



Ramsar Information Sheet

Ukraine

Ozirnyi-Brebeneskul



Designation date	4 April 2019
Site number	2394
Coordinates	48°06'54"N 24°32'17"E
Area	1 656,91 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 "Ozirnyi-Brebeneskul" is a highland wetland, which is located in the Chornohora mountain range. It covers 1657 hectares and lies on the Southern slopes of the highest mountain in Ukraine, Hoverla (2061 m. above sea level), and the adjacent to it mountain peaks. The White Tysa river originates in the Site, and flows into the River Tysa. A dense river network characterizes the wetland. About 8% of the territory is marshy. Mainly it is composed by highland oligotrophic swamps, which were formed during the Ice Age. There are four relatively large lakes of glacial origin and a number of small lakes. Some lakes are connected with each other, either by surface water or by underground streams. In some places, there are a lot of peat lakes filled with a shallow layer of water only during the active melting of snow and in the rainy period. A large number of rare species of flora and fauna characterizes this territory. The vegetation is mainly represented by meadow and shrub plant groups of the sub-alpine and alpine belt. They serve as habitats for a number of alpine and arctic-alpine plant species. Among them there are a number of rare and endemic of the Ukrainian Carpathians. Among them: *Senecio carpathicus*; *Saussurea porcii*; *Oreochloa disticha*, and especially *Pedicularis oederi*. The latter is known in the Eastern Carpathians only from the territory of this wetland. The animal community is represented only by highland species, as well as those that are common of all the Carpathians. For the typical highland complex, there are the following rare species: *Prunella collaris*, *Lyrurus tetrrix*, *Chionomys nivalis* etc. Among the local species amphibians are especially distinguished, as the local reservoirs serve as places of mass reproduction, and invertebrates, especially insects, which are represented by a number of endemic species. Of amphibians, *Lissotriton montandoni* deserves special attention, as it is one of the few endemics of the Carpathians among the vertebrates. The Site is also an important touristic place. It is located on the periphery of the most popular touristic trail in Ukraine, which passes through the highlands of the Chornohora ridge to the top of the Hoverla Mountain. This area is important also from a cultural point of view and connected with local folklore. The Site is a part of the territory of the Carpathian Biosphere Reserve.

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	2012
To year	2018

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Ozirnyi-Brebeneskul
Unofficial name (optional)	Урочище Озірний-Бребенескул (Urochyshe Ozirnyi-Brebeneskul) (Originally designated as "Stow Urochyshe Ozirnyi-Brebeneskul")

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<3 file(s) uploaded>

Former maps	0
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Boundaries description

The wetland is located in the Rakhiv district of the Transcarpathian region (Zakarpatska oblast) within the limits of the Chornohora ridge on the administrative border with the Ivano-Frankivsk region. The Site is located 220 km to the East from Uzhhorod, 35 km Northeast from the town of Rakhiv and 18 km to the North from the village Ludy.

Wetland lies entirely within the Carpathian Biosphere Reserve. It is a part of the core zone, buffer zone and anthropogenic landscapes zone of the Carpathian Biosphere Reserve. The northern boundary of the wetlands runs along the main ridge of the Ukrainian Carpathians and is also the boundary of Carpathian Biosphere Reserve. The rest boundaries are into the Carpathian Biosphere Reserve territory. The western boundary of the wetland is Hoverla mountain and eastern boundary is Brebeneskul mountain. The southern boundary coincides with the upper limit of the forest zone. The total length of the boundaries of wetlands is about 30 km.

2.2.2 - General location

a) In which large administrative region does the site lie?	Zakarpatska oblast (Transcarpathian region)
b) What is the nearest town or population centre?	Rakhiv town

2.2.3 - For wetlands on national boundaries only

- a) Does the wetland extend onto the territory of one or more other countries? Yes No
- b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes No

2.2.4 - Area of the Site

Official area, in hectares (ha):

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

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Alpine

Other biogeographic regionalisation scheme

According to geobotanical zoning, the Site is situated within the European Broadleaf-Woodland Area (zone); Carpathian-Alpine mountain province of forests and highland vegetation; East-Carpathian subprovince of deciduous and coniferous forests and highland vegetation; Marmorosh-Chomohora-Sydvovets district of rocky- and common-oak, beech, larch and spruce forests, sub-alpine and alpine vegetation (Ya.P. Didukh, Yu.R. Shelyag-Sosonko, 2003).
 According to zoogeographical zoning, the Site is located within the Paleoarctic region; Boreal European-Siberian subregion; European-West-Siberian Province; Central-European, European District; of the Carpathian region; Polonyna (alpine highland meadow) area (M. M. Shcherbak, 1988).

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

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

Hydrological services provided

The Site is the most highland wetland in the Ukrainian Carpathians. It includes lakes and marshes formed during the glacial period, which play an important role in maintaining the water regime of the Tysa River, which flows into the Danube. The wetland is important for mitigating the effects of floods for settlements located in the valley of the Tysa River, where live about 350 thousand people, as it accumulates a large amount of precipitation from heavy rainfalls and water, formed during snow melting in the catchment area.

Other ecosystem services provided

An important ecosystem function is providing a high-quality drinking water for local communities in the valleys of the White Tysa and Tysa rivers.
On the territory of the Site locals are engaged in traditional activities - mainly grazing livestock, primarily sheep. Hay-mowing is also present on small areas.
The Site has also an important cultural significance. Life and activity of the national hero named Dovbush is connected with these places, which was reflected in local folklore. A lot of folk legends, songs, tellings, etc. were inspired by him and the Chornohora Range. A cultural phenomenon for this territory is also the traditional Polonyna farming - seasonal milk sheep farming.
The Site is also a popular tourist destination, which is visited by over 100 thousand people during a year.

Other reasons

A various types of ecosystems and habitats are represented in the territory of the Site. Which include alpine and subalpine meadows, crooked woodland formed by different species, mixed and coniferous forests, rivers, streams, lakes, wetlands, stone outcrops with lichens, etc. There are well-represented glacial relief forms, which contributed to the formation of various types of wetlands. Among them, the most unique are mountain lakes of glacial origin, which include the largest in area, the most highland and the deepest in Ukrainian Carpathians. To the unique wetlands also relate local peatlands, which occupy here vast areas.

Criterion 2 : Rare species and threatened ecological communities

Criterion 3 : Biological diversity

Justification

The Site is characterized by a large variety of flora, which includes more than 500 species of higher vascular plants. The dominant types of vegetation are grass formations, namely, sub-alpine and alpine meadows, as well as crooked shrubbery, formed predominantly by *Pinus mugo*. Forests are usually presented by zonal spruce forests.
Wetlands support the existence of populations of a number of species important for the conservation of biodiversity in the Carpathian biogeographical region. In particular, coastal-lake ecosystems are habitats for a number of alpine and arctic-alpine plant species. At the same time, the catchment basins of local lakes of glacial origin are the centers for the distribution of rare, endemic and relic alpine plant species. They are: *Aconitum anthora*, *Agrostis rupestris*, *Anemone narcissiflora*, *Campanula carpatica*, *Carex pauciflora*, *Gentiana acaulis*, *Pedicularis oederi*, *Ranunculus thora*, *Rhododendron myrtifolium*, *Salix herbacea* and others.
The fauna of wetland is also quite diverse and is represented by species characteristic for the Taiga and Alpine complexes. In general, the fauna species of the Chornohora mountain range is dominated by species typical for the entire Carpathian forest zone, although the highland component is very well presented. It is important that many species of invertebrates, which belong to the Carpathian and East-Carpathian endemics, are registered in the Ukrainian Carpathians only in Chornohora massif. Among them: *Nebria transsylvanica*, *Carabus transsylvanicus*, *Trechus carpathicus*, *Deltomerus carpathicus*, *Pterostichus foveolatus* and others.

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
<i>Aconitum anthora anthora</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	Eastern Carpathian endemic
<i>Agrostis rupestris</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - EN	relict
<i>Anemone narcissifolia narcissifolia</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	relict
<i>Botrychium lunaria</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
<i>Campanula camica camica</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
<i>Carex buxbaumii</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
<i>Carex davalliana</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	relict
<i>Carex pauciflora</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	relict
<i>Carex rupestris</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	relict
<i>Crocus heuffelianus</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NE	
<i>Dactylorhiza cordigera</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
<i>Dactylorhiza fuchsii</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NE	
<i>Dactylorhiza maculata</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
<i>Dactylorhiza viridis</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
<i>Diphasiastrum alpinum</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
<i>Doronicum clusii</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
<i>Dryas octopetala</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	relict
<i>Festuca porcii</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
<i>Gentiana acaulis</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	relict
<i>Gentiana lutea</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
<i>Gentiana punctata</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
<i>Gentiana pyrenaica</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - CR	
<i>Gymnadenia conopsea</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
<i>Huperzia selago</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NE	
<i>Kalmia procumbens</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	relict
<i>Oreochloa disticha</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - CR	

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<i>Pedicularis oederi</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - CR	relict
<i>Pinguicula alpina</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
<i>Poa variegata</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
<i>Primula halleri</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
<i>Primula minima</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
<i>Pulsatilla scherfelii</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
<i>Ranunculus thora</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	relict
<i>Rhodiola rosea</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	relict
<i>Rhododendron myrtifolium</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NE	Carpathian-Balkan endemic
<i>Salix herbacea</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	relict
<i>Salix retusa</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
<i>Saussurea alpina</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
<i>Saussurea porcii</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	Eastern Carpathian endemic
<i>Swertia perennis</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	

The Site «Ozirnyi-Brebeneskul» is characterized by an extremely high diversity of biotopes. The vegetation is represented by upper forest belt, subalpine meadows and bushes, alpine meadows, waterside and anthropogenic biotopes prevail here, as well as ones of rocks, stone fields, bogs and ecotones.

From a botanical point of view, the Site is unique due to the extremely high variety of biotopes and diversity of plant species. Here are presented the upper forest belt, subalpine meadows and crooked woodland, alpine meadows, coastal and water areas, as well as rocks, rock placers, marshes, etc. Flora of the wetland counts more than 500 species of vascular plants. It includes a large part of rare species. Among them 42, are listed in the Red Data Book of Ukraine, 10 - endemic, 13 - relic and 10 - need protection at the regional level. The last ones are listed in the Regional Red List of Transcarpathia (2008). The most important here are the following red-listed species: *Senecio carpathicus*, *Saussurea porcii*, *Oreochloa disticha*, *Pedicularis oederi*, *Primula minima*, *Pulsatilla scherfelii*, *Rhodiola rosea*, *Salix retusa*, *Saussurea alpina* etc. Endemics, relicts and regionally vulnerable species are represented by: *Aconitum hosteanum*, *Campanula patula*, *Cirsium waldsteinii*, *Doronicum carpathicum*, *Festuca varia*, *Heracleum sphondylium*, *Leucanthemum rotundifolium*, *Melampyrum saxosum*, *Phyteuma tetramerum*, *Ranunculus carpathicus*, *Viola declinata* and many others.

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	<i>Lyrurus tetrix</i>	Eurasian Black Grouse; Black Grouse	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - CR	
CHORDATA/AVES	<i>Picoides tridactylus</i>	Eurasian Three-toed Woodpecker; Three-toed Woodpecker	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
CHORDATA/AVES	<i>Prunella collaris</i>	Alpine Accentor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
CHORDATA/AVES	<i>Tetrao urogallus</i>	Western Capercaillie	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - CR	
Fish, Mollusc and Crustacea																		
MOLLUSCA/GASTROPODA	<i>Prostenomphalia carpathica</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
Others																		
CHORDATA/AMPHIBIA	<i>Bombina variegata</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
ARTHROPODA/INSECTA	<i>Boreus westwoodi</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - DD	
CHORDATA/MAMMALIA	<i>Chionomys nivalis</i>	European Snow Vole; Snow Vole	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - DD	
CHORDATA/MAMMALIA	<i>Eptesicus nilssonii</i>	Northern Bat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
ARTHROPODA/INSECTA	<i>Erebia manto</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
CHORDATA/AMPHIBIA	<i>Ichthyosaura alpestris</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
CHORDATA/AMPHIBIA	<i>Lissotriton montandoni</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NE	
CHORDATA/MAMMALIA	<i>Mustela erminea</i>	Ermine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NE	
CHORDATA/MAMMALIA	<i>Myotis daubentonii</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
ARTHROPODA/DIPLOPODA	<i>Polydesmus montanus</i>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT	
CHORDATA/MAMMALIA	<i>Ursus arctos</i>	Brown Bear; Grizzly Bear	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - CR	

1) Percentage of the total biogeographic population at the site

The Site is important for conservation of the fauna, characteristic for the highland ecosystems. Although the local fauna is mainly a characteristic for all Carpathians, here is a well-represented group of species, which is typical namely for highlands. Among them there are many rare and endangered species, both vertebrate and invertebrates. Of the vertebrates, only for the highland ecosystems are characteristic such red-listed species as: *Eptesicus nilssonii*, *Chionomys nivalis*, *Prunella collaris*, *Tetrao urogallus*. The wetland is also a habitat for 7 species of invertebrates, listed in the Red Data Book of Ukraine (2009): *Quedius transsylvanicus*, *Chrysolina carpathica*, *Oreina plagiata*, *O. viridis*, *Erebia manto*, *Prostenophalia carpathica*, *Arianta aethiops*.

During the migration period, this territory serves as a station for some migrating aquatic and semi-aquatic species of birds the representatives of Anseriformes and Charadriiformes. Local water reservoirs serve as places of mass reproduction for several species of amphibians, among which are rare and endemic ones. During the summer period, due to the high nutrition storage of the area, here massively migrate animals that usually inhabit the forest belt. This refers, in particular, to ungulates, bears, bats, capercaillies etc.

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
E5.5 Subalpine moist or wet tall-herb and fern stands	<input checked="" type="checkbox"/>	Luxuriant tall herb formations of deep, humid soils in the montane to alpine, but mostly subalpine, levels of the higher mountains, with <i>Cicerbita alpina</i>	Bern Convention - Resolution 4 habitat type.
G3.1B: Alpine and Carpathian subalpine [<i>Picea</i>] forests	<input checked="" type="checkbox"/>	<i>Picea abies</i> forests of the lower subalpine level, and of anomalous stations in the montane level. The spruces, often stunted or columnar, are accompanied by an undergrowth of decidedly subalpine affinities. <i>Picea abies</i> forests of the lower subalpine level	Bern Convention - Resolution 4 habitat type
E4.11: Boreo-alpine acidocline snow-patch grassland and herb habitats	<input checked="" type="checkbox"/>	Snow patches Carpathians, occupying areas free from snow for less than two months, with the herbs e.g. <i>Luzula alpinopilosa</i> , <i>Salix herbacea</i> , <i>Ligusticum mutellina</i> ; mosses <i>Polytrichum sexangulare</i> or sometimes lichens.	Bern Convention - Resolution 4 habitat type.
X04: Raised bog complexes	<input checked="" type="checkbox"/>	Raised bogs are highly oligotrophic, strongly acidic, domed peatlands, whose peat is composed mainly of sphagnum remains and whose surface derives moisture and nutrients only from rainfall (ombrotrophic).	Bern Convention - Resolution 4 habitat type
E4.12: Boreo-alpine calcidline snow-patch grassland and herb habitats	<input checked="" type="checkbox"/>	Herbaceous snow-patch swards of the Apids, characteristic of calcareous soils under snow for long periods, with <i>Carex atrata</i> , <i>Saxifraga androsacea</i> and other calciphile snowfield, snowbed and snow-patch communities of boreal and arcto-alpine mountains	Bern Convention - Resolution 4 habitat type.
D2.226: Peri-Danubian black-white-star sedge fens	<input checked="" type="checkbox"/>	Acidic fens of the mountains and hills forming the basin of the middle and lower Danube system, and of adjacent regions, in particular of the Carpathians, with an herbaceous sward formed by <i>Carex echinata</i> , <i>Carex canescens</i> or <i>Carex rostrata</i>	Bern Convention - Resolution 4 habitat type.

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
D4.1: Rich fens, including eutrophic tall-herb fens and calcareous flushes and soaks	<input checked="" type="checkbox"/>	Wetlands and spring-mires, seasonally or permanently waterlogged, with a soligenous or topogenous base-rich, often calcareous water supply. Rich fens may be dominated by small or larger graminoids <i>Carex</i> spp., <i>Eleocharis</i> spp., <i>Juncus</i> spp.	Bern Convention - Resolution 4 habitat type.
E1.71 [<i>Nardus stricta</i>] swards	<input checked="" type="checkbox"/>	Mesophile and xerophile <i>Nardus stricta</i> -dominated or -rich grasslands of middle Europe. Other important species: <i>Festuca rubra</i> , <i>Agrostis capillaris</i> , <i>Campanula alpina</i> .	Bern Convention - Resolution 4 habitat type.
E4.4 Calcareous alpine and subalpine grassland	<input checked="" type="checkbox"/>	Alpine and subalpine grasslands of base-rich soils of the high mountains of the nemoral, submediterranean and supramediterranean zones. Characteristic species <i>Dryas octopetala</i> , <i>Draba aizoides</i> , <i>Pulsatilla alpina</i> , <i>Phyteuma orbiculare</i> , <i>Astrantia major</i> .	Bern Convention - Resolution 4 habitat type.
C1.1: Permanent oligotrophic lakes, ponds and pools.	<input checked="" type="checkbox"/>	Waterbodies with a low nutrient (nitrogen and phosphorus) content, mostly acid (pH 4-6). Includes oligotrophic waters of medium or high pH, e.g. calcareous.	Bern Convention - Resolution 4 habitat type
C2.12: Hard water springs.	<input checked="" type="checkbox"/>	Springs rich in calcium, typically due to calcareous tufa formation. Species-rich habitats with high moss cover, high dominance of moss <i>Cratoneuron commutati</i> .	Bern Convention - Resolution 4 habitat type
C2.19: Lime-rich oligotrophic vegetation of spring brooks.	<input checked="" type="checkbox"/>	Euhydrophyte communities of Palaearctic streams poor in nutrients but rich in lime, characterized in particular by <i>Potamogeton</i> or by tufa-forming mosses and algae - <i>Batrachion fluitantis</i> , <i>Cratoneurion commutati</i> .	Bern Convention - Resolution 4 habitat type.
C3.55: Sparsely vegetated river gravel banks	<input checked="" type="checkbox"/>	Vascular plant communities occupying gravel deposits of rivers. Vegetation communities of e.g. <i>Salicion elaeagnos</i> , with the most typical species <i>Caltha palustris</i> ssp. <i>laeta</i> , <i>Salix elaeagnos</i> , <i>Salix purpurea</i> and <i>Poa trivialis</i> .	Bern Convention - Resolution 4 habitat type.
C3.62: Unvegetated river gravel banks	<input checked="" type="checkbox"/>	Unvegetated deposit beds of streams formed of pebbles, gravels, boulders or a mixture of gravels and finer sediments, occupying the edges of the stream, forming islands in the channel or supporting the arms and rivulets constituting the stream.	Bern Convention - Resolution 4 habitat type.
E3.4: Moist or wet eutrophic and mesotrophic grassland	<input checked="" type="checkbox"/>	Wet eutrophic and mesotrophic grasslands and flood meadows of the boreal and nemoral zones, dominated by grasses <i>Poaceae</i> , rushes <i>Juncus</i> spp. or club-rush <i>Scirpus sylvaticus</i> .	Bern Convention - Resolution 4 habitat type.
E2.3: Mountain hay meadows	<input checked="" type="checkbox"/>	Often species-rich mesotrophic to eutrophic hay meadows of the montane and subalpine levels of higher mountains of the nemoral and southern boreal zones.	Bern Convention - Resolution 4 habitat type.

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

4.1 - Ecological character

The Site "Ozirny-Brebeneskul" is located in the highland part of the Chornohora ridge, with altitudes ranging from 900 to 2000 m. above sea level, occupying subalpine and alpine altitudinal belts and, partially, the upper tree lines formed by a spruce. The geological structure is determined by the location on the boundary of the central synclinal and internal anticlinal zones of the Carpathians, development of sedimentary formations of flish formation, deposited from the upper Cretaceous to the Oligocene. According to geomorphologic zoning, the wetlands are situated in the middle-high region of the mountain ranges and highland groups of the Chornohora region of the Carpathian country. The relief is a vivid demonstration of glacial formation of relief (moraines, corries, cirques). Forms of relief formed as a result of frosty weathering can often be found, as well as by snow avalanches. The climate of this territory is moderately continental with considerable amount of precipitations, significant daily fluctuations of temperature and strong winds. The average temperature in January is - 6.40C, in July + 11.50C, the average yearly temperature is + 2.8 ° C. Winter is characterized by low temperatures and humid air; frosty period lasts 80-95 days; melting of snow in the spring lasts about 35 days. The snow cover stays from November till the end of May. The annual amount of precipitation reaches 1465 mm. The soil cover of the Site is represented by the underdeveloped and short-profile types of brown soils, mountain-meadow, acid subalpine and mountain-meadow peaty soils. The vegetation community is represented by coastal meadows and shrub vegetation groups of the sub-alpine and alpine belt, which include a number of rare alpine and arctic-alpine plant species. The animal community is common for all Ukrainian Carpathians, although it contains a group of only highland species, which have very limited distribution.

The highland wetland includes four large glacial lakes, which are rather rare in the Carpathian region. They are: the Upper Ozime (surface - 0.20 hectares, the depth is 0.5 m), Lower Ozime (surface- 0.25 hectares, the depth is about 3 meters), Bretskul (surface- 0.16 hectares, the depth is about 1,5 m) and Brebeneskul (surface - more than 0.6 hectares, depth - more than 3 meters). There are also several smaller lakes and marshes, with a surface of water mirror up to 0.1 hectares. Some lakes are interconnected with each other either by surface water or by underground streams. In some places, there are plenty of peated lake basins filled with a shallow layer of water only during active melting of snow and in the rainy period. In addition, within this wetland there are several suspended oligotrophic sedge-sphagnum marshes. Lakes and marshes of Chornohora massif highlands occupy the bottom of glacial cavities, and play an important biogeocoenotic role, accumulating a considerable amount of moisture during long periods of rainfalls and snow melting. Mountain hydro biogeocoenoses are remote from the sources of anthropogenic pollution and serve as reference ecosystems giving opportunity to study various natural processes which are not disturbed by human activity.

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		4	2	Representative
Fresh water > Flowing water >> N: Seasonal/ intermittent/ irregular rivers/ streams/ creeks		4	3	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		4	4	Unique
Fresh water > Lakes and pools >> P: Seasonal/ intermittent freshwater lakes		4	2	Rare
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		2	21	Representative
Fresh water > Lakes and pools >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		3	16	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		2	21	Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		1	57	Representative

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Non-wetland (dry) alpine and subalpine meadows	460
Crooked woodland composed by Pinus mugo	970
Rocky placers	10

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Aconitum hosteanum</i>		Eastern Carpathian endemic
<i>Aconitum nanum</i>		South Eastern Carpathian endemic
<i>Campanula patula abietina</i>		South Eastern Carpathian endemic
<i>Carduus kernerii</i>		South Eastern Carpathian endemic
<i>Carex hartmanii</i>		listed in the Regional Red List of the Transcarpathia
<i>Cirsium waldsteinii</i>		Carpathian-Balkan endemic
<i>Doronicum carpathicum</i>		South Eastern Carpathian endemic
<i>Festuca varia</i>		Carpathian endemic
<i>Heracleum sphondylium carpathicum</i>		Eastern Carpathian endemic
<i>Leucanthemum rotundifolium</i>		Carpathian endemic
<i>Melampyrum herbichii</i>		South Eastern Carpathian endemic
<i>Melampyrum saxosum</i>		Eastern Carpathian endemic
<i>Menyanthes trifoliata</i>		listed in the Regional Red List of the Transcarpathia
<i>Phyteuma tetramerum</i>		South Eastern Carpathian endemic
<i>Phyteuma vagneri</i>		South Eastern Carpathian endemic
<i>Primula elatior poloninensis</i>		South Eastern Carpathian endemic
<i>Pulmonaria filarszkyana</i>		listed in the Regional Red List of the Transcarpathia; Eastern Carpathian endemic
<i>Ranunculus carpathicus</i>		South Eastern Carpathian endemic
<i>Scabiosa lucida</i>		South Eastern Carpathian endemic
<i>Soldanella hungarica</i>		listed in the Regional Red List of the Transcarpathia
<i>Swertia punctata</i>		listed in the Regional Red List of the Transcarpathia
<i>Viola declinata</i>		South Eastern Carpathian endemic

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/AMPHIBIA	<i>Bufo bufo</i>	European Toad				
CHORDATA/MAMMALIA	<i>Microtus tatricus</i>	Tatra Pine Vole;Tatra Vole				listed in the Red Data Book of Ukraine - NT, Carpathian endemic
CHORDATA/AMPHIBIA	<i>Rana temporaria</i>	European frog				

Optional text box to provide further information

From these places are known populations of 38 Carpathian endemic species and subspecies of crustaceans and not less than 22 species of the Carpathian endemic species and subspecies of insects: *Leistus baenningeri* Roubal 1926, *Nebria fuscipes* Fuss, 1850, *N. reitteri* Rybiński, 1902, *N. transsylvanica* (Germar, 1824), *Carabus auronitens escheri* Palliardi, 1825, *C. hampei* Küster, 1846, *C. obsoletus* Sturm, 1815, *C. transsylvanicus* Dejean, 1826, *Pseudanophthalmus pilosellus* (Miller, 1868), *Duvalius corpulentus* Weise, 1875, *D. roubali* Jeannel, 1926, *D. ruthenus* Reitter, 1878, *D. subterraneus* (Miller, 1868), *Trechus carpathicus* Rybiński, 1902, *T. fontinalis* Rybiński, 1901, *T. latus* Putzeys, 1847, *T. plicatulus* Miller, 1868, *Patrobus quadricollis* Miller, 1868, *Deltomerus carpathicus* (Miller 1868), *Pterostichus foveolatus* (Duftschmid, 1812), *P. pilosus* (Host, 1789), *Amara misella* Miller, 1868 (Coleoptera, Carabidae).

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 Site is located in the most highland part of Ukrainian Carpathians that determines its climate, which could be described as cold and humid. In general, the climate of this territory is moderately continental with significant precipitation rate, big daily fluctuations in temperature and strong winds. According to data from the meteorological station Pozhyzhevska (1430 m. above sea level), the average temperature in January constitutes -6,40C, in July + 11,50C, the average yearly temperature is + 2,80C. Winter is characterized by low temperatures and humid air; frosty period lasts for 80-95 days; snow melting in spring lasts about 35 days. The snow cover stays from November till the end of May. The annual amount of precipitation reaches 1465 mm.

4.4.2 - Geomorphic setting

a) Mnimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

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

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

The wetland is located in the upper part of the White Tysa river, which, together with the Black Tysa form the Tysa river. In its turn, the Tysa river is a part of Danube basin and also the largest left tributary of the Danube.

4.4.3 - Soil

- Mneral
- 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)

The area is located on the South-West macroslopes of the Chomohora range on the altitude from 900 to 2061 m a.s.l. The geological structure is determined by location at the edge of the central synclinal and inner anticlinal zones of the Carpathians; by the development of fliisch sedimentary formations, formed in late Cretaceous and Oligocene periods. According to the geomorphologic zoning the Site is located in the middle-high mountain ranges and highland groups of the Chomohora region of the Carpathian country. The relief is characterized by glacial forms (moraines, corries, cirques). There are lots of forms formed by frost weathering and avalanches. The soil cover of the Site is represented by the underdeveloped and short-profile types of brown soils, mountain-meadow acid subalpine and mountain-meadow peaty soils.

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 surface water	<input type="checkbox"/>	No change
Water inputs from rainfall	<input checked="" type="checkbox"/>	No change
Water inputs from groundwater	<input type="checkbox"/>	No change

Water destination

Presence?	
To downstream catchment	No change
Feeds groundwater	No change

Stability of water regime

Presence?	
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 Brebeneskul Lake has a surface about 0,6 ha and depth over 3 m. It lies in the ancient glacial corrie between Brebeneskul and Hutyn-Tomatyk mountains and is the most highland lake in Ukraine.
 The Lower Ozirnyi Lake has the surface over 0,25 ha and depth about 3 m. it is located in the ancient glacial cirque on the South-West macroslopes of the Pozhyzhevska and Turkul summits (1513 m a.s.l.).
 The Upper Ozirnyi lake has the surface over 0,20 ha and depth about 0,5 m. it lies on the ancient glacial cirque on the South-West macroslopes of the Pozhyzhevska and Turkul mountains on the altitude of 1625 m a.s.l.
 The Bretskul Lake has the surface about 0,16 ha and depth about 1,5 m. and is located on the Bretskul plateau, South-West macroslope of the Bretskul Mt. (1731 m a.s.l.).
 In some places there are a lot of peat bogs, which are filled up with an insignificant amount of water only in snow melting season or during heavy rainfalls. There are also many sedge-sphagnous oligotrophic lakes.
 Wetlands are important for mitigating the effects of flooding, which is crucial in this regard for the settlements located below, in the river valley, as it accumulates a large amount of rainfall and water, in particular flood waters formed during snow melting period.

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

Please provide further information on pH (optional):

The Brebeneskul Lake has slightly acid (pH 6,28), hydrocarbonate-natrium type, soft, hardness -0,18 mg-equ./dm3, SO42- – 3,7 mg/dm3, Cl- – 4,3 mg/dm3, general mineral content – 30,9 mg/dm3. Water in the Lower Ozirnyi Lake is acid (pH 5,12), hydrocarbonate-natrium type, hardness - 0,03 mg-equ./dm3, SO42- – 3,7 mg/dm3, Cl- – 2,5 mg/dm3, general mineral content – 18,4 mg/dm3. The Upper Ozirnyi lake has slightly acid water (pH 6,10), hydrocarbonate-natrium type, hardness - 0,15 mg-equ./dm3, SO42- – 3,5 mg/dm3, Cl- – 2,9 mg/dm3, general mineral content – 22,7 mg/dm3. The Bretskul Lake has also acid water (pH 4,82), sulphate-natrium type, hardness - 0,03 mg-equ./dm3, SO42- – 4,7 mg/dm3, Cl- – 1,6 mg/dm3, general mineral content – 15 mg/dm3.

4.4.7 - Water salinity

- Fresh (<0.5 g/l)
- Mxohaline (brackish)/Mxosaline (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 i) broadly similar ii) significantly different 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	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
Hazard reduction	Flood control, flood storage	High

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	Inspiration	Medium
Scientific and educational	Long-term monitoring site	High
Scientific and educational	Major scientific study site	High
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High

Supporting Services

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

Within the site:

Outside the site:

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	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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

The territory of the Site is a part of the core, buffer and anthropogenic landscapes zones of the Carpathian Biosphere Reserve. Lands, owned by the state, given to the administration of the Carpathian Biosphere Reserve for permanent use on the basis of the state act for the right of permanent land use.

5.1.2 - Management authority

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

Carpathian Biosphere Reserve

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

Mykola Rybak, director

Postal address:

77, Krasne Pleso Str., Rakhiv, Zakarpatska oblast, 90600, Ukraine

E-mail address:

cbr-rakhiv@ukr.net

5.2 - Ecological character threats and responses (Management)

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

Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Tourism and recreation areas	Low impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Livestock farming and ranching	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Gathering terrestrial plants	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Problematic native species	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Garbage and solid waste	Low impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Habitat shifting and alteration	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Please describe any other threats (optional):

The wetland is located within the boundaries of the Carpathian Biosphere Reserve, which provides constant control over access to the territory and the use of natural resources. Among the main types of nature use on the territory of the site the following should be mentioned: recreation and traditional agriculture, including grazing and hay-mowing, on a small scale. The main threat to this wetland is that it is located on the periphery of the most popular touristic trail in Ukraine, which is annually visited by more than 100 thousand people. Such neighborhood causes soil erosion, pollution with garbage, trampling, water pollution, etc.

5.2.2 - Legal conservation status

Global legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
UNESCO Biosphere Reserve	Carpathian Biosphere Reserve	http://www.unesco.org/mabdb/br/brdir/directory/biores.asp?code=UKR+03&mode=all	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Biosphere Reserve	Carpathian	http://cbr.nature.org.ua/main.htm	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

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Land conversion controls	Implemented

Species

Measures	Status
Threatened/rare species management programmes	Partially implemented

Human Activities

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

Other:

The scientific department consists of 5 laboratories: botanical, forest-science, zoological, phonological and hydro-meteorological, GIS. There are 5 chiefs of laboratory, 2 senior scientists, 2 scientists, 4 junior scientists, 6 leading specialists, and 2 technicians, who are subordinated to the Deputy Director on scientific research. Main fields of activity are biological and landscape diversity monitoring, flora and faunas investigations, vascular plants diversity, elaboration of protection measures and recommendations, research of depredated ecosystems' succession.

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

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

On the boundary with the site is situated an ecological and educational center "Highlands of the Carpathians", dedicated to the highland areas of Ukrainian Carpathians and also to the traditional nature use. Here is provided detailed information about highland ecosystems and their inhabitants. Also the visit-center serves as a shelter for tourists.

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

Monitoring is conducted for Lissotriton montandoni, Ichthyosaura alpestris, Bombina variegata, Bufo bufo, Rana temporaria (Amphibia) and Erebia manto (Insecta, Lepidoptera).

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

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6.1.2 - Additional reports and documents

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

<no file available>

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

<no file available>

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

<no file available>

iv. relevant Article 3.2 reports

<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:



Brebeneskul (Vasyi Zelenskyi, 14-08-2016)



Ozime (Vasyi Zelenskyi, 09-10-2014)



Ozime (Vasyi Zelenskyi, 09-10-2014)



Nizne Ozime (Vasyi Zelenskyi, 21-09-2008)



Stow Ozirnyi-Brebeneskul (Vasyi Pokynchereda, 10-06-2018)



Stow Ozirnyi-Brebeneskul (Vasyi Pokynchereda, 10-06-2018)



Stow Ozirnyi-Brebeneskul (Vasyi Pokynchereda, 10-06-2018)

6.1.4 - Designation letter and related data

Designation letter

<2 file(s) uploaded>

Date of Designation