# Information Sheet on Ramsar Wetlands (RIS)

# **—** 2009-2014 version

Available for download from http://www.ramsar.org/doc/ris/key\_ris\_e.doc and http://www.ramsar.org/pdf/ris/key\_ris\_e.pdf

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th Conference of the Contracting Parties (2005).

## Notes for compilers:

- The RIS should be completed in accordance with the attached Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands. Compilers are strongly advised to read this guidance before filling in the RIS.
- Further information and guidance in support of Ramsar site designations are provided in the Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance (Ramsar Wise Use Handbook 17, 4th edition).
- Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat.
   Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

## 1. Name and address of the compiler of this form:

#### Dmitry Grummo

Institute of Experimental Botany of the National Academy of Science of Belarus 220072, Minsk, Akademicheskaya st., 27 tel./fax +375172842013 E-mail: zm.hrumo@gmail.com

### Natallia Zeliankevich

Institute of Experimental Botany of the National Academy of Science of Belarus 220072, Minsk, Akademicheskaya st., 27 tel./fax +375172842013 E-mail: zeliankevich\_nat@mail.ru

# 2. Date this sheet was completed/updated:

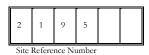
26 November 2013

3. Country:

Belarus

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# 4. Name of the Ramsar site:

The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.

Vydritsa (Выдрица)

## 5. Designation of new Ramsar site or update of existing site:

This RIS is for (tick one box only):

6.	For RIS updates only, changes to the site since its designation or earlier update:
a)	Site boundary and area
	The Ramsar site boundary and site area are unchanged: □
	or  If the site boundary has changed:  i) the boundary has been delineated more accurately  ii) the boundary has been extended ; or  iii) the boundary has been restricted**
	and/or
	If the site area has changed: i) the area has been measured more accurately ii) the area has been extended □; or iii) the area has been reduced** □
Co Ar	Important note: If the boundary and/or area of the designated site is being restricted/reduced, the ntracting Party should have followed the procedures established by the Conference of the Parties in the nex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the omission of an updated RIS.
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	Describe briefly any major changes to the ecological character of the Ramsar site, including in the plication of the Criteria, since the previous RIS for the site:
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#### 9. General location:

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

The site is located between river Berezina and river Vydritsa in the southeast of the country, about 200 km southeast from Minsk and 85 km west of Gomel, within Zhlobin and Svetlogorsk districts in the Gomel region.

10. Elevation: (in metres: average and/or maximum & minimum)

126.3 - 150.3 m above sea level

11. Area: (in hectares)

21,292 hectares

#### 12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Vydritsa is characterized by different ecological systems and a rich biodiversity. The characteristic structural features of the floodplain are oxbow lakes, valleys and rivers, forests and meadows, marshes, swamps and dry valley forest vegetation complexes, representative of both, the southern subzone of hornbeam-oak-conifer forests in the south of the Eurasian boreal region and the northern part of the subzone of broadleaf-pine forests in the European broad leaved forest area.

The wetland serves as a benchmark of natural complexes in the north of Gomel Polesie and it is an important element in the formation of contiguous and unified migratory corridors. The site acts as a reserve for many rare and endangered relict species of plants and animals included in national and international Red Books.

The site is also of international significance as Reserve of Waterfowl Habitats. Moreover, Vydritsa wetland is an ecosystem of accumulation type that acts as a biological filter of anthropogenic pollutants coming from the neighboring territories.

#### 13. Ramsar Criteria:

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the Explanatory Notes and Guidelines for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked.

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# 14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

**Criterion 1** - An example of the rare type of wetland system to the appropriate biogeographic region, which is predominantly in its natural state.

1a – it is unique wetland within the pre-Polesie region;

1c - it has significant importance for natural functioning of the river Pripyat basin;

1d - it has a great hydrological importance to adjacent areas:

- during the dry season holds water supplies and provides flow to other water bodies;
- maintains groundwater levels;
- plays an important role in maintaining high water quality.

Criterion 2 – the wetland supports the existence of vulnerable, endangered or threatened species and ecological communities.

- 2a ensures the preservation of threatened species and endangered ecosystems;
- 2b ensures the existence of rare, endangered or threatened populations of 12 species of vascular plants (Pedicularis sceptrum-carolinum, Dracocephalum ruyschianum, Huperzia selago, Genista germanica, Dentaria bulbifera, Iris sibirica, Carex rhizina, Lycopodiella inundata, Pulsatilla pratensis, Listera ovata, Viola uliginosa, Gladiolus imbricatus), 1 species of reptiles (Emus orbicularis); 13 species of birds (Falco vespertinus, Emberiza hortulana, Ixobrychus minutus,

Pandion haliactus, Circaetus gallicus, Ciconia nigra, Botaurus stellaris, Falco tinnunculus, Grus grus, Circus cyaneus, Alcedo atthis, Picus viridis, Falco subbuteo); 2 species of mammals (Meles meles, Muscardinus avellanarius) included in the Red Book of Belarus.

2d - includes endangered ecosystems (in accordance with the EEC Habitat Directive): 7110 – Active raised bogs; 7120 – Degraded raised bogs still capable of natural regeneration; 7140 – Transition mires and quaking bogs; 9080 – Fennoscandian deciduous swamp woods; 91D0 – Bog woodland.

**Criterion 3** - ensures the existence of populations of plants and animals that are important for maintaining biological diversity within the Continental biogeographic region.

3a – the wetland supports populations of plant and animal species that are important for the conservation of biological diversity of mires, rivers, lakes and oak forests.

**15. Biogeography** (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Continental

b) biogeographic regionalisation scheme (include reference citation):

European Environmental Agency (2012)

http://www.eea.europa.eu/data-and-maps/figures/biogeographical-regions-in-europe-1

#### 16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Geomorphology. The major part of the wetland is located within the Streshin glacial valleys, related to the geomorphologic region of pre-Polesie plains and lowlands. The site's northern boundary limits with Sozh glacier. The peripheral part of the alluvial lowlands of river Rechytsa is located in the extreme southeast of the territory. In the northern area, the site limits with the Centratl Berezina and Bobruisk glacial plains. In the South, the site limits with the territory of Ozarichy glacial lowlands and lakes.

In geostructural terms, the wetland belongs to the adjacent areas of river Pripyat. The crystalline basement is at a depth of 1,000 meters and it is covered by a stratum of chalks, chalk marl and sands, mostly from the Paleogene age.

*Origin.* The current geomorphological terrain was shaped 100 thousand years ago by Sozh glacier activity, which formed outwash deposits, composed of thick layers of sand. These deposits are clearly visible in the wetland, sloping to the south in gently undulating plains and flat lowlands with a dense network of gullies, carrying out melted glacier waters through valleys and thermokarst depressions. Variations in the relative heights usually do not exceed 4.5 m. In the river valleys, outwash deposits gradually merge with the ancient alluvial terraces and Poozerie glacial rocks.

*Hydrology and hydrography.* The site is located within the Berezina River system, tributary of the Dnieper River hydrological basin. The hydrographic network includes the main river Berezina and its left tributaries of first and second order river Ola and river Vydritsa, together with oxbow lakes located in the floodplain and marsh areas in the surrounding area.

Berezina River is the third largest affluent tributary of Dnieper River. The bed of the river is free-meandering and tortuous. Towards the mouth the tortuosity gradually increases (ratio - 1.09). The prevailing width is 80-130 m, characterized by smooth bends and long straight stretches with lots of shoals, bays, articulation sleeves, oxbow lakes and floodplain lakes. The average depth is 2-2.5 m, maximum - 6.5 m. Flow speed is 0.5-0.8 m/s. The bed of the river is clean, just the river banks present vegetation overgrown. The bottom is flat and sandy. The banks have a different slope, from flat to steep, approximate height of 1- 2 meters. With the

erosion of the river valley the slopes reach 15 meters in height. They are predominantly sandy and loamy, breakable and partially fixed by bushes.

Ola River originates in a small bog 0.8 km northeast of the village Ola in the Kirov district within the Mogilev region. River Ola flows into Berezina from the left bank, 81 km from its mouth. The length of the river is of 122 km. The floodplain is asymmetrical, double-sided, 0.5-0.6 km wide and in its lower parts reaches is 1-1.5 km. Surface is flat, hummocky, with some sand hills and ridges of 0.5-1 km of length and 3-8 m height, divided by oxbows, channels and drainage ditches. The floodplain is mostly covered by overgrown meadow or scattered bushes. A large area of the river is drained and cultivated. In the lower swamped floodplain almost everywhere is covered with dense bushes and forest. Soils are peaty. Floodplain is flooded to a depth of 0.5-1.5 m for a period of 2-3 weeks.

River Vydritsa is a distributary of River Ola and has a length of 19 km. It flows throughout the swamps and empties into the River Berezina. The floodplain at the sides has a width from 50 m to 300 m and is overgrown with bushes. The banks are low and marshy with a height about 15 cm. The bed is strongly meandering in width from 4 to 10 m and in some places up to 40 meters. Along the shores there is vegetation overgrown of duckweed, sedges, cattails angustifolia and reed.

In the floodplain of the Berezina River there are more than 26 oxbow lakes with a total area of 0.7 km2 located within the boundaries of the wetland.

On the territory of the wetland, there are 23 marsh areas (about 30% of the total area) with reserves of about 11 million tons of peat. Fens dominate in the depressions and floodplains.

	Place of sampling									
Data	Berezina river	Vydritsa river, the middle course	Vydritsa river, lower course	e Ola river						
		mg per liter								
рН	7.68	7.60	7.56	7.80						
HCO <sub>3</sub> -	176.9	225.4	225.7	244.0						
SO <sub>4</sub> <sup>2</sup> -	12.6	3.7	3.7	32.0						
Cl-	12.5	13.2	9.2	20.1						
Ca <sup>2+</sup>	48.5	64.1	64.1	72.9						
Mg <sup>2+</sup>	9.7	9.7	9.7	16.1						
K <sup>+</sup>	3.4	0.9	0.8	3.3						
Na+	7.1	5.3	5.3	8.2						
$\mathrm{NH_{4}^{+}}$	0.50	0.40	0.40	0.67						
NO <sub>3</sub> -	0.74	0.89	0.89	0.89						
$NO_{2}$	0.018	0.002	0.0	0.014						
PO <sub>4</sub> 3-	0.040	0.050	0.042	0.080						
Fe	0.9	1.4	1.2	0.8						
Si	3.0	0.4	0.6	3.0						

**Soils.** According to soil-geographical zoning, the area belongs to Luban-Svetlogorsk-Kalinkovichi subarea of sod-podzolic boggy sand, loam and peat soils of lowland type, which is part of the South-Eastern District of Polesie. Typical soils of the wetland are:

- 1. Sod-podzolic sandy soils underlain by loam (pH 5.2);
- 2. Sod-podzolic and sod-podzolic swamped sandy soils (pH 4.4);
- 3. Peat soils (pH from 3.1 to 6.5);
- 4. Sod-podzolic and sod-waterlogged sandy soil (pH 5.5);
- 5. Alluvial (floodplain) turf swamped and peat soils (pH from 5.5 to 7.5).

**Climate.** Long-term average annual temperature is  $+6.9 \pm 0.10$  ° C, varying in different years from +4.9 (1940) to +8.70 ° C (1989, 2008). The warmest month of the year is July (+18.60 ° C). The coldest month is January (-5.40 ° C).

The duration of the period with average daily temperatures of above  $0^{\circ}$ C is of 256 days. The growing season is of 207days. Frost free period lasts 148 days. The last frost in the air can be noticed on the  $2^{nd}$  of May and

the first on  $28^{th}$  of September. The average air temperature in January ranges from 0.8 °C (1989) to -15.8 °C (1987). In July from +15.3 °C (1979) to +22.7 °C (2010). The average monthly temperature of the surface of the soil is to -7 °C in winter and 22 °C in July.

Long-term average annual amount of precipitation for the observation period is  $671 \pm 12$  mm, varying in different years from 422 (in 1963) to 969 mm (1998).

In the warm season (April-September) falls 410 mm of rain, in the cold season (October-March) - 260 mm. In the annual variations, the minimum precipitation is usually in February and March (average 36 mm), the maximum - in July (91 mm). Maximum daily rainfall (115 mm) observed in June 1991.

The average height of the snow cover in the winter is 15-20 cm, in some years up to 55 cm. The snow cover formed from 15 to 20 December, goes from 5 to 10 March. Average number of days with thaws (December-February) is 40-45 days.

Humid days (relative humidity  $\ge 80\%$ ) are 108 in the year, dry (relative humidity in one of the periods of observation  $\le 30\%$ ) are 19 days.

In the territory of the wetland, general circulation of the atmosphere determines predominance of winds from the west. Average annual wind speed is 2.6 m/s, the maximum average wind speed from November to May (2.6-2.9 m/s, west to 3.2 m/s), the minimum - from June to October (2.2-2.5 m/s). During the twenty-four hours, the lowest speed is observed at night and the highest during the day, with the diurnal variation of wind speed well expressed in the summer months and low in winter.

#### 17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

The area belongs to the Dnieper River hydrological basin and Berezina River system. The hydrographic network includes the river Berezina and its left tributaries of first and second order Ola and Vydritsa.

Berezina River belongs to the large lowland rivers. Thus, it's formed by three classical parts expressed in its floodplain: riverbed, center and terrace. The central floodplain has a complex surface, divided into smaller delineated areas where meadows of different high-altitude levels are growing. High meadows are typical of the delineated area of riverbed and of the segment-ridged central floodplain. The characteristic topography is their unifying element-levees and riverine mane, raised by 1.5-2.5 meters or more above the water edge, composed of layered sands. Formed on these undeveloped or poorly-developed sod podzolic soils, the land contains small amount of humus (1%). Soils do not have a clear differentiation into genetic horizons and the lower part of the morphological profile is typically gleyed. Due to an unfavorable water and nutrient regime, these soils are covered with scarce vegetation in comparison with other areas of the floodplain.

The central part of the flood plain is expressed in the wetland throughout river Berezina. Depending on the nature of the floods, the central floodplain soils may consist of granular or layered alluvial deposits. These deposits are more common in the flat part of the floodplain, they are mainly sod gleyey, sandy and loamy soil of granulometric composition formed on them.

In the depressions between the large manes of the central part of the floodplain and in the most remote part of the terrace waterlog occurs. This area is characterized by the deposition of alluvial material (loam and clay) and the formation of abundant humus (up to 10 - 12%) and peat soils rich in mineral nutrients. These elements are often formed in the terrace.

Homogeneous flat and very swampy floodplain tributaries of Berezina, Vydritsa and Ola, characterize the site. Their soil cover is composed primarily of alluvial peat-bog soils of different thickness, formed on different botanical composition peat.

#### 18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

The wetland, as part of the natural hydrographic network of the Belorussian pre-Polesie, has a great hydrological value for the adjacent territories:

- Keeps water during the dry season, supporting other water bodies;
- Maintains the groundwater level;
- Participates in the formation of underground hydrological systems, which supply with water surface wetland complexes; and
- Plays an important role in maintaining the high water quality in the region.

### 19. Wetland Types

#### a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the Explanatory Notes & Guidelines.

 $Marine/coastal: A \ \bullet \ B \ \bullet \ C \ \bullet \ D \ \bullet \ E \ \bullet \ F \ \bullet \ G \ \bullet \ H \ \bullet \ I \ \bullet \ J \ \bullet \ K \ \bullet \ Zk(a)$ 

Inland: L • M • N • O • P • Q • R • Sp • Ss • Tp Ts •  $\boxed{U}$  • Va• Vt •  $\boxed{W}$  •  $\boxed{Xp}$  • Y • Zg • Zk(b)

Human-made: 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c)

#### b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

Xf, Xp, W, U, 9

#### 20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

The diversity of natural conditions in the wetland includes different environmental systems represented by 12 natural boundaries combined into five landscapes.

The complex combination of hydrologic and geomorphic features determines the rich fauna and rare plant species present at the site. According to research studies, 670 species of vascular plants can be found belonging to 355 genus, 99 families, 55 orders, 6 classes and 5 divisions. Among them, 5 species of mosses, 6 species of horsetails, 11 species of ferns, 3 species of gymnosperms and 445 species of angiosperms (289 dicots and 156 monocots). There are also 31 tree species, 39 shrubs, bushes and dwarf shrubs, 443 perennial and 157 species of annual and biennial herbaceous plants.

Moreover, the site supports 14 plant species listed in the Red Book of Belarus and 30 rare and economically valuable plants in need of protection.

A forest survey together with Ola and Vydritsy river valleys, Berezina floodplain and many oxbow lakes showed that the structure and composition of zoo-complexes is represented by typical species of different habitats: forests, meadows, wetlands, agrophitocenosis and human settlements of rural type.

Within the boundaries of the wetland around 200 species of terrestrial vertebrates have been registered. 19 protected species of invertebrates included in the Red Book of Belarus can be found. 45 species of fauna are hunted.

The combination of forest, marsh and upland vegetation complexes are remarkable for the area, with a vegetation of pine, spruce, ash, black alder and oak. There is a fairly rich abundant vegetation of rare and endangered plant species.

Within the territory of the wetland, there are 23 marsh areas (about 30% of the total area) with reserves of about 11 million tons of peat. Fens can be found in depressions and floodplains. For the protection of existing wetlands, two protected peat areas "Dikoe" and "Antonovsky" were created.

The diversity and variety of ecological systems and the high level of biological diversity characterizes the wetland. The characteristic structural features of the floodplain are oxbow lakes, valleys and rivers, forests and marshes, meadows, swamps and dry valley forest vegetation complexes representative of both: the southern subzone of hornbeam-oak-conifer forests in the south of the Eurasian boreal region and the northern part of the subzone of broadleaf-pine forests of the European broadleaved forest area.

Wetland ecosystem functions. The ecosystems of the wetland have a number of important socio-economic and environmental functions:

- Flow control;
- Release of oxygen and carbon sequestration
- Raw materials (reserve of berries, medicinal and industrial raw materials, hunting species);
- climate:
- Filter (groundwater);
- Peat-formation;
- Water accumulation;
- Pioneering (in areas destroyed by fire).

### 21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.

12 species of rare and endangered plants included in the Red Book of the Republic of Belarus can be found in the wetland:

1 species classified as Category II of protection (Endangered species, EN):

1. Pedicularis sceptrum-carolinum L.

1 species classified as Category III of protection (Vulnerable species, VU):

2. Dracocephalum ruyschianum L.

10 species classified as Category IV of protection (Near Threatened, NT):

IV категория охраны (NT) — 10 видов:

- 3. Huperzia selago (L.) Bernh. ex Schrank et Mart.
- 4. Genista germanica L.
- 5. Dentaria bulbifera L.
- 6. Iris sibirica L.
- 7. Carex rhizina Blytt ex Lindbl.
- 8. Lycopodiella inundata (L.) Holub
- 9. Pulsatilla pratensis (L.) Mill.
- 10. Listera ovata (L.) R. Br.
- 11. Viola uliginosa Bess.
- 12. Gladiolus imbricatus L.

#### 22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.

The wetland supports the 50.1% of terrestrial vertebrate species recorded in Belarus. 16 species of them are rare, protected and included in the Red Book of Belarus.

List of rare and endangered species of animals inhabiting in the wetland "Vydritsa":

#### Reptiles:

- 1 species classified as Category II of protection (Endangered species, EN):
  - 1. Emus orbicularis L.

#### Birds

- 1 species classified as Category I of protection (Critically Endangered, CR):
  - 2. Falco vespertinus
- 4 species classified as Category II of protection (Endangered species, EN):
  - 3. Emberiza hortulana L.
  - 4. Ixobrychus minutus L.
  - 5. Pandion haliactus L.
  - 6. Circaetus gallicus GM.
- 7 species classified as Category III of protection (Vulnerable species, VU):
  - 7. Ciconia nigra L.
  - 8. Botaurus stellaris L.
  - 9. Falco tinnunculus L.
  - 10. Grus grus L.
  - 11. Circus cyaneus L.
  - 12. Alcedo atthis L.
  - 13. Picus viridis L.
- 1 species classified as Category IV of protection (Near Threatened, NT):
  - 14. Falco subbuteo L.

#### Mammals:

- 1 species classified as Category III of protection (Vulnerable species, VU):
  - 15. Meles meles L.
- 1 species classified as Category IV of protection (Near Threatened, NT):
  - 16. Muscardinus avellanarius L.

The international status of protection (IBA):

Criterion A1 - Botaurus stellaris

Criterion B2 - Circaetus gallicus, Circus cyaneus, Tachybaptus ruficollis

# 23. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

#### Historical and cultural significance.

The wetland is located in a remote and swampy terrain.

Settlements within the wetland are absent.

#### The socio-economic potential.

#### The current land use.

On the agricultural land within the wetland all traditional agricultural activities are permitted. In the forests, picking berries and mushrooms is allowed. Given the high density of game ungulate species, hunting is allowed and regulated by law. On the territory of the wetland recreational fishing is allowed.

#### Population and settlement system.

On the territory of the wetland, settlements are absent, but in the south-west of the territory there are arranged dacha plots. In the immediate vicinity of the wetland area the following villages can be found: Dobrovolscha, Zamen-Rynya, Plesovichi, Korotkovichi, Antonovka, Iskra, Dednoe, Selnoe, Chirkovichi, Zdudichi, Sudovitsa.

### Industrial production.

The territory is not a source of raw materials. In areas immediately adjacent to the wetland in the short term, constructions of new industrial facilities are not planned.

Engineering and transport infrastructure.

Deleted: ¶

The railway Zhlobin-Svetlogorsk and the road Vasilevichi-Zhlobin crosses the territory of the wetland.

#### Recreational resources.

The most accessible natural systems to the neighborhood residents have a high resistance to recreational activities as they are waterlogged. Forests in Korotkovichi are more suitable for recreation and they are well-connected, but they are contaminated with radionucleides.

Limited recreational capacity (sum of the products of allowable loads on the natural systems on the area of these complexes) forest of green space and the river meadows receive about 20,000 people per year, or about 7 people per hectare. For park forest, these values are respectively 2000 people and 8.5 people respectively. However, given the natural characteristics of the territory and seasonal recreation (summer holidays, picking berries and mushrooms), the load is unlikely to exceed 50% of the specified value.

#### Agricultural production.

Agricultural uses are very reduced (only 7%) as well as plowed agricultural land (11%). The contamination of the territory as the result of the Chernobyl accident dramatically worsened the environmental conditions of the land and its management. Thus, about the 10% of agricultural lands of Zhlobin area included in the wetland are contaminated with radionuclides and have been removed from economic circulation.

## Forestry.

State Forestry Enterprise "Svetlogorsk Forestry" (Iskra forestry) and "Zhlobin Forestry" (Dvorischany, Korotkovichi forestry) carry out forest management activities within the boundaries of the wetland.

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?

If Yes, tick the box and describe this importance under one or more of the following categories:

- i) sites which provide 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) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where 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:

## 24. Land tenure/ownership:

a) within the Ramsar site:

The land owned by the state (land Svetlogorsk and Zhlobin executive committees) and transferred to the long-term use to Svetlogorsk and Zhlobin SFEs, agricultural enterprises.

b) in the surrounding area:

State land rented by farms and forestry enterprises.

## 25. Current land (including water) use:

a) within the Ramsar site:

#### In Zhlobin district:

- APC "Kitin" 1163 ha
- APC "Dvorischansky" 1458 ha
- PUE "Agro-Korotkovichi" 1856 ha
- MAUE "Progress" -182 ha
- MAUE "Mormal" -250 ha
- Dvorischany forestry, 60 hectares;
- Korotkovichi Forestry 2820 ha.

## In Svetlogorsk district:

- MAUE "Zolak-Agro" -932 ha
- MAUE "Berezina" 248 ha
- OJSC "STSKK" 408 ha
- Iskra forestry -8179 ha.

The main types of land use:

## Forestry

- logging;
- reforestation;
- secondary forest (collection of berries, mushrooms, medicinal and industrial raw materials);

## Recreation

- hunting;
- fishing.

b) in the surroundings/catchment:

The main types of land use:

## Forestry

- logging,
- reforestation
- secondary forest (collection of berries, mushrooms, medicinal and industrial raw materials)

# Agriculture

- perennial grasses
- tilled and crops
- grazing

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

a) within the Ramsar site:

The main adverse factors are:

- Natural changing environmental regimes of habitats (turfing, reduced lighting, changing hydrological conditions and moisture conditions of ecotope, vegetation succession);
- Anthropogenic economic transformation of land, hydromelioration, water level reduction, logging, fires, excessive recreational loads (trampling, collection of flowering plants and medicinal plants, overgrazing and mowing on unspecified dates).

Radioactive contamination of the territory as a result of the Chernobyl accident dramatically worsened the environmental conditions of the land and its management. Thus, about 10% of agricultural enterprises lands of Zhlobin area included in the wetland are contaminated with radionuclides.

b) in the surrounding area:

These negative factors also occur in adjacent areas.

#### 27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

Important Birds Area (IBA) (criteria A1, B2) (according to Treasures of Belarusian Nature)

Criteria A1 - Greater Spotted Eagle

Criteria B2 - Short-toed Eagle, Hen Harrier, Lesser Spotted Eagle

In 1998, the Republican Landscape Reserve "Vydritsa" was created. Protected peat areas "Dikoe" and "Antonovsky"

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia $\square$ ; Ib $\square$ ; II $\square$ ; III $\square$ ; IV $\square$ ; VI $\square$	Ia	□:Ib	<b></b> :	II	<b></b> :	III	<b></b> :	IV	☑:	V	<b></b> :	VI	
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c) Does an officially approved management plan exist; and is it being implemented?:

The management plan has not been developed yet.

The specially protected natural area Vydritsa is under the operational management of Zhlobin and Svetlogorsk executive committees. In order to improve the effectiveness of the management and protection the of natural complexes of the reserve, the decisions of the respective executive committees are in consultation with the Ministry of Natural Resources and Environmental Protection and the State environmental institution Republican landscape reserve "Vydritsa."

d) Describe any other current management practices:

On the territory is forbidden:

- conducting drainage and other works related to the change of the landscape and existing hydrology, peat and sapropel extraction;
- continuous felling of width cutting area of over 100 meters;
- damage and destruction of trees and shrubs, the violation of the natural soil, except for contours that
  are on agricultural land, as well as when it is connected with forestry activities; burning of dry
  vegetation (burns); air processing of pesticides of agricultural and forest lands;
- diversion of water from reservoirs and water for industrial water supply, irrigation; discharge of
  untreated and inadequately treated sewage, industrial waste and consumption in water bodies and
  watercourses; the clearing of coastal and aquatic vegetation, except for areas designated for
  recreational;

- tourist camping, fires, car parking in places not designed for that purpose; movement off-road motorized vehicles, except vehicles carrying agricultural and forestry work;
- use floating craft with motors, except floating craft of rescue and environmental services;
- haymaking (before 30 June) in the breeding season of birds and animals, and livestock grazing in the coastal zone of the rivers Berezina, Vydritsa and Ola.

Recreation, building and construction of power lines, roads, pipelines and other facilities as well as the development of deposits of minerals in the reserve, is subject to the needs of economic development in accordance with the legislation of the Republic of Belarus and the Ministry of Natural Resources and Environmental protection of the Republic of Belarus and the Ministry of Architecture and Construction.

#### 28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

The State program for the development of the protected areas system (2008-2014), provided retooling to the state environmental agency that manages the reserve Vydritsa (reference 19.6.2)

A certification of the habitats with rare and endangered plant species, the most valuable plant communities, and vulnerable natural ecosystems is required in order to ensure the protection by land users.

## 29. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Case studies of landscape and biological diversity in the reserve have been carried out in the preparation of the scientific substantiation of the protected area "Vydritsa."

In 1998, detailed studies of the flora and fauna were conducted by experts from the Scientific and Practical Center of Bioresources of NAS and the V.F.Kuprevich Institute of Experimental Botany of NASB. Systematic lists of the major groups of vertebrates were prepared, rare and vulnerable species were identified and an assessment of the status of the wetland was produced.

# 30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

The State environmental agency of "Vydritsa" leads target activities aimed at environmental education within the reserve. Work with local residents, students and legal entities is also carried out. Promotional materials are available.

Information about the reserve and its natural value for the conservation of biological diversity has been published in the pages of the regional and national press, television, radio and internet.

However, given the high value of the protected area for the conservation of biological diversity and the high recreational potential, it is of relevance to create a data center in the reserve.

#### 31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

The environmental agency of Vydritsa manages the tourism and recreational activities within the reserve. There are organized routes and nature trails, environmental tours for amateurs and professionals and a parking space is also available.

The State program (2008-2014) for the development of the national protected areas system (reference 32.6.3) is organizing touristic routes to improve the recreational potential of the wetland.

The State environmental agency is actively engaged in the organization (on the equipped areas) of corporate events, cross-country skiing, ice fishing and hiking activities.

Information about the organization of tourism in the reserve can be found at http://www.svetlogorsk.bv.

The Sanatorium "Silver Springs" (Svetlogorsk District) is located near the wetland and is very popular. The wetland is used for informal wellness recreation and tourism, fishing, recreational hunting, picking berries and mushrooms. The maximum recreational burden falls on the summer.

## 32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

- Ministry of Forestry (st. Myasnikova 39, 220048 Minsk, Belarus).
- Ministry of Natural Resources and Environmental Protection (st. Kollektornaya 10, 220048 Minsk, Belarus).

#### 33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Svetlogorsk and Zhlobin executive committees manage the wetland «Vydritsa».

Operational management of reserve is carried out by the State Environmental Institution "Republican landscape reserve "Vydritsa."

Address: st. Aviatsionnaya, 70, Svetlogorsk, Gomel region, 247400

Telephone: +375 2342 2-57-44 Fax: +375 2342 2-57-44 E-mail: vidritsa@mail.ru

Alexander Naydenov +375 2342 34658

Zhlobin and Svetlogorsk district inspections of natural resources and environment protection are the bodies responsible for state control, protection and rational use of the wetland.

Address of Svetlogorsk district inspection: st. Aviatsionnaya, 70, Svetlogorsk, Belarus, 247433, tel.: 8-02342 71294

Address of Zhlobin district inspection: st. Petrovskogo, 9, Zhlobin, Belarus, 247210,

tel.: 8-023342-65-24;

e-mail: ecologynv@vitebsk.bv, ecologynv@gmail.com

## 34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

- The Red Book of Belarus: Rare and endangered species of wild plants / Ch. Editorial Board.: L.I. Khoruzhik (preds.), L.M. Sushchenya, V.I. Parfenov and others 2nd ed. Minsk: BelEn, 2006. 456.
- Treasures of Belarusian Nature: Areas of international importance for biodiversity conservation / A.V. Kozulin [and others]. - 2nd ed. - Mn.: Belarus, 2005. - 215.

Please return to: Ramsar Convention Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • e-mail: ramsar@ramsar.org