

Ramsar Information Sheet

Published on 8 June 2022 Update version, previously published on : 1 January 1998

Ukraine

Bilosaraiska Bay and Bilosaraiska Spit



Designation date 23 November 1995

Site number 773

Coordinates 46°54'43"N 37°16'33"E

Area 11 280,80 ha

Color codes

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

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

1 - Summary

Summary

The Site is a shallow sea bay, freezing in winter, and a sandy, shelly spit. Bilosaraiska spit is of triangular shape, 12 km wide at the base and 14 km long. Villages of Melekine and Bilosaraiska Kosa, which are popular as holiday resorts among the local people, are located along the whole eastern coast of the spit. Bird colonies are situated at the top of the spit. The western part of the spit is low, with numerous shallow lakes, salty wet soils, salty and freshwater marshes and halophytic meadows; the coast of Bilosaraiska Bay is silty and covered with reed beds. During the storms and surging, reservoirs are replenished with seawater. The deepest points of the bay are up to 5 m deep; its bottom in many areas is overgrown with Zostera marina and other aquatic plants, which provide abundant feeding resources for fish and birds. The northern part of the wetland in the lower course of the Mokra Bilosarayka river is represented by flooded marsh complexes. The territory is important for conservation of typical flora and vegetation of the coastal zone of the Sea of Azov and as a habitat for numerous stenotop, endemic and rare plant species, which number has been sharply decreasing in recent decades because of coast management. In total, more than 600 species of vascular plants grow there, 2 of which are listed in the IUCN Red List, 2 - in the Annex I of the Bern Convention, 14 species are listed in the Red Data Book of Ukraine and 30 species are protected regionally. Near 30 species and forms of plants are endemic and sub-endemic for the Southeast of Ukraine. There are 14 types of natural habitats that should be protected and are listed in the Resolution 4 of the Bern Convention. The wetland is inhabited by more than 200 bird species; about 20 thousand pairs of 100 bird species choose this territory for nesting, and about 40 thousand migrating individuals of waterbird species can be observed here simultaneously. Eleven species of birds and 4 species of fish, which can be found on the wetland territory, are listed in the IUCN Red List as NT or higher categories; yet another 59 species of vertebrates are listed in the Red Data Book of Ukraine. Since the wetland is a part of the Azov-Black Sea migration route, it takes on particular significance for migrating or wintering birds.

The wetland is situated on the Sea of Azov Northern coast in the South of the Donetsk region. Most part of it belongs to the National Nature Park "Meotyda".

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the com	piler of this RIS	
Responsible compiler		

National Nature Park 'Meotyda'
Prymorska str., 12, Urzuf village, Mangushskiy District, Donetsk Region, Ukraine, 87455
ve Authority
Ministry of Environmental Protection and Natural Resources of Ukraine
35, Vasilya Lipkivs'kogo Street

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)

Bilosaraiska Bay and Bilosaraiska Spit

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 No O
^(Update) The boundary has been delineated more accurately ☑
^(Update) The boundary has been extended ✓
(Update) The boundary has been restricted
(Update) B. Changes to Site area the area has increased
^(Update) The Site area has been calculated more accurately ☑
^(Update) The Site has been delineated more accurately ☑
^(Update) The Site area has increased because of a boundary extension ✓
(Update) The Site area has decreased because of a boundary restriction
(Update) For secretariat only: This update is an extension

2.1.5 - Changes to the ecological character of the Site

2.1.5 - Ghanges to the ecological character of the offe
(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS? Yes (likely)
(Update) Are the changes Positive O Negative ● Positive & Negative O
(Update) Negative % 10
(Update) No information available
(Update) Optional text box to provide further information
Climate change towards warming leads to a significant shortening of the frost season and ice-cover period on the Sea of Azov, as well as dry winters. Inland lakes, located on the spit and filled with precipitation, dry up more often due to climatic conditions.
(Update) Changes resulting from causes operating within the existing boundaries?
^(Update) Changes resulting from causes operating beyond the site's boundaries? ✓
(Update) Changes consequent upon site boundary reduction alone (e.g., the exclusion of some wetland types formerly included within the site)?
(Update) Changes consequent upon site boundary increase alone (e.g.,

(Update) Please describe any changes to the ecological character of the Ramsar Site, including in the application of the Criteria, since the previous RIS for the site.

The decrease in water levels in inland lakes is caused by natural factors. This changes the feed base for the birds. However, the description additionally substantiates criteria 2 and 5, which were not specified in the previous version of the sheet.

(Update) Is the change in ecological character negative, human-induced

AND a significant change (above the limit of acceptable change)

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<2 file(s) uploaded:

Former maps 0

Boundaries description

The wetland is located on the Northern coast of the Sea of Azov and includes the entire Bilosaraiska Bay with a border from the end of the Bilosaraiska Spit to the coastal village of Yurievka.

The Site occupies the entire territory of the Bilosarai Spit to the high slope of the bedrock, which serves as its natural boundary on the northern side. On the west side of the Site is bounded by the village of Yalta, on the northeast - the village of Melekine, on the other hand - the Sea of Azov. The village of Bilosaraiska Kosa is located on the territory of the Site on the eastern side of the spit. Borders almost accurately correspond to the boundaries of National natural park "Meotyda".

Administratively, it is situated within the Mangushs'ky district of the Donetsk region. A large industrial city of Mariupol is located over a distance of 11 km. In 2018 the boundaries of the Site was extended and delineated more accurately increasing the total area by 9,281 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?	Donetsk Region
b) What is the nearest town or population centre?	Mangush village, Mariupol

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries?

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?

2.2.4 - Area of the Site

Official area, in hectares (ha): 11280.8

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

11280.804

2.2.5 - Biogeography

Biogeographic regions

siogeographic regions								
Regionalisation scheme(s)	Biogeographic region							
Marine Ecoregions of the World (MEOW)	the Sea of Azov							
EU biogeographic regionalization	Stepic							

Other biogeographic regionalisation scheme

According to physiographic zoning of Ukraine, the site is located within the Azov (Pryazovska) lowland of the Dnipro Left Bank–Azov (Livoberezhnodniprovsko–Pryazovsky) Region of the Steppe Zone. According to geo-botanical zoning, the wetland is located within the Azov (Pryazovsky) district of grassland steppes and vegetation of granites areas of the Pontic Steppe Province of the Steppe Zone. According to zoogeographical zoning, it is the Syvash–Azov sub-area of the Azov–Black Sea Rayon of the Pontic District of the Steppe Province of the Mediterranean – Central Asian Sub-Region of Palaearctic Region.

National Scheme of biogeographic regionalisation. National Atlas of Ukraine. – Kyiv: State scientific production enterprise 'Kartographia', 2007. – 440 p.

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

<no data available>

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

Typical for the Sea of Azov aquatic, marsh, halophyte, meadow- halophyte, coast-psammophyte and steppe- psammophyte complexes have been preserved in the wetland's territory (as a representative landscape formation of the Northern part of the Sea of Azov) in their undisturbed or low-disturbed condition, in whole their wildlife diversity, which

determines the wetland's key importance in regional biodiversity maintanence.

The total number of animal species reported within the site is: Arthropoda – more than 1500 species, Justification Actinopterygii – 59 species, Amphibia – 3, Reptylia – 5, Aves – 216 (including water birds – 107), Mammalia – 23; plant species: Gymnospermae – 1 species, Angiospermae – 610 species. Other groups have not been studied. The dominant families are Asteraceae, Poaceae, Brassicaceae, Fabaceae, Chenopodiaceae, Lamilaceae, etc. Genera Artemisia, Plantago, Chenopodium, Polygonum, Carex, Cerastium, etc. are the most species-rich genera. Specific environmental conditions have predetermined the existence of numerous stenotope, endemic and subendemic species and forms of plants in the wetland.

- Criterion 4 : Support during critical life cycle stage or in adverse conditions
- ☑ Criterion 5 : >20.000 waterbirds

Overall waterbird numbers 40000

Start year 2012

Source of data

Bronskov, 2017; Bronskov, Byi, 2017; Bronskov, Dyadicheva, 2017; Bronskov, Mosin, 2016; Bronskov, Mosin. 2017; Bronskov et al., 2017; Molodan et al., 2014; Molodan et al., 2017

- ☑ Criterion 6 : >1% waterbird population
- Criterion 7 : Significant and representative fish

Justification

Three species of fish listed in the IUCN Red List and 8 in the Red Data Book of Ukraine occur in the waters of the Site.

Criterion 8 : Fish spawning grounds, etc.

The wetland's water area is used for feeding and spawning by numerous fish species, such as Clupeonella cultriventris, Engraulis engrasicholus maeoticus, Neogobius melanostomus, which further become a feeding resource for birds and other animals.

Justification The wetland "Bilosaraiska Bay and Bilosaraiska Spit" plays an important role in rare animal species conservation. Its territory is used as a feeding ground by Huso huso ponticus, Acipenser stellatus, Acipenser gueldenstaedtii, Alburnus leobergi, listed in the IUCN Red List and the Red Data Book of Ukraine.

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	Agropyron cimmericum	/	2		EN			
TRACHEOPHYTA/ LILIOPSIDA	Allium regelianum	2	✓				listed in the Red Data Book of Ukraine - NT, appendix I of the Bern Convention	
TRACHEOPHYTA/ LILIOPSIDA	Anacamptis coriophora	/	✓				listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ LILIOPSIDA	Asparagus brachyphyllus	/					listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Astragalus onobrychis		2		LC		listed in the Red Data Book of Ukraine - LC	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Astrodaucus littoralis	₽	2				listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ LILIOPSIDA	Carex liparocarpos	/	✓				listed in the Red Data Book of Ukraine - CR	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Centaurea taliewii	V					listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Crambe maritima	2					listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Frankenia pulverulenta	2	₹				listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ LILIOPSIDA	Gladiolus tenuis	2					listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Glaucium flavum	✓					listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Medicago falcata falcata	₽					VU IUCN Red list Europe	endemic (Medicago kotovii)
TRACHEOPHYTA/ MAGNOLIOPSIDA	Salsola acutifolia	2					listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ LILIOPSIDA	Stipa lessingiana				LC		listed in the Red Data Book of Ukraine - NE	
TRACHEOPHYTA/ LILIOPSIDA	Stipa pennata sabulosa	₽					listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Tamarix gracilis	 ✓	₹				listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ LILIOPSIDA	Tulipa sylvestris australis	/					listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ LILIOPSIDA	Zostera marina	/	✓		LC		appendix I of the Bern Convention	

Within the wetland, two species of plants – Agropyron cimmericum and Medicago kotovii are listed in the IUCN Red List, both species being endemic to Ukraine. Anacamptis coriophora (CITES Appendix II) population has been found in Bilosaraiska Spit (the only known locality among the all Azov spits), which is a rare, non-typical habitat for Orchidaceae species, as well as unusually large populations of Gladiolus tenuis (RDBU) and Allium regelianum (RDBU). The latter is also listed in the Annex I of the Bern Convention, as well as Zostera marina, which is the most important feeding plant for local and migratory aquatic birds in this wetland. Fourteen plant species are listed in the Red Data Book of Ukraine.

No strict endemic species, confined only to the wetland territory, have been reported yet. Nevertheless, about 30 plant species endemic and subendemic to the Southeast of Ukraine grow in the Bilosaraiska Spit, 30 species are protected regionally, 9 species are relict.

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

Phylum	Scientific name	Species qualifies under criterion 2 4 6	co	Species ontributes under criterion	Pop. Size	Period of pop. Est.	%	IUCN	CITES	CMS Appendix I	Other Status	Justification
Others												
CHORDATA/ REPTILIA	Dolichophis caspius							LC			listed in the Red Data Book of Ukraine - VU	
CHORDATA/ MAMMALIA	Eptesicus serotinus serotinus										listed in the Red Data Book of Ukraine - VU	
CHORDATA/ MAMMALIA	Phocoena phocoena							LC			listed in the Red Data Book of Ukraine - VU	
CHORDATA/ MAMMALIA	Pipistrellus kuhlii							LC			listed in the Red Data Book of Ukraine - VU	
Fish, Mollusc a	nd Crustacea											
CHORDATA / ACTINOPTERYGII	Acipenser gueldenstaedtii							CR			listed in the Red Data Book of Ukraine - VU	feeding ground
CHORDATA / ACTINOPTERYGII	Acipenser stellatus							CR			listed in the Red Data Book of Ukraine - VU	feeding ground
CHORDATA / ACTINOPTERYGII	Alburnus leobergi							LC			listed in the Red Data Book of Ukraine - VU	feeding ground
CHORDATA / ACTINOPTERYGII	Benthophilus stellatus							LC			listed in the Red Data Book of Ukraine - NT	spawning
CHORDATA / ACTINOPTERYGII	Chelidonichthys lucerna							LC			listed in the Red Data Book of Ukraine - NT	spawning
CHORDATA / ACTINOPTERYGII	Huso huso							CR			listed in the Red Data Book of Ukraine - EN	feeding ground
Birds												
CHORDATA / AVES	Anas platyrhynchos			\square	13000	2012-2018	0.87	LC				The Site supports the species during migrations.
CHORDATA/ AVES	Aythya fuligula			\square	2000	2012-2018		LC				The Site supports the species during migrations.
CHORDATA/ AVES	Branta ruficollis				50	2012-2018		VU		>	listed in the Red Data Book of Ukraine - VU	The Site supports the species during migrations.
CHORDATA/ AVES	Charadrius alexandrinus				10	2012-2018		LC			listed in the Red Data Book of Ukraine - VU	
CHORDATA/ AVES	Charadrius hiaticula				70	2012-2018		LC			listed in the Red Data Book of Ukraine - LC	
CHORDATA/ AVES	Circus macrourus	2 20			10	2012-2018		NT			listed in the Red Data Book of Ukraine - EN	The species occurs during migrations.
CHORDATA/ AVES	Circus pygargus	V			30	2012-2018		LC			listed in the Red Data Book of Ukraine - VU	The species occurs during migrations.
CHORDATA/ AVES	Coracias garrulus				6	2012-2018		LC		V	listed in the Red Data Book of Ukraine - EN	Breding of 1-2 pairs.

Phylum	Scientific name	Spe qual uncrite	ifies der rion	conti ur crit	nder terio	n	Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Cygnus columbianus bewickii			2			5	2017					listed in the Red Data Book of Ukraine - NT	
CHORDATA / AVES	Falco vespertinus	1		7			60	2012-2018		NT			appendix II of the Bern Convention	The Sites provides breading area.
CHORDATA / AVES	Fulica atra			1			25000	2012-2018	1	LC				The Site supports the species during migrations.
CHORDATA / AVES	Haematopus ostralegus	V		7			150	2012-2018		NT			listed in the Red Data Book of Ukraine - VU	Breeding of 1-2 pairs, migration up to 150 individuals.
CHORDATA / AVES	Haliaeetus albicilla	1					8	2012-2018		LC	1	V	listed in the Red Data Book of Ukraine - rare	The Site supports the species during witwring seasons.
CHORDATA/ AVES	Himantopus himantopus	V		Z			100	2012-2018		LC			listed in the Red Data Book of Ukraine - VU	The Site supports the species during breeding and migratory seasons.
CHORDATA / AVES	Hydrocoloeus minutus			1			3000	2012-2018		LC				The Sites provides places for resting and feeding on migrations.
CHORDATA/ AVES	Larus cachinnans		V.	2			6000	2012-2018	1.87	LC				The Site supports the species during breeding (up to 3000 pairs) and migratory seasons.
CHORDATA/ AVES	Larus ridibundus			1			2000	2012-2018		LC				
CHORDATA / AVES	Limosa limosa			7			200	2012-2018		NT				The Site supports the species during migrations.
CHORDATA/ AVES	Mergellus albellus		Ø.	0			1500	2012-2018	6	LC				The Site supports the species (up to 5000 ind.) during wintering.
CHORDATA/ AVES	Mergus merganser		Ø.	0			500	2012-2018	2.5	LC				The Site supports the species (up to 3000 ind.) during wintering.
CHORDATA/ AVES	Mergus serrator			7			30	2012-2018		LC			listed in the Red Data Book of Ukraine - VU	
CHORDATA/ AVES	Netta rufina			0			10	2012-2018		LC			listed in the Red Data Book of Ukraine - LC	
CHORDATA/ AVES	Numenius arquata	1					30	2012-2018		NT			listed in the Red Data Book of Ukraine - NT	The species occurs during migrations.
CHORDATA/ AVES	Otis tarda			7			12	2012-2018		VU		V	listed in the Red Data Book of Ukraine - EN	
CHORDATA/ AVES	Pelecanus crispus						2	2012-2018		NT	1	V	listed in the Red Data Book of Ukraine - NT	
CHORDATA/ AVES	Phalacrocorax carbo		V	/	90		6000	2012-2018	1.2	LC				The Site supports the species during breeding and migratory seasons.
CHORDATA / AVES	Recurvirostra avosetta			7			60	2016		LC			listed in the Red Data Book of Ukraine - NT	
CHORDATA/ AVES	Sterna hirundo			1			4000	2012-2018	0.3	LC				The Site supports the species during breeding (up to 2000 pairs) and migratory seasons.
CHORDATA / AVES	Sternula albifrons						300	2012-2018		LC			listed in the Red Data Book of Ukraine - NT	The Sites provides breading area.
CHORDATA/ AVES	Thalasseus sandvicensis			/	9		10000	2012-2018	9.1	LC				The Site supports the species during breeding and migratory seasons. SANDVICENSIS, BLACK SEA & MEDITERRANEAN (BRE)
CHORDATA / AVES	Tringa stagnatilis	V		7			30	2012-2018		LC			listed in the Red Data Book of Ukraine - EN	The species occurs during migrations.
CHORDATA/ AVES	Vanellus vanellus			7			300	2012-2018		NT				The Site supports the species during migratory seasons.

1) Percentage of the total biogeographic population at the site

Due to the low water depths at the Bay, which bottom is covered by Zostera marina communities, the area is an important feeding site for local and migratory birds.

In total 216 bird species have been reported there, of which 107 are water birds. Depending on weather conditions throughout the year, the total number of wetland birds nesting in the wetland may be up to near 15-17 thousand pairs. These are mainly Thalasseus sandvicensis (up to 10 thousand pairs in 2018), Sterna hirundo (up to 3 thousand pairs), etc.

The wetland's water area is used for feeding and spawning by numerous fish species, such as Clupeonella cultriventris, Engraulis engrasicholus maeoticus, Neogobius melanostomus, which further become a feeding resource for birds and other animals.

The wetland "Bilosaraiska Bay and Bilosaraiska Spit" plays an important role in rare animal species conservation. Its territory is used as a feeding ground by Huso huso ponticus, Acipenser stellatus, Acipenser gueldenstaedtii, Alburnus leobergi, listed in the IUCN Red List and the Red Data Book of Ukraine. The land part of the wetland is a habitat of Dolichophis caspius, which is listed in the Red Data Book of Ukraine.

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
association Glycyrrhizeta glabrae	Ø		listed in the Green Data Book of Ukraine
A2.2 : Littoral sand and muddy sand	Ø	Littoral areas, formed by sand with a particle size between 0.063 and 1.0 mm. The smallest particle fraction is below 30%. There is no vegetation dominated by angiosperms. It is the extremely important feeding site for numerous species of local and	Resolution 4 of Bern Convention
A2.3 : Littoral mud.	2	Littoral areas formed by mobile formations with the fraction of particles less than 0.063 mm in diameter being at least 30%. There is no vegetation dominated by angiosperms. It is the feeding site for numerous species of water birds throughout the year.	Resolution 4 of Bern Convention
A2.4 : Littoral mixed sediments.	2	Littoral areas, formed by mobile formations with a varying particle size. There is no vegetation dominated by angiosperms. This habitat provides a resting and feeding place for numerous species of water birds during nesting and migration.	Resolution 4 of Bern Convention
A2.5515 Black Sea marshes with Salicornia, Suaeda Ta Salsola	Ø	Areas, located slightly higher than littoral, occupied by halophytic communities, e.g. Salicornietea fruticosae, Thero-Salicornietea, Cakiletea maritimae communities. It is a nesting ground for local water birds and a stopover point for migratory semiaqua	Resolution 4 of Bern Convention
A2.61 : Seagrass beds on littoral sediments	Ø	Littoral communities dominated by Zostera marina, Zostera lode, Ruppia marina. Habitats of this type belong to the speciesrichest habitats of The Sea of Azov and provide the important feeding grounds for local and migratory water bird species.	Resolution 4 of Bern Convention

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
A5 : Sublittoral sediments	Ø	Sublittoral deposits of mobile sedimentary formations. This is a continental shelf permanently flooded with sea water, up to 200 m deep. This zone is characterized by species-rich communities of invertebrates, providing a feeding base of various fish	Resolution 4 of Bern Convention
B1.1 : Sand beach driftlines	2	Sandy beach, which lower limit in tideless seas is the average water level, and which is flooded by a surf. Such habitats are important for local bird species as a nesting habitat and for migratory species as a stopover area.	Resolution 4 of Bern Convention
B1.3 : Shifting coastal dunes.	Ø	Elevated sandy parts of a sea coast with relatively steep slopes without vegetation or with scattered vegetation.	Resolution 4 of Bern Convention
B1.4 : Coastal stable dune grassland (grey dunes).	Ø	Elevated sandy areas of a sea coast with well-developed vegetation.	Resolution 4 of Bern Convention
C2.34 : Eutrophic vegetation of slow-flowing rivers.	2	Water-courses flowing with a low speed, resulting in a laminar water flow.	Resolution 4 of Bern Convention
E1.2 : Perennial calcareous grassland and basic steppes.	Ø	Steppe communities that have developed on sand and shell sediments. Typical dominant species are following: Festuca valesiaca s. l., Koeleria cristata, Phlomis spp., Poa angustifolia, Salvia spp., Stipa spp. Communities mainly belong to the Festuco-B	Resolution 4 of Bern Convention
E6.2 : Continental inland salt steppes.	Ø	The vegetation belongs to Juncetea maritimi, Festuco-Puccinellietea s. I. Typical dominant species are Artemisia santonica, Elytrigia elongata, Juncus gerardi, Puccinellia spp. A place of nesting, feeding and stopover for various bird species.	Resolution 4 of Bern Convention
F9.3 : Southern riparian galleries and thickets.	Ø	Linear communities of Tamarix gracilis, distributed along the shores of shallow, briny ephemeral water reservoirs.	Resolution 4 of Bern Convention
C1.66 : Temporary inland saline and brackish waters	Ø	Ephemeral continental saline water reservoirs and ephemeral parts of permanent reservoirs. They are important as stopover sites and feeding grounds for local and migratory birds.	Resolution 4 of Bern Convention

Optional text box to provide further information

Natural complexes of the Site consist almost entirely of various types of habitats included in Resolution 4 of the Berne Convention. Marine habitats type A (A2.2-2.4; A2.5515; A2.61; A.5) occupy the entire area of Bilosaraiska Bay. Coastal habitats type B (V1.1, V1.3, V1.4) occupy all of the available area of the coastal strip. Habitat types C and E (S1.66, S2.34; E1.2, E6.2) occupy the overwhelming share of upland areas of land. Habitats support a significant diversity of species and contribute to the survival of endangered species. In particular, Agropyron cimmericum and Medicago kotovii, included in the IUCN Red List, find favorable conditions for their existence in sparse plant communities of habitat B1.4. Allium regelianum (Annex I of the Bern Convention, RDBU) and Anacamptis coriophora (CITES Appendix II, RDBU) grow on more or less saline soils of habitat E6.2. Tamarix gracilis (RDBU) creates a separate habitat type F9.3, where it is dominant in vegetation community. Zostera marina (Annex I of the Bern Convention) is common in shallow marine habitats A2.61.

The wetland vegetation is a complex of communities typical for The Sea of Azov coastal zone. It includes aquatic, coastal, marshy, psammophytic, halophilic, meadow and steppe vegetation. The psammophytic variety of the forb-fescue-feather-grass steppes comprises a range of rare, endemic communities, as well as rare and relict plant species. The littoral vegetation, which has been formed on sandy beach ridge and on a shore, is of origin similar to sandy steppes. These are associations of stenotopic plants well-adapted to growth on mobile sandy substrate. They are straining under the biggest pressure of tourists and their distribution area has shrinked most. The most diverse is floristic composition of saline meadows, which provide the habitat for a range of endemic and rare species, and comprise rare plant communities. Saline land vegetation contributes to the landscape individuality. Though being quite even in plant species composition, swamps are the integral part of coastal spits landscape, as well as coastal, and aquatic plant communities. However, they play an important landscape-forming, stabilizing and protective role in this area. A range of phytocoenoses can be found nowhere except the seaboard. Many species exist there on the edge of their range, hence their rarity and vulnerability.

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

4.1 - Ecological character

The Bilosaraiska Spit is a typical prominent Azov-type spit, which is composed of quartz sand and shelly soil. It has a lowland relief, not exceeding 2 m above the sea level. The narrow coastal line on the Eastern shore of the spit is elevated above the sea level and forms a littoral beach ridge with sandy and shelly dunes and a wide beach line. The Western coast is covered with silt and the beach line here is narrow and low. The central part of the spit is a lowland, with numerous shallow depressions, where ephemeral isolated lakes are formed. Storms and surging phenomena have a great influence on this land, its flora and fauna. High permeability of the sandy and shelly sediments predicates the ground water level being dependent on the sea, to which it is tightly hydraulically connected and which affects the chemistry of soil solutions. Ground waters with different degrees of salinity are distributed along the spit, which aggravates extremal conditions for plant growth and limits their development to the limited range of ecomorphs (mainly halophytes, psammophytes, hygrophytes and hydrophytes).

The natural vegetation on the spit is herbaceous. Meadow and halophytic-meadow vegetation dominate primarily in the Northern part of the spit. Phragmites australis dominates among the marsh plants. Zostera marina grows in shallow waters at the Bay. Elevated parts along the shore are occupied by xerophytes. A human impact on the spit caused the presence of artificial and semi-natural trees and shrubs plantations. Reed beds in floodplain of the Mokra Bilosarayka river play significant role in water filtration and pollutants recovery before the river flows into the sea within the city of Yalta.

The climate is temperate continental with short mild winter and long hot summer; precipitations are 300-400 mm/year while evaporation is 800-900 mm. 70% of all precipitations happen during the warm part of year. They reach their maximum in June-July and minimum in January-February. Amount of precipitations may vary significantly from year to year. Fogs in the area of the spit, which is actually at sea level, are much more common than in the adjacent elevated mainland.

Water temperature in summer is +22 - +30°C (to +32.5°C in shallow parts); in winter, it is about 0°C. Average water temperature is +11.5°C. Due to its shallowness, water becomes cold quickly. In cold winters, the sea is totally covered by ice. Average temperature of air in summer is +24°C; maximum is +40°C. Summer is dry. Winter is severe with maximum temperatures of -30°C.

Winds of the eastern direction prevail here. They are strong and constant in spring and bring a lot of dust with them. The eastern wind together with thermal maximum in summer cause dry summer. Droughts happen once every 2.5 years.

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

Marine or coastal wetlands

Marine or coastal wellands				
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		1	8100	
B: Marine subtidal aquatic beds (Underwater vegetation)		2		
E: Sand, shingle or pebble shores		4	54	
G: Intertidal mud, sand or salt flats		4	50	

Inland wetlands

iand wedands					
Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1	
Saline, brackish or alkaline water > Lakes >> R: Seasonal/ intermittent saline/ brackish/ alkaline lakes and flats		2	460		
Saline, brackish or alkaline water > Marshes & pools >> Sp: Permanent saline/ brackish/ alkaline marshes/ pools		3	170		
Saline, brackish or alkaline water > Marshes & pools >> Ss: Seasonal/ intermittent saline/ brackish/ alkaline marshes/ pools		3	250		
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		3	280		

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Halophytic meadows	600
Psamophithic steppe	130
Forest plantations	128
Agricultural plantations	350
Settlements	650

4.3.1 - Plant species

Scientific name	Position in range / endemism / other
	Endemic to the Southern part of the
Agrostis gigantea maeotica	Black Sea coastal area
Anchusa gmelinii	Endemic to the Black Sea coastal area
Arenaria leptoclados leptoclados	Endemic to the Sea of Azov coastal area
Bassia hirsuta	The Red Book of Donetsk region
Centaurea odessana	Endemic to the Southern part of the Black Sea coastal area
Centaurium anatolicum	The Red Book of Donetsk region
Cerastium semidecandrum	Червона книга Дон.обл. Південнопричорноморський ендемік
Ephedra distachya	The Red Book of Donetsk region
Eryngium maritimum	The Red Book of Donetsk region
Frankenia hirsuta	The Red Book of Donetsk region
Geranium linearilobum	The Red Book of Donetsk region Endemic to the Eastern part of the Black Sea and Caspian Sea coastal areas
Heliotropium suaveolens suaveolens	The Red Book of Donetsk region
Inula helenium	The Red Book of Donetsk region
Iris halophila	The Red Book of Donetsk region
Juncus fominii	Endemic to the Black Sea coastal area
Limonium bellidifolium	Endemic to the of the Black Sea and Caspian Sea coastal areas
Linaria genistifolia euxina	The Red Book of Donetsk region Endemic to the Black Sea littoral
Lotus elisabethae	Endemic to the Black Sea and Caspian Sea coastal areas
Lotus ucrainicus	Endemic to the Southern part of the Black Sea coastal area
Papaver laevigatum	The Red Book of Donetsk region Endemic to the Southern part of the Black Sea coastal area
Rhaponticum serratuloides	The Red Book of Donetsk region
Rumex tuberosus euxinus	The Red Book of Donetsk region
Verbascum ovalifolium	Endemic to the Black Sea coastal area
Verbascum pinnatifidum	Endemic to the Southern part of the Black Sea coastal area
	Anchusa gmelinii Arenaria leptoclados leptoclados Bassia hirsuta Centaurea odessana Centaurium anatolicum Cerastium semidecandrum Ephedra distachya Eryngium maritimum Frankenia hirsuta Geranium linearilobum Heliotropium suaveolens suaveolens suaveolens Inula helenium Iris halophila Juncus fominii Limonium bellidifolium Linaria genistifolia euxina Lotus elisabethae Lotus ucrainicus Papaver laevigatum Rhaponticum serratuloides Rumex tuberosus euxinus Verbascum ovalifolium

Invasive alien plant species

Phylum	Scientific name	Impacts	Changes at RIS update
TRACHEOPHYTA/MAGNOLIOPSIDA	Acer negundo	Potential	No change
TRACHEOPHYTA/MAGNOLIOPSIDA	Ambrosia artemisiifolia	Actual (minor impacts)	No change
TRACHEOPHYTA/MAGNOLIOPSIDA	Elaeagnus angustifolia	Actual (minor impacts)	increase
TRACHEOPHYTA/MAGNOLIOPSIDA	Gleditsia triacanthos	Potential	No change
TRACHEOPHYTA/MAGNOLIOPSIDA	Grindelia squarrosa	Actual (minor impacts)	increase
TRACHEOPHYTA/MAGNOLIOPSIDA	Robinia pseudoacacia	Potential	No change

Optional text box to provide further information

The area of the Site was quite significantly affected by economic activity in Soviet Union times, the consequences of which are still observed. A large area within the land is occupied by settlements and roads between them, which serve as a center for the spread of various weeds, including invasive alien species. Grindelia squarrosa spreads along the roads and grows well on disturbed sandy soils, at the same time outside the roadside it is not yet observed. Ambrosia artemisiifolia is quite widespread and diffuse in the territory of former arable fields, which are now fallow 20-25 years of age, and in areas of pastures that have been subjected to excessive stress. The planting of forest belts of Robinia pseudoacacia, Gleditsia triacanthos, Acer negundo has created potential conditions for their spread, but at present their mass spontaneous reproduction is not observed. Elaeagnus angustifolia, which began to spread spontaneously about 15 years ago, now gradually increases its number and area of growth, threatening a radical change in meadow and steppe phytocenoses.

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	Cygnus olor	150	2012-2018		
CHORDATA/AVES	Anser anser	12	2012-2018		
CHORDATAVAVES	Ardea alba	150	2012-2018		
CHORDATAVAVES	Ardea cinerea	60	2012-2018		
CHORDATAVAVES	Ardea purpurea	20	2012-2018		
HORDATAAVES	Cygnus cygnus	120	2012-2018		
CHORDATAVAVES	Tadorna tadorna	20	2012-2018		

Invasive alien animal species

Phylum	Scientific name	Impacts	Changes at RIS update
CTENOPHORA/TENTACULATA	Mnemiopsis leidyi	Actual (major impacts)	unknown
CHORDATA/MAMMALIA	Nyctereutes procyonoides	Actual (major impacts)	No change

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude	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; precipitations are 300-400 mm/year . 70% of all precipitations happen during the warm part of year. Average temperature of air in summer is +24°C; maximum is +40°C. Summer is dry. Winter is severe with maximum temperatures of -30°C.

Climate change towards warming leads to a significant shortening of the frost season and ice-cover period on the Sea of Azov, as well as dry winters. Consequently, conditions, more favorable for the wintering of certain bird species, are created. Also, it results in the wind pattern alterations, with increasing rate of winds blowing from the West, which influences sea current directions, sea water salinity and the amount of precipitation, eventually causing alterations in the hydrochemical and hydrological balances of the water area and the nearby territory. This causes changes in species composition, distribution and abundance of the wetland wildlife.

4.4.2 - Geomorphic setting

a) Minimum	elevation a	level (in metres)	0
a) Maximum	alayatian a	,	
a) Maximum	elevation a	metres)	3

RIS for Site no. 773,	Bilosaraiska Bay and Bi	ilosaraiska Spit, Ukra	ne
	En	tire river basin	
		_	
		t of river basin	
	Middle par	t of river basin \square	
	Lower par	t of river basin 🗹	
	More than o	one river basin	
	No	t in river basin	
		Coastal 🗹	
Please name the river basi	n or basins. If the site lies in a	sub-basin, please also nam	the larger river basin. For a coastal/marine site, please name the sea or ocean.
Mokra Bilosarayka Ri		7,	
4.4.3 - Soil			
		Mineral 🗹	
	(Update) Changes	at RIS update No change	Increase O Decrease O Unknown O
	No availab	ole information \square	
Are soil types subject to	change as a result of changin	ig hydrological	
conditi	ons (e.g., increased salinity or	acidification)?	
Please provide further infor	mation on the soil (optional)		
			mate factors have caused the development of peculiar azonal soils. Soil-
			extremely poor in nutrients. Silt and sand deposits are accumulated in ils and alkaline soils. Turf soils have developed on topographic elevations
			osits close to the sea demonstrate the initial stages of soil formation.
4.4.4 - Water regime			
Water permanence			
Presence? Usually permanent water	Changes at RIS update		
present	decrease		
Usually seasonal, ephemeral or intermittent water present	No change		
Source of water that maintain	as character of the site		
Presence?	Predominant water source	Changes at RIS update	
Water inputs from precipitation		No change	
Marine water	✓	No change	
Water inputs from		decrease	
groundwater			
Water destination			
Presence? Marine	Changes at RIS update No change		
Weitite	No change		
Stability of water regime			
Presence? Water levels fluctuating	Changes at RIS update		
(including tidal)	unknown		
			this box to explain sites with complex hydrology:
			pact on its hydrological regime. The water level on the Bslosaraiska Spit is hich help to increase the water level in saline lakes. The hydrological
regime of the latter de			d to seasonal changes. The lakes are filled in the spring and almost
completely dry.	l amaall uissana flassinaa inta	4b-c b-c, , c, and alm inco	the common is insignificant. The Makes Bilesons de viven is 25 km lans.
			n the summer is insignificant. The Mokra Bilosarayka river is 25 km long. In from the entrance to the Bay, the riverbed has been cleared and now it
has a distinct shape.	The river bed above is o	bstructed by the nume	ous dams.
The Sukha Bilosarayl	ka river, 29 km long, orig	inates from the point n	ortheast past Priazovsky village and flows into the Mokra Bilosarayka River.
4.4.5 - Sediment regim	20		
· ·	r deposition of sediments occ	ure on the site	
Significant accretion of	·		0- 0-
		_	Increase O Decrease O Unknown O
	Sediment reg	gime unknown \square	
Please provide further infor	mation on sediment (optional):	:	

In the Sea of Azov sediment consist of river load and material created by abrasion of river banks, as well as biogenic marine material (shells). Being created by the Sea of Azov, the Bilosaraiska Spit directly depends on its activity. Winds and current directions and strength determine the ratio of its extension and erosion, leading to the variability of its outlines. It can easily be seen at the spit terminus, so-called "dzendzik", which constantly changes its shape and size. A constant process of sedimentation and sediment accumulation is running at Bilosarayska Bay, protected by the Spit, leading to a gradual spit extension to the western direction.

During the last two decades, there has been an intense silt accumulation in the vicinity of the Bilosaraiska Bay, which has already led to a significant fall in recreational attractiveness of the nearby settlement of Yalta, situated on its coast.

(ECD) Water turbidity and colour	Conditional transparency is very small. The color is mostly green or brown. In summer, mostly bright green.
(ECD) Light - reaching wetland	Conditional transparency: in spring and autumn on average 2-3 m, and in winter and summer 1-2 m.
(ECD) Water temperature	In January-February it is 0 °C. In May it reaches 18 °C. In summer 22-25 °C, to 32 °C. In November it is 6-10 °C.

4.4.6 - Water pH

Alkaline (pH>7.4) (Update) Changes at RIS update No change Increase O Decrease O Unknown O Unknown

4.4.7 - Water salinity

Fresh (<0.5 g/l) (Update) Changes at RIS update No change O Increase O Decrease O Unknown O Mixohaline (brackish)/Mixosaline (0.5-30 g/l)

✓ (Update) Changes at RIS update No change

● Increase

O Decrease

O Unknown

O Unknown

Please provide further information on salinity (optional):

The seawater salinity is about 13 %, but nowadays a salinity of the Azov Sea tends to be increasing. Salinity of internal lakes reaches up to 20-25 ‰ and depends on the arrival of both seawater and rainfall.

The content of dissolved oxygen in seawater is close to the maximum 82-99% during periods of high wind activity in cold seasons. Almost every summer there is a phenomenon of oxygen deficiency when its content in seawater can drop to 60% of normal. This is due to the increased water temperature and, as a consequence, the increased rate of oxidation of organic matter of bottom sediments, which consumes more than 30% of oxygen in the reservoir. Oxygen deficiency is exacerbated in the absence of wind mixing of the water column. Such anaerobic or similar situations have a significant negative impact on the biota of the water area.

4.4.8 - Dissolved or suspended nutrients in water

(Update) Changes at RIS update No change

● Increase O Decrease O Unknown O 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 i) broadly similar O ii) significantly different 10 site itself:

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 is located on being elevated bedrock bank with fertile chernozem soils and is intensively used for agriculture. Croplands occupy here up to 75% of the territory. The large industrial city of Mariupol (500 thousand population) is located 10 km north-east.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

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

regulating dervices					
Ecosystem service	Examples	Importance/Extent/Significance			
Maintenance of hydrological regimes	Groundwater recharge and discharge	Low			
Pollution control and detoxification	Water purification/waste treatment or dilution	Medium			

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	Medium
Recreation and tourism	Water sports and activities	Low
Recreation and tourism	Nature observation and nature-based tourism	Low
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Low
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or 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

character of the wetland

Optional text box to provide further information

The wetland is a source of many environmental resources and recreation services. Physical features of the area have been long contributing to

the development of local fisheries, a	and, in the past 50 years, the recreation near the shallow, warm sea shore has become very popular.
Within the site:	10 000s
Outside the site:	100 000s
Have studies or assessments been made o ecosystem services pro	of the economic valuation of Yes O No Unknown O vided by this Ramsar Site?
I.5.2 - Social and cultural values	
i) the site provides a model of wetland wi application of traditional knowledge and me use that maintain the ecologic	sthods of management and \Box
ii) the site has exceptional cultural trac civilizations that have influenced the ecologic	
iii) the ecological character of the wetland with local communit	depends on its interaction ties or indigenous peoples
iv) relevant non-material values such as sa their existence is strongly linked with the mai	· · · · · · · · _

<no data available>

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

Pu				

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	✓	✓
Local authority, municipality, (sub)district, etc.	2	2

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Cooperative/collective (e.g., farmers cooperative)		2
Other types of private/individual owner(s)	✓	2

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

Almost 80% of the wetland territory belongs to the National Natural Park "Meotyda" under the state ownership. Part of the territory of the Site is occupied by rural settlements and privately owned agricultural lands.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for	National Natural Park "Meotyda"
managing the site:	
Provide the name and/or title of the person or people with responsibility for the wetland:	Nadiya Dolgova, director
Postal address:	Prymorska str., 12, Urzuf village, Mangushs'ky district, Donetsk Region, Ukraine, 87455
E-mail address:	meotida_npp@ukr.net

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)

	· · · · · · · · · · · · · · · · · · ·						
	ors adversely fecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hous	ing and urban areas	Medium impact	High impact	/	increase	/	increase
Tourisn	n and recreation areas	Medium impact	High impact	2	increase	2	increase

Water regulation

valor regulation						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Canalisation and river regulation	Medium impact	Medium impact		No change	/	No change
Dredging	High impact	High impact	✓	No change	✓	No change
Drainage	High impact	High impact	✓	No change	✓	No change
Water abstraction	Medium impact	Medium impact		No change	✓	No change

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Livestock farming and ranching	Low impact	Low impact	✓	No change	/	No change
Annual and perennial non-timber crops	Medium impact	Medium impact	2	No change	2	No change

Energy production and mining

nergy production and mining								
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes		
Mining and quarrying	Low impact	Low impact	✓	No change		No change		

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Roads and railroads	Medium impact	Medium impact	✓	No change	✓	No change
Utility and service lines (e.g., pipelines)	Medium impact	Medium impact	2	No change	V	No change

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hunting and collecting terrestrial animals	Medium impact	Medium impact		No change	⊘	No change
Fishing and harvesting aquatic resources	Medium impact	Medium impact	/	No change	/	No change
Gathering terrestrial plants	Low impact	Low impact	V	No change		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	Medium impact	>	increase	/	increase
(Para)military activities	Low impact	Low impact	✓	No change	✓	increase

Natural system modifications

Natural dystem mediations						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Fire and fire suppression	Medium impact	Medium impact	⊘	No change	>	No change
Vegetation clearance/ land conversion	High impact	Medium impact	2	decrease	>	No change

Invasive and other problematic species and genes

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	High impact	High impact	2	increase	>	increase
Problematic native species	Medium impact	Medium impact	/	No change	/	No change

Pollution

1 Olidaoli						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Agricultural and forestry effluents	Medium impact	Medium impact	/	No change	/	No change
Household sewage, urban waste water	Low impact	Medium impact	/	No change	/	increase
Garbage and solid waste	Low impact	Low impact	2	No change	/	No change

Climate change and severe weather

Cliffiate change and severe weather						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Habitat shifting and alteration	Medium impact	Medium impact	2	No change	✓	No change
Storms and flooding	Medium impact	Medium impact	✓	No change		No change
Droughts	Low impact	Low impact	✓	No change	✓	No change

Please describe any other threats (optional):

Nearly from 2008, there is a general water level decrease in the inner water reservoirs of the spit. The reasons for that remain not clearly known; such processes are observed along the whole coast of the Sea of Azov; human impact is one of possible reasons. The negative influence is evident on the land part of the wetland, yet there is no appropriate monitoring of the water area.

Populations of wetland birds that breed in the Site are threatened by natural predatory species such as Vulpes vulpes, Corvus cornix.

Climate change towards warming leads to a significant shortening of the frost season and ice-cover period on the Sea of Azov, as well as dry winters. Consequently, conditions, more favorable for the wintering of certain bird species, are created. Also, it results in the wind pattern alterations, with increasing rate of winds blowing from the West, which influences sea current directions, sea water salinity and the amount of precipitation, eventually causing alterations in the hydrochemical and hydrological balances of the water area and the nearby territory. This, and to some extent, the anthropogenic influence, causes changes in species composition, distribution and abundance of the wetland wildlife.

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	Emerald network National Park 'Meotida' UA0000065	http://natura2000.eea.europa.eu/ Emerald/SDF.aspx?site=UA0000065& release=2	partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
landscape reserve of national importance	Bilosaraiska Spit		partly
National Natural Park	Meotyda		partly
ornithological reserve of national importance	Pryazovsky chapelnyk		partly
Regional Landscape Park	Meotyda		partly

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Bilosarajs'ka peninsula - UA076	http://datazone.birdlife.org/sit e/factsheet/bilosarajska-peninsu la-iba- ukraine	partly

5.2.3 - IUCN protected areas categories (2008)

la Strict Nature Reserve	
lb Wilderness Area: protected area managed mainly for wilderness protection	
Il National Park: protected area managed mainly for ecosystem protection and recreation	J
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 $\hfill \square$

for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Legal protection

Logar protoction				
Measures	Status			
Legal protection	Implemented			

Habitat

Measures	Status
Catchment management initiatives/controls	Proposed
Habitat manipulation/enhancement	Partially implemented

Species

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

Human Activities

Measures	Status
Management of water abstraction/takes	Proposed
Regulation/management of was tes	Partially implemented
Fisheries management/regulation	Partially implemented
Harvest controls/poaching enforcement	Partially implemented
Regulation/management of recreational activities	Partially implemented
Communication, education, and participation and awareness activities	Partially implemented
Research	Partially implemented

5.2.5 - Management planning

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

Has a management effectiveness assessment been undertaken for the site?

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning Yes O No

processes with another Contracting Party?

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No, but restoration is needed

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Plant species	Implemented
Birds	Implemented
Water regime monitoring	Proposed
Plant community	Implemented
Animal community	Implemented

Census of wintering birds and August census of post-breeding ornithocomplexes are periodically conducted within the framework of the regional ornithological monitoring program (ROM) implemented by Interdepartmental Azov-Black Sea Ornithological Station. Within the implementation of the Program of Nature chronicles of National Nature Park "Meotyda" are conducted annual censuses of birds, as well as researches of phytodiversity and herpetofauna.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Bronskov, A. I. 2017. «North Azov Region in the year 2015». ROM bulletin: Results of the regional ornithological monitoring, Issue 11. Winter seasons 2011-2017: 62–63, 66–68.

Bronskov, A. I., and G. A. Byi. 2017. «North Azov Region in the year 2016». ROM bulletin: Results of the regional ornithological monitoring, Issue 11. Winter seasons 2011-2017: 62–63, 66–68.

Bronskov, A. I., and E. A. Dyadicheva. 2017. «North Azov Region in the year 2017». ROM bulletin: Results of the regional ornithological monitoring, Issue 11. Winter seasons 2011-2017: 92–93, 97–98.

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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

<110 lile 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:



The shallow bay is the best feeding ground for Cygnus cygnus. (Alexander Bronskov, 01.03.2017)



The colony of Thalasseus sandvicensis on the terminus of the Bilosaraiska Spit (*Alexander Bronskov*, 12.06.2018)



Larus genei settle near Thalasseus sandvicensis. (Alexander Bronskov, 03.06.2017)



Halophy tic meadows with Rhaponticum serratuloides. (Helena Bronskova, 17.05.2017)



Shallow saline lakes attract the birds due to their security and food av ailability. (*Alexander Bronskov*, 30.11.2015)



Until the bay is completely covered with ice, ducks will not fly further south. (
Alexander Bronskov, 23.01.2017)



Anas penelope refreshes for a long road (*Alexander Bronskov*, 22.0.2017)



Larus genei settle near Thalasseus sandvicensis. (Alexander Bronskov, 03.06.2017)



At the colony of Ardea alba. (Alexander Bronskov, 10.06.2016)



Psammophy te-steppe area with Iris pumila. (Helena Bronskova, 13.04.2016)



In summer, almost all saline shallow lakes are dried-up. (Alexander Bronskov, 10.06.2016)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded

Date of Designation 1995-11-23