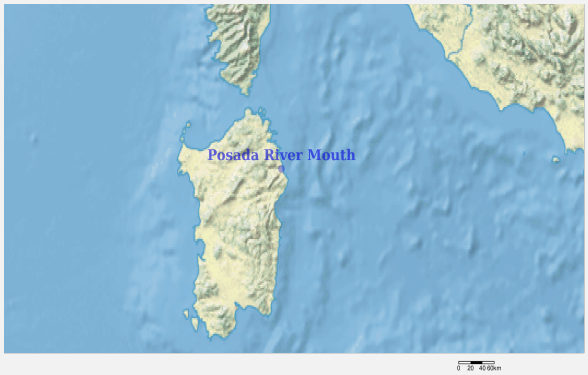
Ramsar Information Sheet

Published on 6 July 2021

Italy

Posada River Mouth



Designation date	25 February 2021
Site number	2452
Coordinates	40°38'22"N 09°43'28"E
Area	736,00 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

The site "Foce del Rio Posada", located within the boundaries of the Tepilora Regional Natural Park, includes the final stretch of the river Rio Posada including the alluvial plain formed by the Rio Posada itself and other minor water streams, as well as the sandy coastline and the stretch of sea included within the 5 m isobath.
It is a complex wetland system which extends over an area of about 841 ha and is characterised by a high degree of naturalness as it is not subject to significant hydraulic regulation interventions. It therefore represents an almost unique example in Sardinia, and now also rare in the Mediterranean zoogeographical region, of a practically intact mouth system of a typical torrential watercourse (criterion 1).
The site also presents a considerable environmental variety since the river stretches which flow into it are sinuous and create a network of waterways, as well as the formation in the alluvial plain of a system of back dune ponds and small internal ponds, partly temporary and partly sub-permanent. This environmental variety is reflected in a biocenosis rather rich in animal and plant taxa representative of the bio-geographical context (criterion 3).
Despite the contiguity of the site with the inhabited centre of Posada the level of anthropization is relatively low and urbanization is limited to sporadic housing units. Human activities in the alluvial plain are limited to horticultural crops and orchards in the marginal areas, and to sheep and cattle breeding in the internal areas, and moreover along the coastal strip there is a tourist use of the seaside between June and September with greater intensity in July-August.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency: Parco naturale regionale di Tepilora

Postal address: Via Attilio Deffenu 69, 08021 Bitti (NU)

National Ramsar Administrative Authority

Institution/agency: Italian Ministry of Ecological Transition - General Directorate for the Natural Heritage

Postal address: Via Cristoforo Colombo, 44, 00147
Rome, Italy

2.1.2 - Period of collection of data and information used to compile the RIS

From year: 1993

To year: 2020

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish): Posada River Mouth

Unofficial name (optional): Foce del Rio Posada

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<2 file(s) uploaded>

Former maps: 0

Boundaries description

The site includes the wetland system of the final stretch of the Rio Posada including part of the alluvial plain, the small temporary ponds and the ponds behind the dunes, which are functionally connected to the Rio Posada itself, and the stretch of sea in front of it. The boundaries of the site can be identified starting from the north-eastern end, from the municipal road that connects Punta Orvile (which almost coincides with the north-eastern limit of the proposed boundary) with the SS125 coasting Monte Orvili. Then the boundary of the area continues along the SS125 until the intersection with the paved road (that passes along the orographic left of the Rio Posada) until the narrowing of the riverbed near the village of Torpé. From here the boundary passes on the other side of the river and, following the embankment on the right bank, crosses the SS125. From here the boundary includes the Rio Santa Caterina along the road that runs alongside the eastern part of the village of Posada as far as its south-eastern end. From here the boundary follows the secondary road system bypassing the purifier and following a route that rejoins the provincial road to San Giovanni-Santa Lucia and then, through the local road system, reaches the Sos Palònes fishpond, which is the mouth of the Longo Pond. The east boundary of the site follows the boundary between halophilous and psammophilous vegetation along the coastal sandy cordon until it includes the mouth of the Rio Posada.

2.2.2 - General location

a) In which large administrative region does the site lie? Sardinia (Italy)

b) What is the nearest town or population centre? The town of Posada (3,041 inhabitants), Nuoro Province, Northeast Sardinia

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries? Yes ○ No ◉

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes ○ No ◉

2.2.4 - Area of the Site

Official area, in hectares (ha): 736

Area, in hectares (ha) as calculated from GIS boundaries: 736.208

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Marine Ecoregions of the World (MEOW)	Mediterranean Sea
EU biogeographic regionalization	Mediterranean

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

☑ Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided	From a hydraulic point of view, the Rio Posada Mouth plays an important role in the natural drainage of the waters of a 680 km2 catchment area, which, due to its considerable extension and strong acclivity, is subject to occasional, sometimes very intense, floods. During these events, the entire plain of the mouth is subject to flooding and this contributes to disperse the water over vast areas, mitigating the impact upstream of the floods. The catchment area consists of two main sub-basins: the Rio Posada and the Rio Mannu di Bitti. The entire system maintains a high degree of naturalness and represents almost a unique example in Sardinia, where most of the watercourses have undergone heavy interventions of water regulation all the way up to the mouth. The site is fed mainly by the Rio Posada, which, at about 1.8 km from the mouth, branches off into two sections that in turn give rise to further ramifications extending along the sandy cordon on south side of the mouth, near Punta Orvili. Further tributaries of the mouth system are the Rio di San Simone and the Rio Santa Caterina, which provides the main continental water supply of the Longo Pond. The latter, also fed by the Paule Pedru reclamation canal, has a permanently perpendicular mouth that guarantees a continuous supply of salt water inside the pond. Finally, the alluvial plain is important, partly used for cultivation (citrus groves and vegetable gardens) and partly for grazing, with large halophyte meadows in the coastal portions and some small ponds in the more inland part that are often flooded even in the summer months as they are fed by the surface water table.
Other ecosystem services provided	The periodic accumulation of alluvial deposits in the emerged areas determines a particular fertility of the soils which, in fact, in the peripheral areas and closer to Posada are rich in horticultural crops and orchards, in particular citrus fruits, contribute to the diversification of the agricultural landscape of the plain and consequently of the bird population which gravitates there during the year. The pasture areas, which make up the majority of the land that has emerged, occupy the areas that are less exposed to the contribution of sea water and are characterised partly by perennial pasture areas and partly by semi-natural grasslands that provide feeding habitats for various species of aquatic birds, in particular Ducks and Lapwings during wintering and Cattle Egrets following livestock throughout the year, but also wintering and/or nesting habitats for various species of passerines, some of which are of conservation interest. The continuous, although variable, contribution of inland water, with its organic and marine debris, contributes to the formation of complex and diversified aquatic biocenoses. In particular, the mouth to the sea of the Longo Pond allows the passage of various fish species of commercial value that are exploited both by humans (there is a fishing cooperative that is concessionary of part of the wetlands) and by aquatic birds that alternate during the year.

☑ Criterion 2 : Rare species and threatened ecological communities

☑ Criterion 3 : Biological diversity

Justification

The site receives permanent contributions, even if subject to important seasonal and inter-annual variations, of fresh water from the vast catchment area and is also characterised by a continuous supply of sea water, also subject to seasonal variations, near the mouths. This contribution of continental and marine waters means that within a relatively small area there is considerable ecological diversity. There are, in fact, large extensions of reeds at Phragmites australis and valuable riparian formations at Tamarix and Salix along the banks of Rio Posada and Rio Santa Caterina, while in the terminal stretches, closer to the sandy cordon, and in the Longo Pond, halophytic saltwater formations prevail (Sarcocornia spp.) Suaeda (Suaeda sp.) and Sea Purslane (Halimione portulacoides); in the areas subject to grazing there are grasslands with grasses and annual plants, partly subject to temporary flooding, which take the form of Mediterranean steppe habitats. In the small internal ponds, there are riparian formations at Tamarix sp. and Typha angustifolia.
This environmental diversity is reflected in a remarkable diversity of animal species, especially birds, but also amphibians and reptiles among which the presence of Emys orbicularis along the river rods of Rio Posada and Rio Santa Caterina is particularly relevant.

☑ Criterion 4 : Support during critical life cycle stage or in adverse conditions

3.2 - Plant species whose presence relates to the international importance of the site

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Plantae								
TRACHEOPHYTA / MAGNOLIOPSIDA	*Atriplex portulacoides*	☐	☑	☐		☐		A species present in association with Cynomorium coccineum, it forms large grasslands in the backdunes
TRACHEOPHYTA / MAGNOLIOPSIDA	*Cynomorium coccineum*	☐	☑	☐		☐		This species is localised in Italy and occurs mainly in Sardinia, Sicily, Basilicata and some smaller islands.
TRACHEOPHYTA / LILIOPSIDA	*Phragmites australis*	☐	☑	☐	LC	☐		Species that characterises riparian habitats in structural terms.
TRACHEOPHYTA / MAGNOLIOPSIDA	*Tamarix africana*	☐	☑	☐	LC	☐		Species that characterises riparian habitats in structural terms.

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
Others																	
CHORDATA / REPTILIA	*Emys orbicularis orbicularis*	☑	☐	☐	☐	☑	☐	☐	☐					☐	☐	Annex II & IV Habitat Directive Annex II Bern Convention EN according to Italian red List (Rondinini et al., 2013)	The site has river banks with surrounding alluvial plains and is a good habitat for this species. CITES Appendix II
CHORDATA / AMPHIBIA	*Hyla sarda*	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II & IV Habitat Directive Annex II Bern Convention	endemic
Birds																	
CHORDATA / AVES	*Acrocephalus scirpaceus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Regularly migratory and regularly breeding

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
CHORDATA/ AVES	*Alauda arvensis*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention VU according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Regularly migratory, wintering and breeding
CHORDATA/ AVES	*Alcedo atthis*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Dir. 2009/147/EC Annex II Bern Convention	Regularly migratory and regularly wintering ; irregular breeder
CHORDATA/ AVES	*Anas crecca*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention EN according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Regularly migratory and regularly wintering
CHORDATA/ AVES	*Anas platyrhynchos*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention	Breeding, migratory and wintering
CHORDATA/ AVES	*Anthus campestris*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Dir. 2009/147/EC Annex II Bern Convention	Regularly migratory and regularly breeding
CHORDATA/ AVES	*Anthus pratensis*	☑	☑	☐	☐	☑	☐	☐	☐				NT	☐	☐	Annex II Bern Convention NA according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013	Regularly migratory and regularly wintering
CHORDATA/ AVES	*Anthus spinoletta*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Regularly migratory and regularly wintering
CHORDATA/ AVES	*Ardea alba*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Dir. 2009/147/EC Annex II Bern Convention NT according to Italian red List (Peronace et al. 2012)	Regularly migratory and regularly wintering
CHORDATA/ AVES	*Ardea cinerea*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention	Regularly migratory and regularly wintering
CHORDATA/ AVES	*Ardea purpurea*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Dir. 2009/147/EC Annex II Bern Convention	Regular breeder in multi-species heronry
CHORDATA/ AVES	*Ardeola ralloides*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Dir. 2009/147/EC Annex II Bern Convention	Irregular breeder in multi-species heronry. Small breeding population in Sardinia (< 50 pairs)
CHORDATA/ AVES	*Aythya ferina*	☑	☑	☐	☐	☑	☐	☐	☐				VU	☐	☐	Annex III Bern Convention EN according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Regularly migratory and regularly wintering ; irregular breeder
CHORDATA/ AVES	*Aythya nyroca*	☑	☑	☐	☐	☑	☐	☐	☐				NT	☐	☑	Annex I Dir. 2009/147/EC Annex III Bern Convention EN according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Irregular breeder
CHORDATA/ AVES	*Bubulcus ibis*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Regular breeder in multi-species heronry
CHORDATA/ AVES	*Burhinus oedicnemus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Wild Birds Directive Annex II Bern Convention VU according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Regular breeder
CHORDATA/ AVES	*Buteo buteo*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention CITES Appendix II	Breeding, migratory and wintering
CHORDATA/ AVES	*Calandrella brachydactyla*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Dir. 2009/147/EC Annex II Bern Convention EN according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Regular migrator and regular breeder
CHORDATA/ AVES	*Carduelis carduelis*	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Resident
CHORDATA/ AVES	*Cettia cetti*	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Resident
CHORDATA/ AVES	*Charadrius alexandrinus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Wild Birds Directive Annex II Bern Convention EN according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Breeding, migratory and wintering

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
CHORDATA/ AVES	*Charadrius dubius*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention NT according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Regular migrant
CHORDATA/ AVES	*Chloris chloris*	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Resident
CHORDATA/ AVES	*Chroicocephalus ridibundus*	☑	☑	☐	☐	☑	☐	☐	☐					☐	☐	Annex III Bern Convention	Regularly migratory and regularly wintering
CHORDATA/ AVES	*Circus aeruginosus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Dir. 2009/147/EC Annex II Bern Convention CITES Appendix II VU according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Regularly migratory and regularly wintering ; probable breeder
CHORDATA/ AVES	*Cisticola juncidis*	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Resident
CHORDATA/ AVES	*Columba palumbus*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐		Regularly migratory and regularly wintering
CHORDATA/ AVES	*Corvus cornix*	☐	☐	☐	☐	☑	☐	☐	☐					☐	☐		Resident
CHORDATA/ AVES	*Coturnix coturnix*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention DD according to Italian red List.	Breeding, migratory and wintering
CHORDATA/ AVES	*Egretta garzetta*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Dir. 2009/147/EC Annex II Bern Convention	Regular breeder in multi-species heronry; regularly migratory and regularly wintering
CHORDATA/ AVES	*Emberiza calandra*	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention	Resident
CHORDATA/ AVES	*Erithacus rubecula*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Regularly migratory and regularly wintering
CHORDATA/ AVES	*Falco tinnunculus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention CITES Appendix II	Breeding, migratory and wintering
CHORDATA/ AVES	*Fringilla coelebs*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Breeding, migratory and wintering
CHORDATA/ AVES	*Fulica atra*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention	Breeding, migratory and wintering
CHORDATA/ AVES	*Gallinago gallinago*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention NA according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Regularly migratory and regularly wintering
CHORDATA/ AVES	*Gallinula chloropus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention	Regular breeder
CHORDATA/ AVES	*Himantopus himantopus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Dir. 2009/147/EC Annex II Bern Convention	Migratory and breeding
CHORDATA/ AVES	*Hirundo rustica*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention NT according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Regularly migratory and regularly breeding
CHORDATA/ AVES	*Ixobrychus minutus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Dir. 2009/147/EC Annex II Bern Convention VU according to Italian red List (Peronace et al., 2012; Rondinini et al., 2013)	Probable breeder and regular migrant
CHORDATA/ AVES	*Lanius senator*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention EN according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Breeding, migratory
CHORDATA/ AVES	*Larus michahellis*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐		Regularly migratory and regularly wintering

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
CHORDATA/ AVES	*Linaria cannabina*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention NT according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Breeding, migratory and wintering
CHORDATA/ AVES	*Luscinia megarhynchos*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Regularly migratory and regularly breeding
CHORDATA/ AVES	*Merops apiaster*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Regularly migratory and regular breeder
CHORDATA/ AVES	*Motacilla alba*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Regularly migratory and regularly wintering
CHORDATA/ AVES	*Motacilla flava*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention VU according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Regularly migratory and regularly breeding
CHORDATA/ AVES	*Nycticorax nycticorax*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Dir. 2009/147/EC Annex II Bern Convention VU according to Italian red List (Peronace et al., 2012; Rondinini et al., 2013)	Regular migrant
CHORDATA/ AVES	*Parus major*	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Resident
CHORDATA/ AVES	*Passer hispaniolensis*	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention VU according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Resident
CHORDATA/ AVES	*Passer montanus*	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention VU according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Resident
CHORDATA/ AVES	*Phalacrocorax carbo sinensis*	☑	☑	☐	☐	☑	☐	☐	☐					☐	☐	Annex III Bern Convention	Regularly migratory and regularly
CHORDATA/ AVES	*Phoenicopterus roseus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Dir. 2009/147/EC Annex II Bern Convention	Regular migrator
CHORDATA/ AVES	*Phoenicurus ochruros*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Regularly migratory and regularly wintering
CHORDATA/ AVES	*Phylloscopus collybita*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Regularly migratory and regularly wintering
CHORDATA/ AVES	*Porphyrio porphyrio*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Dir. 2009/147/EC Annex II Bern Convention NT according to Italian red List (Peronace et al. 2012)	Regular breeder
CHORDATA/ AVES	*Rallus aquaticus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention	Breeding, migratory and wintering
CHORDATA/ AVES	*Saxicola torquatus*	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention VU according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Widespread resident species in Sardinia
CHORDATA/ AVES	*Serinus serinus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Breeding, migratory and wintering
CHORDATA/ AVES	*Setophaga striata*	☑	☑	☐	☐	☑	☐	☐	☐				NT	☐	☐	Annex II Bern Convention	Regularly breeding and regularly migratory
CHORDATA/ AVES	*Streptopelia decaocto*	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention	Resident
CHORDATA/ AVES	*Streptopelia turtur*	☑	☑	☐	☐	☑	☐	☐	☐				VU	☐	☐	Annex III Bern Convention LC according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Regularly migratory and regular breeder
CHORDATA/ AVES	*Sturnus vulgaris*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐		Regularly migratory and regularly wintering
CHORDATA/ AVES	*Sylvia atricapilla*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Breeding, migratory, wintering

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
CHORDATA/ AVES	*Sylvia conspicillata*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Regularly migratory and regularly breeding
CHORDATA/ AVES	*Sylvia melanocephala*	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Resident
CHORDATA/ AVES	*Sylvia subalpina*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Regular migrant
CHORDATA/ AVES	*Tachybaptus ruficollis*	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	
CHORDATA/ AVES	*Thalasseus sandvicensis*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	EU Birds Directive; Bern Convention Annex II; VU according to Italian red List (Peronace et al. 2012; Rondinini et al., 2013)	Regular migrant
CHORDATA/ AVES	*Tringa nebularia*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention	Regular migrant
CHORDATA/ AVES	*Tringa ochropus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Regular migrant
CHORDATA/ AVES	*Turdus merula*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐		Regularly migratory, wintering and breeding
CHORDATA/ AVES	*Turdus philomelos*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex III Bern Convention	Regularly migratory and regularly wintering
CHORDATA/ AVES	*Upupa epops*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention	Regular migrator and regular breeder; irregular winterer

1) Percentage of the total biogeographic population at the site

Among the reptiles, the presence of Emys orbicularis is significant.
Several rare and threatened bird species are also present in the site, including some which are included in Annex I of the Birds Directive:
Ixobrychus minutus - trans-Saharan migratory species, nesting in the reed beds along the river system. Rare at regional and national level.
Nycticorax nycticorax - mainly a trans-Saharan migratory species, present at the site mainly during migration and breeding season. There is no evidence of nesting and it is possible that the occurrence is due to individuals nesting outside the site. Rare in Sardinia and in decline nationally.
Ardeola ralloides - mainly a trans-Saharan migratory species, irregularly nesting at the site in a polyspecific garrison. Rare and localised regionally with a population of less than 20 pairs.
Aythya ferina - is present at the site mainly during migration and wintering and is an irregular breeder. The species is rare as a breeder at regional and national level and in decline globally.
Aythya nyroca - rare and localised in Sardinia. It nests irregularly in the site.
Circus aeruginosus - probably nesting regularly at the site. Also present with wintering and nesting contingents. The species is rare as a regional breeder and has a negative trend in Italy.
Calandrella brachydactyla - nesting in the grasslands within the site. In sharp decline in Italy.
Alauda arvensis - the skylark nests in the halophilous grasslands within the site and is present with migratory and wintering contingents. The species is declining in most of its range, but most markedly in Italy.
Motacilla flava - a migratory nesting species at the site. Rare and localised in Sardinia, it is in sharp decline throughout the country.
Lanius senator - a trans-Saharan migratory species present at the site with a small breeding population. The Woodchat Shrike is in sharp decline in Italy.

3.4 - Ecological communities whose presence relates to the international importance of the site

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Coastal lagoons	☑	Expanses of shallow coastal salt water, of varying salinity and water volume.	It is listed in the Habitat Directive, Annex 1 (Natura 2000 code: 1150). Priority habitat.

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

The coastal lagoon system, which can be identified within the site, constitutes an ecological community of ecotone characterised by considerable complexity. The coastal lagoon system is classifiable among the priority sites listed in Annex I of the Habitats Directive.
The site is a complex ecological unit mainly subject to a dynamic equilibrium generated by the combined actions of marine currents and inland water flows from the vast geographical basin. Inland water inflows, although guaranteed by a permanent flow, are reduced by the artificial dam of Maccheronis (about 11.5 km inland) and still have a strong seasonal variability, and the site is subject to episodic flooding that can contribute alluvial deposits in the plain and shape the profile of the waterways at the coastline. In addition to the contribution of internal waters through natural channels, the site receives the purified wastewater from the municipality of Posada and this mainly flows into Stagno Longu.
The river and plain vegetation has a good degree of naturalness and plays an important role in mitigating the action of exceptional floods, reducing their erosive effects and helping to store and circulate in trophic networks the large quantities of nutrients the floods bring.
These dynamic processes, still largely mediated by natural factors, determine the constitution of aquatic and terrestrial biocenoses that are particularly rich and suitable as foraging and nesting areas for aquatic avifauna and other vertebrate taxa of conservation interest.

4.2 - What wetland type(s) are in the site?

Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
B: Marine subtidal aquatic beds (Underwater vegetation)		3		Representative
E: Sand, shingle or pebble shores		2		Representative
J: Coastal brackish / saline lagoons		1		Representative

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> L: Permanent inland deltas		1		Rare
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		2		Representative
Saline, brackish or alkaline water > Marshes & pools >> Ss: Seasonal/ intermittent saline/ brackish/ alkaline marshes/ pools		4		Representative
Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools		3		Representative

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
In the site there are agricultural areas with a strong parcelling of fodder crops, horticultural crops, orchards, mostly	

(ECD) Habitat connectivity	The habitat connectivity within the site is mainly provided by the hydrographic network formed not only by the branches of the main watercourse but also by the various minor tributaries, distributed in all sectors of the site creating a close continum

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/MAGNOLIOPSIDA	*Centaurium pulchellum*	S-Medit.
TRACHEOPHYTA/MAGNOLIOPSIDA	*Frankenia laevis laevis*	Steno-Medit..
TRACHEOPHYTA/MAGNOLIOPSIDA	*Inula crithmoides*	Medit.-Atl.(Steno-) - Coste atlantiche e
TRACHEOPHYTA/LILIOPSIDA	*Juncus acutus*	Euri-Medit.
TRACHEOPHYTA/LILIOPSIDA	*Juncus maritimus*	Subcosmop.
TRACHEOPHYTA/LILIOPSIDA	*Juncus subulatus*	S-Medit.
TRACHEOPHYTA/MAGNOLIOPSIDA	*Limonium glomeratum*	Endem. Ital.
TRACHEOPHYTA/MAGNOLIOPSIDA	*Limonium narbonense*	Euri-Medit.
TRACHEOPHYTA/MAGNOLIOPSIDA	*Limonium virgatum*	Euri-Medit.
TRACHEOPHYTA/MAGNOLIOPSIDA	*Salicornia fruticosa*	Euri-Medit.
TRACHEOPHYTA/MAGNOLIOPSIDA	*Spergularia salina*	Subcosmop.
TRACHEOPHYTA/LILIOPSIDA	*Sporobolus pungens*	Subtrop.
TRACHEOPHYTA/LILIOPSIDA	*Thinopyrum elongatum*	Euri-Medit.
TRACHEOPHYTA/LILIOPSIDA	*Triglochin bulbosum bulbosum*	Steno-Medit.

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/MAMMALIA	*Apodemus sylvaticus*				
CHORDATA/REPTILIA	*Chalcides chalcides vittatus*				
CHORDATA/REPTILIA	*Chalcides ocellatus*				
CHORDATA/MAMMALIA	*Crocidura russula*				
CHORDATA/AMPHIBIA	*Discoglossus sardus*				
CHORDATA/MAMMALIA	*Erinaceus europaeus*				
CHORDATA/REPTILIA	*Hierophis viridiflavus*				
CHORDATA/MAMMALIA	*Mus musculus domesticus*				
CHORDATA/MAMMALIA	*Mustela nivalis boccamela*				
CHORDATA/MAMMALIA	*Oryctolagus cuniculus huxleyi*				
CHORDATA/AMPHIBIA	*Pseudepidalea viridis*				
CHORDATA/MAMMALIA	*Rattus rattus*				
CHORDATA/MAMMALIA	*Suncus etruscus*				
CHORDATA/MAMMALIA	*Vulpes vulpes*				

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Csb: Mediterranean (Mild with dry, warm summer)

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres): 0

a) Maximum elevation above sea level (in metres): 3

- Entire river basin ☐
- Upper part of river basin ☐
- Middle part of river basin ☐
- Lower part of river basin ☑
- More than one river basin ☐
- Not in river basin ☐
- Coastal ☑

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

Mouth of Rio Posada and surrounding wetlands

4.4.3 - Soil

- Mineral ☐
- Organic ☑
- No available information ☐

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes ◉ No ○

Please provide further information on the soil (optional)

Organic soil with only superficial saline inputs

4.4.4 - Water regime

Water permanence

Presence?	
Usually permanent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	
Water inputs from surface water	☑	No change

Water destination

Presence?	
Marine	No change

Stability of water regime

Presence?	
Water levels largely stable	No change

4.4.5 - Sediment regime

- Significant erosion of sediments occurs on the site ☐
- Significant accretion or deposition of sediments occurs on the site ☐
- Significant transportation of sediments occurs on or through the site ☐
- Sediment regime is highly variable, either seasonally or inter-annually ☑
- Sediment regime unknown ☐

4.4.6 - Water pH

- Acid (pH<5.5) ☐
- Circumneutral (pH: 5.5-7.4) ☐
- Alkaline (pH>7.4) ☐
- Unknown ☑

4.4.7 - Water salinity

- Fresh (<0.5 g/l) ☑
- Mixohaline (brackish)/Mixosaline (0.5-30 g/l) ☑

Euhaline/Eusaline (30-40 g/l) ☐
Hyperhaline/Hypersaline (>40 g/l) ☐
Unknown ☐

Please provide further information on salinity (optional):

Salinity is variable in the different sectors of the area and at different times of the year, generally having near-marine values near the mouths and completely fresh-water values in the innermost areas.

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic ☐
Mesotrophic ☑
Oligotrophic ☐
Dystrophic ☐
Unknown ☐

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar ○ ii) significantly different ◉

Surrounding area has greater urbanisation or development ☐
Surrounding area has higher human population density ☐
Surrounding area has more intensive agricultural use ☐
Surrounding area has significantly different land cover or habitat types ☑

Please describe other ways in which the surrounding area is different:

The Posada estuary and Rio Posada system constitutes a peculiar typology in the territorial context in which it exists. In fact, although this system maintains similarities with the neighbouring coastal system of Posada, from which it is separated by the mainly touristic village of San Giovanni, it is mostly included in the orographic system of which it is the final receptor and which begins, with a rather high gradient, in the immediate hinterland of the plain.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Medium
Fresh water	Water for irrigated agriculture	Medium
Wetland non-food products	Reeds and fibre	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Climate regulation	Local climate regulation/buffering of change	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	High
Spiritual and inspirational	Aesthetic and sense of place values	High
Scientific and educational	Educational activities and opportunities	High

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganizms, the genes they contain, and the ecosystems of which they form a part	High
Soil formation	Sediment retention	Medium

Within the site: 1000s
Outside the site: 10000s

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes ○ No ○ Unknown ◉

4.5.2 - Social and cultural values

i) the site provides 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 ☑

Description if applicable

Numerous archaeological evidence shows that since the Middle Neolithic and throughout the Nuragic, Roman and Medieval eras, the Rio Posada estuary plain has been the site of human settlements, evidently favoured by the fertility of the alluvial land and the opportunities related to lagoon fishing, which have always characterised the area up to the present day, and which have certainly contributed to maintain the site's status quo.

ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland ☐

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples ☐

iv) 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 ☐

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
Local authority, municipality, (sub)district, etc.	☑	☑
Provincial/region/state government	☑	☑

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	☑	☑

Provide further information on the land tenure / ownership regime (optional):

Most of the protected area belong to private owners.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site: Ente parco naturale regionale di Tepilora

Provide the name and/or title of the person or people with responsibility for the wetland: Paolo Angelini

Postal address: Via Attilio Deffenu 69, 08021 Bitti (NU)

E-mail address: info@parcotepilora.it

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Annual and perennial non-timber crops	Low impact	Low impact	☑	☑

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Roads and railroads	Low impact	Low impact	☑	☑

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Hunting and collecting terrestrial animals	Low impact	Low impact	☐	☑

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Recreational and tourism activities	Low impact		☑	☑

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Dams and water management/use	Low impact	Medium impact	☐	☑

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Household sewage, urban waste water	Low impact		☑	☑
Agricultural and forestry effluents	Low impact	Low impact	☑	☑

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Droughts	Medium impact	High impact	☑	☑
Storms and flooding	Medium impact	High impact	☑	☑

5.2.2 - Legal conservation status

Global legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
UNESCO Biosphere Reserve	Tepilora, Rio Posada e Montalbo	www.unesco.it/it/RiserveBiosfera/Detail/365	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Natural Regional Park established by regional Law - L.R. n.21/2014	Parco regionale naturale di Tepilora	www.tepilorapark.it/	whole

5.2.3 - IUCN protected areas categories (2008)

Ia Strict Nature Reserve ☐

Ib Wilderness Area: protected area managed mainly for wilderness protection ☐

II National Park: protected area managed mainly for ecosystem protection and recreation ☑

III Natural Monument: protected area managed mainly for conservation of specific natural features ☐

IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention ☐

V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation ☑

VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems ☐

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

5.2.5 - Management planning

Is there a site-specific management plan for the site? In preparation

Has a management effectiveness assessment been undertaken for the site? Yes ○ No ◉

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes ○ No ◉

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water quality	Implemented

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Biondi E.; Diana S., Farris E., Filigheddu R., 2001. L'ordine Limonietalia Br.-Bl. et O. Bolòs 1958 in Sardegna. Fitosociologia, Vol. 38 (2), p. 37-44. ISSN 1125-9078..
Conti, F., Manzi A., Pedrotti F., 1992. Libro rosso delle Piante d'Italia. Ministero Ambiente, WWF Italia, Società Botanica Italiana, Roma. 637 pp.
Peronace, V., J. G. Cecere, M. Gustin, & C. Rondinini. 2012. Lista Rossa 2011 degli uccelli nidificanti in Italia. Avocetta 36:11–58
Rondinini, C., Battistoni, A., Peronace, V., Teofili, C. (compilatori), 2013. Lista Rossa IUCN dei Vertebrati Italiani. Comitato Italiano IUCN e Ministero dell'Ambiente e della Tutela del Territorio e del Mare, Roma
Rossi G., Montagnani C., Gargano D., Peruzzi L., Abeli T., Ravera S., Cogoni A., Fenu G., Magrini S., Gennai M., Foggi B., Wagensommer R.P., Venturella G., Blasi C., Raimondo F.M., Orsenigo S. (Eds.), 2013. Lista Rossa della Flora Italiana. 1. Policy Species e altre specie minacciate. Comitato Italiano IUCN e Ministero dell'Ambiente e della Tutela del Territorio e del Mare.

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)
<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)
<no file available>

iii. a description of the site in a national or regional wetland inventory
<no file available>

iv. relevant Article 3.2 reports
<no file available>

v. site management plan
<no file available>

vi. other published literature
<no file available>

<no data available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:


Stagno Longu - Posada - Volo di fenicotteri (*Angelo Canu, 03-02-2021*)


Riflessi sul Rio Posada (*Angelo Canu, 08-12-2014*)


Tramonto su Posada dallo stagno Longu (*Angelo Canu, 18-04-2016*)


Skyline di Posada dal Rio Posada (*Angelo Canu, 18-04-2016*)


Riflessi sul Rio Posada (*Angelo Canu, 14-10-2015*)


Alba sul Rio Posada - Stagno Tundu I (*Angelo Canu, 29-09-2019*)


Riflesso del Montalbo sul Rio Posada da San Giovanni (*Angelo Canu, 24-10-2015*)


Pescatore alla foce di Orvile (*Angelo Canu, 23-09-2018*)


Stagni di Posada – Combattimento di folaghe (Fulica atra) (*Domenico Ruiu, 07-06-2008*)


Stagni di Posada – Volo di aironi guarda buoi (Bubulcus ibis) (*Domenico Ruiu, 11-05-2008*)


Stagni di Posada - Aironi (*Domenico Ruiu, 22-09-2019*)


Stagni di Posada – Nidificazione di Airone rosso (Arsea purpurea) (*Domenico Ruiu, 11-06-2012*)


Stagni di Posada – Posatoio di Aironi guardabuoi (Bubulcus ibis) (*Domenico Ruiu, 15-07-2013*)


Stagni di Posada – Folaga (Fulica atra) (*Domenico Ruiu, 25-06-2008*)


Stagni di Posada – Germano reale (*Domenico Ruiu, 03-05-2008*)


Stagni di Posada – Pollo sulatno (Porphyrio porphyrio) (*Domenico Ruiu, 19-04-2008*)


Stagni di Posada – Pollo sultano (Porphyrio porphyrio) (*Domenico Ruiu, 09-07-2007*)


-Stagni di Posada (*Domenico Ruiu, 20-02-2012*)


Cormorano si alza in volo (Torpè) (*Antonio Maria Pala, 15-02-2021*)


Fenicotteri foce – stagno Posada (*Antonio Maria Pala, 12-02-2021*)


Vista aerea Ramsar a Torpè (direzione Ovest) (*Antonio Maria Pala, 15-02-2021*)


Stagno – foce (*Antonio Maria Pala, 15-02-2021*)


La peschiera Posada foce (*Antonio Maria Pala, 15-02-2021*)


Dal guado di Torpè sguardo a Ovest (*Antonio Maria Pala, 15-02-2021*)


Canneto e avifauna a Torpè (*Antonio Maria Pala, 15-02-2021*)

6.1.4 - Designation letter and related data

Designation letter
<2 file(s) uploaded>

Date of Designation	2021-02-25