Gallinago gallinago: over 30 specimens (site important for the migration).

Limosa limosa: endangered specie, over 60 specimens.

Numenius arquata: endangered specie, over 150 specimens.

Tringa erythropus: endangered specie, over 150 specimens.

Tringa totanus: very endangered specie, over 150 specimens (site important for nest building)

Tringa nebularia: endangered specie, over 30 specimens.

Actitis hypoleucos: endangered specie, over 20 specimens.

Larus ridibundus: abundant specie, over 2.000 specimens.

Larus genei: endangered specie, over 1000 specimens.

Larus fuscus: very endangered specie, few specimens.

Larus cachinnans: abundant species, over 2000 specimens.

Sterna sandvicensis: rare and very endangered specie, over 40 specimens (site important for nest building).

Sterna hirundo: very endangered specie, over 20 specimens (site important for nest building).

Sterna albifrons: very endangered specie, over 40 specimens, (site important for nest building).

Chlidonias niger: rare and very endangered specie, few specimens (site important for nest-building).

Alcedo atthis: endangered specie, over 10 specimens.

Coracias garrulus: very endangered specie, few specimens.

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

The site is important for the fishing production, the salt exploitation and the study of Sardinia History, as well as for the tourism.

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

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

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

It is near of Cagliari and Assemini, two important Towns of Sardinia (nearly 500.000 people), and near a important industrial centre.

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: the disused of the salt exploitation, an excessive human disturbance, an increment of the industrialisation, the construction of the new buildings or the new road, the water supply for domestic and industrial use.
- b) The principal problems that affecting the ecological character of the area around the site are an increment of the industrialisation, 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)

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.

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.)

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

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

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.

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

"Ispettorato forestale" of Sardinia Region administration's.

30. Bibliographical references: (scientific/technical only)

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