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:

Nov. 1998

For office use only.

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12/04/88	7IT041
Designation date	Site Reference Number

2. Country:
Italy

3. Name of wetland:
Biviere di Gela

4. Geographical coordinates:
33S VA 415975 Sheet 272 of the map Ponte Dirillo II SE

5. Altitude: (average and/or max. & min.). 7 m a.s.l. (fluctuation 6-8m)

6. Area: (in hectares) 300 ha

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

It is the largest natural coastal lake in Sicily (120 Ha.), characterised by palustrine and riparian vegetation with associations of *Phragmition*, and the interesting presence of *Muscari comosum sbsp. Gussonei* (endemic punctiform *Gigliacea*) and *Ginestra raetam sbsp. Gussonei* (endemic in the southern coast of Sicily). It is an important wetland for the wintering, breeding and refuge of migratory birds with a particularly high percentage of *Plegadis falcinellus, Platalea leucorodia, Aythya nyroca* and *Glareola pratincola*. The notable interest in the fauna is also due to the presence of Discoglossus pictus and to the fact that it is the only site of some *Dytiscus* and for the population of *Odonata*.

8. Wetland Type: (please circle the applicable codes for wetland types as listed in Annex I of the *Explanatory Note and Guidelines* document)

marine-coastal: A - B - C - D - E - F - G - H - I - J - K

inland: L - M - N - O - P - Q - **R** - Sp - Ss - Tp
Ts - U - Va - Vt - W - Xf - Xp - Y - Zg - Zk

man-made: 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9

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

9. Ramsar Criteria: (please circle the applicable criteria; see point 12, next page.)

1a - 1b - **1c** - **1d** / **2a** - **2b** - **2c** - **2d** / **3a** - **3b** - **3c** / 4a - 4b

Please specify the most significant criterion applicable to the site:

10. Map of site included? Please tick *yes* X- or - *no*

(Please refer to the *Explanatory Note and Guidelines* document for information regarding desirable map traits)

11. Name and address of the compiler of this form:
LIPU, Ente Gestore della R.N.O. "Biviere di Gela", Via Venezia 41, 93012 Gela (CL), Sicily.

Please provide additional ínformation 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 poìnt 9, on previous page. (Please refer to Annex II in the *Explanatory Note and Guidelines* document)

Biviere di Gela is a lake with brackish waters with a degree of salinity which varies according to the seasons and the corresponding amount of rainfall. The largest coastal lake in Sicily and one of the few natural lakes left on the island, it plays an important hydrological and ecological role for the Valletorta torrent, for which it is the natural outlet. It has natural and seminatural characteristics which make it quite uncommon in the framework of Sicilian wetlands and it is the habitat of many species of birds including vary rare and endangered species such as *Plegadis falcinellus, Platalea leucorodia, Aythya nyroca* and *Glareola pratincola.*

The reserve is of vital importance for migratory birds which find refuge and food in these wetlands during their migration from Africa to Europe and it is especially important for the numerous endemic plants and animals such as *Ginestra raetam* (endemic in the southern coastal dunes of Sicily), *Muscari gussonei* (endemic in Biviere di Gela) and *Ohrys axyrrhyncphos subsp. Oxyrrhynchos* (endemic orchid of Sicily).

Each year the lake is home to over 20,000 aquatic birds of which some species are particularly numerous, such as *Anas querquedula* - 7,000 in 1998 (Reserve statistics relative to March and April), 13,000 in March 1985 (Sicilian Ornithological Report 1985/1986 "Naturalista siciliano", S. IV, XIII (1-2), 1989 p23-44), 8,300 in April 1987 (Sicilian Ornithological Report 1987/1989 "Naturalista siciliano", S. IV, XVII (1-2), 1993 p149-168); the *Aythia fuligula* - 665 observed in March 1998 (Reserve statistics), more than 2,000 in March 1985 (Sicilian Ornithological Report 1985/1986 "Naturalista siciliano", S. IV, XIII (1-2), 1989 p23-44); the *Platalea leucorodia* - 232 observed in March 1989 and 150 in March 1988 (Sicilian Ornithological Report 1987/1989 "Naturalista siciliano", S. IV, XVII (1-2), 1993 p149-168) and 115 in 1998 (Reseve statistics); the *Ardea purpurea* - 57 observed in spring 1998 (Reserve statistics); 37 in 1984 (Sicilian Ornithological Report 1984 - Picus anno 11 No.3 December 1985); the Chlidonias niger - 287 observed between spring and autumn 1998 (Reserve statistics), 95 in March-April 1983 (Sicilian Ornithological Report 1984 - Picus anno 10 No.3 December 1984), 98 in April 1986 (Sicilian Ornithological Report 1985/1986 "Naturalista siciliano", S. IV, XIII (1-2), 1989 p23-44). A study carried out by G. Sorci, M. Sarà, L. Naselli Flores, S. Surdo in order to evaluate the environmental quality of the Sicilian wetlands by the H.A.T. method (Habitat Assessment Technique), set out by Holmes (1986) and Brack (1987), revealed that Biviere di Gela has the highest fauna index. Furthermore, as far as breeding species are concerned, it has been defined as the most important wetland of Sicily for wealth and rarity of its species.

Based on SPEC data the Biviere di Gela lake is the habitat for more than 1% of the European population of *Aythya nyroca* (SPEC category 1, considered vunerable); approximately 1% of *Platalea leucorodia*; approximately 1% of *Plegadis falcinellus* (SPEC category 3, considered in decline). A large number of fish live and breed in the lake including the following species: *Tinca tinca, Cyprinus carpio, Cyprinus specularis, Carassius carassius, Mugil auratus,*

Gambusia affinis and Anguilla anguilla. The fresh water crab (*Potamon fluviatile*) and shrimp (*Palaemonetes antennarius*) can also be found in the lake.

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

The area falls within the Gela Council at about 10 km south-east of the town (poulation approx. 100,000). It is within the Province of Caltanisetta and lies at approximately 65 km from the chief town, also named "Caltanisetta".

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 lies in the south-east part of a large basin known geologically as "Bacino di Caltanisetta". The stratigraphy of the area is formed by a monocline dipping slightly towards the coast at a gradient of between 5° and 15°. It is a sequence of Plio-Pleistocene terminals with a mainly sandy composition and marly-clayey in part. The stratigraphy, from the oldest to the most recent, is as follows.

Blue marley-clays	Upper Pleistocene/Lower Pleistocene
Silty-sandy clays	Lower Pleistocene
Yellow sand with arenaceous interbedding	Lower Pleistocene/Middle Pleistocene
Red sand	Middle Pleistocene
Marine terraces	Middle Pleistocene
Terraced and recent alluvion	Holocene
Lacustrine and palustrine deposits	Holocene
Old dunes	Holocene
Recent dunes and beach	Recent

As far as the techtonics is concerned, the area falls within the evolutionary context of central-southern Sicily. The Plio-Pleistocene formations do not appear to have undergone a particularly intense techtonic action.

Throughout the Pleistocene era the area was characterised by a general rising resulting in emergence This is shown by the sedimentary characteristics and the presence of fluvial and marine terraces at different levels with respect to the current levels of the torrent and the Mediterannean Sea. There is no techtonic structure in the area since the sediment outcrops are almost all of a plastic and sandy nature.

The lake receives water from the Valletorta Monacella torrent and from the artificial canal that connects it to the Dirillo River, on which a dam has been constructed upstream. The lake is a superficial sign of the underground fresh water table. Therefore, whilst the inflow of water is only partly controllable, the flow towards the sea is guaranteed by the canal to the Dirillo River. In the summer the water level drops by aproximately 2 m due to the drying up of the torrent, high degree of evaporation and the pumping of water which is higher during this period.

The soil around the lake is characterised by alluvial and coastal deposits with some coastal dunes, which are partly hydromorphous and partly alluvial soils.

Statistics regarding the chemical properties of the water (provided by the Hygeine and Prophylaxis Laboratory of Catanisetta) show that these change very little for the same six-month period each year whilst the difference within periods of the same year is more marked. This is due to the rainfall in each period.

The average depth of the lake is 6 m and the seasonal fluctuation is about 2 m (i.e. approx. 7 m in the winter and 5 m in the summer).
The catchment area of Valletorta Monacella is approximately 6,400 Ha and it falls partly in the territory of the Gela Council and partly in that of Niscemi, in which the "Sugherata di Niscemi" Nature Reserve is found.
The valley suffers from high levels of soil erosion.
The climatic characteristics of the area have been determined by considering the two most significant elements of the climate, namely temperature and rainfall. The temperature has been studied using the data from the Gela measurement station (45 m a.s.l.). The maximum, minimum and average values of the monthly, seasonal and annual average temperatures, as well as the daily fluctuations, have been calculated on the basis of the data available. The average annual temperature is lowest in January (9°C) and highest in August (22.3°C). The average annual temperature during the period of the records is 15°C. The coldest months are December, January and February. The daily fluctuations in the temperature are relatively low and vary from a minimum of 7.8°C in February to a maximum of 9.7°C in May. The figures show that the temperature for the area may be classified as hot-temperate with long summers and mild winters.
The data from the station at Niscemi (332 m a.s.l.) has been used in order to study the rainfall. This rainfall station lies within the catchment area and there are records for the period 1974-1990. The average monthly rainfall figures for the area show that the wettest month is November (66.3 mm) and the driest month is July (3 mm). The average rainfall density in the catchment area is quite variable throughout the year, with a maximum of 11.6 mm/g.p. falling in October.The area is characterised by high rainfall in the six-month autumn/winter period, with a lesser amount falling in the three-month spring period, whilst the summer is quite dry. The rainfall proile of the catchment area may be classified as subcoastal-alpine.

15. Hydrological values: (groundwater recharge, flood control, sediment trapping, shoreline stabilisation etc.)
The wetland area plays an important role in the charging and discharging of the underground waters since the lake is a superficial manifestation????of the underground water table.
When the water level reaches 8 m the waters flow directly to the sea by means of the canal connecting it to the Dirillo River and thus the lake regulates the flood flows most efficiently. The Management of the Reserve is soon to commission a study relative to this feature.

16. Ecological features: (main habitats and vegetation types)
The submerged vegetation associations present in the lake are characterised by *Potamogeton* and *Ceratophillum* whilst the riparian vegetation is formed by associations of *Scirpo-Phragmitetum mediterraneum* - important resources for ducks and coots. In some stretches this is replaced by *Arundo donax* and *Saccharum spontaneum* (the latter probably being introduced by man as a wind-break and for crop protection). The coastal vegetation is formed by *Tamarix africana* and *Tamarix Gallica* (the latter probably being introduced by man as a wind-break and to stabilise the dunes). These associations form woods that lie in the northern part of the lake and create an ideal habitat for the breeding of the *nycticorax* and the *penduline.* The tamarisk tends to be invasive due to its adaptability and resistance. The vegetation is distributed around the lake in concentric belts depending on the hydrophile characteristics of the species. These belts generally vary in width from 20 to 60 m, with a maximum of 80 m. There are uncultivated and garigue zones in the area adjacent to the body of water and in some areas it is possible to see traces of Mediterannean scrub, with carob, wild olive trees, lentisk, wild rosemary and thyme. Some acacias have been introduced in an area to the south-east of the lake. The most common crops in the wetland surroundings are

vineyards, olive groves and vegetables in greenhouses. At a short distance from Biviere (approx. 2 km) there is another wetland with different characteristics but nevertheless strongly linked to Biviere from an ecological point of view since aquatic birds use both sites for feeding, resting and breeding.

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

There are three distinct types of vegetation: lacustrine, coastal and relative to the uncultivated land around the lake. The first includes submerged or partly submerged hydrophytes such as *Potamogeti* (*Potamogeton pectinatus, P. natans, p. crispus*) and the *Ceratofillo* (*Ceratophyllum demersum*) which is typical of warm, calm waters. It should be noted that the *Ceratophyllum demersum* was once very common in Italy but in recent years it has been in rapid regression and is now a rare species. The riparian vegetation is characterised by the *Scirpo-Phragmitetum mediterannean* association with *Scirpus lacuster, Scirpus maritimus, Phragmites communis and Typha latifolia.* These formations are important since until now they were only observed in a few "Ghorghi" located in the Carcaciotto district near Palermo (Marcenò, Colombo, Princiotta, 1978), near Lake Soprano di Serradifalco and along Laghetto Bosco di San Cataldo (Marcenò, Raimondo 1997). The *Gigliacea endemica puntiforme Muscari comosum sbsp. Gussonei* is present on the uncultivated areas around the lake. This species has been indicated by the European Union as an important plant in need of special conservation measures. Some examples of *Ginestra raetum subsp. Gussonei*, which is endemic in the southern coast of Sicily, can be found in the residual dune zones. Wild orchids, such as *Oprhis oxyrrhynchos* – which is endemic in Sicily, can be found in the wet pastureland, in the garigues and in the residual scrub.

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

The Biviere di Gela constitutes a key area for the migration of aquatic birds along southern Sicily and on arrival from the African coasts since there are no similar areas nearby. Its closeness to the sea also favours a variety of bird life. 180 bird species have been observed of which 95 typically aquatic. In addition to the common species of Ardeidae, Anatidae and Charadrii (which are present in their thousands) there are also rare species which are very important for scientific and conservation reasons. The presence of the following species is particularly important: *Platalea leucorodia, Plegadis falcinellus, Ardea purpurea, Larus genei, Larus audouinii, Aythya nycora* and the rare *Glareola pratincola.* The *Plegadis falcinellus* in particular is present in large numbers. The area is a habitat during breeding and migration for many birds in the Directive of the Council of the European Union concerning the conservation of wild birds, such as *Botaurus stellaris* (breeding)*, Ixobrychus minutus* (breeding)*, Nycticorax nycticorax* (breeding)*, Ardeola ralloides* (breeding)*, Ardea purpurea* (breeding)*, Alcedo atthis* (breeding)*, Burhinus oedicnemus* (breeding)*, Acrocephalus melanopogon* (breeding)*, Himantopus himantopus* (breeding)*, Calandrella brachydactyla* (breeding)*, Egretta egretta, Egretta alba, Perzana parva, Philomachus pugnax, Tringa glareola, Larus audouini, Larus melanocephalus, Larus genei, Sterna sandvicensis, Sterna hirundo, Sterna albifrons, Chlidonias hybridus, Chlidonias niger, Phalacrocorax arstotelis, Ciconia ciconia, Luscinia svecica, Phoenicopterus ruber, Hieraaetus pennatus, Recurvirostra avasetta, Pluvialis apricaria, Limosa iapponica, Coracias garrulas.* Birds of prey included in the above-mentioned list are also present, such as *Circaetus gallicus* (during the winter months - LIPU 1998) and *Circus aeruginous* and *Pandion haliaetus* (one of the rare sites in Europe – Mascara R. 1984). The area is also of national importance for the presence of *Tachybaptus ruficolis* during the winter as stated in "Results of the census of birds wintering

in Italy 1991-1995" (Serra ed altri) and by the National Wild Bird Institute in the magazine "Biology and conservation of fauna" (101/312). In conclusion, as far as the bird life is concerned there are 41 species included in Directive 79/409 EU of 29.07.97 and of these 2 species are considered endangered, 9 vunerable, 3 rare, 15 in decline and 4 as localised according to the Conservation Status of all European Species (SPEC). The area has therefore been proposed as a IBA (Important Birds Area) under the Birds Directive.
Biviere is the habitat of animal and plant species of European importance, such as *Coenagrion mercuriale subsp. Astellanii*, the protection of which requires the designation of special conservation zones in accordance with EU Council Directive relative to the conservation of the natural and semi-natural habitat of the flora and fauna.
The area is the habitat of reptiles of European importance which require careful protection, such as *Lacertaviridis* and *Podarcis wagleriana*, *Chalcides ocellatus, Coluber viridiflavus* and *Elaphe situla*. Ther are also *Discoglossus pictus* and *Bufo viridis. Geotrupes marginatus*, (endemic in a few sites in southern Sicily) and *Triodonta cintipennis* (endemic in Sicily), *Cicindela campestris siciliana* (subsp. endemic in Sicily) and the rare *Brachytripes megacephalus* are also found.
There are numerous extremely interesting insects in the area and nearby, including rare examples considering the geographical distribution. There are *Sepidium siculum* (present only in Sicily), *Philonthus turbidus* (referred to only for North Africa and Madagascar), *Thorectes marginatus* (of African origin, present only at a few sites in southern Sicily), *Paratriodonta cinctipennis* (North Africa and southern Sicily), *Pachypus caesus* (endemic in Sicily) and *Aphodius parisii* (present in Libya and first discovered in Italy at Biviere). Also interesting are *Cicindela flexuosa circumflexa* and *Cicendela campestris siciliana* (subsp. endemic in Sicily) and the rare *Myriochile melancholica*. There is as a large poulation of aquatic Coleopters with numerous entities including: *Haliplus mucronatus* and *Peltodytes caesus*, *Girinus caspius, Higrobiartarda*, *Cybister vulneratus* and *Cybister senegalensis* and the rare *Herophydrus guineensis* (apart from the Biviere this is present only on Isola di San Pietro in Sardinia). The area holds a third of the Italian species of Dragon-flies. The rare subsp. *Coenagrion mercuriale astellanii* is found and also *Selysiothemis nigra* and *Brachythemis leucosticta*, which are new migrants for Italy.

19. Social and cultural values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.)
With the great social and environmental problems which are present in the territory of Gela, this wetland area has an extremely important role (currently and potentially) in the development of tourisism backed up by the areas historical and archeological wealth (Timoleontee Wall, Acropolises, Archeological Museum, Greek Baths, Federiciano Castle etc). The area is also important for the recreational facilities which it offers (birdwatching, guided tours, excursions, environmental education). The wetland is the subject of various scientific research projects.
Activities which disturb the ecological equilibrium of the area are: fishing (prohibited under Reserve regulations), livestock grazing (regulated) and greenhouse cultivation inside and outside the Reserve.

20. Land tenure/ownership of: (a) site (b) surrounding area
The lake and 65% of the Reserve are state-owned, whilst the remainder is privately owned. The area which is used for greenhouse cultivation is characterised by its being divided into lots due to the high revenue of the activities carried out.

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

a) There is much uncultivated (state-owned) land within the area on which mediterannean scrub, olive trees, carob and wild herbs (rosemary, thyme and others) grow.
The lake waters are used by Consortium Piana di Gela for irrigation of the surrounding land.

b) The land use in the area surrounding the basin of Valletorta Monacelle torrent is agricultural being used mostly for the intensive cultivation of vegetables. These do not have a very large or deep root structure and so are not very effective in retaining the soil which is highly prone to erosion. There is another Reserve ("Sugherata di Niscemi") in the northern part of the basin, which falls under the Niscemi Council.

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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 wetland area underwent a series of reclamation projects in the 1960s. Carried out by the Cosortium Piana di Gela, these included cement grouting of the weirs at the south and north-east of the lake, cement grouting of the bed of the Valletorta Monacella torrent, drying of the west loops using material dredged from the lake bottom, construction of the diversion canal from River Dirillo, uncontrolled drawing of water with sudden variations in water level).

From the end of the 1970s upto today, greenhouse cultivation in the area adjacent to the wetland has gradually increased, with strong repercussions on the visual and environmental impact. Such abuse of the area includes the use of transparent and black plastic sheeting which are not recycled and are sometimes burnt at the site; use of polluting chemicals such as methyl bromide; unauthorised and uncontrolled drawing of water from the water table, illegal hunting and fishing (strongly opposed by the Regional Reserve); excessive livestock grazing (gradually coming under control with the establishment of the Regional Reserve).

The lack of vegetation with root structures and apicals able to contain soil erosion, together with the grouting of the river bed mentioned above, accelerates the silting process at an alarming rate. Another important negative impact on the area is caused by the presence of the Enichem petro-chemical plant only a few kilometres away. This plant causes atmospheric pollution and consequent pollution of the wetland environment.

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23. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes which have been made: management practices; whether an officially approved management plan exists and whether it has been implemented)

The area has been included in the Regional Plan of Parks and Reserves by Decree of the Regional Council for Land and Environment No.970 of 1991, in accordance with Art.No.3 of regional law No.14/88. The nature reserve "Biviere di Gela" was established by Decree of the Regional Council for Land and Environment No.585 of 1st September 1997. The managment of the Reserve is performed, in accordance with Art. No. 20 of regional law No. 14/88, by LIPU (Italian Organisation for the Protection of Birds), which is a partner of Bird Life International. The wetland area falls completely within the protected zone. LIPU is currently preparing a Management Plan to be submitted to the Provincial Scientific Council. The Gela Council is involved in the preparation of Management Plan and they will prepare the guidelines for arrangement of zone "B" of the Reserve. The Council of Gela has also been involved in the preparation of the design (presented to the Ministry of the Environment) for the construction of an "experience centre" for the promotion and management of activities for Environmental Education in the Biviere di Gela Reserve. There is also a "Plan for Depolluting and Restoring the Territory of the Province of Caltanisetta", prepared by the Ministry of the Environment and approved by Government Decree of 17th January 1995 and published in the official gazette on 2nd May 1995. Together with a technical plan of the projects (code G3-1/C) it refers to "The Ecological Restoration of Biviere di Gela".

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

"Plan for Depolluting and Restoring the Territory of the Province of Caltanisetta", prepared by the Ministry of the Environment and approved by Government Decree of 17th January 1995 and published in the official gazette on 2nd May 1995. Together with the technical plan of the projects (code G3-1/C) it refers to "Ecological Restoration of Biviere di Gela".

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

A feasibility study by the National Institute for Wild Fauna is underway for the re-introduction of *Pophirio porphirio* to Sicily and Biviere di Gela is one of the potential sites identified. In the 1980s LIPU presented a project for the re-introduction of *Oxyura leucocephala* and Biviere was one of the zones proposed for Sicily.

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

The wetland falls within the territory of Gela which is characterised by severe pollution and environmental decay due to chaotic urban development and the presence of a petro-chemical plant which constitutes a strong industrial factor.

For this reason the zone has been defined as an "area with high risk of environmental collapse" and an Environmental Reclamation Plan has been prepared by the Ministry of the Environment and approved by presidential decree dated 17th January 1995. The plan was published in the Official Gazette of 2nd May 1995. Thus the Reserve has assumed an important educational value regarding the development of procedures for environmental care, projects for the correct use of the territory and economic activities which work hand in hand with the conservation of nature. The Reserve management body, LIPU, has prepared a project for setting up an "Experience Centre" for the promotion and management of Environmental Education activities in the wetland, requesting finance from the Ministy of the Environment on the basis of Ministerial Memorandum No. 335 of 3rd June 1998.

LIPU has always identified education as one of its prime activities. It has started up Environmental Education initiatives aimed at primary and secondary schools with the involvement of hundreds of people. Classroom discussions (with slides), concerning nature conservation and management of protected areas are held before making field trips. A Field Camp for the study and protection of the migrating species is planned for next spring. It will involve people of many age groups and aims to encourage conservation and to increase awareness of the respect merited by the protected area.

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

Since the offices for the Regional Nature Reserve opened in February 1997 it has been possible to monitor visitors to the lake, offering guided tours to school groups and others on request. Activities such as birdwatching, guided tours and excursions are becoming more frequent.

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

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

LIPU, Ente Gestore della R.N.O. "Biviere di Gela", Via Venezia 41, 93012 Gela (CL), Sicily.

30. Bibliographical references: (scientific/technical only)

Please return to: Ramsar Convention Bureau, Rue Mauverney 28, CH-1196 Gland, Switzerland
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