

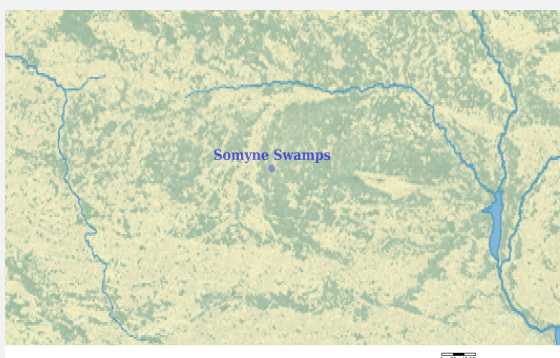


# Ramsar Information Sheet

Published on 13 December 2016

## Ukraine

### Somyne Swamps



|                  |                       |
|------------------|-----------------------|
| Designation date | 24 December 2013      |
| Site number      | 2275                  |
| Coordinates      | 51°24'42"N 26°55'10"E |
| Area             | 10 852,00 ha          |

## Color codes

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

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

## 1 - Summary

### Summary

The site "Somyne Swamps" is located in the Samenskyi District of Rivnenska Oblast. The main territory of the site is a large sedge-sphagnum swamp area mostly of mixed type of nutrition (transitive), which has the sparse growth of trees and forest. There is also a lake near which a small number of eutrophic swamps, swamp of alder forests and pine forests are located. This bog is one among biggest bogs of the Polissia (Polesia), a natural and historical region of Eastern Europe, stretching from parts of Eastern Poland, straddling the Belarus - Ukraine border, and into western Russia. This wetland site is almost unchanged by land drainage, which took part in the region during Soviet times and it plays an important role in maintaining the hydrological regime of a large region in the central-eastern part of West Polesia which is critically important for the wetland, forest and meadow ecosystems functioning, and consequently – for protecting biodiversity, including large number of rare species.

The site provides habitats for over 780 native plant species and 580 animal species, including 89 species protected nationally and internationally. *Aquila clanga* is one of the globally threatened bird species regularly breeding on the site territory. *Aquila clanga* uses small forested islands for nest disposition and surrounding bogs for feeding. The site also serves as an important breeding habitat for some other wetland dependent bird species, especially for *Gru grus*, *Tringa glareola*, *Strix nebulosa* and others.

The site is a part of Rivnenskyi Nature Reserve and one of the best preserved peatlands of Ukraine.

## 2 - Data & location

### 2.1 - Formal data

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

##### Compiler 1

|                    |  |
|--------------------|--|
| Name               | Rostyslav Zhuravchak   |
| Institution/agency | Rivnenskyi Nature Reserve  |
| Postal address     | Rozvylka, selo Chudel, Sarnjanskyi Rajon, Rivnenska Oblast, 34542, Ukraine |
| E-mail             | rivnepz@ukr.net  |
| Phone              | +380365534763  |
| Fax                | +380365534763  |

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

|           |      |
|-----------|------|
| From year | 2000 |
| To year   | 2016 |

#### 2.1.3 - Name of the Ramsar Site

|   |   |
|---|---|
| Official name (in English, French or Spanish) | Somyne Swamps                                 |
| Unofficial name (optional)                    | Болотний масив Сомине (Bolotnyi masyv Somyne) |

## 2.2 - Site location

### 2.2.1 - Defining the Site boundaries

#### b) Digital map/image

<1 file(s) uploaded>

#### Boundaries description (optional)

"Somyne Swamps" is located in the north-western part of Ukraine within the central part of Western Polissia. Nearest settlements are located: village of Klesiv - 3 km to the south, village Karasyn - 4 km to the north-west, village Tomashgorod - 5 km to the south-east, the Sarny (district centre) - 15 km to the south-west, regional centre Rivne - 90 km from the boundalandries of "Somyne Swamps". In the north-east about 15 kilometers from the nearest wetland Syra Pogonia Bog. Boundaries of the Site correspond to the entire territory one of territorial department of Rivnensky Nature Reserve (Karasynske Conservation Department).

### 2.2.2 - General location

|  |                            |
|--|----------------------------|
| a) In which large administrative region does the site lie? | Rivnenska Oblast           |
| b) What is the nearest town or population centre?          | Klesiv, Tomashgorod, Sarny |

### 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):                         | 10852    |
| Area, in hectares (ha) as calculated from GIS boundaries | 10852.12 |

### 2.2.5 - Biogeography

#### Biogeographic regions

| Regionalisation scheme(s)        | Biogeographic region |
|----------------------------------|----------------------|
| EU biogeographic regionalization | Continental          |

[Other biogeographic regionalisation scheme](#)

According to geo-botanical zoning of Ukraine, the site is located in the Poliska sub-province (Volynske Polissya), East European province, European broadleaf forest region.  
Basin affiliation: basin of the L'va River, which flows into the Prypiat River in Belarus; the Prypiat River, in its turn, flows into the Kyivske Water Reservoir in the middle reaches of the Dnipro River.  
National Scheme of biogeographic regionalisation. National Atlas of Ukraine. – Kyiv: State scientific production enterprise 'Kartographia', 2007. – 440 p.

### 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 located between Sluch, Horyn and Ubort rivers and it plays an important role in maintaining the hydrological regime of a large region in the central-eastern part of Western Polissia which is necessary for the aquatic, wetland, forest and meadow ecosystems functioning. It also contributes to hydrological stability of Prypiat River basin, which is critical for European swamp habitats protection. This site is important for flood and hydrological regime control, fresh water retention and water purification.

Other ecosystem services provided

Supports large number of typical and rare species of the boreal biogeographic region, maintain the regional climate, accumulates carbon and fixed radioactive elements after Chernobyl nuclear Disaster.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification

The site is a critically important for conservation of the typical and rare Polissia region (forest-type) flora, fauna, vegetation and habitats. The site's wetlands and forests provide habitat for over 780 native plant species (vascular plants are well studied – they make up 541 species, in addition to other groups – only 17 lichen, 96 mosses, 29 algae and 96 fungi species are known for the site and 580 animal species (14 species of fishes, 7 amphibians, 7 reptiles, 173 birds and 34 mammals, 312 species of insects and 30 of other groups of invertebrates).

- 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>Astragalus arenarius</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>Carex chordorrhiza</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 incarnata</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>Drosera intermedia</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>Hammarbya paludosa</i>             |              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |               | <input type="checkbox"/> | IUCN Europe – LC; listed in the Red Data Book of Ukraine - EN |   |
| <i>Juncus bulbosus</i>                | bulbous rush | <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>Lycopodiella inundata</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>Lycopodium 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>Pedicularis sceptrum-carolinum</i> |              | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |               | <input type="checkbox"/> | listed in the Red Data Book of Ukraine - VU                   | One of the ten location known for Ukraine |
| <i>Pulsatilla patens</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>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>Salix myrtilloides</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>Scheuchzeria palustris</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>Utricularia intermedia</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>Utricularia minor</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                   |   |

Site is important for the conservation of the plant species that are close to their southern areal range, like *Carex chordorrhiza*, *Carex limosa*, *Drosera intermedia*, *Juncus bulbosus*, *Rhynchospora alba*, *Salix lapponum*, *Salix myrtilloides*, *Scheuchzeria palustris*, *Utricularia minor*.

### 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                        | 8                        |           |                     |                            |               |                          |                                     |   |                         |
| <b>Birds</b>  |                      |                       |                                     |                                     |                          |                                     |                                     |                          |                          |                          |           |                     |                            |               |                          |                                     |   |                         |
| CHORDATA/AVES | <i>Anas strepera</i> | Gadwall               | <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"/> | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - NT |                         |
| CHORDATA/AVES | <i>Aquila clanga</i> | Greater Spotted Eagle | <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"/> | 6         | 2015                |                            | VU            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | listed in the Red Data Book of Ukraine - NT | breeds                  |
| CHORDATA/AVES | <i>Aythya nyroca</i> | Ferruginous Duck      | <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"/> |           |                     |                            | NT            | <input type="checkbox"/> | <input checked="" type="checkbox"/> | listed in the Red Data Book of Ukraine - VU | occurs during migration |
| CHORDATA/AVES | <i>Ciconia nigra</i> | Black Stork           | <input 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"/> | 8         |                     |                            | LC            | <input type="checkbox"/> | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - NT | breeds                  |

| 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>Circaetus gallicus</i>    | Short-toed Snake Eagle                                | <input 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<br>   | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - NT | occurs during migration; not regularly occurs during breeding season |
| CHORDATA/AVES                      |  <i>Circus pygargus</i>       | Montagu's Harrier                                     | <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"/> | 10        |                     |                 | LC<br>   | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - VU | breeds   |
| CHORDATA/AVES                      |  <i>Coracias garrulus</i>     | European Roller                                       | <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"/> | 4         | 2010-2015           |                 | LC<br>   | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - EN | occurs during breeding period from year to year                      |
| CHORDATA/AVES                      |  <i>Dendrocopos leucotos</i>  | White-backed Woodpecker                               | <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"/> | 50        |                     |                 | LC<br>   | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - NT |  |
| CHORDATA/AVES                      |  <i>Gallinago media</i>       | Great Snipe   | <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"/> |           |                     |                 | NT<br>   | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - EN | occurs during migration  |
| CHORDATA/AVES                      |  <i>Glaucidium passerinum</i> | Eurasian Pygmy Owl                                    | <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"/> | 4         |                     |                 | LC<br>   | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - VU | occurs during breeding period  |
| CHORDATA/AVES                      |  <i>Grus grus</i>             | Common Crane  | <input 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"/> | 38        |                     |                 | LC<br>   | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - NT | breeds   |
| CHORDATA/AVES                      |  <i>Haliaeetus albicilla</i>  | White-tailed Eagle                                    | <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"/> |           | 2012-2015           |                 | LC<br>   | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | listed in the Red Data Book of Ukraine - NT | feeds  |
| CHORDATA/AVES                      |  <i>Hydroprogne caspia</i>    | Caspian Tern  | <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<br>   | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - VU | occurs during migration  |
| CHORDATA/AVES                      |  <i>Lanius excubitor</i>      | Great Grey Shrike; Northern Shrike                    | <input 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"/> | 20        |                     |                 | LC<br>   | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine      | breeds   |
| CHORDATA/AVES                      |  <i>Limosa limosa</i>         | Black-tailed Godwit                                   | <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"/> | 20        |                     |                 | NT<br>   | <input type="checkbox"/>            | <input type="checkbox"/>            | IUCN Europe – VU                            | breeds   |
| CHORDATA/AVES                      |  <i>Lyrurus tetrix</i>        | Eurasian Black Grouse; Black Grouse                   | <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"/> | 80        |                     |                 | LC<br>   | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - EN | breeds   |
| CHORDATA/AVES                      |  <i>Milvus migrans</i>        | Black Kite  | <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<br>   | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - VU | occurs during migration  |
| CHORDATA/AVES                      |  <i>Numenius arquata</i>      | Eurasian Curlew                                       | <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"/> |           |                     |                 | NT<br>   | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - EN | occurs during migration  |
| CHORDATA/AVES                      |  <i>Picoides tridactylus</i> | Eurasian Three-toed Woodpecker; Three-toed Woodpecker | <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"/> | 6         | 2011-2015           |                 | LC<br>  | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - VU | occurs during breeding period  |
| CHORDATA/AVES                      |  <i>Strix nebulosa</i>      | Great Gray Owl; Great Grey Owl                        | <input 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"/> | 10        | 2012-2015           |                 | LC<br> | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - NT | breeds   |
| CHORDATA/AVES                      |  <i>Tetraoestes bonasia</i> | Hazel Grouse  | <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"/> | 20        |                     |                 |   | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - VU | breeds   |
| CHORDATA/AVES                      |  <i>Vanellus vanellus</i>   | Northern Lapwing                                      | <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"/> | 40        |                     |                 | NT<br> | <input type="checkbox"/>            | <input type="checkbox"/>            | IUCN Europe – VU                            | breeds   |
| <b>Fish, Mollusc and Crustacea</b> |  |   |                                     |                                     |                          |                          |                                     |                          |                          |                          |           |                     |                 |   |                                     |                                     |   |  |
| CHORDATA/ACTINOPTERYGII            |  <i>Carassius carassius</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<br> | <input type="checkbox"/>            | <input type="checkbox"/>            | listed in the Red Data Book of Ukraine - VU |  |
| <b>Others</b>                      |  |   |                                     |                                     |                          |                          |                                     |                          |                          |                          |           |                     |                 |   |                                     |                                     |   |  |
| ARTHROPODA/INSECTA                 |  <i>Apatura iris</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/INSECTA                 |  <i>Aromia moschata</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 |  |

| Phylum                 | Scientific name   | Common name  | Species qualifies under criterion   |                                     |                          |                                     | Species contributes under criterion |                          |                          |                          | Pop. Size | Period of pop. Est. | % occurrence 1) | IUCN Red List   | CITES Appendix I         | CMS Appendix I           | Other Status  | Justification |
|------------------------|---|--|-------------------------------------|-------------------------------------|--------------------------|-------------------------------------|-------------------------------------|--------------------------|--------------------------|--------------------------|-----------|---------------------|-----------------|---|--------------------------|--------------------------|---|---------------|
|                        |   |  | 2                                   | 4                                   | 6                        | 9                                   | 3                                   | 5                        | 7                        | 8                        |           |                     |                 |   |                          |                          |   |               |
| ARTHROPODA/<br>INSECTA | <i>Carabus menetriesi</i><br>        |  | <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"/> | <input type="checkbox"/> | listed in the Red Data Book of Ukraine - NT                   |               |
| ARTHROPODA/<br>INSECTA | <i>Catocala fraxini</i><br>          |  | <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/<br>INSECTA | <i>Coenonympha oedippus</i><br>      |  | <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 IUCN Red List for Europe – EN                   |               |
| CHORDATA/<br>REPTILIA  | <i>Coronella austriaca</i><br>       |  | <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/<br>INSECTA | <i>Endromis versicolora</i><br>      |  | <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                   |               |
| CHORDATA/<br>AMPHIBIA  | <i>Epidalea calamita</i><br>         |  | <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<br> | <input type="checkbox"/> | <input type="checkbox"/> | listed in the Red Data Book of Ukraine - VU                   |               |
| CHORDATA/<br>MAMMALIA  | <i>Eptesicus serotinus</i><br>       | serotine;<br>Common Serotine   | <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<br> | <input type="checkbox"/> | <input type="checkbox"/> | listed in the Red Data Book of Ukraine - VU                   | brood colony  |
| ARTHROPODA/<br>INSECTA | <i>Lucanus cervus</i><br>            |  | <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"/> | <input type="checkbox"/> | listed in the Red Data Book of Ukraine - NT                   |               |
| CHORDATA/<br>MAMMALIA  | <i>Lynx lynx</i><br>                 | Eurasian Lynx  | <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"/> | 2         |                     |                 | LC<br> | <input type="checkbox"/> | <input type="checkbox"/> | listed in the Red Data Book of Ukraine - NT                   |               |
| CHORDATA/<br>MAMMALIA  | <i>Mustela lutreola</i><br>          | 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"/> | 14        |                     |                 | CR<br> | <input type="checkbox"/> | <input type="checkbox"/> | IUCN Europe – CR; listed in the Red Data Book of Ukraine - EN |               |
| CHORDATA/<br>MAMMALIA  | <i>Myotis daubentonii</i><br>        | Daubenton's Myotis   | <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<br> | <input type="checkbox"/> | <input type="checkbox"/> | listed in the Red Data Book of Ukraine - VU                   | brood colony  |
| CHORDATA/<br>MAMMALIA  | <i>Nyctalus noctula</i><br>          | noctule; Noctule   | <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<br> | <input type="checkbox"/> | <input type="checkbox"/> | listed in the Red Data Book of Ukraine - VU                   | brood colony  |
| ARTHROPODA/<br>INSECTA | <i>Papilio machaon</i><br>           | Common Yellow Swallowtail;<br>Swallowtail; Old World Swallowtail;<br>Artemisia Swallowtail | <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                   |               |
| CHORDATA/<br>MAMMALIA  | <i>Pipistrellus pipistrellus</i><br> | Common Pipistrelle;<br>common pipistrelle  | <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<br> | <input type="checkbox"/> | <input type="checkbox"/> | listed in the Red Data Book of Ukraine - VU                   | brood colony  |
| CHORDATA/<br>MAMMALIA  | <i>Vespertilio murinus</i><br>       | Particolored Bat;<br>particolored bat  | <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<br> | <input type="checkbox"/> | <input type="checkbox"/> | listed in the Red Data Book of Ukraine - VU                   | brood colony  |
| ARTHROPODA/<br>INSECTA | <i>Xylocopa valga</i><br>            |  | <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"/> | <input type="checkbox"/> | listed in the Red Data Book of Ukraine - NT                   |               |

1) Percentage of the total biogeographic population at the site



The site territory is important for threatened in global scale bird *Aquila clanga* – 2-3 pairs has stable breeding on small forests islands among bog massif. Most of pairs are looks like “genetically pure” (no interspecific hybridization with *Aquila pomarina* named one of the main threat for *A. clanga*). Peatlands vegetation provides good conditions for Rallidae habitat – one of the main pray of *A. clanga*. Another threatened species - *Mustela lutreola* – makes up to 7 families here.

The site is also important place for nesting and feeding of large number of Ukrainian and European Red Lists species, among them *Ciconia nigra* (2 breeding pairs on adjusted area), *Lyrurus tetrix* (near 40 mails), *Grus grus* (near 20 breeding pairs), *Tringa glareola*, *Numenius arquata* (only on migrations), *Motacilla citreola*, *Aythya nyroca* (on migrations), *Picoides tridactylus* (two localities), *Coracias garrulous* (non regular registration during breeding season), *Mustela lutreola* (regular registration of few families). Also in marsh habitats were recognized *Coronella austriaca*, *Emys orbicularis*, *Alces alces*.

### 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  |
|---|--|---|--|
| Sedge-Sphagnum communities              | <input checked="" type="checkbox"/>    | Transition mires formed by medium-sized or small sedges, associated with sphagnum mosses. Plant communities belong to the alliance <i>Caricion lasiocarpae</i> Vanden Berghen in Lebrun et al. 1949.  | Annex I EU Habitat Directive, Natura 2000: 7140 Transition mires and quaking bogs.   |
| <i>Nymphaea candida</i> communities     | <input checked="" type="checkbox"/>    | Permanent ponds on peat with brown water rich in humic acids. Plant communities belong to the association <i>Nymphaetum candidae</i> Mljan 1958.  | Listed in the Green Data Book of Ukraine (2009); Natura 2000: 3160 Natural dystrophic lakes and ponds.   |
| <i>Utricularia minoris</i> community    | <input checked="" type="checkbox"/>    | Acidic pools and hollows on peat. Plant communities belong to the association <i>Sphagno-Utricularietum minoris</i> (Fijałkowski 1960) Pietsch 1975.  | Listed in the Green Data Book of Ukraine (2009); Natura 2000: 3160 Natural dystrophic lakes and ponds; Characteristic species ( <i>Utricularia minor</i> ) is under legal protection (Red Data Book of Ukraine, 2009)  |
| Sedge-Scheuchzeria-Sphagnum communities | <input checked="" type="checkbox"/>    | Floating carpets and quaking mires in mesotrophic conditions formed by <i>Carex limosa</i> , <i>Rhynchospora alba</i> and <i>Scheuchzeria palustris</i> , associated with sphagnum or brown mosses. Plant communities belong to the alliance <i>Rhynchosporion albae</i> Koch 1926. | Listed in the Green Data Book of Ukraine (2009); Natura 2000: 7150 Depressions on peat substrates of the <i>Rhynchosporion</i> ; Characteristic species ( <i>Scheuchzeria palustris</i> ) is under legal protection Red Data Book of Ukraine (2009).                             |
| <i>Nuphar lutea</i> communities         | <input checked="" type="checkbox"/>    | Lakes with free-floating surface communities dominated by <i>Nuphar lutea</i> . Plant communities belong to the association <i>Nupharo lutei-Nymphaetum albae</i> Nowiński 1930.  | Listed in the Green Data Book of Ukraine (2009); Natura 2000: 3150 Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrocharition</i> -type vegetation.  |
| <i>Sparganieta minimi</i> community     | <input checked="" type="checkbox"/>    | Shallow pools on peat with brown water rich in humic acids. Plant communities belong to the association <i>Sparganietum minimi</i> Schaaf 1925.   | Listed in the Green Data Book of Ukraine (2009); Natura 2000: 3160 Natural dystrophic lakes and ponds; Characteristic species ( <i>Sparganium minimum</i> , <i>Juncus bulbosus</i> , <i>Utricularia intermedia</i> ) are under legal protection Red Data Book of Ukraine (2009). |

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

### 4.1 - Ecological character

On the site area, the sedge-sphagnum mires prevail, with the domination of *Carex lasiocarpa* and *Sphagnum centrale*, *S. fallax*, *S. cuspidatum*, *S. subsecundum*, *S. magellanicum*, *S. palustre*. The rare *Comarum palustre*, *Menyanthes trifoliata*, *Rhynchospora alba*, *Peucedanum palustre*, *Phragmites australis*, *Drosera rotundifolia* also grow here. There is a close group of species composition with the domination of *Carex rostrata* and *C. omskiana*, *Phragmites australis*, *Eriophorum gracile*. Often there are rare-forestry mires (with *Betula pubescens*) of the same species composition. There are large areas of oligomesotrophic wetlands with the domination of *Eriophorum vaginatum* and eutrophic sedge mires. At the elevated areas, pine forests of varying wetness degree occur – dry moss pine forests (*Cladonio-Pinetum*), green moss pine forests (*Peucedano-Pinetum*), and wet molinian forests (*Molinio-Pinetum*). There are swamp alder (*Sphagno squarrosi-Alnetum*) and pine (*Vaccinio uliginosi-Pinetum*) forests, wet pine-birch-alder forests. On the lake periphery, there is a band of 2-6 m width with the domination of reeds. There are small areas of dry sandy meadows with the domination of *Corynephorus canescens*.

The territory of the Site and adjacent areas are used for collecting and harvesting cranberry and bilberry by local population, and that is the one of the main revenue sources for local people. In the surroundings, forestry and agriculture, domestic cattle grazing, hunting, fishing are carried out; there is also a network of reclamation channels.

### 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 > Lakes and pools<br>>> O: Permanent freshwater lakes                   | Somyne     | 3  | 61                        |                              |
| Fresh water > Marshes on peat soils<br>>> U: Permanent Non-forested peatlands       |            | 2  | 1363                      | Representative               |
| Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands             |            | 1  | 4829                      | Rare                         |
| Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands |            | 2  | 1488                      | Representative               |
| Fresh water > Marshes on peat soils<br>>> Xp: Permanent Forested peatlands          |            | 3  | 70                        |                              |

#### Human-made wetlands

| Wetland types (code and name)              | Local name | Ranking of extent (1: greatest - 4: least) | Area (ha) of wetland type | Justification of Criterion 1 |
|--|------------|--|---------------------------|------------------------------|
| 2: Ponds                                   |            | 4  | 0.2                       |                              |
| 9: Canals and drainage channels or ditches |            | 3  | 50.2                      |                              |

#### Other non-wetland habitat

| Other non-wetland habitats within the site | Area (ha) if known |
|--|--------------------|
| non-wetland forests, sands                 | 2991               |

#### (ECD) Habitat connectivity

The area has got mosaic structure with high level of habitats connectivity. It is the core zone of the regional ecological network.

### 4.3 - Biological components

#### 4.3.1 - Plant species

##### Other noteworthy plant species

| Scientific name          | Common name | Position in range / endemism / other       |
|--------------------------|-------------|--|
| <i>Carex limosa</i>      |             | listed in the Red List of Rivnenska oblast |
| <i>Malva excisa</i>      |             | listed in the Red List of Rivnenska oblast |
| <i>Sparganium natans</i> |             | listed in the Red List of Rivnenska oblast |

##### Invasive alien plant species

| Scientific name        | Common name | Impacts     |
|------------------------|-------------|-------------|
| <i>Pinus banksiana</i> | Black pine  | Potentially |
| <i>Quercus rubra</i>   |             | Potentially |

#### 4.3.2 - Animal species

##### Other noteworthy animal species

| Phylum             | Scientific name      | Common name            | Pop. size | Period of pop. est. | %occurrence | Position in range /endemism/other |
|--------------------|----------------------|------------------------|-----------|---------------------|-------------|-----------------------------------|
| CHORDATA/AVES      | Botaurus stellaris   | Eurasian Bittern       | 100       |                     |             |                                   |
| CHORDATA/AVES      | Ixobrychus minutus   | Little Bittern         | 20        |                     |             |                                   |
| CHORDATA/AVES      | Picus canus          | Grey-headed Woodpecker | 50        |                     |             |                                   |
| CHORDATA/AVES      | Porzana parva        | Little Crane           |           |                     |             |                                   |
| CHORDATA/AVES      | Porzana porzana      | Spotted Crane          |           |                     |             |                                   |
| CHORDATA/AVES      | Tringa glareola      | Wood Sandpiper         |           |                     |             |                                   |
| CHORDATA/REPTILIA  | Emys orbicularis     |                        |           |                     |             |                                   |
| ARTHROPODA/INSECTA | Maculinea nausithous |                        |           |                     |             |                                   |

Invasive alien animal species

| Phylum                  | Scientific name   | Common name | Impacts                  |
|-------------------------|-------------------|-------------|--------------------------|
| CHORDATA/ACTINOPTERYGII | Perccottus glenii |             | Potentially              |
| CHORDATA/MAMMALIA       | Neovison vison    |             | Actually (minor impacts) |

#### 4.4 - Physical components

##### 4.4.1 - Climate

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

The climate of the site is comparatively humid and warm. An average annual precipitation is 550-600 mm. An average temperature is +6-7°C; temperature of the warmest month (July) is +18.5°C, temperature of the coldest month (January) is -5.5°C. The site is located in the zone of sufficient humidity, the average annual evaporation values from the surface are 525-550 mm.

##### 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 site "Somyne Swamps" is a separate natural boundary of Ukraine's largest marsh massif of Kreminne located between the Sluch and Lva rivers. From the site water flows to the Lva River (172 km long; catchment area is 2,400 km<sup>2</sup>), which in the territory of Belarus flows into the Stviga River, a tributary of the Prypiat River (length is 761 km; catchment area is 114,000 km<sup>2</sup>). The Prypiat River is a tributary of the Dniipro River.

##### 4.4.3 - Soil

- Mineral
- Organic
- No available information

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

Please provide further information on the soil (optional)

In the elevated areas, the common (soddy-podzol) soils on sands are widespread. The average depth of peat beds is 1.7 m, the maximum – 3 m. Peat is almost everywhere underlying by sand and only in areas with the greatest depth it has sapropelic layer. At the bottom part the reedy peat dominates. Above there is a sedge peat over which there is a layer of sphagnum, or sedge-sphagnum peat. The Somyne Lake is of karst origin and it has the area of 61 ha and the maximum depth of 13 m. The bottom in the north-eastern part is covered with a layer of peat, up to 1 m. In the western and southern parts, the bottom is sandy. The mode of the lake is formed under the influence of precipitation, surface inflow, evaporation, soil inflow and outflow. The lake has several elements related to the nature of the parent rock through which the moderate nutrition by groundwater is conducted. The small content of organic and inorganic substances is typical for the lake.

##### 4.4.4 - Water regime

Water permanence

| Presence?   |
|---|
| Usually permanent water present                           |
| Usually seasonal, ephemeral or intermittent water present |

Source of water that maintains character of the site

| Presence?                       | Predominant water source            |
|---------------------------------|-------------------------------------|
| Water inputs from rainfall      | <input checked="" type="checkbox"/> |
| Water inputs from surface water | <input type="checkbox"/>            |

Water destination

| Presence?         |
|-------------------|
| Feeds groundwater |

Stability of water regime

| Presence?                   |
|-----------------------------|
| Water levels largely stable |

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

The subterranean waters are mostly lying close to terrestrial surface. Big areas are covered with water during flood and high-water period. The precipitations in the form of snow and rain are the main water source. Level regime of surface waters is changeable. Inadequate drainage of the territory causes the season subterranean water level elevation. The 2013-2015 period was very dry so water level got lower and period of floods became shorter.

(EOD) Connectivity of surface waters and of groundwater The groundwater and surface waters are connected, however the connection scope has never been properly studied.

(EOD) Stratification and mixing regime The stratification and mixing regime are changeable, but have never been studied.

#### 4.4.5 - Sediment regime

- Significant erosion of sediments occurs on the site
- Significant accretion or deposition of sediments occurs on the site
- Significant transportation of sediments occurs on or through the site
- Sediment regime is highly variable, either seasonally or inter-annually
- Sediment regime unknown

Please provide further information on sediment (optional):

Significant sedimentary processes do not occur within the Site.

#### 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):

pH-level of water from lake (in October 2015) was 7,4; pH-level from channel (in November 2015) was 7,3.

#### 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

Please provide further information on salinity (optional):

Water salinity from lake (in October 2015) was 0.14 g/l; water salinity from channel (in November 2015) was 0,16 g/l.

#### 4.4.8 - Dissolved or suspended nutrients in water

- Eutrophic
- Mesotrophic
- Oligotrophic
- Dystrophic
- Unknown

(EOD) Dissolved organic carbon No data

(EOD) Redox potential of water and sediments No data

(EOD) Water conductivity No data

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                         |
| Wetland non-food products | Livestock fodder                           | 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 | High                           |
| Hazard reduction                    | Flood control, flood storage                 | Medium                         |

Cultural Services

| Ecosystem service          | Examples   | Importance/Extent/Significance |
|----------------------------|--|--------------------------------|
| Scientific and educational | Important knowledge systems, importance for research (scientific reference area or site) | High                           |
| Scientific and educational | Long-term monitoring site  | High                           |
| Scientific and educational | 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    | Accumulation of organic matter  | High                           |
| Nutrient cycling  | Carbon storage/sequestration  | High                           |

Other ecosystem service(s) not included above:

Populated areas, including social and cultural entities, are absent within the site. Fishing and forestry are not practiced on the Site.

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

Description if applicable

The ecological character of the Site depends on local community's cooperation, because its territory and adjacent areas are the focus of collecting and harvesting cranberry and bilberry by local population, and that is the one of the main revenue sources for the people.

- iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

4.6 - Ecological processes

|  |   |
|--|---|
| (EOD) Primary production   | No data   |
| (EOD) Nutrient cycling   | No data   |
| (EOD) Carbon cycling   | No data   |
| (EOD) Animal reproductive productivity   | High level of animal reproductive productivity        |
| (EOD) Vegetational productivity, pollination, regeneration processes, succession, role of fire, etc. | All natural processes are in place and in large scope |

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|   |   |
|---|---|
| (EOD) Notable species interactions, including grazing, predation, competition, diseases and pathogens | Not visible   |
| (EOD) Notable aspects concerning animal and plant dispersal   | Only natural dispersal processes are located at place, high level of wilderness |
| (EOD) Notable aspects concerning migration  | Active migration  |
| (EOD) Pressures and trends concerning any of the above, and/or concerning ecosystem integrity         | The site is highly naturally integral, avoiding any kind of human pressures     |

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

### 5.1 - Land tenure and responsibilities (Managers)

#### 5.1.1 - Land tenure/ownership

##### Public ownership

| Category   | Within the Ramsar Site              | In the surrounding area             |
|--|-------------------------------------|-------------------------------------|
| Provincial/region/state government                 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Local authority, municipality, (sub)district, etc. | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Other public ownership                             | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

##### Private ownership

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

##### Other

| Category                 | Within the Ramsar Site   | In the surrounding area             |
|--------------------------|--------------------------|-------------------------------------|
| No information available | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

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

a) Within the site: State ownership; lands are transferred for permanent use to the administration of the Rivnenskyi Nature Reserve. The administration of the Reserve has the Certificate on permanent land use. b) In the surrounding area: State, communal (municipal) and private properties (the land reserves of Klesiv and Tomashgorod Town Councils, lands of "Sarny" and "Klesiv" Forestry Enterprises). In the north it borders with Dubrovtskyi (lands of "Dubrovtskyi Forestry Enterprise"), in the east – with Rokytnivskyi counties (the land of private farm "Aberdeen") of Rivnenska oblast.

#### 5.1.2 - Management authority

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

Rivnenskyi Nature Reserve

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

Vasyl Bachuk, director

Postal address:

Urochyshe Dubky-Rozvylka, Sarny, Rivnenska Oblast, 34503, Ukraine

E-mail address:

rivnepz@ukr.net

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

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

#### Water regulation

| Factors adversely affecting site | Actual threat | Potential threat | Within the site                     | In the surrounding area             |
|----------------------------------|---------------|------------------|-------------------------------------|-------------------------------------|
| Drainage                         | 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             |
|---------------------------------------|---------------|------------------|--------------------------|-------------------------------------|
| Wood and pulp plantations             | Low impact    | Low impact       | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Annual and perennial non-timber crops |               |                  | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

#### Biological resource use

| Factors adversely affecting site           | Actual threat  | Potential threat | Within the site                     | In the surrounding area             |
|--|----------------|------------------|-------------------------------------|-------------------------------------|
| Hunting and collecting terrestrial animals | unknown impact | unknown impact   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Gathering terrestrial plants               | Low impact     | Low impact       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Logging and wood harvesting                | Medium impact  | Medium impact    | <input 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    | Low impact       | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Natural system modifications

| Factors adversely affecting site | Actual threat | Potential threat | Within the site                     | In the surrounding area             |
|----------------------------------|---------------|------------------|-------------------------------------|-------------------------------------|
| Fire and fire suppression        | Low impact    | Low impact       | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Unspecified/others               | Medium impact | High 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 | unknown impact | unknown 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             |
|----------------------------------|---------------|------------------|-------------------------------------|-------------------------------------|
| Unspecified                      | Medium impact | Low 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             |
|----------------------------------|----------------|------------------|-------------------------------------|-------------------------------------|
| Droughts                         | unknown impact | High impact      | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Please describe any other threats (optional):

Within the Site the research studies and conservation activities are performed, including fire preventing and sanitary felling carried out according to special permits and limits approved by the Ministry of Ecology and Natural Resources of Ukraine. In the surroundings, forestry and agriculture, domestic cattle grazing, hunting, fishing are carried out; there is also a network of reclamation channels.

Unspecified in Pollution: Increased levels of radiation are observed after the Chernobyl accident.

5.2.2 - Legal conservation status

National legal designations

| Designation type | Name of area | Online information url | Overlap with Ramsar Site |
|------------------|--------------|------------------------|--------------------------|
| Nature Reserve   | Rivnenskyi   |                        | 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 |

Species

| Measures                                      | Status   |
|---|----------|
| Threatened/rare species management programmes | Proposed |

Human Activities

| Measures   | Status                |
|--|-----------------------|
| Communication, education, and participation and awareness activities | Partially implemented |
| Research   | Implemented           |



### 5.2.5 - Management planning

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

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

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

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

Since 2006, the Ecological-Education Center of Rivnenskyi Nature Reserve has been functioning. On the basis of the Centre and at the regional educational institutions, the annual events where the attention is focused on importance of nature conservation and bog value, including wetlands of the Somyne Swamp Mass are carried out.

### 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      |
|---------------------------------|-------------|
| Water quality                   | Proposed    |
| Water regime monitoring         | Implemented |
| Plant species                   | Implemented |
| Animal species (please specify) | Implemented |
| Birds                           | Implemented |
| Plant community                 | Implemented |

According to the appointed aims of the Reserve, on both the territory of the site and of the Rivnenskyi Nature Reserve, the annual inventory and monitoring of rare plant groups, flora and fauna species are implemented and phenological observations are carried out. Also, the development and research on special studies are carried out, including on topics of radioecology, hydrochemical, hydrobiological, flora and fauna survey, syntaxonomy vegetation studying, population parameters of rare plants monitoring and others that accumulate factual and statistical materials. However, such studies are fragmented and research programmes are not fully implemented.

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Chronicle of Nature: Rivnenskyi Nature Reserve. – 2000-2015. [In Ukrainian];  
 Conservation and restoration of biodiversity of protected areas. Proceedings of the International scientific conference devoted to 10th anniversary of the Rivne Nature Reserve (Sarny, 11-13 June 2009) / Ed. by Budz M.D. et al. – Rivne: "Rivne printing", 2009. – 936 p. [In Ukrainian, Russian];  
 Directory of Ukraine's Wetlands / Edited by G. Marushevsky, I. Zharuk. – Kyiv: Wetlands International Black Sea Programme, 2006. – P. 103-107. [In Ukrainian];  
 Nature of Polissia: Research and conservation / Materials of international scientific-practical conference, dedicated to the 15th anniversary of the Nature Reserve "Rivnenskyi" and the 10th anniversary of the Ramsar site "Perebrody Peatlands" (Sarny, 3-5 July 2014) / Edited by Zhuravchak R.O. – Rivne: Ovid, 2014. – 660 p. [In Ukrainian, Russian, English];  
 Reserves and National Nature Parks of Ukraine. – Kyiv: Vyshcha Shkola, 1999. – 230 p. [In Ukrainian];  
 Voloshynova N., Bachuk V., Gryshchenko Yu. The reserve land of forests, wetlands and lakes. – Rivne: "Rivne printing", 2007. – 200 p. [In Ukrainian].  
 Red Data Book of Ukraine. Flora / edited by Y.P. Didukh. – K.: Hlobalkonsaltny, 2009. – 900 p. [In Ukrainian]  
 Red Data Book of Ukraine. Fauna / edited by I.A. Akimov. – K.: Hlobalkonsaltny, 2009. – 600 p. [In Ukrainian]  
 Green Book of Ukraine. – Kyiv: Alterpress, 2009. – 448 p. (in Ukrainian)

#### 6.1.2 - Additional reports and documents

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

<no file available>

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

<no file available>

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

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<1 file(s) uploaded>

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

Please provide at least one photograph of the site:



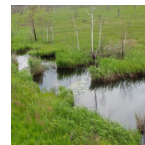
Meztrophic bog of Somyne Swamps ( *Rbstyslav Zhuravchak, 14-07-2013* )



Somyne lake ( *Rbstyslav Zhuravchak, 25-05-2012* )



Meztrophic bog of Somyne Swamps ( *Oksana Galovko, 22-05-2011* )



Old reclamation system ( *Oksana Galovko, 20-04-2008* )



Sedge swamp ( *Rbstyslav Zhuravchak, 18-07-2013* )



Swamped forest ( *Rbstyslav Zhuravchak, 09-07-2013* )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation