



# Ramsar Information Sheet

Published on 24 January 2019

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## Poland

### Poleski National Park



Designation date	29 October 2002
Site number	1565
Coordinates	51°25'45"N 23°11'17"E
Area	9 762,00 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

Poleski National Park is located in eastern Poland in Lubelskie Voivodeship, near the town of Lublin. It protects a unique natural complex at European scale of shallow lakes and mires (raised bogs, transitional mires and, predominantly, fens) with vegetation indicating some features of tundra and woodland tundra in its westernmost location. Major natural values include alkaline fens with species representing Atlantic type vegetation and diverse wetland fauna. The Site is located at the watershed between the basins of Bug and Wieprz rivers. The area embraces open wetlands and wooded lots. Forest communities vary from pine woods on mineral soils to alder swamps with a typical hollow-and-mound structure on organic substrates. Calcareous mires, rare at the country scale, are quite common in the Park. The Site shelters more than 1% of the country population of aquatic warbler *Acrocephalus paludicola*, in addition to more than 150 other species of breeding bird species.

## 2 - Data & location

### 2.1 - Formal data

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

##### Compiler 1

Name	Marek Jobda, Rafał Rzepkowski, Paweł Szałański
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#### 2.1.2 - Period of collection of data and information used to compile the RIS

From year	2007
To year	2015

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Poleski National Park
Unofficial name (optional)	Poleski Park Narodowy

#### 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  No

(Update) B. Changes to Site area No change to area

#### 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? Yes (actual)

(Update) Are the changes Positive  Negative  Positive & Negative

(Update) Positive % 70

(Update) No information available

(Update) Optional text box to provide further information

On 70% of the area there are positive changes in the ecological character of ecosystems and species occurring. Active protection measures were carried out there to improve the ecological character of the area. These treatments were: grazing and mowing, shrubs preventing succession in non-forest ecosystems, cleaning, thinning in forest ecosystems, maintenance and enlargement of water resources, restoring the native composition of ichthyofauna, raising water levels and transforming meadow communities into peatland vegetation communities. Positive effects can also be seen on the example of valuable protected species. Annual mowing of peat bogs in the areas of the Aquatic Warbler and maintaining an optimal water level allows to maintain the number of birds. By improving the habitat conditions, the number of European Pond Turtles has increased.

(Update) Changes resulting from causes operating within the existing boundaries?

(Update) Changes resulting from causes operating beyond the site's boundaries?

(Update) Changes consequent upon site boundary reduction alone (e.g., the exclusion of some wetland types formerly included within the site)?

(Update) Changes consequent upon site boundary increase alone (e.g., the inclusion of different wetland types in the site)?

(Update) Please describe any changes to the ecological character of the Ramsar Site, including in the application of the Criteria, since the previous RIS for the site.

positive changes mainly

(Update) Is the change in ecological character negative, human-induced AND a significant change (above the limit of acceptable change) Yes

## 2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Former maps

Boundaries description

The boundary of the Ramsar site is the same as of the existing National Park.

2.2.2 - General location

a) In which large administrative region does the site lie?

b) What is the nearest town or population centre?

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries? Yes  No

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes  No

2.2.4 - Area of the Site

Official area, in hectares (ha):

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

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Udvardy's Biogeographical Provinces	10. Boreonemoral
Bailey's Ecoregions	220 Hot Continental Division
WWF Terrestrial Ecoregions	Temperate broadleaf and mixed forest
EU biogeographic regionalization	Continental

### 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 lakes and mires of the Poleski National Park constitute a major resource of the region and are very important in the ground water recharge. The Park is located at the watershed between the basins of Bug and Wieprz rivers. The local water regime depends much on precipitation, since underground feeding is scarce and ground water level is close to the ground surface (at the depth of 2-10 m). The ground water creates a complex system of waters originating in different levels (Quaternary, Cretaceous, Jurassic and Carbonic) while the first two levels join to form one water level. Despite of the conspicuous richness of surface water the hydrological regime of the site is quite vulnerable, depending on the balance between annual precipitation which is low and high evapotranspiration.

Other reasons

The site is considered important for conserving biodiversity in the biogeographical region as it supports unique and threatened aquatic ecosystems in the lowlands. The Poleski NP contains sites of the type of tundra and forest tundra – at their southernmost outposts. According to the classification of Natura 2000 areas it contains the following natural habitat types: 3150 natural eutrophic lakes, 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils, 6510 lowlands hay meadows, 7110 active raised bogs, 7140 transition mires, 7210 calcareous fens, 7230 alkaline fens, 91E0 alluvial forests and 91D0 bog woodland.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification

The Park activity is crucial for survival of many rare plants, animals and microorganisms and through genes they contain, and the ecosystems of which they form a part. The site is considered important for conserving biodiversity in the biogeographical region as it supports unique and threatened aquatic ecosystems in the lowlands. The Poleski NP contains sites of the type of tundra and forest tundra – at their southernmost outposts. The site shelters unique vegetation of alkaline mires, tundra-like bogs and special flora of raised and transitional bogs.

The site is very important for many bird species, especially during breeding season but also during spring and autumn migration. Park is important for maintain breeding populations such globally threatened species as Aquatic Warbler *Acrocephalus paludicola*.

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

- Criterion 6 : >1% waterbird population

#### 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>Adenophora liliifolia</i>	Bell-flower; Lily-leaved; LadyBell	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Annex II of the Habitats Directive (Council Directive 92/43/EEC),	
<i>Aldrovanda vesiculosa</i>	Waterwheel; Common Aldrovanda	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EN	<input type="checkbox"/>	Annex II of the Habitats Directive (Council Directive 92/43/EEC), Annex 1 of the Bern Convention as a species requiring specific habitat conservation measures, Polish Red Data Book of Plants (CR)	
<i>Betula humilis</i>	Shrubby Birch	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	Polish Red Data Book of Plants (EN), species protected in Poland	
<i>Carex chordorrhiza</i>	String Sedge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	Polish Red Data Book of Plants (VU), species protected in Poland	
<i>Cephalanthera rubra</i>	Red Helleborine	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Polish Red Data Book of Plants (VU), species protected in Poland	
<i>Cypripedium calceolus</i>	Lady's Slipper Orchid	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC	<input checked="" type="checkbox"/>	Annex II of the Habitats Directive (Council Directive 92/43/EEC)	
<i>Dactylorhiza incarnata</i>	Early Marsh Orchid	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Polish Red Data Book of Plants (EN), species protected in Poland	
<i>Eriophorum gracile</i>	Slender Cottongrass	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Polish Red Data Book of Plants (CR), species protected in Poland	
<i>Liparis loeselii</i>	Loesel Twayblade	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Annex II of the Habitats Directive (Council Directive 92/43/EEC), Polish Red Data Book of Plants (VU)	
<i>Ostericum palustre</i>	Bog Angelica	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Annex II, IV of the Habitats Directive (Council Directive 92/43/EEC), Annex 1 of the Bern Convention, Polish Red Data Book of Plants (EN)	
<i>Pedicularis sceptrum-carolinum</i>	Moor-king Lousewort	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Polish Red Data Book of Plants (EN), species protected in Poland	
<i>Pinguicula vulgaris</i>	Butterwort	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Polish Red Data Book of Plants (CR), species protected in Poland	
<i>Salix lapponum</i>	Downy Willow	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Polish Red Data Book of Plants (CR), species protected in Poland	
<i>Salix myrtilloides</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Polish Red Data Book of Plants (EN), species protected in Poland	

The site shelters unique vegetation of alkaline mires, tundra-like bogs and special flora of raised and transitional bogs.

### 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	GITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
<b>Birds</b>																		
CHORDATA/AVES	<i>Acrocephalus paludicola</i>	Aquatic Warbler	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	231	2013	1	VU	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Annex I of the Birds Directive (Council Directive 79/409/EEC), Polish Red Data Book of Animals (VU)	pop. size: 172-381 singing males, (2009-2014) >1% of biogeographic population important breeding place; main biogeographical population of central Europe (incl. Eastern Poland) - Giessing B., 2002
CHORDATA/AVES	<i>Aythya nyroca</i>	Ferruginous Duck	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	2013		NT	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the Birds Directive (Council Directive 79/409/EEC), Polish Red Data Book of Animals (EN)	pop. size: 5-10 pairs
CHORDATA/AVES	<i>Botaurus stellaris</i>	Eurasian Bittern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 13 males
CHORDATA/AVES	<i>Chlidonias hybrida</i>	Whiskered Crane	<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"/>	5	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the Birds Directive (Council Directive 79/409/EEC), Polish Red Data Book of Animals (LC)	pop. size: 5-10 pairs
CHORDATA/AVES	<i>Chlidonias niger</i>	Black Tern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 5-10 pairs
CHORDATA/AVES	<i>Circus pygargus</i>	Montagu's Harrier	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 2-3 pairs
CHORDATA/AVES	<i>Crex crex</i>	Comcrake	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	40	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 40-48 males
CHORDATA/AVES	<i>Gallinago media</i>	Great Snipe	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	2013		NT	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive, Polish Red Data Book of Animals (VU)	pop. size: 5-8 males
CHORDATA/AVES	<i>Grus grus</i>	Common Crane	<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"/>	30	2013		LC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex I of the Birds Directive (Council Directive 79/409/EEC), Polish Red Data Book of Animals (LC)	pop. size: 30-32 breeding pairs
CHORDATA/AVES	<i>Lyrurus tetrix</i>	Eurasian Black Grouse; Black Grouse	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive, Polish Red Data Book of Animals (EN)	pop. size: 3-8 calling males
<b>Fish, Mollusc and Crustacea</b>																		
CHORDATA/ACTINOPTERYGII	<i>Rhynchocypris percunus</i>	Lake Minnow; Swamp Minnow	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	150	2013		LC	<input type="checkbox"/>	<input type="checkbox"/>	Priority Species in Annex II Habitats Directive, Polish Red Data Book of Animals (EN)	
<b>Others</b>																		
CHORDATA/MAMMALIA	<i>Castor fiber</i>	Eurasian Beaver	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	360	2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex II of the Habitats Directive	
CHORDATA/REPTILIA	<i>Emys orbicularis</i>	European Pond Turtle	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	100	2013			<input type="checkbox"/>	<input type="checkbox"/>	Annex II of the Habitats Directive Polish Red Data Book of Animals (EN)	pop. size: 100-250 adult ind.

1) Percentage of the total biogeographic population at the site

Not found on the list:

Euphydryas aurinia- criterion 2, numerous, Polish Red Data Book of Animals (EN)

Park is important for maintain breeding populations such globally threatened species as Aquatic Warbler *Acrocephalus paludicola*. In 2012 in Poleski National Park occurred in excess of 1% of the Aquatic Warbler population (exactly 1.9%). In 2013, 259 singing males were inventoried, accounting for 8.9% of the national population and approximately 2.1% of the global population of Aquatic Warbler.

Source: Grzywaczewski G., Cios Sz. 2013. Monitoring i czynna ochrona ptaków w Poleskim Parku Narodowym. Maszynopis, Katedra Zoologii UP w Lublinie, Poleski Park Narodowy - Urszulin. 30-31.

### 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
7110 active raised bogs	<input checked="" type="checkbox"/>	110.8 ha	Habitat listed on Annex I Habitats Directive
91D0 bog woodland ( <i>Vaccinio uliginosi-Betuletum pubescentis</i> , <i>Vaccinio uliginosi-Pinetum</i> , <i>Pino mugo-Sphagnetum</i> , <i>Sphagno girgensohnii-Piceetum</i> and birch-pine bog woodland)	<input checked="" type="checkbox"/>	1357.7 ha	Habitat listed on Annex I Habitats Directive
91E0 alluvial forests ( <i>Circaeo-Alnetum</i> )	<input checked="" type="checkbox"/>	5.63 ha	Habitat listed on Annex I Habitats Directive
6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils ( <i>Molinion</i> )	<input checked="" type="checkbox"/>	111.8 ha	Habitat listed on Annex I Habitats Directive
7140 transition mires and quaking bogs (predominantly <i>Scheuchzerio-Caricetea</i> )	<input checked="" type="checkbox"/>	41.6 ha	Habitat listed on Annex I Habitats Directive
7230 alkaline fens	<input checked="" type="checkbox"/>	32.6 ha	Habitat listed on Annex I Habitats Directive
7210 calcareous fens ( <i>Cladietum marisci</i> , <i>Caricetum buxbaumii</i> , <i>Schoenetum nigricantis</i> )	<input checked="" type="checkbox"/>	27.6 ha	Habitat listed on Annex I Habitats Directive
6510 lowlands hay meadows ( <i>Arrhenatherion elatioris</i> )	<input checked="" type="checkbox"/>	92.9 ha	Habitat listed on Annex I Habitats Directive
3150 oxbows and natural eutrophic reservoirs with <i>Nymphaeion</i> and <i>Potamion</i>	<input checked="" type="checkbox"/>	124.8 ha	Habitat listed on Annex I Habitats Directive



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

### 4.1 - Ecological character

Poleski National Park is one of but a few national parks in Poland which protects a unique complex at European scale of non-woody communities of raised bogs, transitional mires and, predominantly, fens with vegetation indicating some features of tundra and woodland tundra. Fens provide habitat for the development of characteristic tall sedge communities and the alkaline fens. In the transitional mires surrounding dystrophic lakes occur also rare plant communities. Fairly large areas are taken by raised bogs overgrown with bushy pine, birch and dwarf shrub species. Calcareous mires with *Cladium mariscus*, rare at the country scale, are common in the Park. Altogether 208 plant associations have been identified in addition to rich flora (about 1000 vascular plants). Aquatic vegetation range from submerged *Potamogeton* sp. and *Chara* sp. communities to emerged vegetation consisting of water lilies *Nymphaea alba* and *N. candida*. The site is located in the flat plains which emerged as a result of organic accumulation at the bottom of a large lake created in the post-glacial period after the withdrawal of the middle-Poland glaciation. Relative elevations in the field do not exceed 10 m. Recent land cover is made up of Quaternary deposits such as sands, clays and organic formations – peat and mud. Most of organic soils have been developed from fen peat on the site of drying out and overgrown lakes. More than half surface of the Park cover is swampy or open water (15% of the area is covered with shallow lakes). Lake waters vary in their trophic conditions from eutrophic to mesotrophic and dystrophic. The climate is transitional with influences of both the Atlantic and continental climates. The latter one is to be seen in the low annual precipitation i.e. 550 mm (40% of that falling in summer) and high insolation – averaging about 4.5 h/day. Length of vegetation period fluctuates between 205 and 215 days.

### 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		Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		3	185	Representative
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		4		Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		1	2051	Representative
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		3	390	Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		1	2051	Representative

#### Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
2: Ponds		3	202	Representative
4: Seasonally flooded agricultural land		2	500	Representative
9: Canals and drainage channels or ditches		3	112	Representative

#### Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Forests on dry soils Non peatland forests: Pine forests, oak-hornbeam forests	2734
Lowland dry grasslands 6230-4 Calluno-Nardetum	11.5
4030 Dry moorlands	6

## 4.3 - Biological components

### 4.3.1 - Plant species

#### Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Carex davalliana</i>	Davall sedge	Species protected in Poland
<i>Carex heleonastes</i>	Swamp sedge	Species protected in Poland
<i>Cephalanthera damasonium</i>	White helleborine	Species protected in Poland
<i>Dactylorhiza maculata</i>	Spotted orchid	Species protected in Poland
<i>Dianthus superbus</i>	Lilac pink, elegant pink	Species protected in Poland
<i>Drosera anglica</i>	English Sundew	Species protected in Poland
<i>Drosera intermedia</i>	Long-leaved Sundew	Species protected in Poland
<i>Drosera rotundifolia</i>	Round-leaved Sundew	Species protected in Poland
<i>Epipactis palustris</i>	Marsh Helleborine	Species protected in Poland
<i>Gentiana pneumonanthe</i>	Marsh Gentian	Species protected in Poland
<i>Gentianella amarella</i>	Autumn Gentian	Species protected in Poland
<i>Gentianella uliginosa</i>	Dune gentian	Species protected in Poland
<i>Hierochloa australis</i>	Southern sweet-grass	Species protected in Poland
<i>Iris sibirica</i>	Siberian iris	Species protected in Poland
<i>Lathyrus palustris</i>	Marsh Pea; Marsh Vetchling	Species protected in Poland
<i>Lycopodiella inundata</i>	marsh club moss	Species protected in Poland
<i>Nymphaea candida</i>	small water lily	Species protected in Poland
<i>Orchis militaris</i>	Military orchis	Species protected in Poland
<i>Rhododendron tomentosum</i>	Marsh tea	Species protected in Poland
<i>Schoenus ferrugineus</i>	Rusty bog rush	Species protected in Poland

## Invasive alien plant species

Scientific name	Common name	Impacts	Changes at RIS update
<i>Acer negundo</i>	Box Elder	Actually (minor impacts)	unknown
<i>Pinus banksiana</i>	Banksian pine	Actually (minor impacts)	unknown
<i>Prunus serotina</i>	Black Cherry	Actually (major impacts)	unknown
<i>Quercus rubra</i>	Northern Red Oak	Actually (minor impacts)	unknown
<i>Robinia pseudoacacia</i>	False Acacia; Black Locust	Actually (minor impacts)	unknown
<i>Solidago gigantea</i>	Giant Goldenrod	Actually (minor impacts)	unknown

## 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	<i>Chlidonias leucopterus</i>	White-winged Tern		2013		Polish Red Data Book of Animals (NT), pop. size: 2-4 pairs
CHORDATA/AVES	<i>Limosa limosa</i>	Black-tailed Godwit		2013		IUCN Red List status (NT), pop. size: 5-10 pairs

## Invasive alien animal species

Phylum	Scientific name	Common name	Impacts	Changes at RIS update
CHORDATA/ACTINOPTERYGII	<i>Ameiurus melas</i>	Brown bullhead	Actually (major impacts)	unknown
CHORDATA/ACTINOPTERYGII	<i>Carassius gibelio</i>	Prussian carp	Actually (minor impacts)	unknown
CHORDATA/ACTINOPTERYGII	<i>Cyprinus carpio</i>	Leather carp; Leather carp	Actually (minor impacts)	unknown
CHORDATA/MAMMALIA	<i>Neovison vison</i>	American Mink	Actually (major impacts)	unknown
CHORDATA/MAMMALIA	<i>Nyctereutes procyonoides</i>	Raccoon dog	Actually (major impacts)	unknown
ARTHROPODA/MALACOSTRACA	<i>Orconectes limosus</i>	spinycheek crayfish	Actually (minor impacts)	unknown

#### 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)

##### 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.

Located at the watershed between the basins of Bug and Wieprz rivers.

##### 4.4.3 - Soil

Mineral

(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 majority (2/3) of the Poleski National Park area is covered by organic (marshy) soils mainly histosols and muck.

##### 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 rainfall	<input checked="" type="checkbox"/>	No change
Water inputs from surface water	<input type="checkbox"/>	No change
Water inputs from groundwater	<input type="checkbox"/>	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 Park is located at the watershed of between the basins of Bug and Wieprz rivers. The local water regime depends much on precipitation, since underground feeding is scarce and ground water level is close to the ground surface (at the depth of 2-10 m). The ground water creates a complex system of waters originating in different levels (Quaternary, Cretaceous, Jurassic and Carbonic) while the first two levels join to form one water level. Despite of the conspicuous richness of surface water the hydrological regime of the site is quite vulnerable, depending on the balance between annual precipitation which is low, and high evapotranspiration.

##### 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

Circumneutral (pH: 5.5-7.4)

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

Unknown

#### 4.4.7 - Water salinity

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

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)	Low
Fresh water	Drinking water for humans and/or livestock	Low
Wetland non-food products	Livestock fodder	Low
Wetland non-food products	Timber	Low
Wetland non-food products	Fuel wood/fibre	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	Low
Erosion protection	Soil, sediment and nutrient retention	Low
Climate regulation	Local climate regulation/buffering of change	Medium
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climatic processes	Medium
Biological control of pests and disease	Support of predators of agricultural pests (e.g., birds feeding on locusts)	Low
Hazard reduction	Flood control, flood storage	Low
Hazard reduction	Coastal shoreline and river bank stabilization and storm protection	Low

##### Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Low
Recreation and tourism	Picnics, outings, touring	High
Recreation and tourism	Nature observation and nature-based tourism	High
Spiritual and inspirational	Inspiration	Medium
Spiritual and inspirational	Cultural heritage (historical and archaeological)	High
Spiritual and inspirational	Contemporary cultural significance, including for arts and creative inspiration, and including existence values	Medium
Spiritual and inspirational	Spiritual and religious values	Medium
Spiritual and inspirational	Aesthetic and sense of place values	Medium
Scientific and educational	Educational activities and opportunities	High
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High
Scientific and educational	Major scientific study site	High
Scientific and educational	Long-term monitoring site	High
Scientific and educational	Type location for a taxon	Medium

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	Storage, recycling, processing and acquisition of nutrients	Low
Nutrient cycling	Carbon storage/sequestration	Medium
Pollination	Support for pollinators	Medium

Other ecosystem service(s) not included above:

**Research**  
 No field stations are currently located within the Park, though numerous studies and various research programmes are being carried out in the Poleski National Park site. Field studies are carried out by employees of various scientific institutions, but also employees of the Park.

**Education**  
 Poleski National Park offers a wide variety of educational services aimed at children, teenagers (wildlife competitions, expeditions, ecological runs) and adults (training, seminars, conferences). It is realized mainly through the education-museum centers in Park headquarters and Zalucze Stare. Education center in Urszulin offers displaying a film about the Park and visiting Turtle Protection Centre.

**Recreation and tourism**  
 Marked trails, viewing towers, observation hide and educational paths give chance to observe rare species of animals and plants in their natural habitats and get to know the methods of active wildlife conservation carried out by the national park. Organised groups can visit the Poleski National Park with an authorised guide.

**Spiritual and inspirational**  
 Although cultural monuments in the Park are limited to wooden traditional cottages the site plays a great role to maintain local culture and historical tradition.

**Biodiversity**  
 The Park activity is crucial for survival of many rare plants, animals and microorganisms and through genes they contain, and the ecosystems of which they form a part.

**Soil formation**  
 As there are three peat-bog complexes within the borders of Poleski National Park it plays a big role in accumulation of organic matter.

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

Description if applicable

The land in the Park has been cultivated since colonisation in XVI century. Difficult hydrological conditions allowed to keep not-intensive agriculture, fishing and forestry. Wetlands were used as meadows for late summer haymaking and as pastures in dry seasons mostly in XVIII and XIX century. Since 1998 the Park has periodically undertaken activities to preserve open ecosystems, including shrubs and reeds removal, grass cutting and mowing, grazing and non-intensive haymaking.

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

Local farmers use the wetland for mowing. Wet grasslands have been mown late summer under the agri-environmental schemes since 2004. Richness of protected species of flora and fauna allowed many farmers to get additional income for implementation of agri-environmental practices (mowing once a year, special technique and machinery for mowing, keeping or improving hydrological regime).

- 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

<no data available>

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

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

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

Other

Category	Within the Ramsar Site	In the surrounding area
Unspecified mixed ownership	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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

The State Treasury (PPN) is the owner of 8453 ha, Other public ownership – 14 ha, private owners– 1211ha i other types – 86 ha.

5.1.2 - Management authority

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

Provide the name and title of the person or people with responsibility Director of the Poleski National Park for the wetland:

ul. Lubelska 3a, 22-234 Urszulin, Poland

Postal address: tel. +48 82 571 30 71

fax + 48 82 571 30 03

E-mail address: poleskipn@poleskipn.pl

5.2 - Ecological character threats and responses (Management)

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

Human settlements (non agricultural)

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

Water regulation

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

Agriculture and aquaculture

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

Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Mining and quarrying	High impact	unknown impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Biological resource use						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Fishing and harvesting aquatic resources	unknown impact	Low impact	<input checked="" type="checkbox"/>	No change	<input 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		<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		High impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Vegetation clearance/land conversion	Medium impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Dams and water management/use	Medium impact	High impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Invasive and other problematic species and genes						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/alien species	Medium impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Problematic native species	Low 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
Agricultural and forestry effluents	Medium impact		<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	unknown

Please describe any other threats (optional):

Other threat: overgrowing of the open habitats, actual threat, within and outside the site, with no changes.

Within the Ramsar Site major threatening factor is overgrowing of open habitats (sometimes habitats of very important species like Marsh Fritillary (*Euphydryas aurinia*) by bushes, trees and undesirable plant species. Species structure of forests is also problematic, alien tree species occur what causes habitat and soil degradation. Water habitats are also endangered due to water level decreasing and eutrophication. In the surroundings there is heavy pressure for recreation, water sports, kayaking, hiking and biking, numerous camping grounds, recreation centers, hotels, water sport facilities etc. are situated along lake borders. Tourist management may pose a threat already, but more tourist developments are to be expected in the near future.

#### 5.2.2 - Legal conservation status

##### Global legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
UNESCO Biosphere Reserve	West Polesie Biosphere Reserve		whole

##### Regional (international) legal designations



Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	Ostoja Poleska PLH060013		whole
EU Natura 2000	Polesie PLB060019		partly
EU Natura 2000	SPA Bagno Bubnów PLB060001		partly

## National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Park	Poleski National Park (Poleski Park Narodowy)		whole

## Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Bagno Bubnów PL103		partly
Important Bird Area	Polesie PL102		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

## Habitat

Measures	Status
Catchment management initiatives/controls	Implemented
Improvement of water quality	Implemented
Habitat manipulation/enhancement	Implemented
Hydrology management/restoration	Implemented

## Species

Measures	Status
Threatened/rare species management programmes	Implemented
Reintroductions	Implemented
Control of invasive alien plants	Partially implemented
Control of invasive alien animals	Partially implemented

Human Activities

Measures	Status
Management of water abstraction/takes	Partially implemented
Regulation/management of wastes	Implemented
Fisheries management/regulation	Implemented
Harvest controls/poaching enforcement	Implemented
Regulation/management of recreational activities	Implemented
Communication, education, and participation and awareness activities	Implemented
Research	Implemented

5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

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:

Poleski National Park offers a wide variety of educational services focused on children, teenagers (wildlife competitions, expeditions, ecological runs) and adults (training, seminars, conferences). It is realized mainly through the education-museum centers in Park headquarters and Załucze Stare. Education center in Urszulin offers displaying a film about the Park and visiting Turtle Protection Centre.

URL of site-related webpage (if relevant): <http://www2.poleskipn.pl/index.php>

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No, the site has already been restored

Further information

The most important achievements in the protection of Poleski National Park wetlands and the species of flora and fauna are:

1. Active protection of wetlands as activities aimed at increasing water resources, such as:

- reducing the rate of water outflow by building dykes, recesses or spotting ditches
- recreation of watercourses and water reservoirs close to the natural state
- recreation of ponds in the Park

2. Inhibition of water eutrophication through:

- initiation of peat forming processes
- promoting organic farming

3. Preventing negative changes in the sphere of biodiversity:

- inhibiting the succession of trees and shrubs on peatlands in order to preserve the diversity of plant communities associated with the respective types of peatlands
- protection of sites of endangered plant and animal species associated with wetlands
- transformation of meadow communities into peatland vegetation communities by raising the water level
- grazing and mowing
- land purchase
- recreating the family composition of ichthyofauna
- restoration of European Beaver.

5.2.7 - Monitoring implemented or proposed

<b>Monitoring</b>	<b>Status</b>
Water regime monitoring	Implemented
Water quality	Implemented
Plant community	Implemented
Plant species	Implemented
Animal community	Implemented
Animal species (please specify)	Implemented
Birds	Implemented

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Bibliography attached in point 6.1.2 vi

Taxonomic lists of plants and animals are published at the Park's website:

Plants: [http://www.poleskipn.pl/index.php?option=com\\_content&task=view&id=92&Itemid=39](http://www.poleskipn.pl/index.php?option=com_content&task=view&id=92&Itemid=39)

Fishes: [http://www.poleskipn.pl/index.php?option=com\\_content&task=view&id=342&Itemid=244](http://www.poleskipn.pl/index.php?option=com_content&task=view&id=342&Itemid=244)

Birds: [http://www.poleskipn.pl/images/stories/pliki/ptaki\\_lista.html](http://www.poleskipn.pl/images/stories/pliki/ptaki_lista.html)

Amphibians and Reptiles: [http://www.poleskipn.pl/index.php?option=com\\_content&task=view&id=343&Itemid=245](http://www.poleskipn.pl/index.php?option=com_content&task=view&id=343&Itemid=245)

Mammals: [http://www.poleskipn.pl/index.php?option=com\\_content&task=view&id=345&Itemid=247](http://www.poleskipn.pl/index.php?option=com_content&task=view&id=345&Itemid=247)

#### 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

<1 file(s) uploaded>

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:



Poleski National Park (  
Małgorzata Opechowska,  
10-09-2015 )



Poleski National Park (  
Małgorzata Opechowska,  
10-09-2015 )



Poleski National Park (  
Małgorzata Opechowska,  
12-09-2015 )



Poleski National Park (  
Małgorzata Opechowska,  
12-09-2015 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation