



# Ramsar Information Sheet

Published on 27 January 2021

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## Belarus Stary Zhaden



Designation date	7 September 2012
Site number	2140
Coordinates	51°54'22"N 27°36'37"E
Area	17 048,00 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 "Stary Zhaden" is a wetland complex with dominance of large mire massifs typical for the Belarusian Polesie region. This area is characterized by a combination of fen mires and transitional mires (the latter situated in the core of the reserve) with massifs of old-aged forests that grow on elevations, creating tree islands. Coniferous species are dominant in them.

The territory of the site is located between the rivers Pripyat and its right tributaries Stviga and Ubort'. Directly on the territory of the site, the hydrological network is represented only by drainage canals. The canals are overgrown with aquatic vegetation, and in some places are closed by floating vegetation mats. Numerous beaver dams prevent the water flow from the mires.

The site plays an important role as a "green corridor" between the Ramsar sites National Park Pripyatsky and Olmany Mires Zakaznik. Together these three sites comprise the Biosphere Reserve "Pripyatskoe Polesie".

The wetland contributes to maintaining the groundwater level and water filling of the rivers of the Pripyat River basin. The mire system influences the local climate and water balance, serves as an accumulator of ground and atmospheric water, and prevents the development of erosion processes. It plays a significant role in the global carbon cycle, accumulating a significant amount of it.

## 2 - Data & location

### 2.1 - Formal data

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

##### Responsible compiler

Institution/agency	Institute of Experimental Botany of the National Academy of Science of Belarus
Postal address	220072, Minsk, Akademicheskaya st., 27,

##### National Ramsar Administrative Authority

Institution/agency	Institute of Experimental Botany of the National Academy of Science of Belarus
Postal address	220072, Minsk, Akademicheskaya st., 27 e-mail: bronibroska@mail.ru

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

From year	2012
To year	2020

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Stary Zhaden
Unofficial name (optional)	Старый Жаден

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

(Update) A. Changes to Site boundary	Yes <input type="radio"/> No <input checked="" type="radio"/>
(Update) B. Changes to Site area	No change to area
(Update) For secretariat only: This update is an extension	<input type="checkbox"/>

#### 2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?	No
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## 2.2 - Site location

### 2.2.1 - Defining the Site boundaries

b) Digital map/image  
<1 file(s) uploaded>

Former maps	0
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##### Boundaries description

The boundaries of the Ramsar site coincide with those of the national hydrological reserve "Stary Zhaden".  
For more information, see Additional materials.

### 2.2.2 - General location

a) In which large administrative region does the site lie?	Gomel region, Zhitkovichi and Lelchitsy districts
b) What is the nearest town or population centre?	Turov

### 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): 17048

Area, in hectares (ha) as calculated from GIS boundaries 17061.208

### 2.2.5 - Biogeography

#### Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Continental

#### Other biogeographic regionalisation scheme

The Pan European Map of Biogeographical Regions 2001(T-PVS 2001/89 Appendix V)

### 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 an example of a representative wetland system of the continental biogeographic region, which is predominantly in its natural state. It is also a typical wetland of the Polesie region.  
The site has a great hydrological importance to adjacent areas:  
- it has a significant importance for natural functioning of the river Pripjat basin;  
- serves as an accumulator of ground and atmospheric water;  
- maintains the level of groundwater;  
- plays an important role in maintaining high water quality.

Other ecosystem services provided

The mire system influences the formation of the local climate, prevents the development of erosion processes. It plays a significant role in the global carbon cycle, accumulating a significant amount of it. Collecting of berries (blueberries, cranberries) within the wetland is an important source of income for the local population. Within the wetland harvesting of biological resources carries out in the following ways:  
- harvesting of fruit, berries (blueberry, cranberry, raspberry) and mushrooms  
- harvesting of officinal and technical plants  
- commercial beekeeping.

Other reasons

The site plays an important role as a "green corridor" between the Ramsar sites Pripjatsky National Park and Olmany Mires Zakaznik. Together these three sites comprise the Biosphere Reserve "Pripjatskoe Polesie".

Criterion 2 : Rare species and threatened ecological communities

Criterion 3 : Biological diversity

Justification

The wetland supports populations of plant and animal species that are important for the conservation of biological diversity of fauna and flora of mires affected by significant drainage reclamation. The wetland contains the range of biological diversity (including habitat types) typical of the Polesie region and supports particular elements of biological diversity that are rare and characteristic of the continental biogeographic region.  
The site's flora includes 563 species of higher vascular plants. The site's fauna of vertebrates is represented by 12 fish species, 4 amphibian species, 5 reptile species, 104 bird species and 20 mammal species.

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

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<b>Plantae</b>								
TRACHEOPHYTA/ LILIOPSIDA	<i>Carex elata</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		
TRACHEOPHYTA/ LILIOPSIDA	<i>Carex lasiocarpa</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		
TRACHEOPHYTA/ LILIOPSIDA	<i>Eriophorum gracile</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red Data Book - Vulnerable	
TRACHEOPHYTA/ LILIOPSIDA	<i>Glyceria fluitans</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		
TRACHEOPHYTA/ LILIOPSIDA	<i>Koeleria pyramidata pyramidata</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Pulsatilla pratensis</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red Data Book - Near Threatened	
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Rhododendron luteum</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red Data Book - Vulnerable	
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Salix lapponum</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red Data Book - Near Threatened	
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Salix myrtilloides</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red Data Book - Vulnerable	
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Utricularia intermedia</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		need of preventive protection
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Utricularia minor</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>		need of preventive protection
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Vaccinium microcarpum</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red Data Book - Vulnerable	
TRACHEOPHYTA/ MAGNOLIOPSIDA	<i>Viola uliginosa</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red Data Book - Near Threatened	

The site supports 5 plant species from the National Red Data Book.

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

Phylum	Scientific 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								
<b>Others</b>																	
CHORDATA/REPTILIA	<i>Coronella austriaca</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"/>	National Red Data Book - Vulnerable	
CHORDATA/REPTILIA	<i>Emys orbicularis</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"/>	National Red Data Book - Vulnerable	
CHORDATA/MAMMALIA	<i>Eptesicus nilssonii</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red Data Book - Vulnerable	
CHORDATA/MAMMALIA	<i>Lutra lutra</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"/>				NT	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/MAMMALIA	<i>Lynx lynx</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National red data Book - Endangered	
CHORDATA/MAMMALIA	<i>Meles meles</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red Data Book - Endangered	
CHORDATA/MAMMALIA	<i>Mustela lutreola</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"/>				CR	<input type="checkbox"/>	<input type="checkbox"/>	National Red Data Book - Critically Endangered	The site is one of 3 habitats of this species known in Belarus.
CHORDATA/MAMMALIA	<i>Myotis brandtii</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red Data Book - Vulnerable	
<b>Birds</b>																	
CHORDATA/AVES	<i>Aquila clanga</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12	2004-2010		VU	<input type="checkbox"/>	<input checked="" type="checkbox"/>	National Red Data Book - Critically Endangered	6 breeding pairs
CHORDATA/AVES	<i>Aquila pomarina</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2004-2010		LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red Data Book - Vulnerable	breeding
CHORDATA/AVES	<i>Ciconia nigra</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2004		LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red Data Book - Vulnerable	breeding
CHORDATA/AVES	<i>Circaetus gallicus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2004		LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red data Book - Endangered	breeding
CHORDATA/AVES	<i>Dendrocopos leucotos</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red Data Book - Near Threatened	
CHORDATA/AVES	<i>Falco subbuteo</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red Data Book - Near Threatened	
CHORDATA/AVES	<i>Grus grus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2004		LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red Data Book - Vulnerable	breeding
CHORDATA/AVES	<i>Haliaeetus albicilla</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	2004		LC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Natioanal Red Data Book - Endangered	4 breeding pairs
CHORDATA/AVES	<i>Limosa limosa</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2004		NT	<input type="checkbox"/>	<input type="checkbox"/>	National Red Data Book - Vulnerable	breeding
CHORDATA/AVES	<i>Numenius arquata</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2004		NT	<input type="checkbox"/>	<input type="checkbox"/>	National Red Data Book - Vulnerable	breeding
CHORDATA/AVES	<i>Strix nebulosa</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20	2007		LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red Data Book - Endangered	10 breeding pairs
CHORDATA/AVES	<i>Tringa nebularia</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2004		LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red Data Book - Vulnerable	breeding

1) Percentage of the total biogeographic population at the site

The site supports 12 bird species and 4 animal specie from the National Red Data Book.

### 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
7120 Degraded raised bogs still capable of natural regeneration	<input checked="" type="checkbox"/>		Annex I of the Habitats Directive
7110* Active raised bogs	<input checked="" type="checkbox"/>		Annex I of the Habitats Directive, priority habitat
7140 Transition mires and quaking bogs	<input checked="" type="checkbox"/>		Annex I of the Habitats Directive
9080* Fennoscandian deciduous swamp woods	<input checked="" type="checkbox"/>		Annex I of the Habitats Directive, priority habitat
91D0* Bog woodland	<input checked="" type="checkbox"/>		Annex I of the Habitats Directive, priority habitat



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

### 4.1 - Ecological character

Wetland "Stary Zhaden" is a complex wetland system with a prevalence of large mire massifs typical of the Belarusian Polesie. This area is characterized by a combination of fen mires and transitional mires (the latter form the core of the reserve) with massifs of old-aged forests that grow on elevations, which are a kind of "islands".

The Site's vegetation structure is composed of forests, occupying 65.3% of the site's area, 31.5% of mires, 0.6% meadows, 0.9% shrubs, and 1.8% of other land covers. The core of the wetland is a complex of nemoral fen mires, combined with sphagnum transitional mires of boreal type and sphagnum raised bogs. Along the periphery of the mires and islands, there are swampy, waterlogged and dry forests, playing the role of a buffer zone for sphagnum mires. Pine forests dominate (66.1% of the forest cover). The share of the white birch is 15.9%, and the silver birch – 14.4%. There are also alder forests (2.7%) and oak woods (0.9%).

The territory of the site is located between the rivers Pripyat and its right tributaries Stviga and Ubort'. Directly on the territory of the site, the hydrological network is represented only by drainage canals. On the eastern border of the site, near the mire tracts Old Zhadensk and Velikoe Mire, there are the Main Ditch and the Bychok Canal, which were built more than 120 years ago. The canals are overgrown with aquatic vegetation, and in some places are closed by floating vegetation mats. Numerous beaver dams prevent the flow of water from the mires. The wetland contributes to maintaining the groundwater level, water filling of the rivers of the Pripyat River basin. The mire system influences the formation of heat and water balance, serves as an accumulator of ground and atmospheric water, and prevents the development of erosion processes. It plays a significant role in the global carbon cycle, accumulating a significant amount of it.

On the territory of the wetland 563 species of vascular plants (including hybridogeneous taxa) are registered. The dominant life forms are perennial grasses (72%) and woods (12%). 16% - annual and biennial plants, the presence of which reflects the intensive forest management within the wetland (the network of forest roads, logging, forest cultivation).

The fauna of the wetlands is diverse and representatively reflects the environmental characteristics of the all spectrum of wetland ecosystems. Within the wetland five classes of vertebrate animals registered: 12 fish species (pike, bream and roach are common), 4 amphibians species (moor frog is dominated by), 5 reptiles species, and 104 birds species (represented by 13 orders), 20 mammal species.

Collecting of berries (blueberries, cranberries) within the wetland is an important source of income for the local population. Within the wetland harvesting of biological resources carries out in following ways:

- harvesting of fruit, berries (blueberry, cranberry, raspberry) and mushrooms
- harvesting of officinal and technical plants
- commercial beekeeping.

### 4.2 - What wetland type(s) are in the site?

#### Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		0	2	
Fresh water > Flowing water >> N: Seasonal/ intermittent/ irregular rivers/ streams/ creeks		0	2	
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		4	1337	
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		0	798	Rare
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		2	1541	Rare
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		0	1229	Rare
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		3	1539	Rare
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		1	4259	Rare

#### Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type
9: Canals and drainage channels or ditches		0	12

## 4.3 - Biological components

### 4.3.1 - Plant species

Other noteworthy plant species

Phylum	Scientific name	Position in range / endemism / other
TRACHEOPHYTA/LILIOPSIDA	<i>Anthericum ramosum</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Aquilegia vulgaris</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Campanula persicifolia</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Dactylorhiza incarnata</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Dactylorhiza maculata</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Daphne mezereum</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Goodyera repens</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Hepatica nobilis</i>	
TRACHEOPHYTA/LILIOPSIDA	<i>Juncus bulbosus</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Jurinea cyanoides</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Polemonium caeruleum</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Primula veris</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Pulsatilla patens</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Pyrola media</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Thalictrum aquilegifolium</i>	
TRACHEOPHYTA/MAGNOLIOPSIDA	<i>Tragopogon bjelorusicus</i>	

Optional text box to provide further information

There are 563 species of vascular plants on the territory of the wetland (303 genus, 82 families, 52 orders, 6 classes and 5 divisions).

### 4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/MAMMALIA	<i>Alces alces</i>				
CHORDATA/MAMMALIA	<i>Canis lupus</i>				
CHORDATA/MAMMALIA	<i>Castor fiber</i>				
CHORDATA/MAMMALIA	<i>Dryomys nitedula</i>				
CHORDATA/MAMMALIA	<i>Lepus europaeus</i>				
CHORDATA/MAMMALIA	<i>Lepus timidus</i>				
CHORDATA/AVES	<i>Lyrurus tetrix</i>				
CHORDATA/MAMMALIA	<i>Martes martes</i>				
CHORDATA/MAMMALIA	<i>Muscardinus avellanarius</i>				National Red Data Book - Near Threatened
CHORDATA/MAMMALIA	<i>Nyctalus lasiopterus</i>				
CHORDATA/MAMMALIA	<i>Nyctereutes procyonoides</i>				
CHORDATA/AVES	<i>Picoides tridactylus</i>				National Red Data Book - Near Threatened
CHORDATA/MAMMALIA	<i>Sus scrofa</i>				
CHORDATA/AVES	<i>Tetrao urogallus</i>				

Invasive alien animal species

Phylum	Scientific name	Impacts	Changes at RIS update
CHORDATA/MAMMALIA	<i>Neovison vison</i>	Potential	No change

Optional text box to provide further information

The fauna of the wetlands is diverse and representatively reflects the environmental characteristics of the all spectrum of wetland ecosystems. Within the wetland five classes of vertebrate animals registered: 12 fish species (pike, bream and roach are common), 4 amphibians species (moor frog is dominated by), 5 reptiles species, and 104 birds species, 20 mammal species.

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

The duration of the period with average daily temperatures above  $00C$  is 256 days, vegetation period - 207 days, frost-free period - 148 days. The latest frost was recorded on 2 of May, the first - on 28 of September. The average monthly temperature in January ranges from  $0.80C$  (1989) to  $-15.80C$  (1987), in July from  $+15.30C$  (1979) to  $+22.70C$  (2010). The average monthly temperature of the soil surface is up to  $-70C$  in winter and up to  $+220C$  in July.

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

See additional material for further information.

##### 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 territory of the wetland is located between river Pripyat (right tributary of the Dnieper River, Black Sea basin) and its right tributaries – rivers Stviga and Ubort.

##### 4.4.3 - Soil

Mneral

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

Organic

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

No available information

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

Please provide further information on the soil (optional)

The main types of soils are mire soils and sod-podzols. Groundwater comes quite close to the soil surface here. This leads to significant spread of sod-podzolic soils of varying hydromorphic degrees and intensive process of mire soil development. Soils of bog type occupy large areas, confined to the central part of the wetland. Soils of transition mire adjoin them. Soils of the fens are dominated by shallow peat, peat-gley, peaty-gley, humic-gley and silty-humic soils, which underlain by unconsolidated ancient alluvial sands.

See additional material for further information.

##### 4.4.4 - Water regime

###### Water permanence

Presence?	Changes at RIS update
Usually permanent water present	

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from surface water	<input type="checkbox"/>	No change
Water inputs from groundwater	<input type="checkbox"/>	No change
Water inputs from precipitation	<input checked="" type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
To downstream catchment	No change
Feeds groundwater	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels largely stable	No change

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

The territory of the wetland is located between river Pripyat and its right tributaries – rivers Stviga and Ubort. Hydrological network within the wetland is represented by only ameliorative canals which are connected with the main water arteries draining the wetland - river Pripyat, and especially its right tributary - river Stviga.  
 On the eastern border of the site, near the mire tracts Old Zhadensk and Velikoe Mire, there are the Main Ditch and the Bychok Canal, which were built more than 120 years ago. The canals are overgrown with aquatic vegetation, and in some places are closed by floating vegetation mats. Numerous beaver dams prevent the flow of water from the mires.

4.4.5 - Sediment regime

Significant accretion or deposition of sediments occurs on the site

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

Sediment regime unknown

4.4.6 - Water pH

Acid (pH<5.5)

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

Circumneutral (pH: 5.5-7.4)

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

Unknown

Please provide further information on pH (optional):

In general, typical for all Polesie mires, and indicator of its close to natural conditions, the average pH value is 3.3-3.8 for bogs, 3.6-4.0 for transition mires, and 4.6-5.9 for fens.

4.4.7 - Water salinity

Fresh (<0.5 g/l)

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

Unknown

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic

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

Mesotrophic

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

Oligotrophic

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

Unknown

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the i) broadly similar  ii) significantly different  site itself.

Surrounding area has greater urbanisation or development

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types

## 4.5 - Ecosystem services

### 4.5.1 - Ecosystem services/benefits

#### Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Medium
Fresh water	Drinking water for humans and/or livestock	Medium
Wetland non-food products	Timber	Low

#### Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
Maintenance of hydrological regimes	Storage and delivery of water as part of water supply systems for agriculture and industry	High
Pollution control and detoxification	Water purification/waste treatment or dilution	High
Hazard reduction	Flood control, flood storage	Medium

#### Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	Low
Recreation and tourism	Recreational hunting and fishing	Low

#### Supporting Services

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

#### Optional text box to provide further information

Collecting of berries (blueberries, cranberries) within the wetland is an important source of income for the local population. Within the wetland harvesting of biological resources carries out in following ways:

- harvesting of fruit, berries (blueberry, cranberry, raspberry) and mushrooms
- harvesting of officinal and technical plants
- commercial bee-keeping

Within the site:

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes  No  Unknown

### 4.5.2 - Social and cultural values

i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland

ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples

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

<no data available>

## 4.6 - Ecological processes

<no data available>

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

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

#### 5.1.1 - Land tenure/ownership

##### Public ownership

Category	Within the Ramsar Site	In the surrounding area
Provincial/region/state government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
National/Federal government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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

within the Ramsar site:

State lands leased by SFI "Poleski Forestry" and farmland of M. Shruba.

in the surrounding area:

State lands leased by agricultural enterprises and forestries.

#### 5.1.2 - Management authority

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

Protection of the reserve was entrusted to the Zhitkovichi and Lelchitsy District Executive Committees. General supervision and control over the state, protection and use of the territory of the reserve is entrusted to the Ministry of Natural Resources and Environmental Protection of the Republic of Belarus and it's local agency: Zhitkovichi and Lelchitsy Inspections of Nature Resources and Environmental Protection.

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

Director of the Zhitkovichi Inspection of Nature Resources and Environmental Protection - Svezhenets Ivan Anatolievich

Postal address:

Zhitkovichi Inspection of Nature Resources and Environmental Protection  
Shkolnaya 7,  
Zhitkovichi, 247960  
Belarus

E-mail address:

zhroos@mail.gomel.by

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

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

#### Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hunting and collecting terrestrial animals	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Logging and wood harvesting	Low impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

#### Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

#### Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Fire and fire suppression	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Dams and water management/use	Low impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

#### Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Unspecified	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Garbage and solid waste	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

#### Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Droughts	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Please describe any other threats (optional):

a) within the Ramsar site:

Logging. Substantial and continuing threat to natural forest ecosystems is logging, first of all - final harvesting. During the period from 2002 to 2010 2638.7 ha (30.7% of forested area) of the wetland territory was affected by logging, 28.2 thousand m<sup>3</sup> of wood were harvested. The most intensive logging was carried out in 2002-2004. After the site was designated as protected area (2015), logging is carried out in accordance with nature protection regulations.

Fires. Fires belong to one of the most significant threats to functioning of natural systems. The main causes of fires: mass visiting the territory by people during the berries and mushrooms collection, disruption of the hydrological regime as a result of drainage reclamation, extreme summer droughts. Especially disastrous fires were in July-September of 2002. As a result, 4322.8 ha (25.5%) of the forest were damaged, 2016.5 ha (18.1% of the forested area) were severely damaged. Timber stock of dead forests is up to 144.0 thousand m<sup>3</sup> (12.7%). Fire caused significant damage to the vegetation resources (berries, officinal plants). The annual minimal cost of damages only from the reduction of cranberries harvesting is about 100-250 thousand USD. The fires led to occurring of the secondary post-fire vegetation, drying out the pine on the mires, in some places - to destroying of ground cover, and consequently to biological diversity decreasing.

Pollution. There is local pollution of the site's ecosystems with household garbage in the vicinity of villages located on the periphery of the site, as well as in places where camps for berry pickers are organized in the western and southern sectors of the reserve.

Impact of existing drainage network. The major waterways within the wetland are the network of old canals and ditches of the end of XIX. Despite the fact that nowadays the drainage network is not functioning effectively enough, it still influences the wetland vegetation formation. Lowering of the groundwater level leads to fires, and to encroachment of shrubs and trees to open mire areas.

Recreational loads on protected areas are hunting, picking mushrooms and berries. In this regard, a long-term path network of winter roads, entrances to the swamp, and places of standing were formed in the site. Berry picking (traditionally picker camps are 200–300 people) occurs with the use of handheld harvesters, often on an industrial scale (90–95% of the annual berry harvest is taken), the deadlines for harvesting berries are violated.

Poaching. As a result of poaching, the number of the main economically valuable animals is much lower than the biological capacity of the site.

Radioactive contamination. As a result of the Chernobyl disaster the area of the wetland was subjected to insignificant contamination of <37 kBq/m<sup>2</sup> (<1 Cu/km<sup>2</sup>) with <sup>137</sup>Cs.

## 5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Wetland Reserve of Republican Importance	Stary Zhaden	<a href="http://zapovednytur.by/loopt/zakazniki/vodno-bolotnye/staryj-zhaden.html">http://zapovednytur.by/loopt/zakazniki/vodno-bolotnye/staryj-zhaden.html</a>	whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Stary Žadzien	<a href="http://iba.ptushki.org/en/iba/6/full">http://iba.ptushki.org/en/iba/6/full</a>	partly

## 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

## Human Activities

Measures	Status
Harvest controls/poaching enforcement	Partially 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:

There are no observational points and ecological trails on the wetland.

## 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
Animal species (please specify)	Implemented

Case studies of landscape and biological diversity in the reserve were carried out to prepare the scientific justification for the establishment of the reserve of national importance "Stary Zhaden". In 2011 flora and fauna of the wetland were studied in details, the systematic list of major groups of vertebrates was also prepared; rare and endangered species were identified, and the current condition of the wetland was assessed in 2003. These works were carried out by various specialists of the Scientific and Practical Center for Bioresources of the National Academy of Sciences, and of the Institute of Experimental Botany of the National Academy of Sciences.

The status of the population *Aquila clanga* (I category of the Red Data Book of Belarus, the European conservation status (SPEC-1), the European threat status (EN), Annex of CITES) is annually monitored.

Forestry management, grading of hunting areas, counts of hunting and rare species are periodically carried out on this territory. The obtained data have the great scientific importance (Scientific and Practical Center for Bioresources of the National Academy of Sciences, RUE "Belgosohota", RUE "Belgosles", national park "Pripytsky").

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

1. The Red Data Book of Belarus. Animals: rare and threatened species of wild animals / Ministry of Nature Resources and Environmental Protection of the Republic of Belarus; National Academy of Sciences of Belarus, Ch. Editorial Board I.M. Kachanovsky. - 4th edition. - Minsk: Belarussian Encyclopedia named after Petrus Brouka, 2015. - 317.
2. The Red Data Book of Belarus. Plants: rare and threatened species of wild plants / Ministry of Nature Resources and Environmental Protection of the Republic of Belarus; National Academy of Sciences of Belarus, Ch. Editorial Board I.M. Kachanovsky. M.E.Nikiforov, V.I.Parfionov [and others]. - 4th edition. - Minsk: Belarussian Encyclopedia named after Petrus Brouka, 2015. - 448.
3. Treasures of Belarusian Nature: Areas of international importance for biodiversity conservation / A.V. Kozulin [and others]. - 2nd ed. - Mn.: Belarus, 2005. - 215.
4. Dambrovski V.Ch. <http://iba.ptushki.org/be/iba/6/full>

#### 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:



Transition mires dominate within the site. ( *Grummo D.*, 12-07-2011 )



Old-aged pine forest preserved on sand dunes. ( *Grummo D.*, 12-07-2011 )



Raised bogs are located in the centre of the mire massif. ( *Grummo D.*, 12-07-2011 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation