

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:

11.11.98

For office use only.

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Designation date

Site Reference Number

2. Country:

Italy

3. Name of wetland:

Santa Valley

4. Geographical coordinates:

44° 33' North; 11° 50' East

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

6. Area: (in hectares) 261 ha

7. Overview:

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

Residual freshwater marsh of the lowlands Padana valley, with embankments built around the perimeter so as to serve as a flood overflow area in the drainage system of the Bolognese lowlands and the river Reno. There are several expanses, *Phragmites australis* and *Typha latifolia* interspersed with *Nymphaea alba*. The banks are surrounded by vegetation dominated by *Salix alba*.

The northern part of the valley borders on the "Valle Campotto e Bassarone" Ramsar wetland with which it constitutes a single environmental and management entity.

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:

Tp, 6, Xp, Ts, 9, M

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* - or - *no* X

(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:

Massimiliano Costa – Regional Park of the Po Delta.

Giuliana Venturi – Emilia-Romagna Region.

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)

Santa Valley together with the bordering Campotto and Bassarone Valleys forms the largest regional expanse of fresh water valleys. The wetland represents an important secondary catchment area for the Reno river, to which it is connected from a hydrological and ecological point of view. The wetland represents an important reservoir of biodiversity for the entire Reno basin and is hosts a large number of rare fauna and flora species, with representative populations at a national level and single-location species at a regional level which find suitable environments for nesting, feeding and resting during migration. In particular, there are important populations of Podicipedidae, Phalacrocoracidae, Ciconiiformes, Anatidae. There are four endemic species of fish in the waters of the marshes and the surrounding water courses.

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

Santa Valley is situated on the boundary of three provincial administrations (Bologna, Ferrara, Ravenna). It is approximately 50 km from Bologna, 35 km from Ravenna, 35 km from Ferrara (capital of the Province) and 8 km from Argenta (main Municipality and nearest town).

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)

The area is a natural freshwater wetland with embankments built around the perimeter in order to serve as a flood overflow area. The area is at the confluence of the Idice torrent with the Reno river and the territory has been strongly influenced by the land reclamation activities carried out during the first decades of the century. The waters flow into the valley, especially during flood periods, from the man-made channels on the left of the Idice torrent which gather the overflow waters from the Bolognese lowlands, to be then discharged into the Reno river when its levels have returned to normal. The soil is calcareous-clayey alluvium. Most of the marsh is permanently flooded with variations in water level during the year mainly due to the need to increase the levels during the more rainy periods.

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

The basin is mainly an overflow catchment area to protect the territory from flooding.

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

Phragmites australis and *Typha latifolia* dominate the marsh. In the free waters there are *Nymphaea alba*, *Nuphar luteum* and *Nymphoides peltata* and vast beds of submerged hydrophytes (*Ceratophyllum demersum*, *Ranunculus trichophyllus*). The banks are covered with riparian woods of *Salix alba*. An adjacent agricultural area has recently been reclaimed with the formation of a wetland meadow which will be enlarged in the near future.

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

The following threatened species at a national level are present in the wetland (“Libro Rosso della Flora d’Italia”): *Hottonia palustris*, *Oenanthe aquatica*, *Sagittaria sagittifolia*, *Salvinia natans*, *Senecio paludosus*. The following species, protected in the Emilia-Romagna region, are also present: *Leucojum aestivum*, *Nymphaea alba*, *Orchidaceae*.

Stratioites elata and *Hippuris vulgaris* have recently disappeared from the area and it was the only site in Emilia Romagna at which these species were present.

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

Birds listed in Attachment 1 of the European Union Directive 79/409: some nests are present of *Ardea purpurea* (9-10 pairs). Nesting of *Botaurus stellaris* (1-2 pairs), *Ixobrychus minutus*, *Aythya nyroca* (1-2 pairs), *Circus aeruginosus* (1-2 pairs), *Porzana parva*, *Porzana porzana*.

Important populations of species contained in Attachments II and IV of the EU Dir.92/43: *Emys orbicularis*, *Chondrostoma genei* (endemic), *Barbus plebejus* (endemic), *Lycaena dispar*, *Zerynthia polyxena*, *Osmoderma eremita*, *Cerambix cerdo*. Presence of other endemic species of fish: *Rutilus erythrophthalmus*, *Padagogobius martensii* and species of fish of economic importance: *Esox lucius*, which has entirely disappeared from several hydrographic catchment areas and is an indicator of good ecological conditions; *Tinca tinca*, a species in decline in Emilia-Romagna.

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

The area serves as an important water resource and enables regulation of the waters, which is essential for safeguarding the territory and defending it from floods. The type of management carried out has enhanced the characteristics of the area which are of great importance for nature conservation.

The location is well-known nationally level for its important environmental and cultural links with the history of reclamation of the Padana plain. Scientific-cultural events are promoted by the Centre for historical-nature documentation which has its offices in the Argenta Valleys Museum (national and international congresses, educational and teaching activities, series of publications “Quaderni di Campotto”). Scientific research is also carried out.

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

The owner is the Rena Land Reclamation Consortium (Consorzio della Bonifica Renana), with offices at Via S. Stefano 56, Bologna, who is directly responsible for hydraulic and environmental management.

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

a) flood overflow basin, controlled fishing, nature conservation and observation, nature tourism

b) “Campotto and Bassarone Valley” Ramsar wetland; ex-cultivated land recently transformed into wet meadow; agriculture

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

The waters coming from the intensely cultivated surrounding plains cause water pollution from pesticides and herbicides and increase in nutrients, with a subsequent eutrophication of the waters and “ageing” of the marsh beds. Loss of efficiency of several water regulation structures has caused a decrease in water circulation in the Valley and reduced the possibility of carrying out timely operations to create small water level variations in the flood overflow area. These maintenance operations are extremely important for avoiding damage to habitats, nesting activities and for the survival of various species of fauna and flora, above all during extreme weather conditions (heavy rainfall or long dry periods).

A particularly adverse impact has been caused by the considerable spread of introduced animal species: *Myocastor coypus* (damage to vegetation communities and disturbance to some nesting species), *Pseudorasbora parva* (competition with small autochthonous and also endemic Ciprinidi), *Silurus glanis* (direct predator of small-medium autochthonous and endemic Ciprinidi, with changing of natural fish cenosis), *Procambarus clarkii*.

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)

Ramsar wetland, established with Ministerial Decree dated 09.05.77, published in the *Gazzetta Ufficiale* (official state journal) No. 216 dated 09.08.77. Subject to hydraulic limitations as a flood overflow catchment area. Further limitations have been set in accordance with law 431/85. The whole Ramsar wetland is comprised within the Regional Park of the Po Delta (Campotto di Argenta Station) established with regional law No.27 of 2.7.88. The regulations of the Territorial Plan have been in force since 1991 and are followed by the Municipality of Argenta (under approval by the Region). The plan foresees a zone B Ramsar site in which hunting is forbidden. Management of the area as a nature reserve for the past decade has been by collaboration among local agencies, the land owners and the Emilia-Romagna Region. Technical and financial collaboration during this period permitted reforestation with autochthonous essences of more than 15 ha which were previously used for cultivation of poplars for industrial purposes, maintenance of footpaths and the setting up of observation points (suitably screened to minimise the environmental impact).

The management is also adopting the integrated agriculture foreseen in EU regulation 2078, allocating 8 ha for hedges and woods (D1). A twenty-year withdrawal is foreseen of about 30 Ha (F1).

Recent regional investments have enabled studies and counts of damaging species (*Myocastor coypus*, *Carassius auratus* and *Silurus glanis*), restoration of wet meadows and flooding of previously cultivated lands adjacent to the Ramsar wetland, and improvement of compatible structures (screened footpaths and observation towers).

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

The Territorial Plan of the Park gives the general plan for the area and defines the structural framework. The plan indicates the general and sectorial objectives and the priorities, and specifies (by means of zoning, regulations, limitations, incentives and directives) the various uses to be made of the territory. The Plan also foresees conservation and re-naturalisation activities, partly under way and partly to be carried out in the next few years.

In particular, a project has been prepared (which will be presented in the near future for Life-Nature financing) which proposes hydraulic works similar to those already carried out under

the Life-Nature project in the Campotto Valley, aimed at solving the problems and obtaining the benefits described under point 22 above.

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

The site is regularly used for scientific research by Bologna University.

The management consortium of the regional Park signed a protocol of understanding with the Regional Agency for Prevention and Environment (ARPA), in 1997, to carry out annual programmes of control and monitoring activities of the quality of the environment over the entire park, the first results of which have already been published.

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

The area uses the facilities present in the adjacent Ramsar wetland including, in particular: the “Argenta Valley Museum” (visitors’ centre of the regional Park - which received the European Council Museum Prize in 1992) and the “Land Reclamation Museum of the Argenta Valley” (situated at the Saiarino pumping station - to promote awareness of the past and present water management of the area).

A considerable amount of documentation has been produced (prepared by local agencies, the Region, the Park and nature associations) for educational and teaching purposes which illustrates the natural characteristics and the recreational, cultural and tourist opportunities offered by the area.

The activities of environmental education (guided tours and schools trips) are run by a co-operative which also manages the Argenta Valley Museum.

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

The area is a recreational and cultural attraction for tourists and many educational activities are carried out, together with controlled sporting fishing events.

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

Region: Emilia-Romagna; Province: Ferrara; Municipality: Argenta.

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

Management of the site is carried out by the Rena Land Reclamation Consortium as owner and/or user of the area, in accordance with the regulations foreseen by the Territorial Plan of the Po Delta Park. In consideration of the particular cultural and natural importance of the area, the management is a result of collaboration among the Land Reclamation Consortium, the Municipality of Argenta and the regional Delta Po Park and is governed by a specific Convention.

30. Bibliographical references: (scientific/technical only)

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 - Mazzotti S., Marchesini R. & Ballanti B., 1994. *“Microteriofauna della provincia ferrarese”* (Micro fauna of the Ferrara Province). Ecologia della Padania, Atti del XII Conv. Naz. dei Gruppo per l'Ecologia di base “G. Gadio”.
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 - Regione Emilia-Romagna, 1988. *Programma di conservazioe per l'area geografica del parco del Delta del Po (II fase) Progetto Life “Riqualificazione naturalistica dell'Oasi delle Valle di Argenta e marmorta”* (Preservation plan for the geographical area of the Po Delta Park (II Phase) Life Project “Naturalistic Requalification of the Oasis of the Argenta and Marmota Valleys”) Commissione Europea DG XI/Regione Emilia-Romagna, realizzato dal Consorzio della Bonifica Renana, Bologna.
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