

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:

For office use only.

20.8.98

dd mm yy
11/04/89

7IT042

Designation date Site Reference Number

2. Country:

Italy

3. Name of wetland:

Valle Averto or Valle dell'Averto.

4. Geographical coordinates:

45°21'N – 12°09'E

5. Altitude: (average and/or max. & min.) -1 to +1 m

6. Area: (in hectares) 500 ha

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

brackish and freshwater wetland, with woodlands and wet meadows; large *Phragmites* areas, lakes and open ponds. The wetland receives the waters from the sea, through the lagoon of Venice, and from the river Brenta, through the Brenta Novissima Canal.

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: a)J; b) E; c) 3; d)Ts.

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: 3b

10. Map of the site included? Yes IGMI n°51 III SE

11. Name and address of the compiler: dr. Giampaolo Rallo - via Caneve 63-65, 30173

Venice-Mestre, Italy.

12. Justification of the criteria selected under point 9: the biotype is representative example of the brackish lagoon ecosystems of the north Adriatic sea, mainly because of the socalled “valli da pesca” (fishing valleys), e.g. wetlands deputed to extensive aquaculture: this activity is known as “vallicoltura” and started during the Republic of Venice period. It is of fundamental importance as a habitat for many rare or vulnerable species (see points 17, 18).The site regularly hosts many different species of waterfowls, even over 20.000 specimens, and it is also important as a resting and feeding site.

13. General location: Venice (Regione Veneto).

14. Physical features: the wetland is upon alluvial rocks (Quaternary), then modelled by natural and anthropic phenomena and by the river Brenta. It is characterized by the presence of large lakes and ponds which receive water thanks to a hydraulic system built in the XVIII century: the freshwater comes from the Brenta Novissima Canal (through an ancient canal called “buseno”) and brackish water from the lagoon of Venice (through canals called “chiaviche”). The climate is damp-temperate. with hot summers: the average temperature in summer is about 24 °C(the isotherm of 3°C of January just touches the site). The hottest month is July, while the coldest is February. The maximum temperature in July is 30.8 °C, and the lowest in Feb. is -5.3 °C; the average excursion in July is 8.2 °C, in Feb. 6.8 °C. February is the driest month (45.4 mm), while the most rainy month is October (98.6 mm). The annual rain amounts to 852.5 mm. Snow is rare. The relative humidity reaches 84.1% in Jan. While the average is 73.2% during the year. The wind reaches the average annual speed of 6.9 km/h.The most important wind is the “bora”, NE wind, and the “scirocco”, SE wind.

15. Hydrological values: The wetland takes water from the Canale Brenta Novissima through a small canal which feeds a wide area of lakes, inland canals and cane meadows (80 ha), and then flows into the main lakes (Lago Ancilotto, Lago Grande, Lago del Buseno, Lago Ninni), mixing its waters with the brackish ones and, finally, flowing into the Lagoon (see also point 14).The hydraulic system is artificial even though very old, and contribute to preserve the native natural environments. Part of the exceeding waters (rain, catchment, tide waters) are controlled thanks to deputed canals or to an electric pump.

16. Ecological features: The site is generally natural and in good condition, as a transition from inland marshes to brackish coastal waters. This affects positively the vegetation which is rich and varied. From typical *Zosteralia marinae* communities to *Uva lactuca/Enteromorpha*, *Ruppietum maritimae*; from *Salicornietum herbaceae*, to *Suaedeto-kochietum hirsutae* *Limonietum*, *Juncetum maritimi*, *Lemno-Utricularetum vulgaris*, *Nymphacetum albae*, *Ceratophylletum demersi*, *Phragmitetum communis*, *Typhetum latifoliae*, *Scirpetum maritimi*, *Polygono hydropiperis-Bidentetum*.

17. Noteworthy flora: *Salicornia veneta*, *Epipactis palustris*, *Salvinia natans*, *Limonium densissimum*, *Limonium bellidifolium*, *Senecio paludosum*, *Rumez palustris*, *Typha minima*.

18. Noteworthy fauna:

Mammals: Mustela putorius, Martes foina, Meles meles, Neomys anomalus, Sorex *araneus*, Crocidura leucodon, Crocidura suaveolens, Talpa europea, Pipistrellus nathusii, P. pistrellus, Nyctalus leisleri (all interesting or endangered species).

Waterfowls, Amphibians, Reptiles, Fishes, Invertebrates. (See check lists attached).

19. Social and Cultural values: The area is partly used for the traditional “vallicoltura”(see point 12). The fish species here bred for economical purposes are *Sparus auratus*, *Anguilla anguilla*, *Dicentrarchus labrax*, *Chelon labrosus*, *Liza ramada*, *Liza aurata*, *L. saliens*, *Mugil capito*. The area owned by the WWF Italy is used for education and controlled tourism. A Regional Museum of Etnography is inside an old rural building (Cà Tiepolo). The whole area represents an important model of management, with production (extensive valleyculture), research (University of Padova and Venice, Natural History Museums, National Research Council), education (guided tours) and preservation (Oasis of faunistic protection, Natural Reserve and Wetland of international importance).

20. Land tenureownership of:

- a) 368 ha, State property; 87 ha, WWF Italy; 35 ha, private.
- b) the canals around the wetland embankments of Valle Averto (Canalette di Lugo and Cornio) are State property; the other valleys are statal and private.

21. Current land use: a) Extensive valleyculture and aquaculture are operated on 300 ha; there is also a farming area of 20 ha. The remaining part is managed for nature conservation only. b) In the surroundings (Valle Serraglia, Contarina, Comio Alto, Cornio Basso) are operated the same economical activities. In the canals around the forward embankment of Valle Averto (Canalette di Lugo e Comio) there is fishing activity (by professionals and amateurs), and it is also present hunting activity, since September to January.

22. Factors adversely affecting the site's ecological character: a) absence of ordinary and extraordinary management; the periodical and constant flow of fresh and brackish water; the periodical excavation of the canals; the backing and restoring of the eroded banks; the control of the macrophytic vegetation. The farming area could be modified into intensive and monocultural activity. The private owners could decide to make drastic environmental changements. b) same problems, plus hunting.

23. Conservation measures taken: The measures taken could avoid what is listed on point 22. It has been asked to the Dept. of Environment to enlarge the protected area. It has also been officially asked to the Provincial (Venice) and Regional (Veneto) Authorities to ban hunting activity all around the Valle Averto biotype.

24. Conservation measures proposed but not yet implemented: official institution of the State Natural reserve. Banning the hunting around the biotype of Valle Averto. Environmental

restoration inside the biotype, upon the lakes, the internal canals and some other areas. Applying the rule 20/78/ECC in the other farrning areas.

25. Current scientirie research and facilities: the area is under study by the Univ. Of Padova (Inst. Of Enthomology, Forestry Sciences, Biology Dept.) and Venice (Environment Sciences, Economy Dept.).

26. Current conservation education: Guided tours, Musewn of Etnography.

27. Current recreation and tourism: special agreements with tourist agencies in the surrounding towns (Venezia, Chioggia, ecc.) for guided tours altogether with historical/artistic visits. Reserved parking for cars, buses and trailers.

28. Jurisdiction: see point 20.

29. Management authority: WWF Italy, Via Garigliano 57, 00198 Roma. Azienda Faunistico venatoria (Soc. AMA - Valle Averto, Campagna Lupia: Mr. Elio Boscoli).

30. Bibliographical references:

A. LAVORI SCIENTIFICI:

1970 - WOLFSBERGER J., 1970, *Meliana stenoptera* Stgr., eine für Europa neue Noctuide (Lepidoptera). Bollettino Società Entomologica Italiana, 102, 5-6: 91-94.

1975 - ZANGHERI S., 1975, La Lepidotterofauna delle Prealpi Venete sulla base della Collezione A. Ancilotto. Bollettino Istituto di Entomologia della Università di Bologna, 31: 215-250.

1984 - GEHU J., SCOPPOLA A., CANIGLIA G. MARCHIORI S. & GEHU-FRANCK J., 1984, Les systemes vegetaux de la cote nord-adriatique italienne, lor originalite a l'echelle europeenne. Università degli Studi di Camerino-Documents Phytosociologiques, 8 (n.s.): 485-558.

1984 - GEHU J., COSTA M., SCOPPOLA A., BIONDI E., MARCHIORI S., PERIS J.B., FRANCK J., CANIGLIA G. & VERI L., 1984, Essai synsistematique et synchologique sur les vegetations littorales italiennes dans un but conservatoire. I - Dunes et vases salees. Università di Cainerino - Documents Phytosociologiques, 8 (n.s.): 393-474.

1986 - RALLO G., 1986, La Lontra nel Veneto. In "La Lontra in Italia", Atti e Studi del WWF Italia: pp.45-46.

1987 - CESTER D., MANZI R. & PANZARIN F., 1987, ACROPROJECT 1987. Dattiloscritto originale: pp. 1-20.

1988 - RAFFONE G., RAMPINI L. & SCARPA G., 1988, Ricerche biologiche nel Rifugio Faunistico del W.W.F. di Valle Averto - 1: Diptera Empididae, Hybozidae, Dolichopodidae, Sciomyzidae, Opomyzidae, Sepsidae, Muscidae (gen. Lispe). Lavori della Società Veneziana di Scienze Naturali, 13: 17-30.

1988 - CANZONERI S. & VIENNA p., 1988, Ricerche biologiche nel Rifugio Faunistico del W.W.F. di Valle Averto - 2: Diptera Ephydidae. Lavori della Società Veneziana di Scienze Naturali, 13: 31-40.

- 1990 - BISAZZA A., ZULIAN E. & MIERLIN E., 1990, Note sulla biologia riproduttiva di *Gambusia holbrooki* nell'Italia nord-orientale. Rivista Italiana di Idrobiologia, 29, 1: 151-162.
- 1991 - CESTER D., MANZI R. & PANZARIN L., 1991, "Acroproject" in laguna di Venezia: risultati preliminari. Atti 5° Conv.Ital.Ornit.-Suppl.Ric.Biol.Selvag., 17: 471-476.
- 1992 - AUTORI VARI, 1992, Piano di gestione della zona protetta "Valle Averto" Laguna di Venezia.
- 1993 - ROSSI W., 1993, New or interesting Laboulbeniales (Ascomycetes) parasitic on Italian diptera. Cryptogamic Botany, 4: 34-39.
- 1993 - BON M., ROCCAFORTE P. & RALLO G., 1993, Ricerche biologiche nel Rifugio faunistico del W.W.F. della Valle dell'Averto: il sistema trofico Barbagianni Micromammiferi. Atti l° Convegno Faunisti Veneti, unico: 159-162.
- 1994 - PRANOVI F., 1994, Ricerche biologiche nel Rifugio faunistico WWF della Valle dell'Averto. 3: la vegetazione sommersa. Studi e Ricerche Sist.Aree Prot.WWF It., 2: 1-6.
- 1996 - PRANOVI F., CURIEL D., MARZOCCHI M. & BELLEMO G., 1996, Indagini preliminari - sui popolamenti macrobentonici di Valle Averto (Laguna di Venezia). Biologia Marina Mediterranea, 3, 1 (Atti XXVI Congresso della S.I.B.M.): 487-488.
- 1996 - CURIEL D., PRANOVI F., MARZOCCHI M. & BELLEMO G., 1996, I popolamenti macrobentonici di una valle da pesca - La Valle Averto nella Laguna veneta. Ambiente Risorse Salute, 15, 43: 25-30.
- 1996 - RALLO G., 1996, Esperienze e progetti di reintroduzione di alcuni invertebrati nella riserva naturale "Valle dell'Averto" Laguna di Venezia - Italia. Atti del Convegno in Catalogna - Spagna (in corso di stampa).
- 1997 - PATASSINI D. & FIORENTINI F., 1997, Analisi contingente e conservazione delle zone umide: un'applicazione alla Riserva Naturale dello Stato di "Valle Averto" della Laguna di Venezia. Archivio di studi urbani e regionali, 58: 85-112. (in corso di stampa):
- BIZIO E., LOSI C. & ROBICH G., Ricerche biologiche nella Riserva Naturale del W.W.F. di Valle dell'Averto. 8 - La Micoflora. Studi e Ricerche Sist.Aree Prot.WWF It., (in corso di stampa)
- BREBER P. & PAGLIANI T.,..., La qualità ambientale del bacino salmastro di Valle Averto (Laguna di Venezia) giudicata dal- macrobenthos animale. Studi e Ricerche Sist.Aree Prot.WWF It., (in corso di stampa).
- MARTINI S., Ricerche biologiche nella Riserva Naturale del W.W.F. di Valle dell'Averto. 10 - *Hyphantria cunea* Drury Studi e, Ricerche Sist.Aree Prot. WWF It., (in corso di stampa)
- B. TESI DI LAUREA:
- 1984 - CRISTOFOLI C., 1984, Aspetti floristici e vegetazionali della Valle Averto (Laguna sud - VE). Tesi di Laurea - Università di Padova, anno accademico 1983/84, pp- 1-71.
- 1990 - ZULIAN E., 1990, Selezione e dimensioni nei maschi di *Gambusia holbrooki* (Pisces: Poeciliidae). Analisi dei meccanismi che determinano la lunghezza alla maturità. Tesi di dottorato di ricerca in Biologia evoluzionistica, Università degli Studi di Padova, A.A. 1986/89: pp. 1.93.
- 1996 - FIORENTINI F., 1996, La stima dei benefici di conservazione per una zona umida protetta in Laguna di Venezia: il caso di "Valle Averto". Tesi di laurea - Università degli Studi di Venezia, Facoltà di Sc.MM.FF.NN - Corso di Laurea in Scienze ambientali, anno accademico 1995-96, pp. 1-1 73 e 1-53 n.n..
- 1997 - TIZIAN L., 1997, Uso dell'habitat e comportamento della Nutria (*Myocastor coypus*) in alcuni ambienti della provincia di Venezia. Tesi di Laurea - Università degli Studi di Padova, Corso di Laurea in Scienze Naturali, pp. 1-88, 2 tav.f.t..

1997 - MARTINI S., 1997, *Hyphantria cunea* Drury: influenza dei fattori climatici sulla velocità di sviluppo e strategie di controllo. Tesi di laurea - Università degli Studi di Padova, Facoltà di Agraria-Istituto di Entomologia Agraria, pp. 1-81, 24 tav.ft..

C. LAVORI VARI:

1982 - RALLO G., 1982, La Valle dell'Averto: la più bella ed importante tra le valli della Laguna di Venezia. S.i.p., pp. 1-4

1986 - RALLO G., 1986, La Valle Averto, rifugio faunistico del World Wildlife Fund. S.i.p..

1987 - BORELLA S. & RALLO G., 1997, Valle Averto. Tip. Commerciale, Venezia, pp. I 24.

1988 - RALLO G., 1988, Acque e barene tra Torcello e il Cavallino. Dal Rifugio WWF di Valle Averto alla "laguna viva".

In "Il camminaveneto", Ed. Ardadia, Milano, pp. 168-179.

1990 - RALLO G., s.d. (ma 1990), Oasi naturale di protezione di Valle Averto. Litocoop srl, Roma, pp. 1-56.

1991 - GIRARDI A., 1991, Valle Averto. Veneto ieri, oggi, domani, 2, 16: 78-83.

1991 - RALLO G., 1991, Bufali in Laguna. Date Vela Ventis, 1, 3: 6-7.

1991 - W-WF ITALIA, 1991, Gestione integrata degli ecosistemi lagunari mediterranei.

Progetto pilota nella Valle dell'Averto (Venezia). Ed.WWF-Italia (S. i.p.), Roma, pp. 1 -43

1991 - LENARDA S. & RALLO G., 1991, Cavalli e bufali / Valle Averto. Ed.

Trevisanstampa, Venezia - Mestre, pp. 1-36

1992 - RALLO G., 1992, Zone umide di importanza internazionale: Valle Averto e Valle Millecampi. Provincia di Venezia, XVI, 5/6: 32-38.

1995 - RALLO G., 1995, La Valle Millecainpi. Il sito ambientale e naturalistico – L'oasi naturalistica "Valle Averto" - Appendice. In "La Valle Millecampi", Provincia di Padova - Studi sul territorio l'ambiente e il paesaggio, 3: 7-16, 35-36 e 55-58.

1996 - PELUSI P. & RALLO P., 1996 (s.d.), Riserva Naturale di Valle Averto e Museo del Territorio della Valli e Laguna di Venezia. Ed. WWF Italia, Roma, pp. 1 -

Valle Averto

Cheek lists

Waterfowls check list

(Annex 1 of Council Directive 79/409/ECC)

- Acrocephalus melanopogon* (stage)
- Acrocephalus paludicola*(stage)
- Alcedo atthis* (resident)
- Aquila clanga* (stage-irregular)
- Ardea purpurea* (breed-stage)
- Aythya nyroca* (breed)
- Botaurus stellaris* (winter)
- Clidonias hybridus* (stage)
- Chlidonias niger* (stage)
- Circus aeruginosus* (resident - breed and winter)
- Circus cyaneas* (stage, winter)
- Circus pygargus* (breed around the biotop)
- Egretta alba* (winter)
- Egretta garzetta* (resident)
- Ficedula albicollis* (stage)
- Haliaetus albicilla* (stage-winter - occasional)
- Himantopus himantopus* (breed-stage)
- Ixobrychus minutus* (breed-stage)
- Lanius collurio* (breed-irregular)
- Lanius minor* (breed)
- Larus melanocephalus* (stage)
- Limosa lapponica* (stage)
- Luscinia suecica* (winter)
- Nycticorax nycticorax* (breed-stage)
- Pandion haliaetus* (stage)
- Pernis apivorus* (breed - stage)
- Philomachus pugnax* (stage)
- Phoenicopterus ruber* (stage, occasional)
- Platalaea leucorodia* (stage)
- Plegadis falcinellus* (stage)
- Porzana porzana* (stage)
- Porzana pusilla* (stage)
- Recurvirostra avosetta* (resident, breed –around the site – and winter)
- Sterna albifrons* (stage)
- Sterna birundo* (breed-stage)
- Sylvia nisoria* (breed)
- Tringa glareola* (stage)

Regularly occurring Migratory Birds not listed on Annex I of Council directive 79/409/ECC

- Accipiter nisus* (winter)
- Acrocephalus arundinaceus/palustris/schoenobaenus/scirpaceus* (breed-stage)
- Actitis hypoleucos* (stage)
- Aegithalos caudatus* (resident)

-*Alaiuda arvensis* (stage)
-*Anas acuta* (winter-stage)
-*Anas clypeata* (occasional breed, winter, -stage)
-*Anas crecca* (winter-stage)
-*Anas penelope* (stage)
-*Anas platyrhynchos* (resident-breed)
-*Anas querquedula* (,stage)
-*Anas strepera* (stage)
-*Anser anser* (resident by reintroduction, stage)
-*Anthus cervinus/pratensis/spinolella/trivialis* (stage)
-*Apus apus* (stage)
-*Ardea cinerea* (winter-stage)
-*Asio otus* (breed)
-*Athene noctus* (breed-stage)
-*Aythya ferina* (winter-stage)
-*Aythya fuligula* (winter-stage)
-*Bubulcus ibis* (rare stage)
-*Buteo buteo* (winter)
-*Calidris alpina/ferruginea/caniutus* (stage)
-*Carduelis carduelis/chloris* (breed-stage)
-*Carduelis cannabina* (breed-winter-stage)
-*Cettia cetti* (resident-breed)
-*Charadrius alexandrinus* (breed-stage)
-*Charadrius dubius* (stage)
-*Chlidonias leucopterus* (stage)
-*Cisticola juncidis* (resident-breed)
-*Colomba palumbus* (stage)
-*Corvus corone* (resident-,breed)
-*Corvus monedula* (stage)
-*Coturnix coturnix* (stage)
-*Crex crex* (stage)
-*Cygnus olor* (resident-breed by reintroduction)
-*Delichon urbica* (stage)
-*Dendrocopos major* (resident-breed)
-*Emberiza schoeniclus* (breed-winter-stage)
-*Erithacus rabecula* (winter)
-*Falco subbuteo* (winter-stage)
-*Falco tinnunculus* (stage)
-*Ficedula hypoleuca* (stage)

-*Fringilla coelebs* (breed-winter-stage)
-*Fringilla montifringilla* (stage)
-*Fulica atra* (breed-winter-stage)
-*Gallinago gallinago* (stage)
-*Gallinula chloropus* (resident-breed)
-*Garrulus glandarius* (stage)

- Hippolais polyglotta* (stage)
- Hirundo rustica* (breed-stage)
- Jynx torquilla* (breed-stage)
- Larus minutus* (stage)
- Larus ridibundus* (resident/winter/stage)
- Limosa limosa* (stage)
- Luscinia megarhynchos* (breed-stage)
- Merops apiaster* (irregular breed-stage)
- Motacilla alba* (winter-stage)
- Motacilla flava* (breed-stage)
- Muscicapa striata* (breed-stage)
- Netta rufina* (resident-breed by reintroduction)
- Numenius arquata/phaeopus* (stage)
- Oenanthe oenanthe* (stage)
- Oriolus oriolus* (stage)
- Panurus biarmicus* (resident-breed)
- Parus caeruleus-major* (breed-stage)
- Phasianus colchicus* (resident-breed)
- Phoenicurus phoenicurus/ochrurus* (stage)
- Phylloscopus bonelli/collybita/sibilatrix/trochilus* (stage)
- Pica pica* (resident-breed)
- Podiceps cristatus* (stage)
- Prunella modularis* (stage)
- Rallus aquaticus* (resident-breed-stage)
- Tachybaptus ruficollis* (resident-breed-stage)
- Tadorna tadorna* (winter-stage)
- Tringa erythropus/nebularia/ochropus/stagnalis/totanus* (stage)
- Troglodytes troglodytes* (winter)
- Turdus illicus/philomelos/pilaris* (stage)
- Turdus merula* (breed-winter-stage)
- Tyto alba* (bree - stage)
- Upupa epops* (stage)
- *Vanellus vanellus* (breed near the biotop, stage)

Amphibians and Reptiles listed on Annex II of Council direglive,92143/ECC

- Emys orbicularis*
- Rana latastei*
- Triturus cristatus*

Other important Species of Amphibians and Reptiles

- Triturus italicus*
- Bufo bufo*
- Bufo viridis*
- Rana dalmatina*
- Rana lessonae*

- Hyla arborea*
- Lacerta viridis*
- Podarcis sicula*
- Podarcis muralis*
- Coluber viridiflavus*
- Natrix natrix*
- Natrix tessellata*
- Anguis fragilis*

Fishes fisted on Annex II of Council dirtdive 92/43/ECC

- Aphanius fasciatus*
- Padogobius panizzai*
- Pomatoschistus canestrini*
- Rutilus rubilio*

Invertebrates listed on Annex II of Council directive 92/43/ECC

- Lycaena dispar*
- Margaritana margaritifera*
- Unio crassus*