

# Ramsar Information Sheet

Published on 20 October 2022 Update version, previously published on: 1 January 2003

# **Ukraine** Lake Synevyr



Designation date Site number

Coordinates 48°36'58"N 23°40'56"E

Area 29,00 ha

17 November 2003 1400

# Color codes

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

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

# 1 - Summary

#### Summary

Lake Synevyr is the largest lake in the Ukrainian Carpathians and located at an altitude of 989 m above sea level. It is surrounded by old trees and mixed forests with domination of Picea abies, Abies alba, Faqus silvatica, Acer pseudoplatanus. The area of the lake is about 8 ha. The water volume is up to 400,000 m3. The lake formed 10-11 thousand years ago as a result of a mountain shift, which blocked the Ozirny stream. The lake is fed by 3 mountain streams. The river mouths are silted and turned into eutrophic herbaceous (glyceria-equisetum) small marshes. Water from the lake flows through underground aquifers into the river Tereblia, one of the numerous headwaters of the Danube River.

The Site is a rare example of natural type of wetlands that exist in the relevant biogeographical area of the Inner (Pryvododilni) Gorgany, and is an important water regulation complex of freshwater storage for wetlands and other protected areas located downstream.

Among the moisture-loving species of flora there are species listed in the Red Data Book of Ukraine - northern firmoss (Huperzia selago), stiff clubmoss (Lycopodium annotinum), spring snowflake (Leucoyum vernum), Traunstein's dactylorhiza (Dactyllorhiza traunsteinerii), fan orchid (Dactyllorhiza majalis), heath spotted-orchid (Dactyllorhiza maculata), twayblade (Listera/Neottia ovata), lesser twayblade (Listera/Neottia cordata), lichen-forming fungus – lung lichen (Lobaria pulmonaria).

Within the wetland the Grey heron (Ardea cinerea) and the Black stork (Ciconia nigra), Eurasian eagle-owl (Bubo bubo), Lesser spotted eagle (Aguila pomarina), Golden eagle (Aquila chrysaetos) and Western capercaillie (Tetrao urogallus) are listed in the Red Data Book of Ukraine. Also, rather rare for Ukrainian fauna are species that occur in the coastal zone of the lake - agile frog (Rana dalmatina) and fire salamander (Salamandra salamandra) among amphibians, Aesculapian snake (Elaphe/Zamenis longissima) and smooth snake (Coronella austriaca) among reptiles.

Synevyr Lake with its charming nature is a national symbol and has a great environmental, cultural and scientific significance. The Ramsar Site is a part of the National Nature Park "Synevyr".

# 2 - Data & location

#### 2.1 - Formal data

2.1.1	- Name	and	address	of the	compile	er of t	his RIS
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Responsible compiler

Institution/agency | National Nature Park Synevyr Synevyr-Ostriky village, Mizhhirya district, Zakarpatska region, 90041, Ukraine Postal address

National Ramsar Administrative Authority

Institution/agency | National Nature Park Synevyr Synevyr-Ostriky village, Mizhhirya district, Zakarpatska region, 90041, Ukraine Postal address

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 Lake Synevyr Spanish)

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

<sup>(Update)</sup> A. Changes to Site boundary Yes O No ● (Update) B. Changes to Site area No change to area  $^{ ext{(Update)}}$  For secretariat only: This update is an extension  $\Box$ 

# 2.1.5 - Changes to the ecological character of the Site

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

# 2.2 - Site location

# 2.2.1 - Defining the Site boundaries

b) Digital map/image

Former maps 0

Boundaries description

Synevyr Lake is located at an altitude of 989 m above sea level in Zakarpatska region near the border with Ivano-Frankivsk region. The wetland is situated on the East in 15 km from the urban village Mizhhirya (4,000 inhabitants), 45 km from the town Khust (35,000 inhabitants) and 60 km from the city Mukachave (95,000 inhabitants). The wetland is completely included into the National Nature Park "Synevyr".

The Site includes the area around the lake which is up to 110 meters wide on the south and north sides of the lake and up to 500 meters wide on the west and up to 350 meters wide on the east of the lake. The territory extends 200 meters along the stream flowing from the lake until an altitude of 913 m asl.

#### 2.2.2 - General location

a) In which large administrative region does Zakarpatska region, Mizhhirya district the site lie? b) What is the nearest town or population Synevyrs'ka Polyana village centre?

### 2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other Yes O No 

O 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):	29
Area, in hectares (ha) as calculated from	20 132
GIS boundaries	25.132

# 2.2.5 - Biogeography

# Biogeographic regions

Diogoogiapino rogiono	
Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Alpine

# Other biogeographic regionalisation scheme

According to geobotanical zoning of Ukraine: East-Carpathian mountain subprovince of the Central European Province of the European broadleaved region

# 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

Lake Synevyr, though small, is the largest natural water body in the Ukrainian Carpathians. The Lake has an important function as water storage for wetlands and other protected areas located downstream.

The catchment of Synevyr Lake is formed throughout its perimeter (Verkhovyna Carpathians) with a maximal altitude of 1495.6 m (Ozerna Lake). The area of the lake catchment is 2.3 sq km. Synevyr Lake, Hydrological services provided depending on its filling, has an area of about 4.45-7.58 ha, an average depth 8-10 m, the deepest is 19-23.5 m, and water the volume 350-460 thousand m3. The source of water is precipitation and surface inflow. The Lake is fed by 3 mountain streams, which are marshy at their respective river mouths. The outflow is underground through the Synevyr Strait which surfaces 350 meters to the west of the lake and 60 meters below its ridge level mark. It nourishes the Tereblia river - the tributary of Tisza River, which leads down to the Danube River.

Other ecosystem services provided

The lake, associated with legends and widely popular among local people, is a symbol of the Ukrainian Carpathians and represents a great environmental and educational value. Human activities include regulated recreation, scientific research and nature conservation. The lake Synevyr supports tourist activities development in the region. The lake is visited by up to 150,000 visitors annually.

#### ☑ Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further Within the wetland noted 16 species listed in Red Data Book of Ukraine - 9 plant species (4 - VU), 3 bird information species, 2 amphibian species and 2 species of reptiles.

# ☑ Criterion 3 : Biological diversity

The wetland has a small area, however, the diversity of biotopes and the uniqueness of water bodies have contributed to the formation of relatively high rates of biodiversity.

Biodiversity consists of: vascular plants – 280 species; gymnosperms – 2 species; ferns – 7 species; mosses - 3 species; lichens - 8 species; micromycetes - 5 species; 30 species of macromycetes; fishes – 7 species; amphibians – 5 species; reptiles – 4 species; birds – 15 species; mammals – 25 species.

# 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	Dactylorhiza maculata	✓	V				listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ LILIOPSIDA	Dactylorhiza majalis		<b>V</b>				listed in the Red Data Book of Ukraine - LC	
TRACHEOPHYTA/ LILIOPSIDA	Dactylorhiza traunsteineri		V				listed in the Red Data Book of Ukraine - LC	
TRACHEOPHYTA/ EQUISETOPSIDA	Equisetum palustre		✓		LC			
TRACHEOPHYTA/ LILIOPSIDA	Galanthus nivalis		✓		NT		listed in the Red Data Book of Ukraine - NE	
TRACHEOPHYTA/ LILIOPSIDA	Glyceria fluitans		✓		LC			
TRACHEOPHYTA/ LYCOPODIOPSIDA	Huperzia selago		✓				listed in the Red Data Book of Ukraine - NE	
TRACHEOPHYTA/ LILIOPSIDA	Leucojum vernum		<b>V</b>		LC		listed in the Red Data Book of Ukraine - NE	
TRACHEOPHYTA/ LYCOPODIOPSIDA	Lycopodium annotinum	V	✓				listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Mentha piperita		✓					
TRACHEOPHYTA/ LILIOPSIDA	Neottia cordata	$\mathscr{J}$	✓				listed in the Red Data Book of Ukraine - VU	
TRACHEOPHYTA/ LILIOPSIDA	Neottia ovata		✓				listed in the Red Data Book of Ukraine - NE	
TRACHEOPHYTA/ LILIOPSIDA	Potamogeton alpinus		✓		LC			
TRACHEOPHYTA/ LILIOPSIDA	Potamogeton crispus		V		LC			
TRACHEOPHYTA/ LYCOPODIOPSIDA	Spinulum annotinum	$\mathscr{J}$	✓				Red Data Book of Ukraine - VU	
Fungi								
ASCOMYCOTA/ LECANOROMYCETES	Lobaria pulmonaria	✓	<b>2</b>				Red Data Book of Ukraine - VU	

For the wetland 280 species of flowering plants were noted; gymnosperms - 2 species; ferns - 7 species; mosses - 3 species; lichens - 8
species; micromycetes – 5 species; 30 species of macromycetes.

9 species are listed in Red Data Book of Ukraine.

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

Phylum	Scientific name	Spe qual und crite	ifies der erion	Species contribute under criterior 3   5   7	Pop. Size	Period of pop. Est.		IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Others	Others											
CHORDATA/ REPTILIA	Coronella austriaca				10	2005-2018					listed in the Red Data Book of Ukraine - VU	important for regional biodiversity
CHORDATA/ MAMMALIA	Felis silvestris	<b>2</b>						LC			listed in the Red Data Book of Ukraine - VU	important for regional biodiversity
CHORDATA/ AMPHIBIA	Ichthyosaura alpestris					2012-2018		LC			Red Data Book of Ukraine – VU	important for regional biodiversity

Phylum	Scientific name	q	uali unc	rion	cont	nder terio	n	Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AMPHIBIA	Lissotriton montandoni	£			<b>/</b>						LC			listed in the Red Data Book of Ukraine - VU	important for regional biodiversity
CHORDATA/ AMPHIBIA	Lissotriton vulgaris				<b>/</b>						LC				important for regional biodiversity
CHORDATA/ MAMMALIA	Lutra lutra	1			<b>/</b>						NT	$\mathscr{L}$		listed in the Red Data Book of Ukraine - VU	important for regional biodiversity
CHORDATA/ MAMMALIA	Lynx lynx	1			<b>2</b>						LC			listed in the Red Data Book of Ukraine - VU	important for regional biodiversity
CHORDATA/ MAMMALIA	Meles meles				<b>/</b>										important for regional biodiversity
CHORDATA/ MAMMALIA	Mustela erminea	¥			<b>/</b>						LC			listed in the Red Data Book of Ukraine - VU	important for regional biodiversity
CHORDATA/ MAMMALIA	Mustela nivalis				<b>/</b>						LC				important for regional biodiversity
CHORDATA/ AMPHIBIA	Rana dalmatina	V			2			30	2012-2018		LC			listed in the Red Data Book of Ukraine - EN; Appendix II of Bern Convention	important for regional biodiversity
CHORDATA/ AMPHIBIA	Salamandra salamandra	1			<b>/</b>			10	2012-2018		LC			listed in the Red Data Book of Ukraine - VU	important for regional biodiversity
CHORDATA/ AMPHIBIA	Triturus cristatus	1			<b>2</b>						LC			listed in the Red Data Book of Ukraine - VU	important for regional biodiversity
CHORDATA/ REPTILIA	Zamenis Iongissimus	J			<b>/</b>			2	2012-2018		LC			listed in the Red Data Book of Ukraine - EN; Bern - 2	important for regional biodiversity
	Zamenis Iongissimus	1			<b>/</b>			2	2005-2015		LC			listed in the Red Data Book of Ukraine - EN	important for regional biodiversity
Fish, Mollusc a	nd Crustacea														
ARTHROPODA/ MALACOSTRACA	Astacus astacus	1			<b>/</b>			1000	2012-2018		VU			listed in the Red Data Book of Ukraine - VU	important for regional biodiversity
CHORDATA/ ACTINOPTERYGII	Cottus gobio				1						LC				important for regional biodiversity
CHORDATA/ ACTINOPTERYGII	Cottus poecilopus				<b>/</b>						LC				important for regional biodiversity
CHORDATA/ ACTINOPTERYGII	Phoxinus phoxinus				<b>/</b>						LC				important for regional biodiversity
CHORDATA/ ACTINOPTERYGII	Salmo trutta				<b>2</b>						LC				important for regional biodiversity
CHORDATA/ ACTINOPTERYGII	Thymallus thymallus	J			<b>/</b>			100	2005-2018		LC			listed in the Red Data Book of Ukraine - VU; Bern - 3	important for regional biodiversity
Birds															
CHORDATA/ AVES	Aquila chrysaetos	J			<b>/</b>						LC			listed in the Red Data Book of Ukraine - VU	important for regional biodiversity
CHORDATA/ AVES	Aquila pomarina	J			<b>2</b>			1	2005-2018					listed in the Red Data Book of Ukraine - rare; CITES - Annex2; Bern Convention Annex – 2; Bonn Convention Annex – 2	important for regional biodiversity
CHORDATA/ AVES	Ardea cinerea				<b>/</b>						LC				important for regional biodiversity
CHORDATA/ AVES	Bubo bubo				<b>/</b>			2	2005-2018		LC			listed in the Red Data Book of Ukraine - rare	important for regional biodiversity
CHORDATA/ AVES	Ciconia nigra				<b>/</b>			2	2005-2015		LC			listed in the Red Data Book of Ukraine - rare	important for regional biodiversity
CHORDATA/ AVES	Tetrao urogallus				<b>/</b>						LC			listed in the Red Data Book of Ukraine - rare	important for regional biodiversity

It should be noted that the combination of lake, coastal-water biotopes and biotopes of mountain streams has formed rather specific fauna. Within the wetland are counted 7 species of fishes; amphibians – 5 species; reptiles – 4 species; birds – 15 species; mammals – 25 species. Within the wetland there were found 3 bird species, listed on Red Data Book of Ukraine (2009), and also 2 rare amphibian species and 2 species of reptiles.

# 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
Piceetum (abietis) hylocomiosum.	Ø	Asmall locality is noted around Synevyr Lake. Dominants are Piceaabies, Pinusmugo. Typical species –Empetrum nigrum, Calamagrostis villosa, Homogyne alpina. In a moss layer dominates Hylocomium splendens.	Green Data Book of Ukraine
Piceetum (abietis) vacciniosum (myrtilli).	<b>2</b>	The grouping is noted within the wetland sporadically. Dominants are Picea abies, Pinus mugo Vaccinium myrtillus. Typical species—Empetrum nigrum, Rhodococcumvitis-idaea, Calamagrostis villosa, Homogyne alpina.	Green Data Book of Ukraine
Piceetum (abietis) vaccinioso (myrtilli) – hylocomiosum.	<b>2</b>	The grouping is noted in the middle part on the wetland's coast. Dominants are Picea abies, Pinus mugo, Vaccinium myrtillus. In a moss layer dominates Hylocomium splendens.	Green Data Book of Ukraine
Piceetum (abietis) vaccinioso (myrtilli) sphagnosum.	Ø	The grouping in the form of two localities was noted within middle and forest tributaries of Synevyr Lake. Dominants are Picea abies, Pinus mugo. In a moss layer dominate species of Sphagnum spp genus.	Green Data Book of Ukraine

#### Optional text box to provide further information

The flora is represented by aquatic-swimming plants, aquatic-coastal plants and coastal-forest groupings. Lake groupings are represented by different species of pondweed alpine Potamogeton alpinus and curled P. Crispus, small pondweed Berchtoldii Fieb., aquatic-coastal –by Floating Sweet-grass thicket Glyceriafluitans, marsh horsetail Equisetum palustre, peppermint Mentha piperita. In three parts (in the area of 3 mountain streams mouth) the lake can become silted, formatting eutrophic marshes. These marshes, the square of which is up to 2 ha, were overgrown by Floating Sweet-grass Glyceriafluitans and marsh horsetail Equisetum palustre. Surrounding complexes are formatted by spruce and fir forests with participation of European beech Faqus silvatica, rowan Sorbus aucuparia and sycamore Acer pseudoplatanus.

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

# 4.1 - Ecological character

The wetland is represented by a mountain lake, streams and marshy forest territories around the lake.

Synevyr Lake is unique and the largest lake in the Ukrainian Carpathians. The lake is stretched among the spruce forest and is nourished by 3 mountain streams. The respective river mouths are silted and eutrophic herbal (mannagrass-horsetail) marshes form. Water from the lake flows through underground aquifers into the river Tereblia - one of the numerous leaks of the Danube. The square of the lake catchment is about 2.3 million sq m.

The lake was formed due to the landslide of indigenous sandstones. The water level constantly changes: it decreases in winter, rises in spring. In summer and autumn, it fluctuates depending on rainfall. The range of water level variability reaches 4,0-4,5 m. According to the level, the square of the water table varies from 4.45 up to 7.58 ha. The largest depth is from 19 up to 23.5 m and the water volume - from 350 up to 460 thousand m3. The water level does not fall below 964 m.a.s.l. The lake water belongs to the type of hydrocarbonate-sulphate and sulphate-hydrocarbonate with mineralization 107-186 mg/l. To the lake sediment loads reach 50 tons per year, from the lake – no more than 1 ton per year. Today in its basin is concentrated about 200 thousand m 3 of lake sediments.

The average temperature of the warmest month of July is + 13°C, of the coldest month of January is -10°C.

Winter is characterized by high temperatures and humidity, the duration of the non-frost period is 110-130 days, the duration of the period of spring snow melting is about 25 days, the duration of the vegetation period is 90-110. The annual average rainfall is 950-1150 mm. The wetland has a small area, however, the diversity of biotopes and the uniqueness of the water body have contributed to the formation of relatively high rates of biodiversity. Synevyr Lake has a great environmental, cultural and scientific significance.

# 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		3	1.5	
Fresh water > Flowing water >> N: Seasonal/ intermittent/ irregular rivers/ streams/ creeks		0		
Fresh water > Lakes and pools  >> O: Permanent freshwater lakes		1	7.5	Unique
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		0		
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		2	2	

#### Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Forest	18

# 4.3 - Biological components

# 4.3.1 - Plant species

Other noteworthy plant species

Other Hoteworthy plant species		
Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/MAGNOLIOPSIDA	Campanula patula abietina	Endemic
TRACHEOPHYTA/LILIOPSIDA	Paris quadrifolia	Endemic
TRACHEOPHYTA/MAGNOLIOPSIDA	Viola declinata	Endemic

## Invasive alien plant species

Phylum	Scientific name	Impacts	Changes at RIS update
TRACHEOPHYTA/MAGNOLIOPSIDA	Galinsoga parviflora	Actual (minor impacts)	No change

#### 4.3.2 - Animal species

# Invasive alien animal species

Phylum	Scientific name	Impacts	Changes at RIS update
CHORDATA/ACTINOPTERYGII	Oncorhynchus mykiss	Actual (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)

An average temperature of the warmest month (July) is +13°C, of coldest (January) is -10°C. Winter is characterized by comparatively high temperatures and air humidity; duration of the frost-free period is 110-130 days, the period of spring snow thaw lasts about 25 days. Annual precipitation is 950-1050 mm.

442-	Geomor	phic	setting

a) Minimum elevation above sea level (in metres)	989
a) Maximum elevation above sea level (in metres)	1020
	Entire river basin
	Upper part of river basin   ✓
	Middle part of river basin ☐
	Lower part of river basin $\square$
	More than one river basin ☐
	Not in river basin ☐
	Coastal 🗆
Please name the river basin or basins. If the s	site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.
Danube river basin	
4.4.3 - Soil	

Mineral 🗹  $^{(Update)}$  Changes at RIS update No change lacktriangle Increase O Decrease O Unknown ONo available information Are soil types subject to change as a result of changing hydrological  $conditions \ (e.g., increased \ salinity \ or \ acidification)?$ Please provide further information on the soil (optional)

On the wetland territory prevail mountain spodosols, brown mountain-earth soils.

# 4.4.4 - Water regime

water permanence	
Presence?	Changes at RIS update
Usually permanent water present	

#### Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from surface water	<b>✓</b>	No change
Water inputs from precipitation	<b>✓</b>	No change

#### Water destination

Presence?		Changes at RIS update
Feeds groundwater		No change

# Stability of water regime

Otability of water regime	
Presence?	Changes at RIS update
Water levels largely stable	No change

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

The lake is freshwater, constantly filled with water with temporary seasonal flooding, in the area of 3 mountain streams mouth is marshy, forming eutrophic herbal (mannagrass-horsetail) marshes of square up to 2,0 ha.

Nourishing occurs by surface and atmospheric waters. There are 3 mountain streams leading down to (ECD) Connectivity of surface waters and of the lake, which are marshy in places of mouth. Water level circulation and self-regulation in the lake are groundwater provided by the Synevyr Strait. In sunny weather, the water surface temperature is 20-22°C, at the depth - drops to 13,4°C (7,5 m -(ECD) Stratification and mixing regime 7,8°C; 17,5 m - 2,6°C). The lowest temperature commits to banks, and the highest - to the slopes of the underwater ridge in the middle of the lake.

#### 4.4.5 - Sediment regime

Significant accretion or deposition of sediments occurs on the site 🗹

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

Sediment regime unknown

Please provide further information on sediment (optional):

Sediment loads to Synevyr Lake reach 50 tons per year, and from the lake - no more than 1 ton per year, it means that 98% of sediment loads are accumulated in the lake. Today in the lake bed about 200 thousand bcm of lacustrine sediments are concentrated. That is why in the eastern part of the lake silt sediments of 11-12 m of thickness almost have reached the surface. The water is heated rather good here, what stimulates rank growth of high aquatic vegetation with necrosis, secondary pollution of the lake.

(ECD) Water temperature It has a constant temperature + 11°C.

#### 4.4.6 - Water pH

Acid (pH<5.5) ■

(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 Increase O Decrease O Unknown O

Unknown

Please provide further information on salinity (optional):

Water of Lake Synevyr belongs to the hydrocarbonate-sulfate and sulfate-hydrocarbonate type with mineralization of 107-186 mg/l.

# 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 ⊚ ii) significantly different O site itself:

# 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	Low

regulating cornect		
Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Low
Erosion protection	Soil, sediment and nutrient retention	Medium
Climate regulation	Local climate regulation/buffering of change	Medium
Hazard reduction	Flood control, flood storage	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	High
Recreation and tourism	Picnics, outings, touring	Medium
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Spiritual and inspirational	Aesthetic and sense of place values	High
Spiritual and inspirational	Inspiration	High
Scientific and educational	Long-term monitoring site	Medium

**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	Sediment retention	Medium
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	Low
Pollination	Support for pollinators	Low

Within the site:	10000
Outside the site:	10000

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site?

# 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

# Description if applicable

- a) within the wetland: The wetland is located within the stationary recreation zone of the National Nature Park Synevir is used for touristic and recreational purposes;
- b) the wetland is located within the regulated recreation zone of the National Nature Park Synevir, where scientific research, nature-conservative measures, regulated recreation are allowed.
- c) lands outside the wetland are also within the regulated recreation zone of the National Nature Park Synevir and there the same land tenure is implemented as within the wetland and also partial cattle grazing and hay mowing.

ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland
iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples
iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

# 4.6 - Ecological processes

<no data available>

# 5 - How is the Site managed? (Conservation and management)

# 5.1 - Land tenure and responsibilities (Managers)

# 5.1.1 - Land tenure/ownership

	own	

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	<b></b> ✓	<b>₽</b>

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

- a) within the wetland: Land is governmental property, is transferred to permanent use to administration of National Nature Park Synevir (has an act for the right of permanent land use)
- b) on adjacent territories: Lands are also governmental property, which were transferred to permanent use to administration of National Nature Park Synevir.

# 5.1.2 - Management authority

Please list the local office / offices of any	National Nature Park "Synevir"
agency or organization responsible for	
managing the site:	
Provide the name and/or title of the person	
or people with responsibility for the wetland:	Derbak Mykola, director
Postal address:	Synevyr-Ostriky village, Mizhhirya district, Zakarpatska region, 90041, Ukraine
. oo an address.	
E-mail address:	npp-synevyr@ukr.net

# 5.2 - Ecological character threats and responses (Management)

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

**Actual threat** 

Potential threat

Human settlements (non agricultural)

Factors adversely

affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Tourism and recreation areas	Medium impact	High impact	<b>2</b>	increase	✓	increase
griculture and aquacultur	е					
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Wood and pulp plantations	Low impact	Low impact		No change	<b>2</b>	No change
ransportation and service	corridors					
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Roads and railroads	Low impact	Medium impact	<b>₽</b>	No change	✓	No change

Within the site

Changes

In the surrounding area

Changes

#### Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Logging and wood harvesting	Medium impact	Medium impact		No change	✓	increase

# Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Medium impact	High impact	✓	increase	<b>✓</b>	increase

#### Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Garbage and solid waste	Medium impact	Medium impact	<b>/</b>	increase	<b>&gt;</b>	increase

### 5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Nature Park	National Nature Park "Synevyr"	http://www.npp-synevyr.net.ua	partly

5.2.3 - IU	JCN protected	l areas ca	teaories (	(2008)

	la Strict Nature Reserve
	lb 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

g p		
Measures	Status	
Legal protection	Implemented	

#### Habitat

Measures	Status
Catchment management initiatives/controls	Partially implemented

#### **Human Activities**

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

# 5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

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 Yes O No 

processes with another Contracting Party?

URL of site-related webpage (if relevant): https://synevyr-park.in.ua/

# 5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

# 5.2.7 - Monitoring implemented or proposed

I	Monitoring	Status
	Water regime monitoring	Implemented

# 6 - Additional material

# 6.1 - Additional reports and documents

# 6.1.1 - Bibliographical references

- 1. Management of wetlands of international importance. Kyiv 2005. PhD of biology V.A. Kostolyn, G.V. Kolomiyets, PhD of biology S.V. Tarashchuk.
- 2. Report. "Investigation of the hydrological regime of Synevyr Lake and the geological-geomorphological situation of the area of its water catchment in order to issue recommendations on the prevention of its shallowing and conservation". Institute of geology and geochemistry of Fuels. 1984. Lviv
- 3. Materials of Nature Chronicle, vol. XV-XXVII, vil. Synevyr, SPE "Synevyr" 1996-2017
- 4. Red Data Book of Ukraine (fauna), Kyiv, 2009.
- Red Data Book of Ukraine (flora) Kyiv, 2009.

# 6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

ii. a detailed Ecological Character Description (ECD) (in a national format)

iii. a description of the site in a national or regional wetland inventory

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

vi. other published literature

<no data available>

# 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Park Synevyr, 10-Natural Parl 06-2015 )



Natural Park Synevyr, 10-06-2015 )

# 6.1.4 - Designation letter and related data

**Designation letter** 

<1 file(s) uploaded>

Date of Designation 2003-11-17