Ramsar Information Sheet

Published on 23 August 2019

Ukraine

Liadova-Murafa

Designation date	4 April 2019
Site number	2387
Coordinates	48°23'25"N 27°53'58"E
Area	5 394,28 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 section of the Dnister River with its tributaries and numerous watercourses flowing along the gully bottoms. The Site includes slopes of the Dnister River and forested areas in the valleys of small rivers and tributaries. The Site comprises incredibly picturesque "walls" along the river banks, composed of thick beds of sedimentary deposits, from the most recent anthropogenic deposits to the most ancient natural ones, which were formed 420 million years ago.
The Site is important for the conservation of fauna and flora species diversity. During the period of reproduction, it supports the residence of 106 bird species. 146 species have been observed during seasonal migrations, stopping for nutrition and moulting. There are high concentrations of the mallard Anas platyrhynchos (over than 9000 ind.), the common goldeneye Bucephala clangula (over than 4000 ind.), the mute swan Cygnus olor (over than 3000 ind.) and the tufted duck Aythya fuligula (over than 800 ind.) , among others.
The wetland is inhabited by over 40 species of mammals, 10 species of amphibians, and 6 species of reptiles. Over 30 species of fish live in the wetland's water bodies.
The flora comprises more than 300 species of vascular plants. Plant associations within the Site are mainly those of calci-petrophytes, as well as meadow-steppe, steppe, forest, semiaquatic, aquatic associations. In addition, preserved populations of rare plant species, the size and distribution of which have sharply decreased in recent decades, can be found within the Site.
Human activities in the Site include recreation, forest management, livestock grazing and hay making, sport fishing.
The wetland is located in the southwestern part of Ukraine within the Vinnytsia region, on the border with the Republic of Moldova along the Dnister River – from the Lyadova village of Mohyliv-Podilskyi district up to the confluence of the Murafa and Dniester rivers in the Yampil district.
The wetland is 32,1 km in lenght along the Dniester river valley.
The wetland belongs to the Regional Landscape Park "Dniester".

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

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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): Liadova-Murafa

2.2 - Site location

2.2.1 - Defining the Site boundaries

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

Former maps: 0

Boundaries description

The site stretches for 32.1 km along the Dniester river valley and is located in the south-western part of Ukraine within the boundaries of Vinnytsia administrative region. The upper (north-western) border of the Site goes from Nahoriany Village downstream the dam of Dnistrovske (Dniester) Reservoir. The lower (south-eastern) border of the Site is represented by the Murafa river mouth and the vicinities of Yampil Village. The western border of the Site goes along the Dniester river channel following the state boundary between Ukraine and Moldova. The western border of the Site is limited by natural communities of the Dniester slopes and valleys of small rivers and streams. The borders of the site mostly correspond to the borders of the Dniester Regional Landscape Park.

2.2.2 - General location

a) In which large administrative region does the site lie? Mohyliv-Podilskyi and Yampil districts of Vinnytsia region

b) What is the nearest town or population centre? Mohyliv-Podilskyi town, Yampil 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): 5394.28

Area, in hectares (ha) as calculated from GIS boundaries: 5394.339

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Continental

Other biogeographic regionalisation scheme

According to the geobotanical zoning of Ukraine, the wetland is situated in the Central Podolian district of hornbeam-oak and oak forests and dry meadows, Ukrainian forest-steppe subprovince, the Eastern European forest-steppe province of the oak forests, steppe meadows and meadow steppes (according to Ya.P. Didukh and Yu. R. Shelyag-Sosonko, 2003).
According to the zoogeographical zoning: Southern Bug-Dnipro district, Western forest-steppe zoogeographical region, Forest-steppe zoogeographical province, European sub-region, Holarctic region (according to O. P. Kornieiev, O. B. Kistiakivskyi, 1956).

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

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

Hydrological services provided	The wetland supplies water to towns of Mohyliv-Podilskyi (population 32.25 thousand people) and Yampil (population 11.3 thousand people).
Other ecosystem services provided	Tourism and recreation activities are carried out within the wetland. Equipped recreational facilities on the coast of the Dnister River are actively used by the local population for a short-term recreation. The presence of valuable natural, historical and cultural complexes within the Site (caves, monasteries, historical monuments) contribute to the recreational activities development within the Site.
Other reasons	This Site is represented by distinctive for the Dnister River types of wetland territories. The riverbed and adjacent slopes (walls) which are created from powerful sedimentation complexes from the youngest anthropogenic to the oldest natural aged 420 million years form unique floristic and faunal complexes. The Dnister River is one of the main ecological corridors for the migration of birds. Besides wetland types within the Site, the are some steppe and forest ecosystems which play an important role in the biodiversity conservation.

☑ Criterion 2 : Rare species and threatened ecological communities

☑ Criterion 3 : Biological diversity

Justification	Typical for Podillya caltcipetrophytic agglomerations, meadow-steppe, steppe, forest, semiaquatic, and aquatic associations, with their wildlife diversity, that determines its importance in biodiversity maintenance in the region, are preserved in their natural or nearly natural condition on the wetland's territory, as the typical landscape form of Podillya. The flora comprises over 300 species of vascular plants. Environmental conditions have predetermined the presence of endemic and relict species (Chamaecytisus blockianus, Staphylaea pinnata). Also, there are preserved populations of rare species of plants, which have sharply reduced their size and distribution in recent decades. The wetland territory is situated on the migratory route of birds. During the reproduction season it supports the residence of 106 bird species; and 146 species have been reported during seasonal migrations. Eighty-three species winter within the wetland boundaries. Over 30 species of fish live in wetland water bodies. The wetland is inhabited by over 40 species of mammals, 10 species of amphibians, and 6 species of reptiles.

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

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

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Adonis vernalis		☐	☑	☐		☐	Red Data Book of Ukraine - NE	
Astragalus monspessulanus		☑	☑	☐		☐	Red Data Book of Ukraine - VU	
Chrysopogon gryllus		☑	☑	☐		☐	Red Data Book of Ukraine - VU	
Cytisus albus		☑	☑	☐		☐	Red Data Book of Ukraine - VU	
Cytisus blockianus		☐	☑	☐		☐	Red Data Book of Ukraine - NT	
Epipactis purpurata		☐	☑	☐	LC	☐	Red Data Book of Ukraine – NT	
Galanthus nivalis		☐	☑	☐	NT	☐	Red Data Book of Ukraine - NE	
Neottia nidus-avis		☐	☑	☐	LC	☐	Red Data Book of Ukraine - NE	
Staphylea pinnata		☐	☑	☐	LC	☐	Red Data Book of Ukraine - NT	

Slopes with a steepness of 45% or more are covered with meadow-steppe plants: Carex humilis, Adonis vernalis, Chamaecytisus austriacus, Potentilla arenaria, Astragalus onobrychis, Teucrium chamaedrys, Cleistigenes bulgarica, Plantago media, Poterium sanguisorba, Euphorbia cyparissias, Eryngium campestre, Asperula cynanchica, Botriochloa ischaemum, Hieracium virosum, Pimpinella saxifraga, Carlina biebersteinii, Salvia verticillata, Teucrium pannonicum, Helichrysum arenarium, Achillea millefolium, Festuca valesiaca.
Communities of floodplain willow forests of Salix alba are formed along small watercourses and streams; the adventitious species Amorpha fruticosa dominates in the shrub layer, also with Sambucus nigra, Cornus mas, Rhamnus cathartica; while Eupatorium cannabinum, Chaerophyllum aromaticum, and Scirpus sylvaticus dominate in the herbaceous cover.

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

Phylum	Scientific name	Common 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								
Birds																		
CHORDATA / AVES	*Anas platyrhynchos*	Mallard	☐	☑	☐	☐	☑	☐	☐	☐	9000			LC	☐	☐		The Site supports the species during autumn migrations and wintering
CHORDATA / AVES	*Ardea alba*	Great Egret	☑	☐	☐	☐	☑	☐	☐	☐	100			LC	☐	☐	Bern Convention - Appendix II	
CHORDATA / AVES	*Aythya ferina*	Common Pochard	☑	☑	☐	☐	☑	☐	☐	☐	500			VU	☐	☐		The Site supports the species during autumn migrations and wintering
CHORDATA / AVES	*Aythya fuligula*	Tufted Duck	☐	☑	☐	☐	☑	☐	☐	☐	800			LC	☐	☐		The Site supports the species during autumn migrations and wintering
CHORDATA / AVES	*Bubo bubo*	Eurasian Eagle-Owl	☑	☐	☐	☐	☑	☐	☐	☐	4			LC	☐	☐	Red Data Book of Ukraine - NT; Bern Convention - Appendix II	
CHORDATA / AVES	*Bucephala clangula*	Common Goldeneye	☐	☑	☐	☐	☑	☐	☐	☐	4000			LC	☐	☐	Red Data Book of Ukraine - NT	The Site supports the species during autumn migrations and wintering
CHORDATA / AVES	*Ciconia nigra*	Black Stork	☑	☑	☐	☐	☑	☐	☐	☐	4			LC	☐	☐	Red Data Book of Ukraine - NT, Bern Convention - Appendix II	The Site supports the species during migrations

Phylum	Scientific name	Common 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	*Cygnus cygnus*	Whooper Swan	☑	☑	☐	☐	☑	☐	☐	☐	200			LC	☐	☐	Bern Convention - Appendix II	The Site supports the species during autumn migrations and wintering
CHORDATA/ AVES	*Cygnus olor*	Mute Swan	☐	☑	☐	☐	☑	☐	☐	☐	3000			LC	☐	☐		The Site supports the species during autumn migrations and wintering
CHORDATA/ AVES	*Fulica atra*	Eurasian Coot	☐	☐	☐	☐	☑	☐	☐	☐	700			LC	☐	☐		
CHORDATA/ AVES	*Haliaeetus albicilla*	White-tailed Eagle	☑	☑	☐	☐	☑	☐	☐	☐	3			LC	☑	☑	Red Data Book of Ukraine - NT, Bern Convention - Appendix II	The Site supports the species during autumn migrations and wintering
CHORDATA/ AVES	*Mergellus albellus*	Smew	☑	☑	☐	☐	☑	☐	☐	☐	400			LC	☐	☐	Bern Convention - Appendix II	The Site supports the species during autumn migrations and wintering
CHORDATA/ AVES	*Mergus merganser*	Common Merganser	☐	☑	☐	☐	☑	☐	☐	☐	120			LC	☐	☐		The Site supports the species during autumn migrations and wintering
CHORDATA/ AVES	*Milvus migrans*	Black Kite	☑	☐	☐	☐	☑	☐	☐	☐	2			LC	☐	☐	Red Data Book of Ukraine - VU, Bern Convention - Appendix II	
CHORDATA/ AVES	*Pandion haliaetus*	Western Osprey; Osprey	☑	☑	☐	☐	☑	☐	☐	☐	2			LC	☐	☐	Red Data Book of Ukraine - EN	The Site supports the species during autumn migrations
CHORDATA/ AVES	*Phalacrocorax carbo*	Great Cormorant	☐	☐	☐	☐	☑	☐	☐	☐	650			LC	☐	☐		
CHORDATA/ AVES	*Podiceps cristatus*	Great Crested Grebe	☐	☐	☐	☐	☑	☐	☐	☐	100			LC	☐	☐		
CHORDATA/ AVES	*Streptopelia turtur*	European Turtle-Dove; European Turtle Dove	☑	☐	☐	☐	☑	☐	☐	☐	10			VU	☐	☐		
CHORDATA/ AVES	*Tachybaptus ruficollis*		☑	☐	☐	☐	☑	☐	☐	☐	50			LC	☐	☐	Bern Convention - Appendix II	
Fish, Mollusc and Crustacea																		
CHORDATA/ ACTINOPTERYGII	*Ballerus sapa*	Southwest white-eye	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Bern Convention - Appendix III	
CHORDATA/ ACTINOPTERYGII	*Barbus peloponnesius*		☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Red Data Book of Ukraine - VU, Bern Convention - Appendix III	
CHORDATA/ ACTINOPTERYGII	*Barbus thessalus*		☑	☐	☐	☐	☑	☐	☐	☐					☐	☐	Red Data Book of Ukraine - VU	
CHORDATA/ ACTINOPTERYGII	*Chondrostoma nasus*	Common nase	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Bern Convention - Appendix III	
CHORDATA/ ACTINOPTERYGII	*Leuciscus leuciscus*		☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Red Data Book of Ukraine - VU	
CHORDATA/ ACTINOPTERYGII	*Vimba vimba*	Baltic vimba; Baltic vimba	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Bern Convention - Appendix III	
CHORDATA/ ACTINOPTERYGII	*Zingel streber*		☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Red Data Book of Ukraine - NT, Bern Convention - Appendix III	
Others																		
ARTHROPODA/ INSECTA	*Iphiclides podalirius*	Scarce Swallowtail	☑	☐	☐	☐	☑	☐	☐	☐					☐	☐	Red Data Book of Ukraine - VU	
CHORDATA/ REPTILIA	*Lacerta viridis*		☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Red Data Book of Ukraine - VU	
ARTHROPODA/ INSECTA	*Lucanus cervus*		☐	☐	☐	☐	☑	☐	☐	☐					☐	☐	Red Data Book of Ukraine - NT	
CHORDATA/ MAMMALIA	*Lutra lutra*	European Otter	☑	☐	☐	☐	☑	☐	☐	☐				NT	☑	☐	Red Data Book of Ukraine - NE, Bern Convention - Appendix II.	

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
ARTHROPODA / INSECTA	*Papilio machaon*	Artemisia Swallowtail; Old World Swallowtail; Swallowtail; Common Yellow Swallowtail	☑	☐	☐	☐	☑	☐	☐	☐					☐	☐	Red Data Book of Ukraine - VU	

1) Percentage of the total biogeographic population at the site

Buteo lagopus, Lanius excubitor, Fringilla montifringilla, Spinus spinus, Pyrrhula pyrrhula etc occur here in winter season.
Bufo viridis, Bufo bufo, Hyla arborea, Rana temporaria; Lacerta agilis, Natrix natrix, Natrix tesselata,Vepera berus; Erinaceus europaeus, Talpa europaea, Sorex araneus, Crocidura leucodon,
Falco tinnunculus, Perdix perdix, Columba palumbus, Streptopelia turtur, Cuculus canorus, Merops apiaster, Upupa epops, Dendrocopos major, Hirundo rustica, Alauda arvensis, Anthus trivialis, Motacilla alba, Lanius collurio, Oriolus oriolus, Sturnus vulgaris, Garrulus glandarius, Corvus corax, Sylvia nisoria, Sylvia atricapilla, Sylvia communis, Phylloscopus collybita, Phylloscopus sibilatrix, Muscicapa striata, Saxicola rubetra, Saxicola torquata, Oenanthe oenanthe, Erithacus rubecula, Luscinia luscinia, Turdus pilaris, Turdus merula, Turdus philomelos, Parus major, Fringilla coelebs, Chloris chloris, Carduelis carduelis, Acanthis cannabina, Coccothraustes coccothraustes, Emberiza calandra etc nest within the Site area.
Myotis myotis, Vulpes vulpes, Martes foina, Mustela nivalus, Lepus europaeus, Sciurus vulgaris, Micromys minutus, Mus musculus, Apodemus agrarius, Sylvaemus sylvaticus, Microtus arvalis etc, can be found on meadow-steppe and shrubby slopes, as well as in the forest habitats of the wetland.

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
E1.11: Euro-Siberian rock debris swards. Communities of unions Alysso-Sedion albi and Seslerio-Festucion pallentis	☑	Characterized by a significant share of succulents and annuals. Allium podolicum, Melica transsilvanica, Sedum acre, Thymus dimorphus are typical species. Common along with rocks and steppe areas.	Resolution 4 of Bern Convention
E1.2 : Perennial calcareous grassland and basic steppes	☑	This group of habitats includes grasslands, typical and petrophytous stepoes, calcareous, sand communities. Typical dominants are Botriochloa ischaemum, Carex humilis, Festuca rupicola, Festuca valesiaca s. l., Phlomis spp., Poa angustifolia.	Resolution 4 of Bern Convention
H3.2: Basic and ultra-basic inland cliffs	☑	More or less vertical limestone outcrops. Riverine associations are represented by Amorpha fruticosa, Myricaria germanica, Salix acutifolia, Salix cinerea, Salix pentandra, Salix purpurea, Salix triandra, Salix viminalis communities	Resolution 4 of Bern Convention
H3.511: Limestone pavements	☑	Limestone outcrops, partly covered by grassland-steppe vegetation. Typical species are Adoxa moschatellina, Aegopodium podagraria, Anemone ranunculoides, Carex pilosa, Corydalis cava, Corydalis marschalliana, Dentaria bulbifera, Ficaria verna.	Resolution 4 of Bern Convention

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

4.1 - Ecological character

The Site contains different types of landscapes, which interact in conditions of the fragmented forest undulated-erosion-accumulative and hilly elevations, and the flat terraced alluvial depressions and river valleys. Especially picturesque views are provided by the river valley's landscapes (left tributaries of the Dniester River), by geological objects of foliated Silurian deposits almost 400 mln years old, which are unique natural stratigraphic monuments of global significance, residues of Lower Cretaceous deposits of the Albian age, picturesque travertine rocks, Liadovskyi Rock Monastery, etc.
The region of the Dniester canyon's terraces stretches from the north-west to the south-west as a stripe up 30 km wide. Absolute altitudes of the surface descend towards the Dniester from 280-300 m to 120-150 m, and the cutting depth of river valleys reaches from 60 to 180 m. Due to this, the structure of the landscapes is characterized by a combination of different types of watershed and riparian (valley) areas, which are drained by the Dniester tributaries. The geomorphological structure and relief, dominated in the past by tree vegetation, have contributed to the development of grey forest-steppe podzolized soils, bright-grey, grey, grey transiting to dark-grey podzolized soils mostly based on loess rocks.
The climate of the area is moderate continental. The average July temperature +21 ˚C, January –5 ˚C. The period with average daily temperatures above 5 ˚C lasts 206 days, above 10 ˚C – 167 days. The sum of active temperatures equals to 2700-2800 ˚C. The period with snow cover lasts 50-55 days. The average annual rainfall is 504 mm, the highest amount of rainfall is recorded in June and July. The decrease of precipitation that took place from 2013 to 2017, resulted in a significant decrease in water levels, which adversely affected certain groups of aquatic animals (molluscs, fishes), and aquatic flora.
The water of the Dniester river flows in a canyon-like valley. The water body is characterized by regular daily water level fluctuations, which are caused by the functioning of the Dniester hydro-electric power plant (HPP), Dniester HPP 2 and Dniester hydro-electric pumped storage power plant. Such variations of the water level negatively impact the water fauna in the season of reproduction.
The wetland territory is significantly transformed by human activity. The main ways of resourceuse are hydro-electric power industry, and to a lesser extent, recreation (tourism, amateur fishing) and livestock grazing.

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

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		1	1100	Representative

Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
2: Ponds		2	40	Representative

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Steppe slopes	1500
Meadows	400
non-wetland forests	1800

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Pulsatilla pratensis		Red Data Book of Ukraine - NE
Sorbus torminalis		Red Data Book of Ukraine - NE
Stipa capillata		Red Data Book of Ukraine - NE
Stipa lessingiana		Red Data Book of Ukraine - NE

Invasive alien plant species

Scientific name	Common name	Impacts	
Acer negundo		Actually (major impacts)	No change
Amorpha fruticosa	Bastard Indigo;False Indigo;Indigobush Amorpha	Actually (major impacts)	No change
Robinia pseudoacacia	False-acacia	Actually (major impacts)	No change
Salix fragilis		Actually (minor impacts)	No change

4.3.2 - Animal species

Invasive alien animal species

Phylum	Scientific name	Common name	Impacts	
CHORDATA/ACTINOPTERYGII	*Carassius gibelio*		Actually (minor impacts)	No change
MOLLUSCA/BIVALVIA	*Dreissena polymorpha*		Actually (major impacts)	No change
CHORDATA/ACTINOPTERYGII	*Lepomis gibbosus*		Actually (minor impacts)	No change
CHORDATA/AVES	*Phasianus colchicus*	Common Pheasant	Actually (major impacts)	No change
CHORDATA/ACTINOPTERYGII	*Pseudorasbora parva*	Stone morokos	Actually (minor impacts)	No change

4.4 - Physical components

4.4.1 - Climate

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

The climate of the area is moderate continental. The average July temperature +21 ˚C, January –5 ˚C. The period with average daily temperatures above 5 ˚C lasts 206 days, above 10 ˚C – 167 days. The period with snow cover lasts 50-55 days. The average annual rainfall is 504 mm, the highest amount of rainfall is recorded in June and July.
Rise in seasonal average temperatures in 2012-2018 years, along with decrease in precipitation, had a negative impact on wetland's flora and fauna.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres): 100

a) Maximum elevation above sea level (in metres): 360

- 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.

Dniester

4.4.3 - Soil

- Mineral ☑
- Organic ☐
- No available information ☐

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

Please provide further information on the soil (optional)

Turf-carbonate soils, sometimes, with bedrock outcrops; to a lesser extent – superficial slightly rocky soils, eroded, various in depth.

4.4.4 - Water regime

Water permanence

Presence?	
Usually permanent water present	No change

Source of water that maintains character of the site

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

Water destination

Presence?	
To downstream catchment	No change

Stability of water regime

Presence?	
Water levels fluctuating (including tidal)	No change

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

Small streams and springs from surrounding limestone rocks flow into the Dniester river. Groundwater also can feed the wetland. Besides that, water regimen of the wetland depends on the Dniester river flow and the performance of the Dniester HPP i.e., on regular daily fluctuations in the water level, caused by the Dniester HPP, Dniester HPP 2 and Dniester HPSP.

4.4.5 - Sediment regime

Significant erosion of sediments occurs on the site ☐

Significant accretion or deposition of sediments occurs on the site ☐

Significant transportation of sediments occurs on or through the site ☐

Sediment regime is highly variable, either seasonally or inter-annually ☑

Sediment regime unknown ☐

Please provide further information on sediment (optional):

The wetland is characterized by erosion processes, associated with a rainfall type (predominantly, heavy rain showers) and with the prevalence of steep sloping surfaces. Part of the river sediments within the wetland is transit for the area and is transported outside the wetland to the Dniester waters.

4.4.6 - Water pH

Acid (pH<5.5) ☐

Circumneutral (pH: 5.5-7.4) ☑

Alkaline (pH>7.4) ☐

Unknown ☐

4.4.7 - Water salinity

Fresh (<0.5 g/l) ☑

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

Euhaline/Eusaline (30-40 g/l) ☐

Hyperhaline/Hypersaline (>40 g/l) ☐

Unknown ☐

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic ☐

Mesotrophic ☑

Oligotrophic ☐

Dystrophic ☐

Unknown ☐

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

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

Surrounding area has greater urbanisation or development ☐

Surrounding area has higher human population density ☐

Surrounding area has more intensive agricultural use ☑

Surrounding area has significantly different land cover or habitat types ☐

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

The surrounding area is a built-up and human-managed territory. A large share of this land is used for agriculture.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Low
Fresh water	Drinking water for humans and/or livestock	Low
Fresh water	Water for irrigated agriculture	Medium
Fresh water	Water for industry	Low
Fresh water	Water for energy production (hydro-electricity)	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Medium
Maintenance of hydrological regimes	Storage and delivery of water as part of water supply systems for agriculture and industry	Medium
Hazard reduction	Coastal shoreline and river bank stabilization and storm protection	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	Low
Recreation and tourism	Nature observation and nature-based tourism	Low
Spiritual and inspirational	Cultural heritage (historical and archaeological)	High
Spiritual and inspirational	Spiritual and religious values	High
Spiritual and inspirational	Inspiration	High
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High
Scientific and educational	Long-term monitoring site	High
Scientific and educational	Type location for a taxon	High

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganizms, the genes they contain, and the ecosystems of which they form a part	High
Soil formation	Accumulation of organic matter	Medium
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	Medium
Pollination	Support for pollinators	High

Within the site: 1000

Outside the site: 3500

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 ☐

<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

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	☑	☑
Local authority, municipality, (sub)district, etc.	☑	☑
Other public ownership	☑	☑

Private ownership

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

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

The major part of the area belongs to the state enterprise "Mohyliv-Podilske Forestry". The number of other types of users is small agricultural producers and local authorities.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:	Department of ecology and natural resources of the Vinnytsia Regional State Administration
Provide the name and title of the person or people with responsibility for the wetland:	Kononova Iryna Mykolaivna, the Head of the Office of Land Conservation, Bioresources, Reserve Management and Ecological Network (Department of Ecology and Natural Resources in Vinnytsia region).
Postal address:	21000, 600-richchia st., 19, Vinnytsia, Ukraine
E-mail address:	vineco@vineco.gov.ua

5.2 - Ecological character threats and responses (Management)

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

Human settlements (non agricultural)

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

Water regulation

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

Agriculture and aquaculture

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

Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Renewable energy	High impact	High impact	☑	☑

Transportation and service corridors

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

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Hunting and collecting terrestrial animals	Low impact	Low impact	☑	☑
Logging and wood harvesting	Medium impact	Medium impact	☑	☑
Fishing and harvesting aquatic resources	High impact	High impact	☑	☑

Human intrusions and disturbance

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

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Fire and fire suppression	Low impact	Low impact	☑	☑
Dams and water management/use	High impact	High impact	☑	☑
Vegetation clearance/ land conversion	Medium impact	Medium impact	☑	☑

Invasive and other problematic species and genes

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

Pollution

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

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Droughts	Low impact	Medium impact	☑	☑

Please describe any other threats (optional):

Upper and lower of the Site are located hydroelectric power plants, which strongly influence on the ecological condition of the wetland.

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 site UA0000149 Liadova-Murafa	http://natura2000.eea.europa.eu/Emerald/SDF.aspx?site=UA0000149&release=2	partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Local botanical reserve	Local botanical reserve “Bronnystka gora”		partly
Local botanical reserve	Local botanical reserve “Grygorivska gora”		partly
Local botanical reserve	Local botanical reserve “Kryshtofivska gora”		partly
Regional Landscape Park	Regional Landscape Park «Dniester»		partly
State botanical reserve	State botanical reserve “Bronnytsky"		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	Partially implemented

Habitat

Measures	Status
Catchment management initiatives/controls	Proposed
Improvement of water quality	Partially implemented
Habitat manipulation/enhancement	Partially implemented
Hydrology management/restoration	Partially implemented

Species

Measures	Status
Threatened/rare species management programmes	Partially implemented

Human Activities

Measures	Status
Communication, education, and participation and awareness activities	Implemented
Regulation/management of recreational activities	Implemented
Research	Implemented

5.2.5 - Management planning

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

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

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

5.2.6 - Planning for restoration

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

Further information

Restorations plans are focused on the improvement of water quality and hydrological regime. To mitigate the negative impact of waste waters of Mohyliv-Podilskyi city the plan for the reconstruction of old treatment facilities is being developed. Implementation of modern treatment techniques will contribute to the improvement of water quality within the Site.

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Proposed

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Didukh Ya.P., Kuzemko A.A. The classification of Halychina-Slobozhanshina econetwork's ecosystems // Ukr. phytocenol. zb. – Київ, 2005. – Series C, N.23. – P. 38-61.
Didukh Ya.P., Shelyag-Sosonko Yu.R. Geobotanical zoning of Ukraine and adjusting territories // Ukr. botan. journ. – 2003. Vol.60, N. 1. – P.6–17.
Kornieiev O. P. Textbook on zoogeography/ O. P. Kornieiev, O. B. Kistiakivskyi. – K.: Rad. shk., 1956. – 135 p.
Kuzemko A. A., Yavorska O. G., Vorona Ye. I., Chorna G. A., Fedoronchuk M. M. Key territories of national level in Vinnytsia region and theirs importance in econet optimization // Nature Reserves in Ukraine. – Vol. 16, N 1. –2010. – P. 88-92.
Marynych O.M., Shishchenko P.G. Physical Geography of Ukraine: Textbook. – Kyiv: Znannia, (2005). – 511 p.
Matviichuk, O. A. Wintering of waterbirds in Vinnytsia region / O.A. Matviichuk, A. B. Pirkhal // Topical issues in geography, biology and chemistry. Main scientific challenges and research prospects. Collection of studies of VSPU. – 2010. – Vol. 7(12). – P. 78-79
Matviichuk, O. A. Cadastre of terrestrial tetrapods of Vinnytsia region/ O.A. Matviichuk, A. B. Pirkhal, V. Yu. Reminnyi; Ed. V.G. Kuriata. – Vinnytsia: TOV «Nilan-ltd», 2015. – 436 p.
Mosh, A., Trombitskiy, I. (2013). Fishes of the Middle and Lower Dniester (River Keepers Handbook). Kishinev, -2013. – 139 pp.
Mudrak, O. V. The rarities of the animal life of Podillya: state, threats, conservation / O.V. Mudrak, O.A. Matviichuk, G.V. Mudrak, M.D. Matvieiev, M.V. Drebet, I.S. Osadchuk, M.M. Ganchuk/ O.V. Mudrak. – Vinnytsia: TOV «Nilan-ltd», 2015. – 564 p.
Protected natural sites in Vinnytsia region. — Vinnytsia: Veles, 2005. — 104 p.+ 28 fig.
The environmental passport of the Vinnytsia region, 2009.
The Red Data Book of Ukraine. Plant Kingdom/ – Ed. Ya. P. Didukh. – K.: Globalconsulting Press, 2009. – 900 pp.
The Red Data Book of Ukraine. Animal Kingdom/ – Ed. I.A.Akimov. – K.: Globalconsulting Press, 2009.- 600 pp.

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:


Murafa River (*Olexandr Matviichuk, 07-06-2016*)


Ardea cinerea near Murafa River (*Olexandr Matviichuk, 07-06-2016*)


Rosa canina L. (*Olexandr Matviichuk, 07-06-2016*)


Murafa River (*Olexandr Matviichuk, 30-01-2016*)


Dniester River (*Olexandr Matviichuk, 23-03-2012*)


Dniester River (*Olexandr Matviichuk, 23-03-2012*)

6.1.4 - Designation letter and related data

Designation letter
<2 file(s) uploaded>

Date of Designation: 2019-04-04