



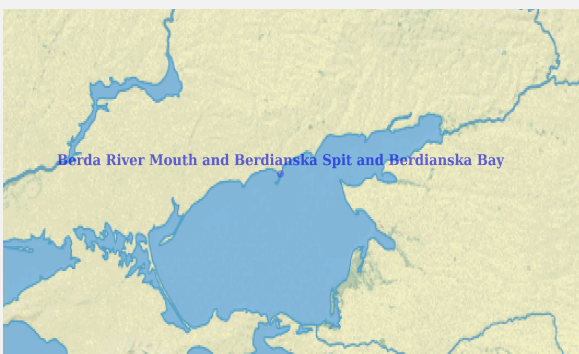
Ramsar Information Sheet

Published on 8 June 2022

Update version, previously published on : 1 January 1998

Ukraine

Berda River Mouth and Berdianska Spit and Berdianska Bay



Designation date	23 November 1995
Site number	772
Coordinates	46°44'05"N 36°49'33"E
Area	8 419,86 ha

RIS for Site no. 772, Berda River Mouth and Berdianska Spit and Berdianska Bay, Ukraine

Created by RSIS V.1.6 on - 8 June 2022

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 is situated on the northern coast of the Sea of Azov near the city of Berdiansk. It consists of two areas: the sand-shell spit, islands, adjacent bay of the Sea of Azov and the delta area of Berda River with numerous lakes-estuaries.

Both areas are important as places of post-breeding concentrations of waterfowl and migratory stopovers of waterbirds. Their gatherings are most numerous in August-October and reach 45000 of individuals. Lake-estuaries, marshy areas and meadows in the floodplain of Berda are nesting places of many waterfowl and shorebird species, among which *Fulica atra*, *Aythya ferina*, *Anas platyrhynchos* and *Podiceps cristatus* are most numerous. A number of bird species listed in international and national conservation lists occur here during migratory and nesting periods, for example, *Himantopus himantopus*, *Recurvirostra avosetta*, *Haematopus ostralegus*, *Anas strepera*, *Netta rufina* etc. The spit with islands adjoined from the West by Berdianska Bay is the wintering area of numerous waterbirds, such as *Aythya marila* (300 of ind.), *Bucephala clangula* (700 of ind.), *Anas platyrhynchos* (4500 of ind.) etc.

There are 420 plant species noted on the Site territory, among which 14 species are listed in the Red Data Book of Ukraine and 155 bird species are noted, 21 bird species are listed in the Red Data Book of Ukraine, including 18 waterbird species. In the Site there are 64 fish species, among them 5 species are listed in the Red Data Book of Ukraine. The area provides habitats for 7 amphibian and reptile species. Within the area about 30 species of mammals are noted and 8 species are listed in the Red Data Book of Ukraine.

The shallow coastal marine water area is used for fishing, tourism and recreation, including various types of active leisure (surfing, sea voyages, etc.) and health-resort treatment and recuperation.

The wetland is included to Pryazovskyi National Nature Park.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency	Pryazovskyi National Nature Park, Azov-Black Sea Ornithological Station
Postal address	I.Bogun St. 46, Melitopol, Melitopol District, Zaporizhzhia Region, Ukraine, 72319

National Ramsar Administrative Authority

Institution/agency	Ministry of Environmental Protection and Natural Resources of Ukraine
Postal address	35 Mytropolnya Vasylya Lypkivskogo Str.

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

From year	2012
To year	2018

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Berda River Mouth and Berdianska Spit and Berdianska Bay
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2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary	Yes <input type="radio"/> No <input checked="" type="radio"/>
(Update) B. Changes to Site area	the area has increased
(Update) The Site area has been calculated more accurately	<input checked="" type="checkbox"/>
(Update) The Site has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The Site area has increased because of a boundary extension	<input checked="" type="checkbox"/>
(Update) The Site area has decreased because of a boundary restriction	<input type="checkbox"/>
(Update) For secretariat only: This update is an extension	<input type="checkbox"/>

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?	Not evaluated
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2.2 - Site location

2.2.1 - Defining the Site boundaries

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

Former maps	0
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Boundaries description

The Site is situated on the northern coast of the Sea of Azov within Berdiansk District of the Zaporizhzhia Region. It includes the floodplain of Berda River, Berdianska Spit and coastal areas of the Sea of Azov. From the east and north, the wetland is bounded by villages Staropetrivka, Novopetrivka and Novovasyivka. It is bounded by the building areas of the City Berdiansk from the west. From the south, the Site is bounded by coastal sea area of 500-700 meters wide around Berdianska Spit.

In 2018 the boundaries of the Site was delineated more accurately increasing the total area by 6,620 ha and officially approved by Ukrainian Governance in 2021. The area was calculated based on the Land Cadastral Map of Ukraine using GIS tools.

2.2.2 - General location

a) In which large administrative region does the site lie?	Zaporizhzhia Region, Berdiansk District
b) What is the nearest town or population centre?	Berdiansk city

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):

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

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Steppic

Other biogeographic regionalisation scheme

Place in the system of zoogeographical zoning: the East Steppe (Pryazovya) site, Azov-Black Sea area, Pontic district, Steppe province, Arid Mediterranean-Central Asian subregion, Palearctic region (Shcherbak, 1988).

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

Berda river mouth zone is situated in dry steppe zone and it's representative wetland type for this area. Its important hydrological function is to support the existence of the system of numerous lakes-estuaries in its flood plain, especially during the dry period of the year. The river delta is joined with these lakes by special canals to form one hydrological system. Without water from Berda mouth area and downstream, lakes and the flood plain would be dry during the summer. Important breeding ground for waterfowl, including key hunting bird species would be lost. Input of water from Berda mouth area makes it possible to support water level in lakes, especially in summer and prevents drying up of lakes and adjacent wetlands which are important for waterfowl breeding.

Other reasons

The downstream area of the Berda river and the river mouth support the existence of flood plains, meadows and reed beds that are important breeding and foraging habitats for numerous waterbirds.

- Criterion 2 : Rare species and threatened ecological communities
- Criterion 3 : Biological diversity

Justification

On the Site area about 420 species of vascular plants are noted. Plants of families Asteraceae, Poaceae, Fabaceae, Brassicaceae, Chenopodiaceae dominate. In flora composition of the Site there are littoral-sand, sand-steppe, steppe, saline-meadow, saline land, shrubby, coastal water and water floral complexes.

Floodplain biotopes are occupied mostly by saline meadows (cl. Festuco-Puccinellietea), where *Elytrigia elongata*, *Carex extensa*, *Juncus gerardii*, *Limonium meyeri*, *Puccinellia distans*, *Tripolium pannonicum* are dominant species. On rather saline soils of the mainland-standing part of the spit and around the river mouth of Berda salt marsh spots are spreaded (cl. Salicornietea fruticosae, Thero-Salicornietea). Main dominants are *Aeluropus littoralis*, *Halocnemum strobilaceum*, *Halimione verrucifera*, *Salicornia prostrata*, *Suaeda salsa*. Coastal water cenosises are forming around the permanent streams (cl. Phragmito-Magno-Caricetea, Bolboschoenetea maritimi, Juncetea maritimi). *Phragmites australis*, *Bolboschoenus maritimus*, *Juncus maritimus* dominate here. Coastal part of the wetland, which is included in the Site area, is occupied by cenoses of littoral vegetation (beaches and dunes – cl. Cakiletea maritimae, Ammophiletea) and sandy steppes (*Festuceta vaginatae*). On the islands of Berdiansk bay there are saline, meadow and marsh types of vegetation.

Within the Site area 155 bird species, including 94 waterbird species were observed in different seasons of 2012-2018. Shallow lakes, reed beds, islands and marsh floodplain meadows provide optimal conditions for nesting, feeding and forming of post-breeding concentrations of hydrophilic birds, among which the most numerous are *Fulica atra*, *Aythya ferina*, *Anas platyrhynchos*.

Besides, 64 fish species inhabit marine water areas and the lower reaches of Berda River. Dominated fish species are round goby (*Neogobius melanostomus*), European anchovy (*Engraulis encrasicolus*), Black Sea sprat (*Clupeonella cultriventris*), which are actively used in fishing.

Within the Site about 30 species of mammals are noted. The area is important for bats that use it during migrations. A number of other species of mouse-like rodents are registered in steppe lands area.

In recent years, a certain increase of Eurasian otter (*Lutra lutra*) numbers should be noted, that is related to the reduction of anthropogenic pressure on this species.

The Site provides habitats for 7 species of amphibians and reptiles. The most numerous species are marsh frog (*Rana ridibunda*), sand lizard (*Lacerta agilis*) and dice snake (*Natrix tessellata*). On the steppe slopes of the Site there is a steppe viper *Vipera renardi*.

In general, the Site has united very diverse biotops: marine and freshwater, seaside dunes and sandbanks, floodplain saline meadows and steppe slopes, which clearly contributed to high biodiversity. An important factor of biodiversity preserving is the conservation status of the territory

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

Criterion 5 : >20,000 waterbirds

Overall waterbird numbers 46000

Start year 2012

Source of data: Bullitien ROM, 2018

Criterion 6 : >1% waterbird population

Criterion 7 : Significant and representative fish

Justification At the Site there are 3 critically threatened fish species listed in IUCN Red List, 5 species listed in the Red Data Book of Ukraine, including 3 vulnerable species and 1 endangered; 2 fish species are listed in Appendix 2 of CMS and 12 fish species are listed in Appendixes 2, 3 of Bern Convention.

Criterion 8 : Fish spawning grounds, etc.

Justification The wetland is important for fattening of the juveniles of *Acipenser gueldenstaedtii* and *Acipenser stellatus*

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	<i>Agropyron cimmericum</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EN	<input type="checkbox"/>		
TRACHEOPHYTA/ LILIOPSIDA	<i>Asparagus pallasii</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Astragalus onobrychis</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - LC	
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Astrodaucus littoralis</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Caragana scythica</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ LILIOPSIDA	<i>Carex liparocarpos</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - EN	
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Crambe maritima</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Glycyrrhiza glabra</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NE	
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Salsola mutica</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ LILIOPSIDA	<i>Stipa capillata</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine -NE	
TRACHEOPHYTA/ LILIOPSIDA	<i>Stipa lessingiana</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NE	
TRACHEOPHYTA/ LILIOPSIDA	<i>Stipa pennata</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ LILIOPSIDA	<i>Stipa rubens</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Tamarix gracilis</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ LILIOPSIDA	<i>Tulipa sylvestris australis</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ LILIOPSIDA	<i>Zostera marina</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	Appendix I of the Bern convention	

The flora of Berdianska spit includes a number of endemic species, which should be divided on 3 groups: endemics of littoral-steppe (Agropyron cimmericum Nevski, Arenaria leptoclados subsp. leptoclados, Asparagus maritimus (L.) Mill., Astragalus onobrychis L., Helichrysum arenarium subsp. ponticum (Velen.) Clapham, Papaver laevigatum M.Bieb., Polygonum arenarium subsp. arenarium), southern steppe sublittoral (Agropyron cristatum (L.) Gaertn., Gagea maeotica Artemczuk, Ornithogalum pyrenaicum L., Silene dolichocarpa (Klokov) S.K.Cherepanov, Linaria macroura (M. Bieb.) M.Bieb.) and halophyte-meadow complexes (Agrostis gigantea subsp. maeotica (Klokov) Tzvelev, Apera spica-venti (L.) P.Beauv., Juncus fominii Zoz, Odontites vulgaris subsp. vulgaris, Puccinellia dolicholepis (V.I.Krecz.) Pavlov). Within the Site area there are 15 species of vascular plants listed in the Red Data Book of Ukraine (RDB, 2009). Among them there are 9 vulnerable species and 1 endangered, other are not evaluated. On the wetland territory also 6 formations listed in the Green Data Book of Ukraine (GDB, 2009) are noted: of steppe almond Amydaleta nanae, of spear grass Stipeta borysthenicae and Stipeta capillatae, Stipeta lessingiana, Stipeta ucrainicae, Glycyrrhizeta glabrae formations. Among them there are 4 endangered groupings. Among the regionally rare phytocoenoses, 3 formations are noted here – formation of Astragaleta borysthenicae, of yellow Lucerne Medicageta kotovii, of Ephedreta distachyae.

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/MAMMALIA	<i>Eptesicus serotinus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine - VU	
CHORDATA/REPTILIA	<i>Eremias arguta</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>		Number is up to 1-2 ind/km near the river mouth of Berda and central part of Berdianska spit.
CHORDATA/MAMMALIA	<i>Nyctalus lasiopterus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2012-2018		VU	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine - EN	
CHORDATA/MAMMALIA	<i>Nyctalus leisleri</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine - VU	
CHORDATA/MAMMALIA	<i>Nyctalus noctula</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine - VU	
CHORDATA/MAMMALIA	<i>Phocoena phocoena</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10	2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine - VU, European Red List – VU	Occur in coastal waters in spring-autumn, the most frequently occur finds of dead animals
CHORDATA/MAMMALIA	<i>Pipistrellus pipistrellus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine - VU	
CHORDATA/MAMMALIA	<i>Plecotus austriacus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2012-2018		NT	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine - VU	
CHORDATA/MAMMALIA	<i>Vespertilio murinus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine - VU	
Fish, Mollusc and Crustacea																	
CHORDATA/ACTINOPTERYGII	<i>Acipenser gueldenstaedtii</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				CR	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU, Bern Convention – Appendix II, CMS – Appendix II	The wetland is important for fattening of the juveniles
CHORDATA/ACTINOPTERYGII	<i>Acipenser stellatus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>				CR	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU; Bern Convention – Appendix II, CMS – Appendix II	The wetland is important for fattening of the juveniles
CHORDATA/ACTINOPTERYGII	<i>Alburnus leobergi</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	widespread in Eastern Europe in the Sea of Azov basin
CHORDATA/ACTINOPTERYGII	<i>Huso huso</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>				CR	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - EN	
Birds																	
CHORDATA/AVES	<i>Anas crecca</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2700	2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>		The Site is important stopover place during seasonal migrations

RIS for Site no. 772, Berda River Mouth and Berdianska Spit and Berdianska Bay, Ukraine

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	<i>Anas platyrhynchos</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4050	2012-2018	0.3	LC	<input type="checkbox"/>	<input type="checkbox"/>		The wetland is important during migration periods (the number reaches 1400 ind.), in nesting period (about 150 pairs; with broods – 840 ind.) and in period of wintering (up to 4050 ind.).
CHORDATA/AVES	<i>Anser anser</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	40	2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>		The Site is one of the most important nesting places in the dry steppe zone of Ukraine. it's also wintering area for the species.
CHORDATA/AVES	<i>Aythya ferina</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3500	2012-2018	0.7	VU	<input type="checkbox"/>	<input type="checkbox"/>		The Site supports species during nesting and migration periods, the number in migration gatherings up to 3800 in favorable years.
CHORDATA/AVES	<i>Aythya marila</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	300	2013-2017	0.2	LC	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	<i>Bucephala clangula</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	700	2013-2017	2.3	LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine - NT	The Site supports species during wintering period, in some winters gatherings up to 700 individuals
CHORDATA/AVES	<i>Calidris ferruginea</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13	2012-2018		NT	<input type="checkbox"/>	<input type="checkbox"/>	Bern Convention – Appendix II	
CHORDATA/AVES	<i>Charadrius alexandrinus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10	2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine - VU, Bern Convention – Appendix II	Up to 5 pairs nest within the Site.
CHORDATA/AVES	<i>Charadrius hiaticula</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15	2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine - NT, Bern Convention – Appendix II	
CHORDATA/AVES	<i>Chroicocephalus ridibundus</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4000	2012-2018			<input type="checkbox"/>	<input type="checkbox"/>		The species forms significant seasonal concentrations in the wetland area
CHORDATA/AVES	<i>Circus pygargus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine - VU Bern Convention – Appendix II	Appear within the Site during migratory period
CHORDATA/AVES	<i>Cygnus cygnus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	65	2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>	Bern Convention – Appendix II	The Site is important wintering place for this species.
CHORDATA/AVES	<i>Cygnus olor</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	655	2012-2018	0.9	LC	<input type="checkbox"/>	<input type="checkbox"/>		The Site is a part of wintering area of this species
CHORDATA/AVES	<i>Fulica atra</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	17000	2012-2018	0.8	LC	<input type="checkbox"/>	<input type="checkbox"/>		During migration period number of birds reaches 17000, in post-breeding period – up to 5300, in breeding period – up to 3400 ind. (with broods).
CHORDATA/AVES	<i>Haematopus ostralegus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	92	2012-2018		NT	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine - VU	Up to 6 pairs nest within the Site.
CHORDATA/AVES	<i>Haliaeetus albicilla</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1	2012-2018		LC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Red Data Book of Ukraine - NT, Bern Convention – Appendix II	
CHORDATA/AVES	<i>Himantopus himantopus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	60	2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine - VU	Up to 30 pairs nest in the Site in favorable years.
CHORDATA/AVES	<i>Larus minutus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	22800	2012-2018	13.4		<input type="checkbox"/>	<input type="checkbox"/>	Bern Convention – Appendix II	The Site support species during summering and migrations. Pop: W ASI/AE MEDITERRANEAN, BLACK SEA & CASPIAN
CHORDATA/AVES	<i>Limosa limosa</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	60	2012-2018		NT	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/AVES	<i>Netta rufina</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	30	2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine – NT	up to 15 pairs nest on the territory of the Site.
CHORDATA/AVES	<i>Numenius arquata</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12	2012-2018		NT	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine – EN	
CHORDATA/AVES	<i>Recurvirostra avosetta</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	176	2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine – NT, Bern Convention – Appendix II	up to 88 pairs nest within the Site in favorable seasons.
CHORDATA/AVES	<i>Tringa stagnatilis</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	124	2012-2018		LC	<input type="checkbox"/>	<input type="checkbox"/>	Red Data Book of Ukraine – EN, Bern Convention – Appendix II	The Site is important for this species during migrations
CHORDATA/AVES	<i>Vanellus vanellus</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11	2012-2018		NT	<input type="checkbox"/>	<input type="checkbox"/>		

1) Percentage of the total biogeographic population at the site

The Site is important for breeding, migratory stopovers and wintering of 94 waterbird species, 42 of which are listed in Appendix 1 of CMS, and 8 – in IUCN Red List in categories VU and NT. 30 species of waterbirds occur in the wetland on nesting. During migrations species which are protected by other international agreements and listed in the Red Data Book of Ukraine are noted, first of all, these are White-tailed Eagle (*Haliaeetus albicilla*), Common Ringed Plover (*Charadrius hiaticula*), Eurasian Curlew (*Numenius arquata*), Curlew Sandpiper (*Calidris ferruginea*), Common Crane (*Grus grus*). Their number is on the level of 10-20 individuals.

The fish fauna of the wetland has a tendency to change, which is caused by the transformation of hydroecological conditions in the Sea of Azov. In recent years (2015-2018), the level of salinity has increased to 13-14 g/l, it led to a significant decrease of freshwater forms in the ichthyofauna composition.

Analyzing the number of fishes listed in the Red Data Book of Ukraine it should be noted that the largest number has *Alburnus leobergi*. European sturgeon (*Huso huso*), Russian sturgeon (*Acipenser gueldenstaedtii*) and starry sturgeon (*Acipenser stellatus*) are much less common and rarer in catches. Freshwater ichthyofauna of the Berda River has a tendency to change. The main causes of these changes are: the loss of spawning grounds and the low number of resource fish species (zander *Sander lucioperca*, white bream *Blicca bjoerkn*, common bream *Abramis brama*). Hydrological problems which occur in the mouth part of the river do not allow the passage of species for spawning. The main cause is a significant reduction of river runoff and along-coastal deposits which close the river mouth part.

Marine water areas are important for spawning and fattening of many fish species listed in Appendix 3 of the Bern Convention, namely monkey goby (*Neogobius fluviatilis*), Syrman goby (*Neogobius syrman*), Ukrainian stickleback (*Pungitius platygaster*), black-striped pipefish (*Syngnathus nigrolineatus*).

A number of rare species of insects listed in the Red Data Book of Ukraine and international environmental lists occur on the Site area, namely Stizus fasciatus, praying mantis (*Irys polystictica*), seathorn hawk-moth (*Hyles hippophaes*), etc.

The most common representatives of benthic aquatic invertebrates of the wetland are *Neantes succinea* (Leuckart, 1847), *Theodoxus astrachanicus* (Starobogatov in Starobogatov, Filchakov, Antonova et Pirogov, 1994), *Bittium reticulatum* (Da Costa, 1778), *Rissoa venusta* Philippi, 1844, *Hydrobia acuta* (Draparnaud, 1805), *Cerastoderma glaucum* (Poiret, 1789), *Abra ovata* (Philippi, 1836), *Lentidium mediterraneum* (O.G. Costa, 1829), *Sphaeroma pulchellum* (Colosi, 1921), *Idotea baltica basteri* (Audouin, 1827), *Gammarus aequicauda* (Martinov, 1931), *Pontogammarus maoticus* (Sovinskyi, 1894).

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
A2.61 Seagrass beds on littoral sediments	<input checked="" type="checkbox"/>	Hyperhaline water plant communities. Dominants are species from genus <i>Zannichellia</i> , <i>Zostera</i> , <i>Potamogeton</i>	Listed in Resolution 4 of the Bern Convention.
B1.3 Shifting coastal dunes	<input checked="" type="checkbox"/>	Plant communities along beaches, dominants are <i>Leymus sabulosus</i> , <i>Crambe pontica</i> , <i>Eryngium maritimum</i> . Vegetation is composed of many endemic species.	Listed in Resolution 4 of the Bern Convention.
B1.1 Sand beach driftlines	<input checked="" type="checkbox"/>	Plant communities along beaches, dominants are <i>Argusia sibirica</i> , <i>Salsola pontica</i> , <i>S. soda</i> , <i>Euphorbia peplis</i> . Vegetation is very open and composed of many endemic species.	Listed in Resolution 4 of the Bern Convention.
B1.8 Moist and wet dune slacks	<input checked="" type="checkbox"/>	Moist or wet depressions in coastal dune systems, seasonally moist or flooded by fresh water. Vegetation is composed of <i>Scirpoides holoschoenus</i> , <i>Puccinellia distans</i> , <i>Elytrigia elongate</i> .	Listed in Resolution 4 of the Bern Convention.
C1.3411 Water crowfoot communities in shallow water	<input checked="" type="checkbox"/>	Water plant communities in the mouth of Berda River and weakly saline lakes. Dominant species is <i>Batrachium rionii</i>	Listed in Resolution 4 of the Bern Convention.

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
E1.2 Perennial calcareous grassland and basic steppes	<input checked="" type="checkbox"/>	Cliff plant communities atop of the spit, dominants are species of genus <i>Festuca</i> , <i>Agropyron</i> , <i>Stipa</i> .	Listed in Resolution 4 of the Bern Convention.
F9.3 Southern riparian galleries and thickets	<input checked="" type="checkbox"/>	Shrub halophyte plant communities where dominant species is <i>Tamarix gracilis</i>	Listed in Resolution 4 of the Bern Convention.
B1.4 Coastal stable dune grassland (grey dunes)	<input checked="" type="checkbox"/>	Plant communities on fixed or semifixed dunes of the coasts. Dominants are <i>Carex colchica</i> , <i>Secale sylvestre</i> , <i>Festuca beckeri</i> , <i>Stipa borysthenica</i> .	Listed in Resolution 4 of the Bern Convention.
C1.33 Rooted submerged vegetation of eutrophic waterbodies	<input checked="" type="checkbox"/>	Flooded plant communities in the mouth of Berda River, dominants are <i>Ceratophyllum demersum</i> , <i>Myriophyllum spicatum</i> , <i>Potamogeton pectinatum</i>	Listed in Resolution 4 of the Bern Convention.
Formation of <i>Stipeta capillatae</i>	<input checked="" type="checkbox"/>	Steppe plant communities where dominants are <i>Stipa capillata</i> , subdominants are <i>S. lessingiana</i> , <i>S. ucrainica</i> etc.	Included into Green Data Book of Ukraine (2009) as typical and stable steppe formation, category I, II; 4; typical.
Formation of spear grass <i>Stipa pennata</i> subsp. <i>sabulosa</i> (synonym of <i>Stipa borysthenica</i>) Formation of <i>Stipeta borysthenica</i>	<input checked="" type="checkbox"/>	Sand steppe plant communities where dominants are <i>Stipa pennata</i> subsp. <i>sabulosa</i> (synonym of <i>Stipa borysthenica</i>), subdominants are <i>S. capillata</i> , <i>S. ucrainica</i> etc.	Included into Green Data Book of Ukraine (2009) as unique association of dominant species of sand steppe, category I, II; 2; endangered.
Formation of <i>Stipeta ucrainicae</i>	<input checked="" type="checkbox"/>	Threatened dry steppe endangered grouping where dominants are <i>Stipa rubens</i> (synonym of <i>Stipa pennata</i>)	Included into Green Data Book of Ukraine (2009), category I, II; 2; endangered.
Formation of <i>Glycyrrhiza glabrae</i>	<input checked="" type="checkbox"/>	Threatened southern steppe grouping where dominants are <i>Glycyrrhiza glabra</i> , subdominants are <i>Carex colchica</i> , <i>Helichrysum arenarium</i> etc.	Included into Green Data Book of Ukraine (2009), category I; 4; endangered.
Formation of <i>Stipeta lessingianae</i>	<input checked="" type="checkbox"/>	Typical for Ukraine steppe groupings where dominants are <i>Stipa lessingiana</i> , subdominants are <i>S. capillata</i> , <i>S. ucrainica</i> etc.	Included into Green Data Book of Ukraine (2009), category I, II; 3; typical.
A2.5 Coastal saltmarshes and saline reedbeds	<input checked="" type="checkbox"/>	Saltmarsh plant communities formed by <i>Salicornia prostrata</i> , <i>Suaeda salsa</i> , <i>Salsola soda</i> , <i>Halimione verrucifera</i> , <i>Petrosimonia oppositifolia</i>	Listed in Resolution 4 of the Bern Convention.
X29 Salt lake islands	<input checked="" type="checkbox"/>	Permanently or usually emergent features of inland saline lakes and of permanent or temporary saline lakes. Dominants are <i>Argusia sibirica</i> , <i>Artemisia santonica</i> , <i>Salsola soda</i> , <i>Salicornia prostrata</i> .	Listed in Resolution 4 of the Bern Convention.
Formation of steppe almond <i>Amygdala nanae</i>	<input checked="" type="checkbox"/>	Bush-steppe plant communities where dominants are <i>Prunus tenella</i> Batsch (synonym of <i>Amygdalus nana</i>)	Included into Green Data Book of Ukraine (2009) as threatened association, category II; 3; endangered.

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

4.1 - Ecological character

The Berdianska spit is 23 km long and it is situated at the northern coast of the Sea of Azov. Sand-shell beaches and dunes dominate on the east side and on the top of Berdianska spit, the western coast is lowland. A number of small accumulative islands are situated in the bay along the coast, the largest of them – Great Dzendzyk and Small Dzendzyk, which are important for waterbird nesting. In the widest part of the spit, along the sea coast there are small, shallow salt lakes, most of which in the past were mainly estuaries, and then they gradually have separated from the sea (Krugle, Dovge, Mazankove, Gnyle, estuaries Krasnoper, Solodkyi etc.). Some lakes (Krugle, Mazankove) along the coast are covered with reed and form valuable places for nesting and rest of waterfowl. The salinity of lakes varies from 4-6 g/l (estuary Solodkyi) to 130 g/l (Dovge lake). The area of the mouth zone of Berda River is situated in the eastern part of the wetland. Partly preserved floodplain marshes, open shallow areas with low marsh vegetation, partially saline floodplain lakes, floodplain meadows and wet salt flats are represented here. All these habitats are important as nesting places for birds of hydrophilic complex.

The hydrological regime of the delta is characterized by seasonal cyclic changes. During the flood, the water level rises and the river floods a significant part of the delta. In the low water period most of channels are shallow, the delta dries, water is preserved only in several river-beds. Sea water areas around the spit and waters adjacent to the mouth of Berda River are typical for the northern sea coast.

Soils are shell-sand and silty-sand. The gradual increase of salinity to 13-14‰ is typical for the sea water areas, that is caused by a reduction of river runoff and climatic changes. This has a negative effect on aquatic biocenoses and leads to the decrease of hydro ecosystems productivity.

The top of the Berdianska spit has the status of protected landscape area of local significance. The Great Dzendzyk and Small Dzendzyk are complex nature monuments of local significance, Floodplain of Berda River is National Landscape Reserve. Also, the large part of the wetland is included into the Pryazovskiy National Nature Park.

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
A: Permanent shallow marine waters		3	200	
B: Marine subtidal aquatic beds (Underwater vegetation)		2	120	
E: Sand, shingle or pebble shores		2	300	
J: Coastal brackish / saline lagoons	Berdianska bay	1	600	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	mouth zone of Berda River	1	460	Representative
Saline, brackish or alkaline water > Lakes >> Q: Permanent saline/ brackish/ alkaline lakes		4	50	Representative
Saline, brackish or alkaline water > Lakes >> R: Seasonal/ intermittent saline/ brackish/ alkaline lakes and flats		4	15	Representative

Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type
9: Canals and drainage channels or ditches		4	2

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Steppe areas	20
Afforestation	25
Built-up land-uses	10

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTAMAGNOLIOPSIDA	<i>Medicago falcata</i>	endemic species

Invasive alien plant species

Phylum	Scientific name	Impacts	Changes at RIS update
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Ailanthus altissima</i>	Potential	increase
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Ambrosia artemisiifolia</i>	Actual (minor impacts)	No change
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Artemisia absinthium</i>	Actual (minor impacts)	No change
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Cyclachaena xanthiifolia</i>	Actual (minor impacts)	No change
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Elaeagnus angustifolia</i>	Actual (major impacts)	increase
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Grindelia glutinosa</i>	Actual (minor impacts)	increase
TRACHEOPHYTA/LILIOPSIDA	<i>Hordeum murinum</i>	Actual (minor impacts)	No change
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Ribes aureum</i>	Actual (minor impacts)	increase
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Sisymbrium volgense</i>	Actual (minor impacts)	No change
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Xanthium orientale riparium</i>	Actual (major impacts)	increase

4.3.2 - Animal species

Invasive alien animal species

Phylum	Scientific name	Impacts	Changes at RIS update
CHORDATA/ACTINOPTERYGII	<i>Lepomis gibbosus</i>	Actual (minor impacts)	unknown
CHORDATA/MAMMALIA	<i>Nyctereutes procyonoides</i>	Actual (major impacts)	unknown

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude climate with cold winters	Dfa: Humid continental (Humid with severe winter, no dry season, hot summer)

The climate is temperate continental with short mild winter and long hot summer. Annual precipitations are 300-400 mm/year while evaporation is 800-900 mm. The average temperature of water in the summer is +22-30°C; in winter is about 0°C. In winter, the bay freezes.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- 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.

The Berda River belongs to the Sea of Azov basin

4.4.3 - Soil

Mineral

(Update) Changes at RIS update No change Increase Decrease Unknown

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)

Soils of the spit are chernozemic shell-sandy and silt-sandy, on the loess coast – southern chernozems. Marine soils - silt-shelly, rarely sandy.

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from precipitation	<input checked="" type="checkbox"/>	No change
Marine water	<input checked="" type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
Marine	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels largely stable	unknown

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology.

Phenomenon of longshore drift of the Sea of Azov effects on the hydrological regime of most part of the wetland, namely on the Berdianska spit, the adjacent bay and some parts of the mouth of Berda River. The water level in small salt lakes, which are located in the middle part of the spit, depends on nourishing by the waters of the Sea of Azov. Berda, as the average river of the steppe type, in arid periods of the year, especially in summer, becomes shallow, but with a periodicity about of every 5 years, the amount of precipitation exceeds the norm, and the floodplain of the river is completely covered with wetland vegetation during a water level of 5 cm to 1 m.

4.4.5 - Sediment regime

Sediment regime unknown

(ECD) Water temperature

The water temperature in Berdianska Bay in summer is up to 22-30°C, in winter its temperature is about 0°C.

4.4.6 - Water pH

Alkaline (pH>7.4)

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

Please provide further information on pH (optional):

pH of water in the Berdianska Bay near Berdianska Spit was 8,1 – 8,61

4.4.7 - Water salinity

Fresh (<0.5 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Mixohaline (brackish)/Mixosaline (0.5-30 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Euhaline/Eusaline (30-40 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Hyperhaline/Hypersaline (>40 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

Please provide further information on salinity (optional):

Water salinity in the Berdianska bay is 13.0-14.0‰. The water salinity of lakes and estuaries varies from 4-6 g/l (estuary Solodkyi) to 130 g/l (Dovge lake). In the river Berda - 2,7-3,2 g/l.

(ECD) Dissolved gases in water

The content of oxygen in the water (O₂, mg/l) 5.5 – 6.06 (2017 year)

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic

(Update) Changes at RIS update No change Increase Decrease Unknown

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 surrounding area includes the resort city Berdiansk, around the Ramsar site the territory is also densely occupied by clinic-resort complexes and country-style single-, two-stored buildings of a seasonal character of use. There are also about 5 villages surrounded by lands of agricultural use. The seacoast to the west of the Site is cut by a number of barks of different depths and lengths.

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)	High
Fresh water	Drinking water for humans and/or livestock	Medium
Wetland non-food products	Livestock fodder	Low
Wetland non-food products	Reeds and fibre	Low

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	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	High
Recreation and tourism	Water sports and activities	High
Scientific and educational	Long-term monitoring site	High

Supporting Services

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

Optional text box to provide further information

On the Berdianska spit about 70 clinics, madhouses and numerous recreation institutions are located. Lakes-estuaries serve as a source of therapeutic mud. Most of the local population traditionally is engaged in fishing. One of the oldest lighthouses of the Sea of Azov is situated here (Lower Berdiansk lighthouse), which is more than 160 years old. On the sea water area, industrial fishery is developed.

Within the site: 10000

Outside the site: 600000

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

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
Provincial/region/state government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Local authority, municipality, (sub)district, etc.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other public ownership	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Cooperative/collective (e.g., farmers cooperative)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

Berdiansk City Council; Priazovskyi National Nature Park

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

Volovyk Dmytro Ivanovych, Director of Priazovskyi National Nature Park

Postal address:

I.Bogun St. 46, Melitopol, Melitopol District, Zaporizhzhia Region, Ukraine, 72319

E-mail address:

priazovpark@gmail.com

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	Changes	In the surrounding area	Changes
Housing and urban areas	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Tourism and recreation areas	High impact	High impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Commercial and industrial areas	High impact	High impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Canalisation and river regulation	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Fishing and harvesting aquatic resources	High impact	High impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Medium impact	High impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Dams and water management/use	High impact	High impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/ alien species	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Industrial and military effluents	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Household sewage, urban waste water	Medium impact	Medium impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Garbage and solid waste	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Geological events

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Unspecified			<input checked="" type="checkbox"/>		<input type="checkbox"/>	

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Storms and flooding	High impact	High impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Droughts	High impact	High impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

5.2.2 - Legal conservation status

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Other international designation	Object UA0000092 of Emerald Network in Ukraine Pryazovsky National Nature Park	https://natura2000.eea.europa.eu/Emerald/SDF.aspx?site=UA0000092&release=2	partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Nature Park	Priazovskyi	http://pnpp.info/	partly

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	UA077 - Berdyans'ka peninsula	http://datazone.birdlife.org/site/factsheet/berdyanska-peninsula-iba-ukraine/details	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

5.2.5 - Management planning

Is there a site-specific management plan for the site? No

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
Birds	Implemented
Water quality	Implemented
Plant species	Implemented
Animal species (please specify)	Implemented

Within the framework of the regional ornithological monitoring program (ROM), implemented by Interdepartmental Azov-Black Sea Ornithological Station, census of wintering birds and August census of post-breeding ornithocomplex are periodically conducted. Within the implementation of the Program of Nature chronicles of Pryazovsky National Nature Park are conducted annual censuses of birds, insects are conducted, as well as researches of water status, of benthic and planktonic groupings, of phytodiversity, ichthyofauna and herpetofauna.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Diadicheva E.A., Chernichko R.N., Andrushchenko Y.A., Bronskov A.I. Materials for the avifauna of the middle stream and lower reaches of Berda River and contiguous lakes // Natural, historical and cultural heritage of the Kamyana Mohyla Reserve. Scientific works of the All-Ukrainian scientific-practical conference (v. Nazariivka, Donetsk region, May 25-27, 2017 year) / Labor department "Kamyani Mohyly" of USNR NAS of Ukraine. – Issue 4 / Series «Conservation Biology in Ukraine». – Zaporizhia: Dyke Pole, 2017. – p. 238-256.

Kolomiychuk V.P. Synopsis of the flora of vascular plants of the coastal zone of the Sea of Azov / V.P. Kolomiychuk / by ed. Of T.L. Andriyenko. – K.: Alterpress, 2012. – 300 p.

Kolomiychuk V.P., Tyscchenko O.V. National Nature Park Priazovsky / Phytodiversity of reserves and national nature parks of Ukraine. P. 2. National Nature Parks / The team of authors by ed. Of V. A. Onishchenko and T.L. Andriyenko. – Kyiv: Phytosocialcenter, 2012. – p. 392–411.

Korotchenko I.A. Flora types of Ukraine in the database of the International Union for the Conservation of Nature (IUCN) / I.A. Korotchenko, S.L. Mosiakin // Vegetation world in the Red Data Book of Ukraine: implementation of the Global Strategy for plant conservation / Materials of the 3rd Internat. Scient. Conf. (June 4-7, 2014 year, c. Lviv). – Lviv, 2014. – P. 42-47.

Nature chronicles of Priazovsky National Nature Park (2015 year). Vol. V. In 2 parts. / Under the general editorship of Barabokha N. M. // Antonovsky O.G., Barabokha N. M., Barabokha O.P., Bren O.G., Vovk O.A., Zolotova G.V., Demchenko V.O., Diadicheva O.A., Mykytynets G.I., Suchkov S.I., Tkachenko V.V., Tkachenko M.Y., Yarova T.A., Yarovy S.O. – Priazovsky National Nature Park. – Melitopol, 2016. – p.632 – Ukr. - Dep. of SSTL of Ukraine 22.06.2016, № 7 - Uk 2016

Nature chronicles of Priazovsky National Nature Park (2017 year). Vol. VII Under the general editorship of Barabokha N. M. // Antonovsky O.G., Barabokha N. M., Barabokha O.P., Bren O.G., Vovk O.A., Zolotova G.V., Demchenko V.O., Diadicheva O.A., Mykytynets G.I., Suchkov S.I., Tkachenko V.V., Tkachenko M.Y., Yarova T.A. - Priazovsky National Nature Park. – Melitopol, 2018. – p. 597

Protopopova V.V. Invasive plants in flora of the Northern Black Sea Coast / [Protopopova V.V., Shevera M.V., Mosiakin S.L. etc.]. - K: Phytosocialcenter, 2009. – p. 56.

Red Data Book of Ukraine. Vegetation world / by ed. of Y.P. Didukh. – K.: Globalconsalting, 2009. – p. 900.

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:



Floodplain lakes in Berda mouth (Elena Diadicheva, 24.05.2017)



Floodplain lakes in Berda mouth (Elena Diadicheva, 17.08.2014)



Floodplain lakes in Berda mouth (Elena Diadicheva, 20-08-2014)



Berdianska Spit and Berdianska Bay (Elena Diadicheva, 28-04-2017)



Berdianska Spit and Berdianska Bay (Elena Diadicheva, 20-08-2014)



Berdianska Spit and Berdianska Bay (Elena Diadicheva, 20-08-2014)



Berdianska Spit and Berdianska Bay (Elena Diadicheva, 28-04-2017)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1995-11-23