Ramsar Information Sheet

Published on 25 January 2017

Ukraine

Archipelago Velyki and Mali Kuchugury

Designation date	24 December 2013
Site number	2282
Coordinates	47°33'50"N 35°12'10"E
Area	7 740,00 ha

Color codes

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

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

1 - Summary

Summary

The area of wetland is represented by the island archipelago of Large and Small Kuchugury, as well as the surrounding shallows located in the upper reaches of the Kakhovka Reservoir on the territory of Zaporizhzhia region, in the floodplain of the Lower Dnipro River. A wide variety of habitats on a relatively small isolated area and located away from the coast helped to protect them from human impact. An amazing combination of high sand dunes, inland lakes, wet meadows and floodplain forest makes this wetland a unique area in the south of Ukraine. This combination with the state of preservation does not exist anywhere along the lower valley of the Dnipro River. These factors contributed to the formation of powerful nesting location of wetland bird communities. Among the rarest breeding species, we should note are Platalea leucorodia, Anas strepera, Aythya nyroca, Haliaeetus albicilla, Larus ichthyaetus. The largest colonies of ciconiiformes and copepods along the floodplain of the Lower Dnipro River are concentrated here. The shallow reservoirs with rich benthos and good protection from the wind and storms are attractive to birds during molting and seasonal migrations. During autumn migration, according to the 2010-2015 monitoring, up to 30,000 waterfowl individuals can be observed here. The floodplain forest with thick undergrowth is the nesting and migration place of forest birds. We should also note the ridge of sand dunes which contributed to the protection of the plant diversity are the largest location of endemic Centaurea konkae. Here, we can find one of the best protected populations of this endangered species. Overall, in the course of the wetland studies, there were registered 156 species of birds, 18 species of mammals, 54 species of fish, 867 insect species, 163 species of plants, 14 species of algae, 16 species of fungi.
The practical significance of this area is valuable as a largest fish reproduction site throughout the Kakhovka Reservoir for the development of fish stock. The state of the wetland influences the size and quality of the reproduction of many game fish species.
Being a powerful sand underwater ridge, the area of wetlands is of great importance as a natural filter of fresh water within the Kakhovka Reservoir. It should be noted that in the shallow part of the reservoir, water extraction is conducted not only for irrigation of agricultural landscapes, but also as a drinking water resource.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

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

From year: 2010

To year: 2015

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish): Archipelago Velyki and Mali Kuchugury

Unofficial name (optional): Архіпелаг Великі і Малі Кучугури

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Boundaries description (optional)

Site located within the protected zone of National Nature Park «Velykyi Lup» in the northern part of the Kakhovsky Water Reservoir.

2.2.2 - General location

a) In which large administrative region does the site lie? Zaporizhska Oblast

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

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): 7740

Area, in hectares (ha) as calculated from GIS boundaries: 7749.54

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Steppic

Other biogeographic regionalisation scheme

According to physical and geographic zoning of Ukraine, the wetlands belong to Kinsko-Yalynska low-lying area of the Left Bank Dnipro-Azov of north-steppe region of northern steppe subzone (National Atlas of Ukraine, 2008). According to the biogeographic zoning of Ukraine (Udra, 1997) the wetlands belong to Prykahovsko-Molochanskyi biogeographic region of Lower Danube-Black Sea-Azov subprovince of Pontic province of the steppe zone of Ukraine.

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 area is of great importance of economic development of the region. The island complex is a powerful fresh water filter, besides from the surrounding shallow waters of Kakhovka Reservoir, the water is withdrawn for irrigation of agricultural landscapes. Located in the zone of dry steppes, the settlements and arable land are very dependent on this source. The quality and chemical composition of the water has a direct impact on the degree of productivity of field crops.
Other reasons	The wetland is a unique island complex which includes several types of habitats - sand dunes, floodplain forests, scrubs, swamps and shallow waters. The area is a natural floodplain of the Dnipro River, and is represented by habitats, which are typical for this biogeographical region. At the same time, the wetland is of particular value as the area within the lower valley of the Dnipro as recognized as regional biodiversity hotspot with the best preserved biodiversity values.

☑ Criterion 2 : Rare species and threatened ecological communities

☑ Criterion 3 : Biological diversity

Justification	The waterlogged meadows is a typical of the Lower Dnipro floodplain habitat, which have a high biodiversity and in geobotanical respect could characterize the best values and species composition of Prykahovsko-Molochanskyi biogeographical area of Pontic province of the steppe zone of Ukraine. At the same time, the wetland is a typical and one of the best preserved part of the channel floodplain forests of the lower valley of the Dnipro. The uniqueness of this site lies primarily in the fact that high biodiversity spot is preserved on a relatively small area surrounded by almost completely destroyed nature habitats in the region during construction of the Kakhovka Water Reservoir in the middle of the XX century. Overall, in the course of the wetlands studies, there were registered 156 species of birds, 18 species of mammals, 54 species of fish, 867 insect species, 163 species of plants, 14 species of algae, 16 species of fungi. The standing water bodies are of great value as a nesting reserve for wetland birds (Podicipedidae, Ardeidae, Anatidae, Rallidae, Laridae). The solid thickets of Trapa natans, Numphaeeta albae, and Salvinia natans are suitable for nesting and post-nesting migrations of most wetland bird species. The alternation of high dunes and inland lakes creates excellent conditions for the ovipositor Emys orbicularis, Natrix tessellata, and in fact is one of the most important places in the maintenance of the populations of these species.

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

☑ Criterion 5 : >20,000 waterbirds

Overall waterbird numbers	30000
Start year	2010
Source of data:	Chronicle of Nature: National Nature Park "Velykyi Luh". – Vol. 4-9. – Dniprorudne, 2010-2015

☑ Criterion 6 : >1% waterbird population

☑ Criterion 8 : Fish spawning grounds, etc.

Justification

The wetland reservoir is rich in benthos with well warmed shallow bays and channels, which are one of the major spawning grounds for the fish fauna of the Kakhovka Water Reservoir. The inland lakes overgrown with aquatic vegetation are the places for growing stock of fish, which stay here throughout the spring - summer period. During the studies in 2010-2015, the observed most numerous representatives of the local fish fauna included the follow species Rutilus rutilus, Scardinius erythrophthalmus, Tinca tinca, Carassius gibelio, Esox lucius, Perca fluviatilis, Abramis brama. The value of the wetlands lies in the fact that on a relatively small area, the clusters of mollusks (11 species) and crustaceans (7 types), for which the area of wetlands is a nature reserve during all seasons of the year, are concentrated. The deep pits within the waters of the islands are of value as a place for natural wintering of many game fish species.
In recent years, according to the Institute of Fisheries of the National Academy of Agrarian Sciences of Ukraine, the number of commercial fish production in the Water Reservoirs of the Lower Dnipro cascade has significantly decreased. One of the main reasons is the lack of areas suitable for spawning and growing, so the conservation of Large and Small Kuchugury islands biodiversity is of strategic importance to improve the economic development of the fishing industry in the region. Protection of this key area will also have a positive effect on the preservation of rare and endangered species of fish and shellfish.

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
Aldrovanda vesiculosa		☑	☑	☐	EN	☐	listed in the Red Data Book of Ukraine - rare	
Betula pubescens pubescens		☐	☑	☐		☐	listed in the Red Data Book of Ukraine - NE	
Centaurea konkae		☑	☑	☐		☐	listed in the Red Data Book of Ukraine - CR	
Salvinia natans		☐	☑	☐	LC	☐	listed in the Red Data Book of Ukraine - NE	
Trapa natans		☐	☑	☐	LC	☐	listed in the Red Data Book of Ukraine - NE	

The area of wetlands is represented by several types of habitats that are critically important for biodiversity conservation at the Lower Dnipro region. The most valuable are spiked forest type composed by Betula borysthenica Klokov, this endemic tree species has a limited distribution and in all areas is experiencing a strong human pressure. The wetlands area is isolated, so the Reserve is of great importance in the protection of this habitat type for the whole Dnipro river valley. The floodplain forests are also preserved in its original composition, huge old growth trees with dense vegetation layers, which are typical for the area. Very few of such composition and diversity of natural species, which is a try biodiversity hotspot, left within the Central Ukraine floodplains.
The area of wetland habitat is unique due to the presence of narrowly areal endemic plant species Centaurea konkae. As of 2014, we know only 3 localities of this species for whole Ukraine, the islands of Large and Small Kuchugury is an area with the most well protected populations of this species.
The uniqueness of the landscape also lies in the mosaic composition of forest types with open sand dunes, which reach heights of 8 meters or more. It should also be noted that the wetlands area is characterized by amazing protection of this type of habitat, it is only there that the lowlands and the feet of dunes are covered dominantly with moss and lichen species, which indicates the absence of human intervention within the territory.
The large areas are covered with dominance of rare and Red Data Book of Ukraine (2009) plant species, like aquatic species Trapa natans, Numphaeeta albae, and Salvinia natans etc within the bays.

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 acuta*	Northern Pintail	☐	☐	☐	☐	☐	☑	☐	☐	350	2010-2015		LC	☐	☐		
CHORDATA / AVES	*Anas crecca*	Eurasian Teal; Green-winged Teal	☐	☐	☐	☐	☐	☑	☐	☐	350	2010-2015		LC	☐	☐		
CHORDATA / AVES	*Anas penelope*	Eurasian Wigeon	☐	☐	☐	☐	☐	☑	☐	☐	500	2010-2015		LC	☐	☐		
CHORDATA / AVES	*Anas platyrhynchos*	Mallard	☐	☐	☐	☐	☑	☑	☐	☐	400	2010-2015		LC	☐	☐		
CHORDATA / AVES	*Anas strepera*	Gadwall	☑	☑	☐	☐	☑	☐	☐	☐	45	2010-2015			☐	☐	Bern - III; CMS - II; listed in the Red Data Book of Ukraine - VU	The Anas strepera nesting on Kakhovka Reservoir has been proved only in the southern tip of the island, and given the sharp decline in the European population, we should pay special attention to this nesting group.
CHORDATA / AVES	*Anser albifrons*	Greater White-fronted Goose	☐	☑	☐	☐	☐	☑	☐	☐	3000	2010–2015		LC	☐	☐		occurs during migration
CHORDATA / AVES	*Anser anser*	Greylag Goose	☐	☑	☐	☐	☑	☑	☐	☐	1000	2010–2015		LC	☐	☐		nests here, occurs during migration
CHORDATA / AVES	*Ardea cinerea*	Gray Heron; Grey Heron	☐	☐	☐	☐	☑	☑	☐	☐	300	2010-2015		LC	☐	☐		
CHORDATA / AVES	*Ardeola ralloides*	Squacco Heron	☑	☑	☐	☐	☑	☐	☐	☐	100	2010-2015		LC	☐	☐	Bern - II; listed in the Red Data Book of Ukraine - NT	There is the largest colony of this species for the whole of the floodplain of the Lower Dnipro and makes around 50 nesting pairs. The islands Large and Small Kuchugury are the northern boundary of the range of this species.
CHORDATA / AVES	*Aythya fuligula*	Tufted Duck	☐	☐	☐	☐	☐	☑	☐	☐	1500	2010-2015		LC	☐	☐		
CHORDATA / AVES	*Aythya nyroca*	Ferruginous Duck	☑	☑	☐	☐	☑	☐	☐	☐	75	2010-2015		NT	☐	☑	Bern - III; CMS - II; listed in the Red Data Book of Ukraine - VU	Breeding group of Aythya nyroca makes 4-5 breeding pairs, and is one of the main places for post-nesting of this species in the Kakhovka Reservoir (50 individuals).
CHORDATA / AVES	*Bucephala clangula*	Common Goldeneye	☐	☑	☐	☐	☐	☑	☐	☐	700	2010–2015		LC	☐	☐	listed in the Red Data Book of Ukraine - rare	occurs during migration
CHORDATA / AVES	*Chlidonias hybrida*	Whiskered Tern	☐	☐	☐	☐	☑	☑	☐	☐	200	2010-2015		LC	☐	☐		
CHORDATA / AVES	*Chlidonias niger*	Black Tern	☐	☐	☐	☐	☑	☑	☐	☐	200	2010-2015		LC	☐	☐		
CHORDATA / AVES	*Chroicocephalus ridibundus*	Black-headed Gull	☐	☐	☐	☐	☐	☑	☐	☐	400	2010-2015			☐	☐		
CHORDATA / AVES	*Haematopus ostralegus*	Eurasian Oystercatcher	☑	☑	☐	☐	☑	☐	☐	☐	15	2010-2015		NT	☐	☐	Bern - II; listed in the Red Data Book of Ukraine - VU	Sandy spit and open beaches are important in maintaining Haematopus ostralegus the number of which as of 2015 we estimated at about 5 breeding pairs.

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	*Haliaeetus albicilla*	White-tailed Eagle	☑	☑	☐	☐	☑	☐	☐	☐	34	2010-2015		LC	☑	☑	Bern - III; CMS - II; listed in the Red Data Book of Ukraine - EN	Throughout the year, in the wetlands, there are at least 20-30 single individuals of this species. The two nests were identified on the islands occupied by birds annually.
CHORDATA / AVES	*Ichthyaetus ichthyaetus*	Pallas's Gull	☑	☑	☐	☐	☑	☐	☐	☐	56	2010-2015			☐	☐	Bern - III; CMS - II (only West Eurasion); listed in the Red Data Book of Ukraine - EN	nests here
CHORDATA / AVES	*Larus cachinnans*	Caspian Gull; Yellow-legged Gull	☐	☐	☐	☐	☐	☑	☐	☐	1200	2010-2015		LC	☐	☐		
CHORDATA / AVES	*Mergellus albellus*		☐	☑	☐	☐	☐	☑	☐	☐	400	2010–2015		LC	☐	☐		occurs during migration
CHORDATA / AVES	*Mergus merganser*	Common Merganser	☐	☑	☐	☐	☐	☑	☐	☐	2000	2010–2015		LC	☐	☐		occurs during migration
CHORDATA / AVES	*Microcarbo pygmeus*	Pygmy Cormorant	☑	☑	☐	☐	☐	☐	☐	☐	10	2010-2015			☐	☐	Bern - II; CMS - II; listed in the Red Data Book of Ukraine - EN	occurs during migration
CHORDATA / AVES	*Nycticorax nycticorax*	Black-crowned Night Heron; Black-crowned Night-Heron	☐	☐	☐	☐	☐	☑	☐	☐	350	2010-2015		LC	☐	☐		
CHORDATA / AVES	*Oxyura leucocephala*	White-headed Duck	☑	☐	☐	☐	☐	☐	☐	☐	2	2010-2015		EN	☐	☑	Bern - II; CMS - II; listed in the Red Data Book of Ukraine - EN	
CHORDATA / AVES	*Pandion haliaetus*	Osprey; Western Osprey	☑	☑	☐	☐	☐	☐	☐	☐	40	2010-2015		LC	☐	☐	Bern - III; CMS - II; listed in the Red Data Book of Ukraine - EN	occurs during migration
CHORDATA / AVES	*Phalacrocorax carbo*	Great Cormorant	☐	☐	☐	☐	☑	☑	☐	☐	10000	2010-2015		LC	☐	☐		
CHORDATA / AVES	*Platalea leucorodia*	Eurasian Spoonbill	☑	☑	☐	☐	☑	☐	☐	☐	6	2010-2015		LC	☐	☐	Bern - II; CMS - II; CITES -II; listed in the Red Data Book of Ukraine - VU	The breeding population, for which the wetland area is actually the first recorded case of breeding for this species along the whole valley of the Dnipro. As of the 2015, at least 3 pairs nest there, and there also are about 5 single individuals.
CHORDATA / AVES	*Podiceps cristatus*	Great Crested Grebe	☐	☑	☑	☐	☑	☑	☐	☐	8000	2010–2015	1	LC	☐	☐		nests here, occurs during migration
CHORDATA / AVES	*Podiceps grisegena*	Red-necked Grebe	☐	☑	☑	☐	☐	☑	☐	☐	700	2010–2015	1	LC	☐	☐		occurs during migration
CHORDATA / AVES	*Podiceps nigricollis*	Black-necked Grebe; Eared Grebe	☐	☐	☐	☐	☐	☑	☐	☐	700	2010-2015		LC	☐	☐		
CHORDATA / AVES	*Sterna hirundo*	Common Tern	☐	☐	☐	☐	☑	☑	☐	☐	350	2010-2015		LC	☐	☐		
CHORDATA / AVES	*Sternula albifrons*	Little Tern	☑	☑	☐	☐	☑	☐	☐	☐	60			LC	☐	☐	Bern - II; CMS - II; listed in the Red Data Book of Ukraine - LC	The Sterna albifrons annually nests on sandy spits and open beaches in the amount of 20-30 pairs.
CHORDATA / AVES	*Tachybaptus ruficollis*	Little Grebe	☐	☐	☐	☐	☐	☑	☐	☐	1000	2010-2015		LC	☐	☐		

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	*Tadorna ferruginea*	Ruddy Shelduck	☑	☐	☐	☐	☑	☐	☐	☐	25	2010-2015		LC	☐	☐	Bern - II; CMS - II; listed in the Red Data Book of Ukraine - VU	

1) Percentage of the total biogeographic population at the site

The wet meadows in the floodplain forests create an amazing picture for the Lower Dnipro islands, this is the only place in the region where they experience absolutely no human impact load. The standing water bodies are of great value as a nesting reserve for large number of waterbirds (Podicipedidae, Ardeidae, Anatidae, Rallidae, Laridae). The solid thickets of Trapa natans, Numphaeeta albae, and Salvinia natans are suitable for nesting and post-nesting migrations of most wetland bird species. These habitat types are also very important as feeding grounds for many species during their migration periods.
The wetlands area is a unique set of conditions during molting and migration of water birds, not only for the region but for the whole southern part of Ukraine in general and is also serve as a part of intercontinental bird migration corridors. Being a nesting reserve for water birds, numerous environmental factors of the wetlands contribute to the accumulation of these birds broods until the moment of post-juvenile molting and future migration processes. Numerous bays and inland lakes with reed beds create a natural environment for the birds sheltering from predators during this period while feeding conditions allow birds to accumulate in large flocks, even within a relatively small pond for quite a long time. So, according to the 2010-2015 monitoring, throughout the wetlands, there flocked up to 22,000 molting birds. The location of the island archipelago and the specifics of forest vegetation is appealing to some forest species, which do not nest in the wetlands area, but visit the island during migration. The rich benthic bays and inland lakes are attractive to birds during migration, floodplain forests and high dunes provide a natural hiding places against the strong winds, which contributes to the accumulation of water birds in inland lakes and bays whose number is several times higher than that in the post-breeding period (50,000 individuals). This is especially pronounced during the autumn migration as the islands of the Large and Small Kuchugury are located on the most important migration route of the valley of the Dnipro River.

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
Betuleta borysthenicae	☑	The community of floodplain forests is characterised by an overstorey of Betula borysthenica Klok, Salix alba L., Populus nigra L., Salix acutifilia Willd., Alnus glutinosa (L.) Gaertn., Agropyron dasyanthum Ledeb., Jurinea salicifolia Grun.	Is rare according to the Green Data Book of Ukraine
Nymphaeta albae	☑	Species of community: Nuphar lutea (L.) Smith., Nymphaea alba L., Trapa natans L., Nymphoides peltata O.Kuntze, Potamogeton natans L., Potamogeton nodosus Poir.	Is rare according to the Green Data Book of Ukraine
Stipeta lessingianae	☑	Species of community: Stipa lessingiana Trin. et Rupr., Veronica steppacea Kotov, Salvia nutans L., Salvia pratensis L., Festuca valesiaca Gaud., Euphorbia seguierana Neck.	Is rare according to the Green Data Book of Ukraine

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

4.1 - Ecological character

The area is a natural floodplain of the Dnipro River. The wetlands area is characterized by the presence of inland lakes, mires, narrow sand ridges and floodplain areas with appropriate vegetation types: aquatic water and coastal water, swamp, oxbow lakes, bush, meadow and forest.
The Large and Small Kuchugury Islands represent accumulative alluvial ridges formed by sand dunes whose degradation is flooded and form a network of shallow lakes with rich benthic sediments.
The wetland area is of great importance in terms of economic development of the region. The island complex is a powerful fresh water filter, besides from the surrounding shallow waters of Kakhovka Water Reservoir, the water is withdrawn for irrigation of agricultural landscapes. Located in the zone of dry steppes, settlements and arable land are very dependent on this source and the quality and chemical composition of the water has a direct impact on the degree of productivity of field crops.

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

Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
E: Sand, shingle or pebble shores		2	2400	Representative

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		3	1100	Rare
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		4	800	Unique

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
6: Water storage areas/Reservoirs		1	2900	Representative

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
wet meadows and sand dunes	540

(ECD) Habitat connectivity: The area has got mosaic structure with high level of habitats connectivity. It is the core zone of the national ecological network.

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Agropyron dasyanthum		
Dianthus capitatus andrzejowskianus		
Jurinea salicifolia		
Lysimachia vulgaris		
Thymus borysthenicus		
Tragopogon ucrainicus		

Invasive alien plant species

Scientific name	Common name	Impacts
Amorpha fruticosa	Indigobush Amorpha;Bastard Indigo;False Indigo	Actually (minor impacts)

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	Accipiter gentilis	Northern Goshawk	4	2010–2015		
CHORDATA/AVES	Acrocephalus palustris	Marsh Warbler	100	2010–2015		
CHORDATA/AVES	Anas clypeata	Northern Shoveler	50	2010–2015		
CHORDATA/AVES	Anas querquedula	Garganey	80	2010–2015		
CHORDATA/AVES	Ardea alba	Great Egret	140	2010–2015		
CHORDATA/AVES	Ardea purpurea	Purple Heron	25	2010–2015		
CHORDATA/AVES	Aythya ferina	Common Pochard	140	2010–2015		
CHORDATA/AVES	Botaurus stellaris	Eurasian Bittern	15	2010–2015		
CHORDATA/AVES	Chlidonias leucopterus	White-winged Tern	140	2010–2015		
CHORDATA/AVES	Circus aeruginosus	Western Marsh Harrier	28	2010–2015		
CHORDATA/AVES	Cygnus olor	Mute Swan	30	2010–2015		
CHORDATA/AVES	Egretta garzetta	Little Egret	90	2010–2015		
CHORDATA/AVES	Ixobrychus minutus	Little Bittern	60	2010–2015		
CHORDATA/AVES	Locustella luscinioides	Savi's Warbler	320	2010–2015		
CHORDATA/AVES	Panurus biarmicus	Bearded Reedling	50	2010–2015		
CHORDATA/AVES	Remiz pendulinus	Eurasian Penduline Tit	120	2010–2015		

Invasive alien animal species

Phylum	Scientific name	Common name	Impacts
CHORDATA/MAMMALIA	Nyctereutes procyonoides	Raccoon dog	Potentially

4.4 - Physical components

4.4.1 - Climate

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

The wetland climate is temperate continental, closer to the continental - with moderately cold winters with frequent thaws, hot and dry summer. The average temperature range is + 9.7oC. The average July temperature is + 24.5 oC, January: -0.8 oC. Maximum summer temperatures usually occur in August and reach 40 + 42 oC and winter temperatures in February -25 -30 oC. The first frosts occur in the last days of October, the last - in the first days of April. However, from year to year, variability of frosty and no-frost periods is quite high. The winter on average lasts 64 days, spring - 77 days, summer - 148 days, autumn - 69 days. Winter is short with little snow (sometimes without snow). Snow cover lasts for an average of 30 days for year, the maximum height is 14 cm. During the whole winter there is at least 40 days with temperatures up to + 14 oC.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres): 16

a) Maximum elevation above sea level (in metres): 16

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

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

The wetlands are located in the basin of the Dnieper River and it flows to the Black Sea.

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 ◉

4.4.4 - Water regime

Water permanence

Presence?
Usually permanent water present

Source of water that maintains character of the site

Presence?	Predominant water source
Water inputs from surface water	☑

Water destination

Presence?
To downstream catchment

Stability of water regime

Presence?
Water levels largely stable

4.4.5 - Sediment regime

Significant erosion of sediments occurs on the site ☐

Significant accretion or deposition of sediments occurs on the site ☐

Significant transportation of sediments occurs on or through the site ☐

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

Sediment regime unknown ☑

4.4.6 - Water pH

Acid (pH<5.5) ☐

Circumneutral (pH: 5.5-7.4) ☐

Alkaline (pH>7.4) ☐

Unknown ☑

4.4.7 - Water salinity

Fresh (<0.5 g/l) ☑

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

Euhaline/Eusaline (30-40 g/l) ☐

Hyperhaline/Hypersaline (>40 g/l) ☐

Unknown ☐

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic ☐

Mesotrophic ☐

Oligotrophic ☐

Dystrophic ☐

Unknown ☑

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

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

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Drinking water for humans and/or livestock	High
Fresh water	Water for irrigated agriculture	High

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Pollution control and detoxification	Water purification/waste treatment or dilution	High
Hazard reduction	Flood control, flood storage	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	High
Recreation and tourism	Nature observation and nature-based tourism	High
Spiritual and inspirational	Cultural heritage (historical and archaeological)	High
Scientific and educational	Long-term monitoring site	High
Scientific and educational	Major scientific study site	High

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Soil formation	Sediment retention	High
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	High

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

4.5.2 - Social and cultural values

i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland ☐

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

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

(ECD) Primary production	No data
(ECD) Nutrient cycling	No data
(ECD) Carbon cycling	No data
(ECD) Animal reproductive productivity	High level of animal reproductive productivity
(ECD) Vegetational productivity, pollination, regeneration processes, succession, role of fire, etc.	All natural processes are in place and in large scope
(ECD) Notable species interactions, including grazing, predation, competition, diseases and pathogens	Not visible
(ECD) Notable aspects concerning animal and plant dispersal	Only natural dispersal processes are located at place
(ECD) Notable aspects concerning migration	Active migration
(ECD) Pressures and trends concerning any of the above, and/or concerning ecosystem integrity	The site is highly naturally integral, avoiding any kind of human pressures

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	☑	☑
Provincial/region/state government	☑	☑

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

Strictly protected zone of the National Nature Park «Velykyi Luh»

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site: National Nature Park "Velykyi Luh"

Provide the name and title of the person or people with responsibility for the wetland: Tamara Yosipenko, director

Postal address: 37, Shevchenka Str., selo Skelki, Vasylivskyi rajont, Zaporizhzhia oblast, 71640, Ukraine

E-mail address: grandmeadow@ukrpost.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
Tourism and recreation areas	Medium 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	Medium impact	☑	☑

Biological resource use

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

Human intrusions and disturbance

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

Natural system modifications

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

Pollution

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

Geological events

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Unspecified	Low impact	Low impact	☑	☐

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Unspecified	Low impact	Low impact	☑	☐

Please describe any other threats (optional):

"Unspecified" under "Geological events" include flooding created at the reservoir and formation of islands. Also, the impact of fluctuations of water level on the size of the islands and formation of the coastline.

The impact of climate change on biodiversity has not been studied. But there are some changes in timing of migration.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Nature Park	«Velykyi Luh»		whole
the strictly protected zone of National Nature Park			whole

5.2.3 - IUCN protected areas categories (2008)

Ia Strict Nature Reserve ☐

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

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

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

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

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

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

<no data available>

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Catchment management initiatives/controls	Implemented
Habitat manipulation/enhancement	Implemented
Hydrology management/restoration	Implemented
Faunal corridors/passage	Implemented

Species

Measures	Status
Threatened/rare species management programmes	Implemented
Control of invasive alien animals	Implemented

Human Activities

Measures	Status
Regulation/management of recreational activities	Implemented
Harvest controls/poaching enforcement	Implemented
Research	Implemented

5.2.5 - Management planning

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

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

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

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Please select a value

5.2.7 - Monitoring implemented or proposed

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

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

1. Udra I.Kh. Biogeographic zoning of Ukraine // Ukr. Geography magazine. – 1997. – №4. – C. 28-34. [In Ukrainian] [In Ukrainian]
2. Red Data Book of Ukraine. Flora / edited by Y.P. Didukh. – K .: Hlobalkonsaltynh, 2009. – 900 p. [In Ukrainian]
3. Red Data Book of Ukraine. Fauna / edited by I.A. Akimov. – K.: Hlobalkonsaltynh, 2009. – 600 p. [In Ukrainian]
4. Chronicle of Nature: National Nature Park "Velykyi Luh" – 2010-2015. [In Ukrainian]
5. Busel V.A. Rare birds of headwaters of the Kakhovka reservoir / V.A. Busel // Materials of the nationwide Ukrainian Scientific Conference (21-22 August 2014). – Dniprorudne, 2014. – C. 77–85. [In Ukrainian]
6. Busel V.A. Breeding birds of prey National Nature Park "Velykyi Luh" / V.A. Busel // Regional aspects of floral and faunal studies. - Chernovtsy, 2014б. – C.147–151. [In Ukrainian]

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>

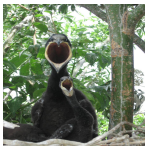
<no data available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:


Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 20-05-2011*)


Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 19-09-2011*)


Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 25-05-2007*)


Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 20-05-2011*)


Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 20-05-2011*)


Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 19-09-2011*)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Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 19-09-2011*)


Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 23-05-2014*)


Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 21-09-2015*)


Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 20-05-2011*)


Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 23-05-2014*)


Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 27-05-2007*)


Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 10-07-2013*)


Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 14-05-2013*)


Archipelago Velyki and Mali Kuchugury (*Viktor Busel , 13-07-2013*)

6.1.4 - Designation letter and related data

Designation letter
<1 file(s) uploaded>

Date of Designation: 2013-12-24