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	comp	leted	/upd	ated
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11.11.98

Designation date

7 I T 0 0 5
Site Reference Number

2. Country:

Italy

3. Name of wetland:

Alberete Point

4. Geographical coordinates:

44° 31' North; 12° 14' East

5. Altitude: (average and/or max. & min.). average 0 m a.s.l. (max 7/min -2) 6. Area: (in hectares) 480 ha

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

Alberete Point is a group of fresh water wetlands resulting from reclamation works carried out at the beginning of 19th century in a vast area surrounding the final stretch of the Lamone River. The river still crosses the area today (enclosed by high embankments), dividing it into two distinct zones: Alberete Point to the south and Mandriole Valley to the north.

Alberete Point is a hydric woodland which is mostly flooded and is on land which alternates low areas with high areas (remains of dune ridges which have formed the coastal area of Ravenna). The woodland is dominated by *Populus alba*, *Quercus robur*, *Salix alba*, *Ulmus minor*, *Alnus glutinosa* and by *Fraxinus oxycarpa* in the lowest areas, with undergrowth of *Carex elata*. There are reed beds of *Phragmites australis*, *Typha latifolia*, *Schoenoplectus lascustris* and *Cladium mariscus* in the deepest lowlands with laminae of *Nymphaea alba*.

Mandriole Valley, known locally as "Reed Valley", is an open marsh with extensive reed beds of *Phragmites australis*, *Typha latifolia* and *Schoenoplectus lascustris* mixed with hydric bushes of *Salix cinerea*. The open waters are covered by laminae of *Nymphaea alba*. The area has been used as a reservoir for the domestic and industrial water supply for the city of Rayenna.

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

man-made: 1 - 2 - 3 - 4 - 5 - <u>6</u> - 7 - 8 - <u>9</u>

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

Tp, 6, Xp, Xf, W, Ts, M, 9

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 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)

Alberete Point is the last example of flooded woodland on the lower Padana plain and the two well-preserved wetlands together comprise all the evolutionary stages of natural wetlands. They form an important marginal basin for the Lamone river (crossing the wetland from west to east) to which they are linked from both a hydrological and ecological point of view and they represent a reservoir of biodiversity. The site 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 ideal habitats for breeding, resting during migration and feeding. There are several endemic species present. There are more than 20,000 aquatic birds regularly present and in particular there are important populations of Ciconiiformes, Anatidae, Accipitriformes, Charadriidae and Sternidae.

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

The area is located approximately 10 km north of the city of Ravenna (capital of the Province and Muncipality) along the Romea state road (which forms the eastern boundary), in the vicinity of several tourist resorts (Casalborsetti, Marina Romea, Porto Corsini).

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

Alberete Point is a naturally occurring wetland, formed by the overflowing of the Lamone river onto the paleodunes of the Ravenna coast, of which the outline is preserved (deeper zones and dune ridges), which run in a north-south direction. Mandriole Valley is also natural in origin but embankments have been built around the perimeter so that it acts as a reservoir. Water circulates constantly at Alberete Point, entering from the Lamone river and the Fossatone canal and then flowing through the Taglio canal into the Pialassa della Baiona and from there into the sea. Mandriole Valley, on the other hand, is normally charged only once a year in the autumn, and maybe again in the spring, by means of intakes on the Lamone and Reno rivers. The soils are sandy on the dunes and silty in the lower parts where the river waters deposit sediment. Both areas dry up partially in the summer due to the lowering of the water table and the reduced flows (Mandriole Valley) and for management reasons related to the performance of maintenance activities (Alberete Point).

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

Mandriole Valley, which once served as a water reservoir for domestic and industrial purposes, is presently managed solely from a naturalistic point of view. Both the wetland areas play an important role in improving the quality of the waters by means of natural phyto water purification.

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

The flooded woodland at Alberete Point is dominated by Fraxinus oxycarpa, often with undergrowth of Carex elata, gradually alternated in the higher areas with Salix alba, Alnus glutinosa, Ulmus minor, Populus alba and Quercus robur. Reed beds dominate in the lower areas with Phragmites australis, Typha latifolia, Schoenoplectus lacustris and Cladium mariscus, with laminae of Nymphaea alba and Salvinia natans. Mandriole Valley is dominated by extensive reed beds of Phragmites australis, Typha latifolia and Schoenoplectus lacustris with open waters covered by Nymphaea alba. Wooded areas of Salix cinerea are found in amongst the reed beds in the areas with shallow water.

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

The following species threatened at a national level are present ("Libro Rosso della Flora d'Italia"): Leucojum aestivum (species protected in the Emilia-Romagna Region), Thelypteris palustris, Salvinia natans, Sagittaria sagittifolia and Utricularia australis. The following species, protected in the Emilia-Romagna Region, are also present: Nymphaea alba, Orchidaceae.

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: presence of the most important heron breeding area in Italy in the trees of the Alberete Point with *Phalacrocorax carbo* ssp. *sinensis*, *Phalacrocorax pygmaeus* (5-19 pairs) only nesting site in Italy, *Ardeola ralloides* (25-57 pairs), *Nycticorax nycticorax* (360 pairs), *Egretta garzetta* (700-1000 pairs) most important colony in Italy, *Plegadis falcinellus* (2-3 pairs), *Platalea leucorodia* (0-7 pairs) in the reed beds of the Mandriole Valley with *Ardea purpurea* (80 pairs), *Egretta alba* (2-5 pairs), *Ardea cinerea*, and isolated nests of *Botaurus stellaris* (1 pair) and *Ixobrychus minutus*. Main Italian group of *Acrocephalus melanopogon* (80-100 pairs). In addition, nesting of *Circus aeruginosus* (3-4 pairs), *Porzana parva, Porzana porzana, Chlidonias hybrida* (0-50 pairs). Wintering of *Aquila clanga*.

Important populations of species contained in Attachments II and IV of the EU Dir.92/43: Barbastella barbastellus, Emys orbicularis, Rana latastei (endemic and isolated in the southernmost part of the area), Lycaena dispar, Zerynthia polyxena, Graphoderes bilineatus. One endemic fish species is present: Rutilus erythrophthalmus and fish species of economic importance: Esox lucius, which has disappeared from the entire hydrographic basin and is an indicator of good ecological conditions; Tinca tinca, a species in rapid decline in Emilia Romagna. An endemic subspecies of Coleoptera is present: Carabus clathratus ssp. antonellii and a Lepidoptera: Chamaesphecia palustris.

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

The site is known nationally for scientific research. Alberete Point is a favourite destination both for residents of Ravenna and tourists (especially during the summer season) who value it as a nature reserve of great interest.

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

The area is entirely publicly-owned: partly by the Municipality of Ravenna (40%) and partly by the State (60%).

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

- a) nature conservation and observation;
- b) agriculture, San Vitale pine woods, "Bassa del Bardello" wet meadow, agro-tourism, reforestation.

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 from the Lamone river, which also come from the highly-cultivated surrounding plains, are often of very poor quality and cannot be discharged into Alberete Point or Mandriole Valley. The shortage of rainfall during the summer and the use of the Lamone waters for irrigation purposes creates a shortage of water and a worsening of the quality, with drying up of the wetlands. This can cause replacement of aquatic habitats with less hygrophyte habitats and a deterioration in the quality of the water itself.

The area is the final remains of the gently sloping valleys of Ravenna and one of the main management aims is therefore to prevent, or at least slow down, the evolution of the marshes and flooded woodland towards more developed ecosystems in order to preserve the maximum environmental diversity and therefore biodiversity.

Poaching and hunting near the banks of the wetland constitute a serious threat for the Anatidae, whether or not hunting is permitted, in particular for *Aythya nyroca*, which is frequently killed since, in flight, it may be confused with similar species.

A strong negative impact is caused by the considerable spread of introduced animal species: *Myocasgor coypus* (damage to the vegetation communities and disturbance to some nesting species), *Pseudorasbora parva* (competition with small autochthonous Ciprinidi, also endemic), *Siluris glanis* (direct predator of small-medium autochthonous Ciprinidi, also endemic, with changing of natural fish coenosis.

The presence of the Romea state road creates numerous problems. In addition to pollution, it represents a division between areas of great naturalistic value (Alberete Point to the west – Basse del Bardello and San Vitale Pine Wood to the east). Each year, especially in the spring and summer, a great number of dead reptiles, small mammals and amphibious creatures are found, victims of the traffic.

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. 208 dated 30.07.77. The area is also subject to the limitations of law 431/85 and law 1497/39. The entire Ramsar zone is comprised within the perimeter of the Po Delta regional park (Pineta San Vitale and Piallasse di Ravenna Station) established with regional law No.27 dated 02.07.88. The regulations of the Territorial Plan have been in force since 1991 and are followed by the Ravenna Municipality (under approval by the Region). The area is included in Ramsar zones A and B in which hunting is forbidden. Access to the Mandriole Valley is forbidden except for two observation points.

Management of the site as a nature reserve for the past decade has been by collaboration between the Municipality of Ravenna, WWF of Ravenna, local associations and the Emilia-Romagna Region. Technical and financial collaboration during this period has permitted numerous works to be carried out, among which are the construction and maintenance of footpaths, observation points which are suitably screened in order to minimise the

environmental impact, and maintenance of the areas. Maintenance works have been carried out regularly by cutting heliophytes and uprooting of Salicone, etc in order to prevent the natural silting of the wetlands. Monitoring of the numbers of *Myocastor coypus* has been carried out and also dredging of the sub-lagoon canals, in order to improve water circulation. Trial operations have been carried out aimed at preventing or reducing deaths of protected fauna (*Emys orbicularis*) when crossing the Romea state road; monitoring is in progress to verify the effectiveness of these trial activities.

In order to determine suitable forms of management, the Municipality of Ravenna has recently carried out a Life-Nature project entitled "Management Plan for the San Vitale Site" aimed at recreating the conditions necessary for nesting of several bird species in danger of extinction, and at resisting the alteration of characteristic habitats of the wetlands with subsequent decline of the biodiversity.

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 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 underway and partly to be carried out in the next few years. The provisions foreseen for the site by the above-mentioned Life project will be included within the existing planning instruments ("P.R.G." - General Regulatory Plan - of the Municipality of Ravenna, Territorial Plan of the Station "Pineta San Vitale and Piallasse di Ravenna" of the Po Delta Regional Park and relative regulations regarding permitted activities).

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

Monitoring of the heron breeding grounds and ringing of the migratory Passeriformi by the University of Ferrara (Dr. Stefano Volponi).

The management consortium of the regional Park signed a protocol of understanding with the Regional Agency for Conservation and the 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 following facilities are present: information point (at Albertee Point), a nature trail and an observation tower, managed by the Cultural Co-operative "L'ARCA" of the WWF of Ravenna, which also organises guided tours for schools and organised groups.

A considerable amount of documentation has been produced (prepared by local agencies, WWF, 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 area and the nature trails are equipped with information signposts and teaching aids.

27. Current recreation and tourism: (state if wetland is used for recreation/tourism; indicate type and frequency/intensity) The area is a tourist and cultural destination and a site where teaching activities take place.

28. Jurisdiction: (territorial e.g. state/region and functional e.g. Dept of Agriculture/Dept. of Environment etc.) Region: Emilia-Romagna; Province: Ravenna; Municipality: Ravenna.

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

Management of the area is carried out by the Municipality of Ravenna in accordance with the instructions established by the Territorial Plan of the Po Delta Regional Park. The Municipality handed over management to the Cultural Co-operative "L'ARCA" (established by the WWF Ravenna) in 1988, on the basis of specific four-yearly agreements and annual programmes.

30. Bibliographical references: (scientific/technical only)

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