Information Sheet on Ramsar Wetlands (RIS) – 2006 version

Available for download from http://www.ramsar.org/ris/key_ris_index.htm.

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.

2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.

3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

Directorate General for Nature Protection - Ministry o Environment and Nature Protection – Via Capitan Bavastro 174 – I-00100 ROMA

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DD MM YY

Designation date | Site Reference Number

2. Date this sheet was completed/updated:
12 June 2006

3. Country:
Italy

4. Name of the Ramsar site:
The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.

Pantano di Pignola

5. Designation of new Ramsar site or update of existing site:

This RIS is for (tick one box only)**:**
a) Designation of a new Ramsar site ✓; or
b) Updated information on an existing Ramsar site ❑

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area

The Ramsar site boundary and site area are unchanged: ❑

or
If the site boundary has changed:

i) the boundary has been delineated more accurately ❑; or
i) the boundary has been extended ❑; or
iii) the boundary has been restricted** ❑

and/or

If the site area has changed:
i) the area has been measured more accurately ❑; or
ii) the area has been extended ❑; or
iii) the area has been reduced** ❑

** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

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7. Map of site:
Refer to Annex III of the *Explanatory Note and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

i**) a hard copy** (required for inclusion of site in the Ramsar List): ✓;

ii**) an electronic format** (e.g. a JPEG or ArcView image) ✓;

iii) **a GIS file providing geo-referenced site boundary vectors and attribute tables** ❑;

b) Describe briefly the type of boundary delineation applied:
e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The boundary of the Ramsar site is similar to the border site SIC IT9210142 "Lago Pantano di Pignola" – (EU-Directive 92/43/CEE), but modified with a secure border (streets, channals, valley, etc).

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8. Geographical coordinates (latitude/longitude, in degrees and minutes):
Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.
x = 15°44' 52" East (centroid)
y = 40°35' 32" North (centroid)

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9. General location:
Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.
South of Italy, Basilicata Region, Province of Potenza, within the municipalities of Matera, Miglionico and Grottole.

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10. Elevation: (in metres: average and/or maximum & minimum)
min 763 - media 770 - max 774

11. Area: (in hectares)
172

12. General overview of the site:
Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

In origin, the wetland consisted of a muddy pool collecting the contribution of few springs. During the 1930s and '40s the area was drained for farming and irrigation development. Towards the 1960s nearby fields were partially converted, into a storage reservoir managed by the Society for the Industrialisation of Potenza (Ministerial Committee for the Mezzogiorno 03.04.2006). This site is currently undergoing a gradual reversal to natural conditions. The area is a nature reserve according to Regional Law 42/80 and a Faunal Protection Oasis according to article 10 of Regional Law 39/79. The reserve comprises Petrucco, a fraction of Pignola county council (Potenza County). The lake represents an important transit and nesting site for a number of residential and migratory species.

13. Ramsar Criteria:
Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked.

1	2	3	4	5	6	7	8	9
✓	✓	✓	✓	❑	❑	❑	❑	❑

14. Justification for the application of each Criterion listed in 13 above:
Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Criterion 1: the area includes a portion of near-natural wetland with habitats dominated by *magnopotamiom* and *hydrocarition* vegetation types, within a Mediterranean biogeographic region, including three habitat types which are listed in Annex I of the EU Habitats Directive:

- 3150. Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* - type vegetation. Lakes and ponds with mostly dirty grey to blue-green, more or less turbid, waters, particularly rich in dissolved bases (pH usually > 7), with free-floating surface communities of the *Hydrocharition* or, in deep open waters, with associations of large pondweeds (*Magnopotamion*).
- 3280. Constantly flowing Mediterranean rivers with *Paspalo-Agrostidion* species and hanging curtains of *Salix* and *Populus alba*. Nitrophilous annual and perennial grass and sedge formations, common in the ripatian ecotones of large Mediterranean rivers, with *Paspalum paspaloides, P. vaginatum, Polypogon viridis (= Agrostis semiverticillata), Cyperus fuscus*, and hanging curtains of *Salix* spp. and *Populus alba.*
- 6420. Mediterranean tall humid herb grasslands dominated by *Molinio-Holoschoenion* associations. Mediterranean humid grasslands of tall grasses and rushes, widespread in the entire Mediterranean basin, extending up to the coasts of the Black Sea, in particular in dunal systems.

Criterion 2: the area supports populations of species mentioned in Annex II and III of Directive 79/409/CEE

Species of birds localized in the site and mentioned in Annex II and III of Directive 79/409/CEE

Scientific name	Status	IUCN categ.	Italian law n.157 92	709/409 CEE	Cites	Bonn	Berna
Phalacrocorax pygmaeus	M-W	LR: nt	x	x		x	x
Ardea purpurea	M	LC	x	x			x
Ardeola ralloides	M	LC	x	x			x

Botaurus stellaris	M-W	LC	x	x			x
Ixobrychus minutus	N-M	LC	x	x			x
Nycticorax nycticorax	M	EX	x	x			x
Ciconia ciconia	M	LC	x	x			x
Platalea leucorodia	M	LC	x	x	x	x	x
Plegadis falcinellus	M	LC	x	x			x
Egretta alba	W	LC	x	x			x
Egretta garzetta	M-W	LC	x	x			x
Aythya nyroca	M	NT	x	x		x	x
Circus aeruginosus	M	LC	x	x	x	x	x
Circus pygargus	M	LC	x	x	x	x	x
Circus cyaneus	M	LC	x	x	x	x	x
Milvus migrans	N–M	LC	x	x	x	x	x
Milvus milvus	N-M	NT	x	x	x	x	x
Falco biarmicus	M	LC	x	x	x	x	x
Falco tinnunculus	N-M-W	LC	x	x	x	x	x
Falco naumanni	M	VU A1ace	x	x	x	x	x
Buteo buteo	M-W	LC	x		x	x	x
Pernis apivorus	M	LC	x	x	x	x	x
Pandion haliaetus	M	LC	x	x	x	x	x
Accipiter nisus	M	LC	x	x	x	x	x
Neophron percnopterus	M	LC	x	x	x	x	x
Grus grus	M	LC	x	x	x	x	x
Porzana porzana	M-W	LC	x	x			x
Chlidonias niger	M	LC	x	x			x
Chlidonias hybridus	M	LC	x	x			x
Gallinago media	M	NT	x	x		x	x
Himantopus himantopus	M	LC	x	x		x	x
Recurvirostra avosetta	M	LC	x	x		x	x
Philomachus pugnax	M	LC		x		x	x
Sterna sandvicensis	M	LC	x	x			x
Alcedo atthis	N-M-W	LC	x	x			x
Athene noctua	N-M-W	LC	x		x		x
Asio otus	M-W	LC	x		x		x
Tyto alba	N-M-W	END	x		x		x
Otus scops	N-M	END	x		x		x
Bubo bubo	N-W	LC	x		x		x
Melanocorypha calandra	N-M	LC	x	x			x
Anthus campestris	N-M	LC	x	x			x
Lullula arborea	N-M	LC	x	x			x
Remiz pendulinus	N-M-W	LC	x				x
Lanius collurio	N-M	LC	x	x			x
Lanius minor	N-M	LC	x	x			x

Criterion 3: the area supports populations of plant and animal species important for maintaining biodiversity within the Mediterranean region.

Invertebrate surveys revealed the presence of 995 species, belonging to 68 families of Coleoptera and butterflies and moths; 11 of these were a first record for southern Italy, five had not been reported in Italy before,one was new to science and three new for the Italian Peninsula:

- Arthrolips convexiuscula (Coryolophidae) – New for Italy
- Corticaria fagi (Latriididae) - New for Italy

- Bruchidius variopictus (Bruchidae) - New for Italy
- Ceratopion cylindricolle (Apionidae) - New for Italy
- Nephus (Sidis) canepari (Coccinellidae) – New for the Science
- Microlestes mauritanicus (Carabidae) – New for the Italian Peninsula
- Bruchus emarginatus (Bruchidae) - New for the Italian Peninsula
- Bagius argillaceus (Curculionidae) - New for the Italian Peninsula

Also Lepidoptera were reported by many species (around 200), and many are very localized:

- Pharmacis aemiliana (Hepialidae) – unical site in the south of Italy
- Epirrhoe rivata (Geometridae) - unical site in the south of Italy
- Theria primaria, Euchalcia modestoides, Dichonia convergens & Luperina Samnii (Noctuidae) - unical site in the south of Italy
- Proserpinus proserpinus (Sphingidae) – DD in the IUCN Threatened Species Red List and listed in the Annex of Berna Convention and in the Habitat Directive 92/43/EEC

Criterion 4: the area supports populations of animal species during the wintering period, particularly "wildfowl".

Among the species listed in Annex I of the "Wild Birds" Directive, we the following have been spotted within the site: *Phalacrocorax pygmeus, Botaurus stellaris, Ixobrychus minutes, Nycticorax nycticorax, Ardeola ralloides, Egretta garzetta, Egretta alba, Ardea purpurea, Ciconia ciconia, Plegadis falcinellus, Platalea leucorodia, Aythya nyroca, Milvus migrans, Milvus milvus* (2 couples), *Circus aeruginosus, Circus cyaneus, Circus pygargus, Porzana porzana, Himantopus himantopus, Recurvirostra avosetta, Philomachus pugnax, Gallinago media, Chlidonias hybridus, Chlidonias niger, Alcedo atthis* (5 couples), *Melanocorypha calandra* (10 couples), *Lullula arborea* (10 couples), *Anthus campestris, Grus grus, Phalacrocorax carbo sinensis, Bucephala clangula, Anas platyrhynchos, Anas crecca, Anas strepera, Anas penelope, Anas acuta, Anas clipeata, Aythya ferina, Tadorna tadorna, Fulica atra* (1000 individuals), *Acrocephalus arundinaceus.*

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15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region: Mediterranean Region

b) biogeographic regionalisation scheme (include reference citation):

European Councils Habitat Directive 92/43/EEC

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16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

1. Water bodies
2. Land principally occupied by agriculture
3. Non irrigated arable land

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17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

The majority of the soil surface is composed of clayey soils. The territory of Beralda is characterised mostly by sands and cobbles, which belonged to the marine terraces of the "Bradanic Trough", formed during one of the few sedimentary cycles which originated during the marine plio-pleistocenic regression.

The geology of the Basento River can be described by three distinct portions comprising the upper, the mid and the lower portions of the basin. The first portion is characterised by the presence of Lagonegro bedrock units, which are further differentiated into more specific stratigraphical units. Between the springs of Fossa Cupa and the residential area of Potenza dominates a series of strata including Mount

Facito formation, calcareous rocks with flint, siliceous schists, and *galestri* (limestone and clay aggregates). On top of such sub-soil, around Potenza, lies a succession of Pliocene sandy loams. Miocenic clay loams including flysch (Gorgoglione) are common along the Camastra stream, right-side tributary of the Basento. The middle portion up to the residential centre of Calciano is characterised by the presence of an Oligocene clay catena (red flysch), Miocene clayey quartz (numidic flysch) and the Serra Palazzo formation (loamy clays). The distal portion of the basin belongs entirely to the formerly described Bradano Trough, while close to the estuary, it is characterised by terraced Quaternary deposits.

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

The Basento (157 km) includes the Pantano of Pignola wetland within its catchment. It stems from Mt. Arioso near Fossa Cupa, and flows in a northerly direction up to the confluence with Tora stream. In this stretch, the stream bed is restrained and the banks are gently sloping, under the influence of the prevailing surface geological formations. The main course if relatively steep and decrease markedly in correspondence with the confluence with Tora stream. Up to its confluence with the Tiera, the streamflow keeps a prevailing easterly direction and a slope close to 1%. It flows across sandy loams, with a stream bed which enlarges up to 80 m. After joining the Tiera, the Basento receives the inflow of the Camastra, in proximity of Albano-Lucania. Before joining up with the Basento, the Camastra flows into a reservoir which bears the same name, and which represents the main portion of the Basento-Bradano-Basentello hydrological network. Near Campomaggiore, the prevailing slope increases, the riverbed becomes constrained and more deeply incised. This portion of the basin, characterised by the presence of an extensive woodland, and by the presence of numerous springs, the main channel receives the greatest portion of flow along its entire course. The middle and lower reaches witness a significant decrease in slope and the river crosses sandy loams. The riverbed reaches a far wider surface and forms numerous meanders, especially in its lower course. The main tributaries include: the Tora, the Gallitello and he Rifreddo stream along the right riverbank. At the lower end of the basin, the river receives the Vella Stream from the right-hand side and the Canale from the left, both of which run parallel to the Basento.

The valley bottoms are occupied by relatively large residential settlements and industries (Basento Valley), and by the rail and road networks which represent relevant stress factors to take account of during river basin planning. Mean yearly rainfall averages 766 mm year-1, with highly irregular peaks and troughs. In general, rains are comprised between October and March, while other periods of the year are mostly dry.

Pantano di Pignola reservoir extends up to 5 million m^3, is allocated to provide water to the industrial areas of Tito and Potenza. Its environmental and landscape characteristics conditioned its conversion into a nature reserve area and into a faunal reserve of particularly high value.

Structural data

Dam closure	1981
Status	Experimental reservoir
River	Tora Stream (Pignola)
Dam height (m)	7.45
Volume (Mm3)	5.5
Highest water level (m a.s.l.)	769.2
Regulatory may height (m a.s.l.)	768.6
Operational reservoir volume (Mm3)	4.5
Dam type	Loose material held by a concrete structure
Purpose	Provide water for industrial use

19. Wetland Types

a) presence
Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the *Explanatory Notes & Guidelines*.

Marine/coastal:

Inland: • O • P • Tp • W • Xf • Xp • Y • Zk(b)

Human-made: • 6 • Zk(c)

b) dominance:
List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

O - permanent freshwater lake	5%
P - seasonal/intermittent freshwater with floodplain lake	5%
Tp - permanent freshwater marshes/pools	10%
W – shrub-dominated swamps	10%
Xf - freshwater, tree-dominated wetlands	3%
Xp - forested peatlands; peatswamp forests	2%
Y - Freshwater springs	2%
Zk(b) - karst and other subterranean hydrological systems, inland	2%
6 - Water storage areas	60%
ZK(c) - Karst and other subterranean hydrological systems, human-made	1%

20. General ecological features:
Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Pignola wetland is situated some few km outside Potenza, enshrined within the Stantiere sierra, Mount Piano, Mount Crocetta and sierra San Marco. The reserve includes a little mountain lake that recently acquired a renewed naturalistic value after undergoing drainage. Originally, the wetland consisted in a prevalently swampy area, with few springs. During their seasonal migrations (*transhumance*), shepherds would stop here to water their flocks and to collect sedges and rushes that were used to thatch small baskets in which cheese used to be sold (hence the name of a traditional cheese: "giuncata"). Sedges would suit the construction of rudimentary fishing tools. The swamp drained under the fascist regime, to try and reduce the incidence of malaria that constituted a serious local threat. Finally in 1969 a dam was built creating a reservoir to supply the nearby industrial area. Measures designed to improve the water supply and to ameliorate environmental health conditions produced some further changes in the structure of the little wetland. In 1984 a nature reserve was established to be managed by the WWF up to our days.
The wetland is a semi-natural basin of 2,5 m dept, characterised by a varied and a well structured community. Characteristic fringe vegetation includes: *Phragmitetum communis, Typhetum angustifoliae* and *Scirpetum lacustris*. Well represented are perennial grasses and sedge formations typical of the alluvial banks of large Mediterranean rivers such as: *Carex* sp.pl. e *Juncus* sp.pl., as well as hygrophytes belonging to *Potamogetonetum lucentis*. The area constitutes an interesting resting and nesting site.
Standing water and running water cover 90%, the rest comprises bogs, marshes, water fringe vegetation and fens (10%) corresponding to habitat types 3150, 3280 and 6420 of the "Habitat" Directive.

- 3150. Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition* - type vegetation. Lakes and ponds with mostly dirty grey to blue-green, more or less turbid, waters, particularly rich in dissolved bases (pH usually > 7), with free-floating surface communities of the *Hydrocharition* or, in deep open waters, with associations of large pondweeds (*Magnopotamion*).
- 3280. Constantly flowing Mediterranean rivers with *Paspalo-Agrostidion* species and hanging curtains of *Salix* and *Populus alba*. Nitrophilous annual and perennial grass and sedge formations, common in the ripatian ecotones of large Mediterranean rivers, with *Paspalum paspaloides, P.*

vaginatum, Polypogon viridis (= Agrostis semiverticillata), Cyperus fuscus, and hanging curtains of *Salix* spp. and *Populus alba*.

- 6420. Mediterranean tall humid herb grasslands dominated by *Molinio-Holoschoenion* associations. Mediterranean humid grasslands of tall grasses and rushes, widespread in the entire Mediterranean basin, extending up to the coasts of the Black Sea, in particular in dunal systems.

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS*.

Extant vegetation is primarily constituted by helophytes, plants provided with developed roots and buds laid onto the humid substrate which form a typical cover along the lake edge, acquiring a typical distribution in relation to water depth and to drought tolerance. A thick vegetation layer, characterised by a vegetation mosaic dominated by *Scirpus lacustris, Thypha angustifolia* and by a dense growth of *Phragmites australis* developed along the lake edge, providing shelter to a wide number of water birds. The water surface is interspersed with rooted macrophytes characterised by the presence of *Ceratophy/lum demersum, Myriophyllum spicatum, Polygonum amphibium f. aquatica* and *Potamogeton lucens*. These tend to blossom in summer, covering the surface of the lake with intense colours. The woodland includes willows, black poplar and elm growing across formerly cultivated wet meadows. The main riparian trees found are: *Salix purpurea* and *Populus nigra*. Rare and characteristic wetlands species include: *Alisma lanceolatum, A. plantago-aquatica, Carex otrubae, C. pseudocyperus, Cyperus glaber, Eleocharis palustris, Juncus bufonius, J. conglomerates, J. subnodulosus, Lythrum salicaria, Myriophyllum spicatum, Phragmites australis, Polygonum amphibium, Potamogeton coloratus, P. crispus, P. lucens, P. natans, P. pectinatus, P. perfoliatus, Schoenoplectus lacustris, Sparganium erectum, Typha latifoglia, T. latifolia x angustifolia, Veronica anagallis-aquatica, V. beccabunga.*

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS*.

The wetland fauna comprises of a wide variety of aquatic species. Fishes include: *Esox lucius, Leuciscus cephalus* e *Cyprinus carpio,* amphibians include: *Triturus carnifex, Bombina pachypus, Rana dalmatina, Rana graeca, Hyla italica, Bufo bufo,* etc.; among reptiles, noteworthy is the presence of: *Testudo hermanni*.

There is a large number of wetland bird species, including migrants, winter residents and nesting birds. Noteworthy taxa include: *Podiceps cristatus* (more than 20 nesting pairs), *Podiceps nigricollis*, *Tachybaptus ruficollis* (elevated to the status of icon of the wetland), *Fulica atra, Gallinula chloropus, Anas platyrhynchos, Anas strepera, Aythya ferina, Anas penelope, Anas acuta, Anas crecca, Phalacrocorax carbo, Alcedo atthis*, etc. During the main migration period the list includes also *Ciconia ciconia, Ardea purpurea*, and limicolous species such as: *Tringa* sp.pl., *Calidris* sp.pl., etc. Among the species listed in Annex I of the "Wild Birds" Directive, we the following have been spotted within the site: *Phalacrocorax pygmeus, Botaurus stellaris, Ixobrychus minutes, Nycticorax nycticorax, Ardeola ralloides, Egretta garzetta, Egretta alba, Ardea purpurea, Ciconia ciconia, Plegadis falcinellus, Platalea leucorodia, Aythya nyroca, Milvus migrans, Milvus milvus* (2 couples), *Circus aeruginosus, Circus cyaneus, Circus pygargus, Porzana porzana, Himantopus himantopus, Recurvirostra avosetta, Philomachus pugnax, Gallinago media, Chlidonias hybridus, Chlidonias niger, Alcedo atthis* (5 couples), *Melanocorypha calandra* (10 couples), *Lullula arborea* (10 couples), *Anthus campestris, Grus grus, Phalacrocorax carbo sinensis, Bucephala clangula, Anas platyrhynchos, Anas crecca, Anas strepera, Anas penelope, Anas acuta, Anas clipeata, Aythya ferina, Tadorna tadorna, Fulica atra* (1000 individuals), *Acrocephalus arundinaceus.*

Invertebrate surveys revealed the presence of 995 species, belonging to 68 families of Coleoptera and butterflies and moths; 11 of these were a first record for southern Italy, 5 had not been reported in Italy before and 1 was new to science.

23. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

Pignola township stands out off the top of a hill, a few km away from Potenza. Its name was cited for the first time in the XII century as "Vineolae", derived from the Latin "vinea" (vineyard). The town is characterised by ancient arched gateways; there is a striking 200 of them, built along the twisting footpaths among small stony houses, generous fountains, tiny squares with beautiful panoramic views overlooking into the surrounding woodlands and up to Potenza. The dominant church of Saint Mary the Major, built in the late 1400 by Trifoglio, was rebuilt in the XVIII century. Its interior is decorated with a number of paintings attributed to Master Pietrafesa and the cadets of his school of arts. A decorated bell tower stands out on the exterior. A rather peculiar building in the lower portion of town, hosts the Scenic Museum of Countryside Culture which exhibits scenes of country life including a number of daily life events, customs, rituals, traditional outfits laid out in a context of ancient music and colour, which contribute to lead the visitor though a highly evocative and enriching experience. Pignola is known to be one of the most lively summer towns in the whole region thanks to a number of lively traditions such as the folk music festival, the town music band, the blues happenings, young people's theatre shows and cabaret. Each of these tends to be repeated every year and to attract an ever increasing number of participants.
Situated at 926 m a.s.l., Pignola sits in between sites of great natural history significance such as the Pignola Wetland regional reserve at 750 m a.s.l. and the Rifreddo woodland at 1125 m. Not far from the residential estates, the Madonna del Pantano (Wetland Madonna) church hosts a wooded statue of the Madonna holding the Child enriched with chiselled gold decorations, and two 1700 paintings attributed to Filippo Mangere. An interesting anthropological feature is the so-called "uglia" of Pignola: a traditional procession accompanied with live torches which evolved from an ancient traditional celebration taking place during the third or fourth Sunday of May, run to commemorate the Madonna of Pantano. Every year, during the anniversary of the feast in honour of Saint mary of the Angels, a huge construction was built and carried around the town streets the night preceding the celebration day. Torches and large wax candles accompany the procession up to the entrance of the church, where the construction is eventually burnt down to give homage to the "one who protects" the community. This custom probably originated around year 1000, when a Byzantine Madonna was worshipped under a ritual inspired by St. Basil monks who had established in the area of Basento, along the riparian edge of the Pantano wetland.

The holy image of the Madonna used to be taken around town during a whole week. A historical document of 1614 bears the record of the expenses incurred into due to the organisation of the annual feast by the Collegiata of Pignola church administrator.
Next to Potenza, Picerno, Tito and Trecchina, Pignola residents tend to speak Gallo-Italic; a language survives as a result of ancient migrations by people originated in northern Italy (around Turin). Current demographical researches claim that between the XII and the XIV century, this region hosted a number of colonisers from the Turin and the Genoa regions. They tended to settle in less favoured areas, ravaged by the rulers of the d'Angiò regime and by disastrous earthquakes. The consciousness of this common origin pushes current residents to revive ancient ties, language and family histories.

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?

If Yes, tick the box ✓ and describe this importance under one or more of the following categories:

i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:

ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:

iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:

iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

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24. Land tenure/ownership:

a) within the Ramsar site: Pubblico/Consorzio per lo Sviluppo Industriale di Potenza

b) in the surrounding area: public/ private

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25. Current land (including water) use:

a) within the Ramsar site:

Land use:

4. Water bodies
5. Land principally occupied by agriculture
6. Non irrigated arable land

cfr. Land use map

b) in the surroundings/catchment:

cfr. Land use map

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26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

a) within the Ramsar site:

The water level tends to undergo significant seasonal variation, as a consequence of drought and irrigation.

Originally the wetland consisted of a muddy pool collecting the contribution of few springs; during the 1930s and '40s the area was drained for farming and irrigation development. Towards the 1960s nearby fields were partially converted, into a storage reservoir managed by the Society for the Industrialisation of Potenza (Ministerial Committee for the Mezzogiorno). This site is currently undergoing a gradual reversal to natural conditions. The lake represents an important transit and nesting site for a number of residential and migratory species.

b) in the surrounding area: in the surrounding area there are not relevance or influence caused by the dam construction (1960).

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27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ✓; Ib ❑; II ❑; III ❑; IV ✓; V ❑; VI ❑

c) Does an officially approved management plan exist; and is it being implemented?:

The Management Plan is in progress by the WWF Italy (NGO with manegement liability).

d) Describe any other current management practices:

1. Natural Regional Reserve with D.P.G.R.-Basilicata Region n. 795/19.06.1984
2. Important Bird Area (IBA)
3. SIC IT9210142 "Lago Pantano di Pignola" – (EU-Directive 92/43/CEE)

28. Conservation measures proposed but not yet implemented:
e.g. management plan in preparation; official proposal as a legally protected area, etc.
The Management Plan is in progress by the WWF Italy (NGO with manegement liability).

29. Current scientific research and facilities:
e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Monitoring of bird populations in the wetland; monitoring of qualifying features will be undertaken by WWF.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:
e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

Conservation education is a main part of the initiatives promoted by the WWF in the "Pantano di Pignola" Regional Nature Reserve. Facilities were developed over the past 10 years to aid in educating the public, school groups and to train educators which use "Pantano di Pignola" as an outdoor learning site.

31. Current recreation and tourism:
State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Local produce includes a number of remarkable peculiarities:
Wine of controlled origin (DOC) "Aglianico of Vulture", an Aglianico red cultivated since ancient times.
Typical produces include the Sila *caciocavallo* cheese with its characteristic shape derived from the habit of tying the cheese to a wooden stick. The Sarconi bean was locally selected out the cultivation of standard bean varieties. Its popularity is due to the fact that it can cook rather rapidly.
The win des "Grottino di Roccanova" which is produced in the three varieties: red (novello), white and rosé. The minimal spirit content required is 10,5% for the whites, 11% for the reds, the novellos and the rosés, and 14% for the wine produced out of dried grapes (raisins). The recognised production area includes the surroundings of Matera and of Potenza.
Several farm tourism centres are developing next to a growing demand for cultural tourism.

32. Jurisdiction:
Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

Ministry of Environment and Nature Protection and Basilicata Region

33. Management authority:
Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

- Ministry of Environment, Nature and Sea Protection: Directorate General for Nature Protection - Via Capitan Bavastro 174 00100 Rome – E-mail: dpn-dg@minambiente.it
- WWF-Italy (adopted by Consorzio Sviluppo Industriale of Potenza-Act n.2/09.01.1987, approved 30.08.1988): Regional Section Basilicata - Gradinata IV novembre n. 6 – 85100 Potenza –E.mail: basilicata@wwf.it.
- Centro Educazione Ambientale, c/o Riserva reg. WWF Lago di Pignola, C. da Petrucco cm, 85010 Pignola (PZ), e-mail info@novaterralucana.it

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

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