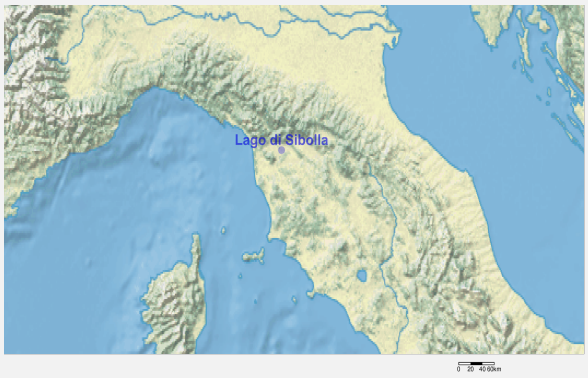
Ramsar Information Sheet

Published on 10 July 2025

Italy

Lago di Sibolla



Designation date	21 October 2013
Site number	2572
Coordinates	43°49'27"N 10°42'15"E
Area	128,00 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

Lake Sibolla is a small wetland of high naturalistic interest, an integral part of the vast network of wetlands constituted by the Padule di Fucecchio and the Ex Alveo and Padule di Bientina. The wetland holds great naturalistic value both from a floristic-vegetational perspective, with relict species and habitats of conservation interest, and from a faunal perspective, with notable species.

The wetland, a small natural lake surrounded by a much larger marsh area and some meadow and wooded areas, constitutes a biotope of great geobotanical interest due to the presence of relict floristic species such as Hottonia palustris L., Menyanthes trifoliata L., Narcissus poeticus L., Thelypteris palustris Schott, Osmunda regalis L., and rare vegetational associations like the sphagnum bog (Sphagno-Droseretum rotundifoliae), a paleomicroecosystem of phytogeographic relevance, and the magnocaricetum.

The nuclei of hygrophilous tree-shrub vegetation in the marsh area have been colonized by an increasing number of nesting species of herons and ibises (Ardea cinerea, Egretta garzetta, Bubulcus ibis, Ardea purpurea, Ardea alba, Nycticorax nycticorax, Ardeola ralloides, Platalea leucorodia, Plegadis falcinellus, Threskiornis aethiopicus), recently joined by Microcarbo pygmaeus. For the number of species and nesting pairs (over 1000), the heronry of Lake Sibolla is now the most important site in peninsular Italy for herons and ibises. The wetland is also an important reference point for wintering waterbirds, particularly for Anas crecca.

The area also boasts a rich entomofauna that includes 12 species of odonates and, among the lepidopterans, Lycaena dispar and Zerynthia cassandra. Noteworthy among the reptiles is the presence of Emys orbicularis.

The value of the wetland is further attested by its recognition as a Special Area of Conservation under the Habitats Directive 92/43/EEC and as a Regional Reserve L.R.T. 30/2015.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency: Regione Toscana – Settore Tutela della Natura e del Mare

Postal address: Via di Novoli 26
50127 Firenze (Italia)

National Ramsar Administrative Authority

Institution/agency: Ministry of the Environment and Energy Security General Directorate for natural heritage and sea (PNM)
Div. III - Biodiversity strategies

Postal address: Via Cristoforo Colombo n.44, 00147 – Rome - Italy

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

From year: 2000

To year: 2024

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish): Lago di Sibolla

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<1 file(s) uploaded>

Former maps: 0

Boundaries description

Lake Sibolla is located in the lower Valdarno between the Padule di Bientina and the Padule di Fucecchio, among the hills of Montecarlo, the Cerbaie, and Monte Albano. The original wetland area, reduced in the last century by the reclamation of the Fucecchio and Bientina marshes, is now surrounded by numerous infrastructural works and activities, including the A11 highway and the industrial area of Altopascio.

2.2.2 - General location

a) In which large administrative region does the site lie? Italy – Tuscany Region – Province of Lucca – Municipality of Altopascio.

b) What is the nearest town or population centre? Altopascio

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): 128

Area, in hectares (ha) as calculated from GIS boundaries: 128.04

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
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	The wetland, although limited in extent, plays an important role in the hydrological balance of the territory, within the mosaic of local wetland areas (Ex Lago and Padule di Bientina and Padule di Fucecchio), as a natural freshwater reservoir with a positive effect on the drainage of the surrounding areas.
Other ecosystem services provided	The wetland provides a crucial habitat for relict plant species and avifauna, offering an essential refuge for pollinators. It plays a vital role in maintaining the hydrogeological equilibrium of the broader area and fosters ecological connectivity with the Padule di Fucecchio—a nearby natural site. Located close to residential and industrial zones, it stands out for its excellent provisions for eco-sustainable activities and educational opportunities aimed at promoting environmental stewardship.
Other reasons	The wetland is a well-established entity in the monitoring of wintering waterbirds (International Waterbird Census, coordinated in Italy by ISPRA), in scientific monitoring and research, in environmental education, and in eco-sustainable use.

☑ Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further information	The wetland hosts relict floristic species and habitats of conservation interest and serves as a reference point for aquatic bird species of conservation interest.

☑ Criterion 3 : Biological diversity

Justification	The wetland is representative as a biodiversity hotspot, with over 160 bird species recorded. The heronry of Lake Sibolla is now the most important site in peninsular Italy for herons and ibises

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

Optional text box to provide further information	The site is an important reference point for aquatic birdlife, particularly as a colonial nesting site for herons and ibises and as a wintering site for a large contingent of Anas crecca

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 / LILIOPSIDA	*Anacamptis palustris*	☐	☑	☐	LC	☐	EN IUCN Red List of Italian Flora (among the NPS Non Policy Species)*.	Few populations in coastal lowlands in Mediterranean Bioregion..
TRACHEOPHYTA / LILIOPSIDA	*Baldellia ranunculoides*	☑	☑	☐	NT	☐	EN IUCN Red List of Italian Flora**	
TRACHEOPHYTA / MAGNOLIOPSIDA	*Drosera intermedia*	☑	☑	☐		☐	EN IUCN Red List of Italian Flora **	
TRACHEOPHYTA / MAGNOLIOPSIDA	*Hottonia palustris*	☑	☑	☐	LC	☐	EN IUCN Red List of Italian Flora*	Hydrophyte becoming rare in Tuscan wetlands.
TRACHEOPHYTA / MAGNOLIOPSIDA	*Hydrocotyle vulgaris*	☑	☑	☐	LC	☐	EN IUCN Red List of Italian Flora**	
TRACHEOPHYTA / LILIOPSIDA	*Leucojum aestivum*	☑	☑	☐	LC	☐	VU IUCN Red List of Italian Flora**	
TRACHEOPHYTA / MAGNOLIOPSIDA	*Lysimachia tenella*	☑	☑	☐		☐	EN IUCN Red List of Italian Flora**	
TRACHEOPHYTA / LILIOPSIDA	*Rhynchospora alba*	☑	☑	☐	LC	☐	EN IUCN Red List of Italian Flora**	
TRACHEOPHYTA / LILIOPSIDA	*Spiranthes aestivalis*	☑	☑	☐		☐	EN IUCN Red List of Italian Flora* Annex. I Bern Convention, Annex IV Habitats Directive	.
TRACHEOPHYTA / POLYPODIOPSIDA	*Thelypteris palustris*	☑	☑	☐	LC	☐	VU IUCN Red List of Italian Flora**	

*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
**Rossi G., Orsenigo S., Gargano D., Montagnani C., Peruzzi L., Fenu G., Abeli T., Alessandrini A., Astuti G., Bacchetta G., Bartolucci F., Bernardo L., Bovio M., Brullo S., Carta A., Castello M., Cogoni D., Conti F., Domina G., Foggi B., Gennai M., Gigante D., Iberite M., Lasen C., Magrini S., Nicolella G., Pinna M.S., Poggio L., Prosser F., Santangelo A., Selvaggi A., Stinca A., Tartaglini N., Troia A., Villani M.C., Wagensommer R.P., Wilhalm T., Blasi C., 2020 - "Lista Rossa della Flora Italiana. 2 Endemiti e altre specie minacciate". Ministero dell'Ambiente e della Tutela del Territorio e del Mare

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*	☑	☐	☐	☐	☑	☐	☐	☐					☐	☐	EN Italian Red List App. II Bern Convention, Annexes II and IV Habitats Directive,	
ARTHROPODA / INSECTA	*Lucanus cervus*	☐	☐	☐	☐	☑	☐	☐	☐					☐	☐	App. III Bern Conv., Annex II Hab. Dir.,	
ARTHROPODA / INSECTA	*Lycaena dispar*	☐	☐	☐	☐	☑	☐	☐	☐					☐	☐	App. II Bern Convention, Annexes II and IV Habitats Directive	
CHORDATA / AMPHIBIA	*Triturus carnifex*	☑	☐	☐	☐	☑	☐	☐	☐				VU	☐	☐	VU Italian Red List App. II Bern Convention, Annexes II-IV Habitats Directive.	

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								
ARTHROPODA / INSECTA	*Zerynthia cassandra*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	An Italian endemic, recently elevated to species rank, distributed south of the Po river; listed in Appendix II of the Bern Convention and Annex IV of the Habitats Directive.	Critical life stage: Entire life cycle.
Birds																	
CHORDATA / AVES	*Acrocephalus melanopogon*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	VU in National Red List, EU Birds Directive Annex I.	Critical life cycle phase: migration, nesting.
CHORDATA / AVES	*Acrocephalus paludicola*	☑	☑	☐	☐	☑	☐	☐	☐				VU	☐	☑	EU Birds Di-rective Annex I	Accidental Stopping Site
CHORDATA / AVES	*Alcedo atthis*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention; Annex 1 Birds directive	Critical life cycle phase: migration, nesting, overwintering
CHORDATA / AVES	*Anas crecca*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	EN Italian Red List.	Critical life cycle phase: migration, nesting.
CHORDATA / AVES	*Anthus campestris*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	VU in National Red List, Annex 1 Birds directive	Critical life cycle phase: migration
CHORDATA / AVES	*Ardea alba*	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex II Bern Convention; Annex 1 Birds directive	Critical life cycle phase: migration, nesting, overwintering
CHORDATA / AVES	*Ardea purpurea*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention; Annex 1 Birds directive	Critical life cycle phase: migration, nesting
CHORDATA / AVES	*Ardeola ralloides*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention; Annex 1 Birds directive	Critical life cycle phase: migration, nesting
CHORDATA / AVES	*Aythya ferina*	☑	☑	☐	☐	☐	☐	☐	☐				VU	☐	☐	VU in National Red List,	Critical life cycle phase: migration, nesting
CHORDATA / AVES	*Botaurus stellaris*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	EN Italian Red List; Annex II Bern Convention; Annex 1 Birds directive	Critical life cycle phase: migration, overwintering
CHORDATA / AVES	*Burhinus oedicnemus*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention; Annex 1 Birds directive	Accidental stopover habitat
CHORDATA / AVES	*Ciconia ciconia*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention; Annex 1 Birds directive	Critical life cycle phase: migration, overwintering
CHORDATA / AVES	*Circus aeruginosus*	☑	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	VU in National Red List, Annex 1 Birds directive	Critical life cycle phase: migration, overwintering
CHORDATA / AVES	*Egretta garzetta*	☑	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex II Bern Convention; Annex I Birds directive .	Critical life cycle phase: migration, nesting, overwintering
CHORDATA / AVES	*Ixobrychus minutus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	VU in National Red List, Annex II Bern Convention; Annex 1 Birds directive	Critical life cycle phase: migration, overwintering
CHORDATA / AVES	*Jynx torquilla*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	EN Italian Red List	Critical life cycle phase: migration, nesting, overwintering
CHORDATA / AVES	*Lanius collurio*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	VU in National Red List n; Annex 1 Birds directive	Critical life cycle phase: migration, overwintering
CHORDATA / AVES	*Limosa limosa*	☑	☑	☐	☐	☑	☐	☐	☐				NT	☐	☐	EN in National Red List,	Critical life cycle phase: migration
CHORDATA / AVES	*Locustella luscinioides*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	EN in National Red List	Critical life cycle phase: migration, overwintering
CHORDATA / AVES	*Mareca strepera*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	VU Italian Red List	Critical life cycle phase: migration, overwintering
CHORDATA / AVES	*Microcarbo pygmaeus*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention; Annex 1 Birds directive	Critical life cycle phase: migration, nesting, overwintering
CHORDATA / AVES	*Nycticorax nycticorax*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex II Bern Convention; Annex I Birds directive	Critical life cycle phase: migration, nesting, overwintering
CHORDATA / AVES	*Platalea leucorodia*	☐	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	Annex I Birds directive	Critical life cycle phase: migration, nesting, overwintering

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	*Plegadis falcinellus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	VU Italian Red List Annex 1 Birds directive	Critical life cycle phases: migration, nesting (30% of the Italian breeding population), and wintering.
CHORDATA / AVES	*Podiceps auritus*	☑	☑	☐	☐	☑	☐	☐	☐				VU	☐	☐	Annex II Bern Convention; Annex I Birds directive	Accidental stopover habitat
CHORDATA / AVES	*Saxicola rubetra*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	VU Italian Red List App. II Bern Convention,	Critical life cycle phase: migration
CHORDATA / AVES	*Saxicola torquatus*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	EN Italian Red List App. II Bern Convention,	Critical life cycle phase: migration, nesting, overwintering
CHORDATA / AVES	*Spatula clypeata*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	VU Italian Red List App. II Bern Convention,	Critical life cycle phase: migration, overwintering
CHORDATA / AVES	*Spatula querquedula*	☑	☑	☐	☐	☑	☐	☐	☐				LC	☐	☐	VU Italian Red List	Critical life cycle phase: migration

1) Percentage of the total biogeographic population at the site

Balletto, E., Bonelli, S., Barbero, F., Casacci, L.P., Sbordoni, V., Dapporto, L., Scalercio, S., Zilli, A., Battistoni, A., Teofili, C., Rondinini, C. (compilers), 2015 - “IUCN Red List of Italian Butterflies - Rhopalocera”. Italian IUCN Committee and Ministry of the Environment and Protection of Land and Sea

Italian Red List: Rondinini, C., Battistoni, A., Teofili, C. (compilers) - 2022 “IUCN Red List of Italian Vertebrates 2022”. Italian IUCN Committee and Ministry of the Environment and Energy Security

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
6420 - Mediterranean wet meadows with herbaceous plants	☑	Mediterranean rushes and other tall hygrophilous herbaceous formations of the Molinio-Holoschoenion, predominantly located near coastal dune systems on sandy-clay soils.	Habitats Directive Ann. I
91AA - Eastern White Oak Forests*	☑	The habitat includes forests dominated by Quercus pubescens s.l. with Fraxinus ornus, thermophilic and often in edaphic-xerophilous positions, widespread along the Italian peninsula and large islands, particularly in subcoastal areas.	Listed as a priority habitat in Annex I of the Habitats Directive
91E0 - Alluvial forests of Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)*	☑	Alluvial, riparian, and swamp forests of Alnus spp., Fraxinus excelsior, and Salix spp. present along watercourses in mountainous, hilly, and plain areas, as well as on the shores of lake basins and in areas with water stagnation.	Listed as a priority habitat in Annex I of the Habitats Directive
7210 - Calcareous fens with Cladium mariscus and species of the Caricion*	☑	Emergent formations dominated by Cladium mariscus, generally developed along the shores of lakes and marshes, often in contact with the vegetation of the Caricion davallianae or Phragmition alliances.	Listed as a priority habitat in Annex I of the Habitats Directive
7150 - Depressions on peat substrates of the Rhyncosporion	☑	Pioneer communities with Rhynchospora alba, R. fusca, Drosera intermedia, D. rotundifolia, Lycopodiella inundata, developed in depressions on bare peat or sandy substrates, in the presence of oligotrophic waters.	Habitats Directive Ann. I
3130 - Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojunc	☑	Small to medium-sized amphibious communities, both perennial and annual, developing at the edges of lakes and ponds with stagnant waters, on permanently moist, nutrient-poor substrates.	Habitats Directive Ann. I
3150 - Natural eutrophic lakes with vegetation of the Magnopotamion or Hydrocharition	☑	Hydrophytic vegetation of Habitat 3150 develops in various water bodies, including lakes, ponds, canals, and ditches with stagnant waters, rich in bases, and alkaline pH (generally >7).	Habitats Directive Ann. I
3260 - Rivers of the plains and mountains with vegetation of Ranunculion fluitantis and Callitricho-Batrachion	☑	This habitat includes watercourses from plains to mountains, characterized by perennial herbaceous vegetation with aquatic macrophytes, generally emergent floral structures of Ranunculion fluitantis and Callitricho-Batrachion, and aquatic mosses.	Habitats Directive Ann. I
92A0 - Gallery forests of Salix alba and Populus alba	☑	Riparian woods dominated by Salix spp. and Populus spp. found along watercourses in the Mediterranean basin, attributable to the alliances Populion albae and Salicion albae.	Habitats Directive Ann. I

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

4.1 - Ecological character

The wetland consists of a small natural lake surrounded by a much larger marsh area and some meadows and wooded areas. The lake (groundwater lake) is fed by spring waters and, to a lesser extent, by rainwater, and has only one outlet, the Fosso Sibolla, which is connected to the Padule di Fucecchio, located just 6 km away. The wetland hosts significant hygrophilous vegetation, including small portions of reed beds, peat bogs, sedge meadows, and areas occupied by hygrophilous forests of alders and willows. Surrounding the lake and marsh are rich oak forests (downy oaks and pedunculate oaks) and a complex mosaic of meadows, fallow lands, and still cultivated fields.

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

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 > Lakes and pools >> O: Permanent freshwater lakes		1		Representative
Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools		1		Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		4		Rare
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		2		Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		2		Representative

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
abandoned countryside naturally recovering young woods.	

(ECD) Habitat connectivity: Habitat connectivity is low. Practically, there is only one small channel connecting Sibolla to Fucecchio through a heavily mechanized countryside.

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/MAGNOLIOPSIDA	*Drosera rotundifolia*	Glacial microthermal relict, in the process of becoming rarefied (sphagnum bog).
TRACHEOPHYTA/MAGNOLIOPSIDA	*Menyanthes trifoliata*	Species in significant decline, closely associated with wetland habitats.
TRACHEOPHYTA/LILIOPSIDA	*Narcissus poeticus*	One of the most important sites for the species in Tuscany.
TRACHEOPHYTA/POLYPODIOPSIDA	*Osmunda regalis*	Tertiary thermohygrophilous relict
BRYOPHYTA/SPHAGNOPSIDA	*Sphagnum palustre*	Microthermal relict (sphagnum bog), a paleomicroecosystem of phytogeographical significance.

Invasive alien plant species

Phylum	Scientific name	Impacts
TRACHEOPHYTA/MAGNOLIOPSIDA	*Amorpha fruticosa*	Actual (major impacts)
TRACHEOPHYTA/MAGNOLIOPSIDA	*Robinia pseudoacacia*	Actual (major impacts)

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/AVES	*Ardea cinerea cinerea*				
CHORDATA/AVES	*Bubulcus ibis*				

Invasive alien animal species

Phylum	Scientific name	Impacts
CHORDATA/AVES	*Amandava amandava*	Actual (minor impacts)
CHORDATA/AVES	*Leiothrix lutea*	Actual (minor impacts)
CHORDATA/MAMMALIA	*Myocastor coypus*	Actual (major impacts)
CHORDATA/MAMMALIA	*Sylvilagus floridanus*	Actual (minor impacts)
CHORDATA/AVES	*Threskiornis aethiopicus*	Actual (major impacts)
CHORDATA/REPTILIA	*Trachemys scripta*	Actual (major impacts)
CHORDATA/ACTINOPTERYGII	*Ameiurus melas*	Actual (major impacts)
CHORDATA/ACTINOPTERYGII	*Gambusia affinis*	Actual (major impacts)
CHORDATA/ACTINOPTERYGII	*Gambusia holbrooki*	Actual (major impacts)
CHORDATA/ACTINOPTERYGII	*Lepomis gibbosus*	Actual (major impacts)
ARTHROPODA/MALACOSTRACA	*Procambarus clarkii*	Actual (major impacts)

4.4 - Physical components

4.4.1 - Climate

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

4.4.2 - Geomorphic setting

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

a) Maximum elevation above sea level (in metres): 1

- [ ] Entire river basin
- [ ] Upper part of river basin
- [x] Middle part of river basin
- [ ] Lower part of river basin
- [ ] More than one river basin
- [ ] Not in river basin
- [ ] Coastal

4.4.3 - Soil

- [ ] Mineral
- [ ] Organic
- [x] No available information

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

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 groundwater	☑	No change

Water destination

Presence?	
Feeds groundwater	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 ☐

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 ☑

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)	Low
Fresh water	Water for irrigated agriculture	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Storage and delivery of water as part of water supply systems for agriculture and industry	Medium
Climate regulation	Local climate regulation/buffering of change	Medium
Hazard reduction	Flood control, flood storage	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	High
Scientific and educational	Educational activities and opportunities	High
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High
Scientific and educational	Long-term monitoring site	High
Scientific and educational	Major scientific study site	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
Pollination	Support for pollinators	High

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 ☐

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

Description if applicable

There are ancient traditions of weaving marsh grasses, with the collection of herbaceous helophytic species such as Carex elata All. or shrubby species such as Salix sp. pl. for the strawing of chairs, demijohns, flasks, and the creation of everyday objects such as baskets, fish traps, etc.

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

Private ownership

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

Other

Category	Within the Ramsar Site	In the surrounding area
Commoners/customary rights	☑	☐

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

The whole area is private land, both inside and outside the Ramsar site. Only a small spot of about 2,0 ha have been recently bought by the district administration in order to realise a educational public garden and a visit center, besides 20 ha as customary rights.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site: Region of Tuscany – Department for the Protection of Nature and the Sea

Provide the name and/or title of the person or people with responsibility for the wetland: Ing. Gilda Dirigente

Postal address: Via di Novoli 26 – 50127 Firenze Italia

E-mail address: gilda.ruberti@regione.toscana.it

5.2 - Ecological character threats and responses (Management)

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

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Housing and urban areas	Medium impact	Medium impact	☑	☑
Commercial and industrial areas	High impact	High impact	☑	☑

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Drainage	Medium impact	Medium impact	☑	☑
Canalisation and river regulation	Medium impact	Medium impact	☑	☑

Agriculture and aquaculture

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

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Roads and railroads	High impact	High impact	☑	☑
Utility and service lines (e.g., pipelines)	Medium impact	Medium 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	Medium impact	☑	☑
Logging and wood harvesting	Medium impact	Medium impact	☑	☑

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Vegetation clearance/ land conversion	Medium impact	Medium impact	☑	☐

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Invasive non-native/ alien species	High impact	High impact	☑	☑

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Household sewage, urban waste water	High impact	Medium impact	☑	☑
Industrial and military effluents	Medium impact	Medium impact	☑	☑
Agricultural and forestry effluents	Medium impact	Medium impact	☑	☑
Garbage and solid waste	High impact	High impact	☑	☑
Excess heat, sound, light	High impact	High impact	☑	☑

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Habitat shifting and alteration	Medium impact	Medium impact	☑	☑
Droughts	High impact	High impact	☑	☑
Temperature extremes	High impact	High impact	☑	☑

Please describe any other threats (optional):

The area is a very small spot of semi-natural habitat within a highly polluted and densely inhabited area.

5.2.2 - Legal conservation status

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	ZSC IT5120018 Lago di Sibolla		partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Nature Reserve	Regional Nature Reserve Lake Sibolla		partly

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

Habitat

Measures	Status
Hydrology management/restoration	Proposed
Re-vegetation	Proposed
Catchment management initiatives/controls	Proposed
Improvement of water quality	Proposed
Habitat manipulation/enhancement	Proposed
Soil management	Proposed
Land conversion controls	Proposed
Faunal corridors/passage	Proposed

Species

Measures	Status
Threatened/rare species management programmes	Proposed
Reintroductions	Proposed
Control of invasive alien plants	Partially implemented
Control of invasive alien animals	Proposed

Human Activities

Measures	Status
Regulation/management of recreational activities	Proposed
Communication, education, and participation and awareness activities	Implemented
Harvest controls/poaching enforcement	Proposed
Research	Implemented
Management of water abstraction/takes	Proposed

Other:

Current Protection Measures:

D.G.R. 454/2008 “D.M. 17.10.2007 of the Ministry of Environment and Protection of Land and Sea - Uniform minimum criteria for the definition of conservation measures related to special areas of conservation (SAC) and special protection areas (SPA) – Implementation.” (Annex A - Conservation measures valid for all SPAs and Annex B - Division of SPAs into types and related conservation measures)

D.G.R. 1213/2015 “Directive 92/43/EEC "Habitat" - art. 4 and 6 - Approval of conservation measures for SCIs (Sites of Community Importance) for their designation as SACs (Special Areas of Conservation).” (Annex A – General measures valid for all terrestrial and marine SCIs, Annex B – Site-specific measures for SCIs located wholly or partially within the territory of regional and national parks, Annex C - Site-specific measures for SCIs not located wholly or partially within the territory of regional and national parks)

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 ◉

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

The wetland is equipped with a visitor center and trails with birdwatching hides, walkways over the water, screened paths, and a small observation tower. The wetland is a well-established reality in the field of environmental education and eco-sustainable use (excursions, conferences, exhibitions, publishing), scientific monitoring (IWC ISPRA), and research and scientific projects (including the ex situ conservation of locally extinct native hydrofitic species).

URL of site-related webpage (if relevant): https://www.regione.toscana.it/-/aree-ramsar https://www.regione.toscana.it/-/rete-natura-2000-in-toscana-2 https://www.regione.toscana.it/riserve-naturali-regionali

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Yes, there is a plan

Further information

An important, albeit partial, success was achieved in controlling the invasive exotic species Amorpha fruticosa. During the period 2011-2015, environmental restoration interventions were carried out using various species control methodologies (repeated cuts, eradications, use of systemic foliar desiccants) over an area of about 15,000 square meters, distributed in various zones around the central lake body. In 2024, during the post-project phase of the LIFE+11 Nat/IT/00094 “SOS Tuscan Wetlands” project, habitat restoration interventions were carried out in flooded areas covered by invasive vegetation.

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water quality	Proposed
Plant species	Implemented
Animal species (please specify)	Implemented
Birds	Implemented
Plant community	Implemented
Water regime monitoring	Proposed

Wintering Waterbird Censuses (IWC ISPRA), Heronry Censuses, Roost Censuses, Scientific Bird Ringing Sessions (ISPRA)

Invasive Plant Species: Monitoring and Habitat Restoration through Life SOS Tuscan Wetlands

Conservation of Hydrophytes in Decline

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

AA.VV., 2020 - Management Plan of the Special Conservation Area Lake Sibolla IT5120018. Drafted October 2022 (approval process not yet completed)

Tomei P.E., Guazzi. E., Kugler P.C. 2001 – The Wetlands of Tuscany. Survey on Floristic and Vegetational Components. Region of Tuscany, Florence.

Venturato E. & Petrini R. (eds.) 2001 – Along the Migration Routes. Research Projects on Vegetation, Avifauna, and Alien Species. Quaderni del Padule di Fucecchio n. 1. Research, Documentation and Promotion Center of Padule di Fucecchio.

Vezzani A., Bartolini A., Verducci D. (eds.) – The Birds of the Lake Sibolla Nature Reserve. Friends of Padule di Fucecchio for Biodiversity, LIPU.

Zenatello M., Baccetti N., Borghesi F. (2014). Results of the Wintering Waterbird Censuses in Italy. Distribution, Estimation, and Trends of Populations in 2001-2010. ISPRA, Report Series, 206/2014

Websites:
https://www.iucnredlist.org/
https://www.iucn.it/liste-rosse-ita liane.php
https://www.mase.gov.it/pagina/liste-rosse-nazionali
https://cites.org/eng/app/app endices.php
https://cms/int/en/species/appendix-i-ii-cms
https://www.coe.int/en/web/bern-con vention
https://www.mase.gov.it/pagina/direttiva-uccelli
https://www.mase.gov.it/pagina/dire ttiva-habitat
https://raccoltanormativa.consiglio.regione.toscana.it/articolo?urndoc=urn:nir:reg ione.toscana:legge:2015-03-19;30
http://vnr.unipg.it/habitat/index.jsp
https://dryades.units .it/floritaly/index.php

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
<2 file(s) uploaded>

iv. relevant Article 3.2 reports
<no file available>

v. site management plan
<no file available>

vi. other published literature
<no file available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:


The lake surface in winter (*Debora Agostini, 10-02-2009*)

Edges of the marsh area (*Debora Agostini, 10-02-2009*)


The heronry in winter (*Debora Agostini, 30-01-2015*)


The heronry established in spring (*Francesca Ruggeri, 16-05-2021*)


Blooming of Narcissus poeticus L. (*Francesca Ruggeri, 21-04-2024*)


Hygrophilous and helophytic tree and shrub vegetation in spring (*Francesca Ruggeri, 16-05-2021*)


The nature trail in spring (*Francesca Ruggeri, 16-05-2021*)

6.1.4 - Designation letter and related data

Designation letter
<1 file(s) uploaded>

Date of Designation: 2013-10-21