



# Ramsar Information Sheet

## Ukraine

### Prut River Headwaters



Designation date	20 March 2019
Site number	2395
Coordinates	48°10'N 24°33'08"E
Area	4 935,44 ha

## Color codes

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

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

## 1 - Summary

### Summary

The Site is represented by an alpine post-glacial community of wet meadows, peat bogs, lakes, streams, watercourses, riparian zones, and century-old forests of the Chornohora mountain range in the Ukrainian part of the Carpathians. The Prut River has its source in these highlands, and one of the largest alpine lakes, Nesamovyte, can be also found there. The Site holds a high concentration of Carpathian endemic and a number of post-glacial relict species. It is one of the most important biodiversity hotspots in the Ukrainian Carpathian region, crucial for the conservation of its species and ecological communities. A relatively small area of the Site supports about 700 species of vascular plants and plant communities, over 137 species of vertebrates (12 species of amphibians and reptiles, 85 species of birds, 40 species of mammals). The site provides habitats for 35 vulnerable and endangered species included in the Red Data Book of Ukraine (2009), which are vital components of biological diversity of the Carpathian highlands. It supports 6 plants and 17 animal species of IUCN Red List. Also, here, it was recorded 3 species listed in Appendix II (Bern Convention). The Site provides a habitat for at least 45 endemics plant and animal species and their subspecies. Remarkably, the Site holds 12 habitats included in Resolution 4 of the Bern Convention. It is recognized as habitats hotspot of highland wetlands for the Ukrainian Carpathians.

The territory is also characterized by a unique landscape with a high diversity of relief mountain forms, developed under the prolonged effect of geological epochs. Apart from this, the Site acts as a large storage tank of water resources, slowly accumulating them during heavy rains or snow-melting, and thus preventing drastic floods in the downstream areas. It is an important source of fresh water for at least 5,000 people and crucial for the support of the hydrological balance of the Prut River. The favourable climate conditions and weakly disturbed landscapes have turned the wetland into a very popular and the most frequently visited place of interest in the Ukrainian Carpathians.

The Site is a part of the Carpathian National Nature Park, which is responsible for the restricted use and management of natural resources of the area.

## 2 - Data & location

### 2.1 - Formal data

#### 2.1.1 - Name and address of the compiler of this RIS

##### Compiler 1

Name	Ivan Danylyk
Institution/agency	Institute of Ecology of the Carpathians of National Academy of Sciences of Ukraine
Postal address	4 Kozelnytska St., Lviv, Ukraine, 79026
E-mail	idanylyk@ukr.net
Phone	+380673116065
Fax	+380322707430

##### Compiler 2

Name	Bohdan Prots
Institution/agency	State Museum of Natural History, Carpathians of National Academy of Sciences of Ukraine and NGO "Danube-Carapthian Programme"
Postal address	18 Tetralna St., Lviv, Ukraine, 79008
E-mail	bohdan.prots@gmail.com
Phone	+380673533813
Fax	+380322356917

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

From year	2011
To year	2018

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Prut River Headwaters
Unofficial name (optional)	Витоки ріки Прут (Vytoky riky Prut)

## 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 Site is located in 100 km to the south-west from Ivano-Frankivsk city, 12 km to the south from the town of Vorokhta (Yaremchanska City Council of Ivano-Frankivsk Region). It is located in the headwaters of the Prut River. The upper part of the Site lies on the border between Ivano-Frankivska Oblast and Zakarpatska Oblast (Transcarpathia) and follows mountain peaks along the edge of the river catchment. Thus, the Site delimitation goes clockwise across Mount Kizly (1,911 m a.s.l.) to Mount Turkul (1,933 m), Dantsy (1,856 m), Pozhyzhevsk (1,822 m), Breskul (1,912 m), Hoverla (2,061 m), Mala Hoverla (1,762 m), Velyka Kozmeska (1,573 m), Kukul (1,539 m), Mount Ozirnyi (1,337 m), Velyka Maryshevska (1,567 m), and Shpytsi (1,863 m), Kryvohyhy (1,299 m) and Marysh (1,352 m). The delimitation of the Site between from the Mount Kukul (1,539 m) and Mount Ozirnyi (1,337 m) goes via Zakukul Polonyna, mountain range till the Zarusliak-Vorokhta tourist road (910 m) appears. After the tourist road, the delimitation goes via mountain range (which belongs to Ozirnyi track), and Ozirna Polonyna till the Mount Ozirnyi (1,337 m).

### 2.2.2 - General location

a) In which large administrative region does the site lie?	Nadvirna District (Nadvirnianskyi Raion), Ivano-Frankivsk Region, Ukraine
b) What is the nearest town or population centre?	Vorokhta 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 of Ukraine, the site is located within the European broad-leaved region (zone), the Carpathian-alpine mountain province of forests and alpine vegetation, the Eastern Carpathian sub-province of the deciduous and coniferous forests and alpine vegetation of the Marmorosko-Chornohirsko-Svydovetskyi district of the sessile- and common oak, beech, larch and fir forests, subalpine and alpine vegetation (National Atlas of Ukraine, 2007).

### 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 crucial for the natural functioning of the Prut river basin. It plays a leading role in the natural control and mitigation of floods and is an important storage tank, seasonally accumulating water for the areas protected within the Carpathian National Nature Park (Ukraine) and located downstream. It is also an important source of fresh water for at least 5,000 citizens of Vorokhta Town and its vicinities. The peat bog prevents floods in the upper part of the river and plays a determining role in the mitigation of flood consequences. The wetland areas are crucial for the support of the hydrological balance of the Prut River.

Other ecosystem services provided

Forest areas in the region of the Prut Headwaters provide supporting services for such key ecosystem processes as soil formation, protection from soil erosion, primary productivity, basic biochemical processes (nutrient cycle, photosynthesis) and microclimatic stability support. The Site is located within the area of the Hutsul ethnographic group of Ukrainians. The part of rich spiritual and cultural heritage of this group is linked to this Site. A cultural value of the ecosystem services lies in the enrichment of cultural, spiritual and aesthetical aspects of human welfare: positive emotions due to communication with nature.

Other reasons

The Prut Headwaters is a rare natural wetland in the Eastern Carpathian biogeographical region. It is one of the most important biodiversity hotspots, crucial for the conservation of species and ecological communities of the Ukrainian Carpathians, including regionally rare and threatened ones. This value is increasing under the climate change and the continuing upward shift of the upper forest border in mountains.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

The ecological diversity of the Chornohora mountain range and historical peculiarities of flora genesis have led to a high species variety of plants in this site. 700 species of plants, found there, makes up more than half of the total number of species of the Ukrainian Carpathians. As for a taxonomic structure, the families Asteraceae, Poaceae, Cyperaceae dominate. Montane (25.9%), boreal (24.7%) and nemoral (30.7%) flora elements are the most numerous. Arctic-alpine (2.7%), alpine (5.4%), polyzonal (5.8%) and arid (2.8%) elements are more localized.

The Prut Headwaters is one of the hotspots for endemic and relict species of plants, including Arctic-alpine species (*Carex bicolor*, *Polygonum viviparum*, *Botrychium lunaria*), Eastern Carpathian endemics (*Pulmonaria filarszkyana*, *Silene dubia*, *Centaurea mollis*, *Gentiana laciniata*, *Chrysosplenium alpinum*), Eastern-Southern-Carpathian endemics (*Viola declinata*, *Aconitum paniculatum*), and one Carpathian-Balkan endemic (*Doronicum carpaticum*). Among rare Carpathian endemics, *Festuca carpatica* and *Pyrola carpatica* are important.

Slopes of Mount Turkul is the only locality of *Oreochloa disticha* in the Ukrainian Carpathians. The Site also holds a unique isolated habitat of *Linnaea borealis* on the northern macroslope of Mount Pozhyzhevska.

**Justification** The wetland supports animal species important for the biodiversity of the Eastern Carpathians. It also holds a great number of endemic species of invertebrates, including Amphipoda (at least 37 species and subspecies are endemics of the Carpathians): *Niphargus stygius corinae*, *N.stygius hoverlicus*, representatives of Ephemeroptera (*Ecdyonurus austriacus nataliae*, *E.rizuni*, *E.nigrescens*), Trichoptera (*Apatania carpathica*, *Drusus carpathicus*, *Chaetopteryx polonica*, *Chaetopteryx subradiata*, *Psilopteryx psorosa carpathica*, etc.), and Coleoptera, Carabidae (*Nebria fuscipes*, *N.reitteri*, *N.transsylvanica*, *Carabus auronitens escheri*, *C.hampei*, *C.obsoletus*, etc).

The Site provides habitats for more than 137 species of vertebrates (12 species of amphibians and reptiles, 85 species of birds, 40 species of mammals). 30 vertebrate species, typical for the Site, are vital components of biodiversity of the Carpathian highlands and are listed in the Red Data Book of Ukraine (2009), Bern Convention (II), the IUCN Red List. They are *Salamandra salamandra*, *Mesotriton alpestris*, *Lissotriton montadoni*, *Sorex alpinus*, *Lutra lutra*, *Chionomys nivalis*, *Ursus arctos*, *Canis lupus* and others. The Site is valuable for rodents (*Sicista betulina* (Red Data Book of Ukraine), *Arvicola scherman*, *Chionomys nivalis* (RDBU), *Microtus tatricus* (RDBU), *Microtus agrestis*), preferring wet and waterlogged habitats, in particular, scrubs of *Vaccinietum-Alnetum*, *Rumex*, mountain valleys with rich grass cover, scrubs of *Pinus mugo*, juniper, alder, rhododendron and sedge, and raised bogs.

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

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

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<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>Carex bicolor</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - EN	
<i>Carex pauciflora</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>Cerastium cerastoides</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - EN	
<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 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>Erigeron atticus</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - EN	
<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	

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<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	
<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"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	
<i>Gladiolus imbricatus</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>Goodyera repens</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>Gymnadenia conopsea</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>Gymnadenia densiflora</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>Linnaea borealis</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - EN	
<i>Neottia cordata</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>Orchis mascula</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - EN	
<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 - EN	
<i>Primula matthioli</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - EN	
<i>Pseudorchis albida</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>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>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	
<i>Rhododendron myrtifolium</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EN	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NE	
<i>Salix lapponum</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>Selaginella selaginoides</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>Spinulum annotinum</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>Traunsteinera globosa</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	listed in the Red Data Book of Ukraine - VU	

### 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 <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7								
<b>Birds</b>																	
CHORDATA/AVES	<i>Aegolius funereus</i>	Boreal Owl	<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/AVES	<i>Aquila chrysaetos</i>	Golden Eagle	<input checked="" 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>Aquila pomarina</i>	Lesser Spotted Eagle	<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	

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	GITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA/AVES	<i>Falco peregrinus</i>	Peregrine Falcon	<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 - NT	
CHORDATA/AVES	<i>Glaucidium passerinum</i>	Eurasian Pygmy Owl	<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>Regulus ignicapilla</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/AVES	<i>Strix uralensis</i>	Ural Owl	<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	
<b>Fish, Mollusc and Crustacea</b>																		
CHORDATA/ACTINOPTERYGII	<i>Cottus gobio</i>	Common bullhead	<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"/>		
CHORDATA/ACTINOPTERYGII	<i>Phoxinus phoxinus</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"/>		
CHORDATA/ACTINOPTERYGII	<i>Salmo trutta</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"/>		
CHORDATA/ACTINOPTERYGII	<i>Thymallus thymallus</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	
<b>Others</b>																		
CHORDATA/AMPHIBIA	<i>Bombina variegata</i>		<input checked="" type="checkbox"/>	<input checked="" 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	Area of breeding and growth of juveniles
CHORDATA/MAMMALIA	<i>Canis lupus</i>	Gray Wolf	<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"/>	Bern Convention - Appendix II	
CHORDATA/MAMMALIA	<i>Capreolus capreolus</i>	western roe deer	<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"/>		
CHORDATA/MAMMALIA	<i>Cervus elaphus</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 checked="" type="checkbox"/>		
CHORDATA/MAMMALIA	<i>Chionomys nivalis</i>	European 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 - NT	
CHORDATA/AMPHIBIA	<i>Ichthyosaura alpestris</i>		<input checked="" type="checkbox"/>	<input checked="" 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	Area of breeding and growth of juveniles
CHORDATA/AMPHIBIA	<i>Lissotriton montandoni</i>		<input checked="" type="checkbox"/>	<input checked="" 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	Area of breeding and growth of juveniles
CHORDATA/MAMMALIA	<i>Lutra lutra</i>	European Otter	<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"/>				NT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - NT, Bern Convention - Appendix II	
CHORDATA/MAMMALIA	<i>Lynx lynx</i>	Eurasian Lynx	<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/MAMMALIA	<i>Martes martes</i>	European Pine Marten	<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"/>		
CHORDATA/MAMMALIA	<i>Microtus tatricus</i>	Tatra Pine Vole; Tatra Vole	<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 – EN Bern Convention - Appendix II	
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>Mustela lutreola</i>	European Mink	<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"/>				CR	<input type="checkbox"/>	<input type="checkbox"/>	listed in the Red Data Book of Ukraine - CR	
CHORDATA/AMPHIBIA	<i>Salamandra salamandra</i>		<input checked="" type="checkbox"/>	<input checked="" 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	Areas of breeding and growth of juveniles
CHORDATA/MAMMALIA	<i>Sicista betulina</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/MAMMALIA	<i>Ursus arctos</i>	Brown 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 - EN	

## 1) Percentage of the total biogeographic population at the site

The site supports at least 37 Carpathian endemic species and subspecies of invertebrates. The Prut Headwaters provide valuable habitats for *Salmo trutta m. fario*. The river is inhabited by *Salmo trutta*, *Cottus gobio*, *Phoxinus phoxinus*. It is also an important reproduction area for mountain species of amphibians, listed in the Red Data Book of Ukraine (2009): *Salamandra salamandra*, *Ichthyosaura alpestris*, *Lissotriton montadoni*, and *Bombina variegata*.

Species, adapted to extreme climatic conditions of highlands, can be also found there: *Canis lupus*, *Vulpes vulpes*, *Ursus arctos*, *Martes martes*, *Mustela erminea*, *Mustela lutreola*, *Lutra lutra*, *Lynx lynx*, *Sus scrofa*, *Capreolus capreolus*, *Cervus elaphus*. The wetland is important for a number of rodents, preferring wet and waterlogged habitats (in particular, scrubs of *Vaccinium-Alnetum*, *Rumex*; mountain valleys with rich grass cover; scrubs of *Pinus mugo*, juniper, alder, rhododendron and sedge; raised bogs).

## 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
C2.12 Hard water springs	<input checked="" type="checkbox"/>	Species-rich habitats with high moss cover, high dominance of moss <i>Cratoneuron commutatum</i> is typical. The stands belong to alliances <i>Cratoneurion commutati</i> and <i>Lycopodo-Cratoneurion commutati</i> with typical species <i>Saxifraga aizoides</i> , <i>Viola biflora</i> .	Bern Convention - Resolution 4 habitat type.
C2.18 Acid oligotrophic vegetation of spring brooks.	<input checked="" type="checkbox"/>	Euhydrophyte communities of Palaearctic streams poor in nutrients and in lime, with, in particular <i>Callitriche hamulata</i> , or acidophilous mosses and algae.	Bern Convention - Resolution 4 habitat type.
C2.25 Acid oligotrophic vegetation of fast-flowing streams	<input checked="" type="checkbox"/>	Euhydrophyte communities of Palaearctic streams poor in nutrients and in lime, with, in particular, <i>Callitriche hamulata</i> , or acidophilous mosses and algae.	Bern Convention - Resolution 4 habitat type.
D2.226 Peri-Danubian black-white-star sedge fens	<input checked="" type="checkbox"/>	Acidic fens, with an herbaceous sward formed by <i>Carex echinata</i> , <i>Carex canescens</i> , <i>Carex dacica</i> or <i>Carex rostrata</i> and sometimes <i>Juncus effusus</i> , or <i>Nardus stricta</i> .	Bern Convention - Resolution 4 habitat type.
D5.2 Beds of large sedges normally without free-standing water	<input checked="" type="checkbox"/>	Terrestrialized stands of tall <i>Carex</i> , usually species-poor and often dominated by one species, growing on waterlogged ground. These species also grow as emergents and fringing vegetation beside water bodies (C3.2).	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 Other important species: <i>Festuca rubra</i> , <i>Agrostis capillaris</i> , <i>Avenula versicolor</i> , <i>Campanula alpina</i> and <i>Avenella flexuosa</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.

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
E4.3 Acid alpine and subalpine grassland	<input checked="" type="checkbox"/>	Alpine and subalpine grasslands developed over crystalline rocks and other lime-deficient substrates or on decalcified soils of mountains. On boreal mountains, <i>Carex bigelowii</i> and <i>Juncus trifidus</i> .	Bern Convention - Resolution 4 habitat type.
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> , <i>Ranunculus platanifolius</i> , <i>Adenostyles alliariae</i> , <i>Trollius europaeus</i> , <i>Tozzia alpina</i> .	Bern Convention - Resolution 4 habitat type.
F2.224 Carpathian <i>Rhododendron kotschy</i> heaths	<input checked="" type="checkbox"/>	Heaths of the subalpine and lower alpine levels (1700-2000 m) of the eastern and southern Carpathian Mountains, common and widespread, but occupying small surfaces, dominated by <i>Rhododendron myrtifolium</i> .	Bern Convention - Resolution 4 habitat type.
G1.12 Boreo-alpine riparian galleries	<input checked="" type="checkbox"/>	Riverside of the high mountains of the nemoral zone and of their piedmont influence region, dominated by <i>Alnus incana</i> . In the herb layer, nitrophilous and hygrophilous species dominate.	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. 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 of the Carpathians.	Bern Convention - Resolution 4 habitat type.

[Optional text box to provide further information](#)

Generally, the fauna has the nature of "insular" mountain taiga. It is a specific community of boreal-taiga and mountain species of vertebrates, plants and habitats has been formed.

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

### 4.1 - Ecological character

The site is represented by a catchment basin with a system of streams, bogs and lakes of natural origin in the Prut Headwaters. It is located within Chornohora tectonic zone, formed of chalk and Paleogene flysch, with the dominance of massive sandstones and less developed layers of argillite and aleurolite. Soil cover is represented by weakly developed and short-profile types of mountain-meadow sour subalpine brown soils and sour moderately cold brown soils. The climate is transitional from moderately warm Western European to continental Eastern European. The macroclimate is moderately continental and represented by several mountain's altitudinal mesoclimate belts, overlapped with vegetation zones.

The relief is characterized by a combination of rounded and dome-shaped mountain peaks with steep slopes of the relict glacial complex (Meso-Pleistocene glacial cirques and deflections of valleys), associated with current nival, gravitational and fluvial-denudation processes.

The site provides valuable habitats and breeding grounds for numerous representative fauna: wet and waterlogged areas, banks of streams and rivers, boggy areas in the upper part of a beech and fir forest zone; alpine meadows with abundant grass cover; beds of Rumex; elfin woodland; scrubs (in particular Vaccinietum-Alnetum, juniper, rhododendron), evergreen sedges; raised bogs and water bodies of different size, including temporary ones.

Beech-spruce (up to 1250 m), spruce (1250-1500 m), sub-Alpine with mountain pine, juniper and green alder (1500-1750 m) and Alpine (over 1750 m) altitudinal vegetation zones are delineated here. The forests and the Alpine pastures were intensively exploited until the middle of the 20th century – therefore, there are frequent cultural spruce monodominant stands in the spruce-beech altitudinal belt.

The wetland provides regulatory services for such ecosystem processes as the climate formation, protection from floods, landslides and other natural disasters, air and water purification.

### 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	3	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		3	5	Representative
Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools		3	15	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		3	25	Rare
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		2	487.54	Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		1	3080	Representative
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		3	20	Rare
Fresh water > Flowing water >> Y: Permanent Freshwater springs; oases		4	0.5	Representative

#### Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
1: Aquaculture ponds	Trout fish farming	4	1	
2: Ponds		4	0.5	

#### Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Foliated rocks	25
Meadows and mountain valleys	200
Elfin woodland	150
Buildings	10
Roads	0.5
Coniferous and deciduous forests	950

### 4.3 - Biological components

#### 4.3.1 - Plant species

Other noteworthy plant species

RIS for Site no. 2395, Prut River Headwaters, Ukraine

Scientific name	Common name	Position in range / endemism / other
<i>Aconitum nanum</i>		endemic
<i>Carex umbrosa</i>		Red Data Book of Ukraine - NE
<i>Centaurea mollis</i>		endemic
<i>Crocus heuffelianus</i>		Red Data Book of Ukraine - NE, a montane-alpine species at the south-eastern limit of its range
<i>Epipactis helleborine</i>		Red Data Book of Ukraine - NE
<i>Huperzia selago</i>		Red Data Book of Ukraine - NE, a tertiary relict
<i>Jacobaea abrotanifolia carpathica</i>		endemic
<i>Lilium martagon</i>		Red Data Book of Ukraine - NE
<i>Neottia nidus-avis</i>		Red Data Book of Ukraine - NE
<i>Neottia ovata</i>		Red Data Book of Ukraine - NE
<i>Phyteuma wagneri</i>		endemic
<i>Platanthera bifolia</i>		Red Data Book of Ukraine - NE
<i>Poa granitica disparillis</i>		south-eastern Carpathian endemic
<i>Tozzia alpina</i>		Carpathian-Balkan endemic

Invasive alien plant species

Scientific name	Common name	Impacts	
<i>Bidens frondosa</i>		Potentially	No change
<i>Erigeron annuus</i>		Potentially	No change
<i>Heracleum sosnowskyi</i>		Potentially	No change

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
ARTHROPODA/INSECTA	<i>Acrophylax vernalis</i>					Carpathian endemic
ARTHROPODA/INSECTA	<i>Apatania carpathica</i>					Carpathian endemic
ARTHROPODA/INSECTA	<i>Carabus sylvestris transylvanicus</i>					
ARTHROPODA/INSECTA	<i>Chaetopteryx polonica</i>					Carpathian endemic
ARTHROPODA/INSECTA	<i>Chaetopteryx subradiata</i>					Carpathian endemic
ARTHROPODA/INSECTA	<i>Chionophylax czarnohoricus</i>					Carpathian endemic
ARTHROPODA/INSECTA	<i>Drusus carpathicus</i>					Carpathian endemic
ARTHROPODA/INSECTA	<i>Ecdyonurus nigrescens</i>					Carpathian endemic
ARTHROPODA/INSECTA	<i>Ecdyonurus rizuni</i>					Carpathian endemic
ARTHROPODA/INSECTA	<i>Isogamus czarnohorensis</i>					Carpathian endemic
ARTHROPODAMALACOSTRACA	<i>Niphargus corinae</i>					Carpathian endemic
ARTHROPODAMALACOSTRACA	<i>Niphargus hoverticus</i>					Carpathian endemic
ARTHROPODA/INSECTA	<i>Potamophylax carpathicus</i>					Carpathian endemic
ARTHROPODA/INSECTA	<i>Psilopteryx psorosa carpathica</i>					Carpathian endemic

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)

Climate zoning: a cold zone, a cooler subzone (the sum of temperatures is 6,000-10,000, hydrothermal coefficient is 4-5, the total vegetation period lasts 90 days).  
 The macroclimate of the area is moderately continental and represented by several mountain altitudinal mesoclimatic belts corresponding to altitudinal vegetation belts. The altitude differs between 2061 and 910 meters above sea level. It influences the temperature and precipitation. The mean temperature differs between 0.1-0.5 °C at the highest peaks and 2.95 °C at lowest area of the Site. The annual sum of active temperatures (above 10°C) ranges from 1,400°C in the lower part of the site to 100-200°C on the highest mountain peaks. The annual mean precipitation amount is about 1,100 mm. The beech-fir (up to 1,250 m), fir (1,250-1,500 m), subalpine with the participation of Pinus mugo, juniper and green alder (1,500-1,750 m) belts and the alpine (above 1,750 m) altitudinal vegetation belts are distinguished ther

4.4.2 - Geomorphic setting

a) Minimum 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 Prut River is the left tributary of the Danube. The site is represented by a catchment basin of the Prut headwaters.

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 soil cover is represented by weakly developed and short-profile types of dominant mountain-meadow sour subalpine brown soils and sour moderately cold brown soils. The only peat bog located at the lower part of the Pozhyzhevskia Mount has got the peat organic soil.

4.4.4 - Water regime

Water permanence

Presence?	
Usually permanent water present	No change

Source of water that maintains character of the site

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

Water destination

Presence?	
To downstream catchment	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 Prut River is the left tributary of the Danube. Its length is 910 km; the catchment area covers 27,500 km<sup>2</sup>. The width varies from 50 to 150 m, reaching 500-800 m in branched sections. The depth of the river is insignificant (0.5-1. m, reaching 5-6 m or even more during the peak water levels). The flow rate does not exceed 1-1.2 m/sec, and during floods - 3-4 m/sec. High floods are frequent, the width of the flooded area reaches 3 km. The site is represented by a catchment basin of the Prut headwaters and play a significant role in the formation of the hydrological regime of the river upper reaches.

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):

Water pH varies depending on the bog type (raised bog, transitional, lowland bog), the altitude above sea level, the extent and type of anthropogenic impact.

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	High
Wetland non-food products	Timber	Medium
Wetland non-food products	Fuel wood/fibre	Medium
Genetic materials	Medicinal products	Low

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
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	High
Spiritual and inspirational	Inspiration	Medium
Spiritual and inspirational	Contemporary cultural significance, including for arts and creative inspiration, and including existence values	Medium
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Spiritual and inspirational	Spiritual and religious values	Medium
Spiritual and inspirational	Aesthetic and sense of place values	High
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Long-term monitoring site	High
Scientific and educational	Major scientific study 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
Soil formation	Sediment retention	High
Soil formation	Accumulation of organic matter	High
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	High
Nutrient cycling	Carbon storage/sequestration	Medium
Pollination	Support for pollinators	High

Other ecosystem service(s) not included above:

Due to the favourable climate and availability of almost undisturbed landscapes, the wetland is very popular among tourists. This territory is one of the most frequently visited within the whole Ukrainian Carpathians. There is a wide network of thematic ecological trails: botanical, zoological, geographic and landscape ones. Their aim is to show visitors the natural ecosystems, geological and geomorphologic monuments. Also the Prut is mentioned in many ancient historical texts. The territory is deeply connected with a cultural ethnographic nationality of Ukraine and the Carpathians, called the Hutsuls. The site is valuable in terms of ecological education, recreation and scientific research. It encloses part of the highest peak of Ukraine, Mount Hoverla, being an important social and cultural heritage of the national level.

Within the site: 10 000

Outside the site: 100 000

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"/>

##### Private ownership

Category	Within the Ramsar Site	In the surrounding area
Religious body/organization	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other types of private/individual owner(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

##### Other

Category	Within the Ramsar Site	In the surrounding area
Commoners/customary rights	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

The ownership regime of the Site is fully linked to the National/Federal government, which is represented by the Carpathian National Nature Park. The only small chapel for religious purpose (ca. 20 sq.m) belongs to local religious community and located at the tourists concentration point before the tourist trail starts.

#### 5.1.2 - Management authority

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

Carpathian National Nature Park

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

V.Ya. Slobodian, director

Postal address:

6, Stusa Str., Yaremche town, Ivano-Frankivska oblast, 78500, Ukraine

E-mail address:

cnp@meta.ua

## 5.2 - Ecological character threats and responses (Management)

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

#### Human settlements (non agricultural)

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

#### Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Water abstraction	Low impact	Low 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"/>
Marine and freshwater aquaculture	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

#### Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Roads and railroads	Low impact	Low impact	<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"/>
Logging and wood harvesting	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	Medium 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
Invasive non-native/ alien 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
Household sewage, urban waste water	Low impact	Low impact	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Garbage and solid waste	Low impact	Low impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Geological events

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Avalanches/landslides	Medium impact	Medium impact	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Please describe any other threats (optional):

The basic threat for the ecological status of the site is represented by intensive recreation pressure, especially along the watercourses. It has a direct impact not only on the wetland ecosystems but more or less on the adjacent areas as well, depending on their accessibility and infrastructure.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Nature Park	Carpathians	<a href="http://cnp.if.ua/en/">http://cnp.if.ua/en/</a>	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
Habitat manipulation/enhancement	Implemented

Species

Measures	Status
Threatened/rare species management programmes	Implemented

Human Activities

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

Other:

The wetland belongs to the territory of the Carpathian National Nature Park. The conservation activity is mostly focused on the protection of valuable natural communities. The south-western border of the site adjoins to the territory of the Carpathian Biosphere Reserve. Conservation regime and management of the site is ensured by the Carpathian NNP; IUCN categories – Ia and II. The Management Plan is valid (“Project of the territory organization”).

5.2.5 - Management planning

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

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

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

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

The Site is important area for ecological awareness and recreation. Coordination of recreational and educational activities is carried out by Carpathian NNP. The park has a small educational center in the city of Yaremcha.

URL of site-related webpage (if relevant):

5.2.6 - Planning for restoration

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

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Plant species	Implemented
Plant community	Implemented
Animal community	Implemented
Animal species (please specify)	Implemented

The territory of the site is one of the most important scientific research areas for the investigation of the Carpathian alpine zone. The ecological, biological and geographic surveys are carried out by employees of the Carpathian National Nature Park, scientists of the Ivan Franko National University of Lviv and the Institute of Ecology of the Carpathians (Lviv).  
 The botanical monitoring within the given area is carried out by scientists of the Carpathian National Nature Park, the Institute of Ecology of the Carpathians (Lviv) and the State Museum of Natural History, NAS of Ukraine (Lviv). A network of transects have been developed to study the alpine biota.  
 A research station, belonging to the Institute of Ecology of the Carpathians (Lviv), and a weather station are located on Mount Pozhzhzhevska. The permanent monitoring of rodents, ground beetles, amphibians, bats and large carnivores (brown bear, wild cat) is implemented at the Site.

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

The Carpathian National Nature Park / ed. by M.M. Prykhodko, O.I. Kyseliuk, A.I. Yavorskyi. - Ivano-Frankivsk: Foliant, 2009. - 672 p. [in Ukrainian]

Kyseliuk O.I. Mammal communities of the north-eastern macroslopes of the Ukrainian Carpathians // International aspects of the study and protection of the Carpathian biodiversity: Conference proceedings. - Rakhiv, 1997. - P. 80-83. [in Ukrainian]

Kyseliuk O.I., Klapchuk V.M., Tymchuk O.V. On the Red Data Book of Ukraine. – Yaremcha, 2001. – 138 p. [in Ukrainian]

Kyseliuk O. Mammals of the Carpathian National Nature Park // Scientific notes of Ivano-Frankivsk National History Museum. – Ivano-Frankivsk, 2001. – P. 188-192. [in Ukrainian]

Malynovskyi K. A. Vegetation of the alpine zone of the Ukrainian Carpathians. – Kyiv: Naukova Dumka. – 1980. – 280 p. [in Ukrainian]

Malynovskyi K. A. Plant communities of the alpine zone of the Ukrainian Carpathians / K. A. Malynovskyi, V. V. Krichfalushii. - Uzhhorod: Karpatska Vezha, 2002. - 244 p. [in Ukrainian]

National Atlas of Ukraine. - Kyiv: Kartografii, 2007. - 440 p. [in Ukrainian]

Phylogenetic fund of rare species of western regions of Ukraine (sozological assessment and scientific basis of conservation) / [ed. by S. M. Stoiko]. - Lviv: Liha-Press, 2004. - 232 p. [in Ukrainian]

Rizun V. B. Endemic species of ground beetles (Coleoptera, Carabidae) in the Carpathian National Nature Park // National natural parks: issues of designation and development. - Yaremche, 2000. - P.242-247. [in Ukrainian]

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Stoiko S. M. Nature of the Carpathian National Park / [S. M. Stoiko, L. I. Milkina, L.O. Tassenkevich et al.]. - Kyiv: Naukova Dumka, 1993. - 214 p. [in Ukrainian]

Tatarynov K.A. Vertebrate fauna of the west of Ukraine: ecology, value, conservation. – Lviv: Lviv University Press, 1973. – 257 p. [in Ukrainian]

Fedorenko A.P., Rohatko I.V., Yakivchuk I.M. Terrestrial vertebrate animals of the park and their conservation // Nature of the Carpathian National Park. - Kyiv: Naukova Dumka, 1993. - P. 145-169. [in Ukrainian]

Red Data Book of Ukraine. Plant World / ed. by Ya.P. Didukh - Kyiv: Globalconsulting, 2009.-912 p. [in Ukrainian]

Red Data Book of Ukraine. Animal World / ed. by I. A. Akimov. - Kyiv: Globalconsulting, 2009. - 600 p. [in Ukrainian]

[IUCN, 2018]. 2018 IUCN Red List of Threatened Species. Gland, IUCN.

EU Water Framework Directive 2000/60/EC Definitions of Main Terms.

Szczęśny B., Godunko R.J. Catalogue of caddis flies (Insecta: Trichoptera) of Ukraine. - Lviv, 2008. 104 p.

#### 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

<1 file(s) uploaded>

#### 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Prut river flow start ( B. Prots, 22-10-2012 )



Shrubed peat-bog ( B. Prots, 22-10-2012 )



View on Tsybulnyk forested/shrubed peat bog ( B. Prots, 10-06-2012 )



Stream running through peat bog ( B. Prots, 22-10-2012 )



Spurge virgin wet/dry forests ( *B. Prots, 22-10-2012* )



A post-glacial kettle under Mount Turkul with the alpine lake Nesamovyte ( *I. Danylyk, 17-07-2011* )



A rivulet in the boggy cirque between the mounts of Hoverla and Breskul ( *I. Danylyk, 01-09-2012* )



A sedge-moss bog "Tsybulnyk" under Mount Breskul ( *I. Danylyk, 24-06-2009* )

#### 6.1.4 - Designation letter and related data

##### Designation letter

<1 file(s) uploaded>

Date of Designation