



# Ramsar Information Sheet

Published on 11 February 2020

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## Poland

### Lake of Seven Islands Nature Reserve



Designation date	3 January 1984
Site number	285
Coordinates	54°18'28"N 21°34'54"E
Area	1 763,05 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

Lake of Seven Islands Nature Reserve (Rezerwat przyrody "Jezioro Siedmiu Wysp") is located in north-eastern Poland, Warmińsko-Mazurskie Voivodeship, near the town of Węgorzewo. The wetland embraces a vast and shallow lake of a water surface exceeding 300 ha with fourteen forested islands, a peninsula and surrounding mires and forests as well as a portion of the valley of Oświnka river flowing out of the lake and adjacent meadows. The lake is fed by three rivers and has one larger and several small reservoirs linked by straits. The majority of water surface is overgrown with reedbeds. The lake is surrounded with a belt of three assemblages of great sedges and reeds. In immediate vicinity, there are wet meadows and patches of riparian and oak-hornbeam forests. The Site is not inhabited thus it provides a good resting and feeding refuge for migratory birds. At least 28 bird species of the Annex I to Birds Directive have been found to breed within the wetland.

## 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
Institution/agency	Pracownia Przyrodnicza
Postal address	ul. Bohaterów Powstania Styczniowego 4, 05-480 Karczew, Poland
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Phone	+48 509 029 647

#### 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)	Lake of Seven Islands Nature Reserve
Unofficial name (optional)	Rezerwat przyrody "Jeziro Siedmiu Wysp"

#### 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 checked="" type="radio"/> No <input type="radio"/>
(Update) The boundary has been delineated more accurately	<input type="checkbox"/>
(Update) The boundary has been extended	<input checked="" type="checkbox"/>
(Update) The boundary has been restricted	<input type="checkbox"/>
(Update) B. Changes to Site area	the area has increased
(Update) The Site area has been calculated more accurately	<input type="checkbox"/>
(Update) The Site has been delineated more accurately	<input type="checkbox"/>
(Update) The Site area has increased because of a boundary extension	<input checked="" type="checkbox"/>
(Update) The Site area has decreased because of a boundary restriction	<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?	Uncertain
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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 wetland boundary of the Ramsar site is the same as of the Lake of Seven Islands nature reserve (Rezerwat przyrody „Jeziro Siedmiu Wysp”).  
The nature reserve was extended in 2016 because of the ecological value of the Oswin Lake (protected species of plants, animals and birds). Carried out inventory revealed the occurrence of rare plant species: *Helichrysum arenarium*, *Dactylorhiza incarnata* and *Dactylorhiza maculata*; Habitats Directive's lowland hay meadows (habitat 6510) and potential habitat of European pond turtle (*Emys orbicularis*).

### 2.2.2 - General location

a) In which large administrative region does the site lie?	Warmińsko-Mazurskie
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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
EU biogeographic regionalization	Continental
Udvardy's Biogeographical Provinces	10. Boreonemoral
Bailey's Ecoregions	210 Warm Continental Division
WWF Terrestrial Ecoregions	Temperate broadleaf and mixed forest

### 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 lake plays important role in:  
 - Maintenance of hydrological regimes through groundwater recharge and discharge. Due to big surface (more than 300 ha) and the low level of lake water (maximal depth 3.5 m) it can only be immediately supplied by the shallow first level of groundwater through the layer remaining in close contact with organic formations. The deeper main groundwater level is separated from the upper one by a layer of compact sediments and has no contact with surface water.  
 - Sediment and nutrient retention: eutrophic lake accumulates sediment and nutrients.

Other reasons

The site is considered important for conserving biodiversity in the biogeographical region as it supports representative aquatic ecosystems in the lowlands. According to the classification of Natura 2000 areas it contains five natural wetland habitat types listed in Annex 1 of the Habitats Directive (Council Directive 92/43/EEC): 3150 natural eutrophic lakes, 6510 lowlands hay meadows, 7110 active raised bogs, 91E0 alluvial forests and 91D0 bog woodland.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification

The site is considered important for conserving biodiversity in the biogeographical region as it supports representative aquatic ecosystems in the lowlands. The flora of Oświn Lake was found to contain 50 aquatic species on various hydrogenic sites (littoral vegetation and marshland) while the group of submerged vegetation (floating leaves and pleustonic plants) counts 17 species. The site is very important for many bird species, especially during breeding season but also during spring and autumn migration.

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

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

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<i>Dactylorhiza incarnata</i>	Bloody Cuckoo	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	protected in Poland	
<i>Dactylorhiza maculata</i>	Spotted Orchid	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	protected in Poland	
<i>Dactylorhiza majalis</i>	Broad-leaved Marsh Orchid	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	protected in Poland	

Botanical inventory from 2014 r. shows the huge variety of plants and bryophytes occurrence. In nature reserve noticed 244 species of vascular plants including Sandpiper *Helichrysum arenarium*, bloody cuckoo *Dactylorhiza incarnata*, Cuckoo *Maculatus Dactylorhiza maculata*, Centuria vulgaris *Centaurium erythraea*; protected bryophytes: *Rhytidiadelphus squarrosus*, *Climacium dendroides*, *Calliergonella cuspidata*, *Abietinella abietina*.

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

Phylum	Scientific name	Common name	Species qualifies under criterion			Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification	
			2	4	6	9	3	5	7									8
<b>Birds</b>																		
CHORDATA/AVES	<i>Anas strepera</i>	Gadwall	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10	2015			<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 10-15 breeding ind
CHORDATA/AVES	<i>Anser albifrons</i>	Greater White-fronted Goose	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	150	2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	migration population 150 ind
CHORDATA/AVES	<i>Anser fabalis</i>	Bean Goose	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	150	2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	migration population 150 ind
CHORDATA/AVES	<i>Aquila pomarina</i>	Lesser Spotted Eagle	<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"/>		2004-2009		LC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 1-2 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"/>		2008-2009		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size 10-12 males
CHORDATA/AVES	<i>Chlidonias niger</i>	Black Tern	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 40-45 pairs
CHORDATA/AVES	<i>Ciconia ciconia</i>	White Stork	<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"/>		2003-2009		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 1 pair
CHORDATA/AVES	<i>Ciconia nigra</i>	Black Stork	<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"/>		2007-2009		LC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 1-2 pairs
CHORDATA/AVES	<i>Circus aeruginosus</i>	Western Marsh 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"/>		2007-2009		LC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 10-15 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"/>				LC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	
CHORDATA/AVES	<i>Crex crex</i>	Corn Crane	<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"/>		2007-2009		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 10-13 males
CHORDATA/AVES	<i>Dendrocopos leucotos</i>	White-backed Woodpecker	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	2015		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	breeding population 5-7 ind
CHORDATA/AVES	<i>Grus grus</i>	Common Crane	<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"/>		2007-2009		LC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 12-15 pairs
CHORDATA/AVES	<i>Haliaeetus albicilla</i>	White-tailed Eagle	<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"/>		2003-2009		LC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Annex I Birds Directive	pop. size: 1 pair, 10-12 wintering ind.
CHORDATA/AVES	<i>Milvus migrans</i>	Black Kite	<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"/>		2005		LC	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive, Polish Red Data Book of Animals (NT)	pop. size: 0-1 pairs
CHORDATA/AVES	<i>Porzana parva</i>	Little 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"/>		2007-2009	1		<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive (Council Directive 79/409/EEC), Polish Red Data Book of Animals (NT)	Important breeding place in biogeographical zone. pop. size: 70-90 males, >1% occurrence
CHORDATA/AVES	<i>Porzana porzana</i>	Spotted Crane	<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"/>		2007-2009		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 7-10 males
CHORDATA/AVES	<i>Sylvia nisoria</i>	Barred Warbler	<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"/>		2007-2009		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 10-12 pairs
<b>Fish, Mollusc and Crustacea</b>																		
MOLLUSCA/BIVALVIA	<i>Anodonta cygnea</i>	Swan Mussel	<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"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Polish Red Data Book of Animals (EN)	
ARTHROPODA/MALACOSTRACA	<i>Astacus astacus</i>	European Crayfish	<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"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>	Polish Red Data Book of Animals (VU)	
CHORDATA/ACTINOPTERYGII	<i>Cobitis taenia</i>	Spine Loach	<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"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex II, IV Habitats Directive	
CHORDATA/ACTINOPTERYGII	<i>Misgurnus fossilis</i>	Mud Loach	<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"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex II, IV Habitats Directive	
CHORDATA/ACTINOPTERYGII	<i>Rhodeus amarus</i>	Bitterling	<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"/>					<input type="checkbox"/>	<input type="checkbox"/>	Annex II, IV Habitats Directive	
<b>Others</b>																		

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA/ AMPHIBIA	<i>Bombina bombina</i>	Fire-bellied Toad	<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"/>	<input type="checkbox"/>	2009		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex II, IV Habitats Directive	pop. size: 101-250
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"/>	<input type="checkbox"/>	2009		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex II Habitats Directive	pop. size: 101-250
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"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	Annex II Habitats Directive, Polish Red Data Book of Animals (EN)	
CHORDATA/ MAMMALIA	<i>Lutra lutra</i>	European Otter	<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"/>	<input type="checkbox"/>	2009		NT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex II Habitats Directive	pop. size: 6-10
ARTHROPODA/ INSECTA	<i>Osmoderma eremita</i>	Hermit Beetle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>	Annex II Habitats Directive	
CHORDATA/ AMPHIBIA	<i>Pseudepidalea viridis</i>	European Green Toad	<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"/>	<input type="checkbox"/>			LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex IV Habitats Directive, Annex II Bern Convention	
CHORDATA/ AMPHIBIA	<i>Triturus cristatus</i>	Great Crested Newt	<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"/>	<input type="checkbox"/>	2009		LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex II, IV Habitats Directive	pop. size: 11-50

1) Percentage of the total biogeographic population at the site

The site is very important for many bird species, especially during breeding season but also during spring and autumn migration.

### 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
6510 lowland hay meadows	<input checked="" type="checkbox"/>		Habitat listed in Annex I Habitats Directive
91E0 alluvial forests	<input checked="" type="checkbox"/>		Habitat listed in Annex I Habitats Directive
91D0 bog woodland	<input checked="" type="checkbox"/>		Habitat listed in Annex I Habitats Directive
7110 active raised bogs	<input checked="" type="checkbox"/>		Habitat listed in Annex I Habitats Directive
3150 natural eutrophic lakes	<input checked="" type="checkbox"/>		Habitat listed in Annex I Habitats Directive

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

### 4.1 - Ecological character

The lake is of a melt-down lake type supported by a front moraine in its western part. The Ramsar site lies in the valley of lyna river cutting the Sępopolska Plain. The lake has natural character and is shaped in semicircle with uneven arms open to the north. Lake waters are eutrophic and shores inaccessible, heavily swamped and overgrown with reedbed vegetation and swampy forest. Within the site podsol soils developed from boulder and medium clays as well as from sands of diverse clay content dominate. In the stream valleys and trough-like local depressions occur shallow and moderately thick peats. Medium mud and mud-silt soils are spread along the river valley. The site lies within the range of the Masurian climatic zone. The mean monthly temperature fluctuates between -3.5°C in January to +17.1°C in July, at an annual average of +7.1°C. The annual precipitation is 582 mm.

The Oświn lake with neighbouring areas lies in the Pregola river basin. The Oświn catchment covers 144.9 km<sup>2</sup>. The lake is a flow reservoir fed by numerous streams with the most important rivers Rawda and Ruda. Almost entire Oświn catchment area is intersected with a dense network of draining ditches discharging water to Rawda and Ruda rivers. The lake water level is highly dependent upon the amount and inflow of groundwater whose level occurs at the depth of 0.6 – 6.0 m.

The vegetation cover of the reserve is varied and strictly dependent on hydrogenic conditions. The reserve shelters a variety of communities of aquatic vegetation, rushes, mires and of forests. The flora of Oświn Lake was found to contain 50 aquatic species on various hydrogenic sites (littoral vegetation and marshland) while the group of submerged vegetation (floating leaves and pleustonic plants) counts 17 species. Rare meadow species occur in the pasture: *Helichrysum arenarium*, *Dactylorhiza incarnata* and *Dactylorhiza maculata*.

At least 26 bird species of the Annex I to Birds Directive have been found to breed within the wetland, e.g. the white-tailed eagle *Haliaeetus albicilla*, the osprey *Pandion haliaetus*, the lesser spotted eagle *Aquila pomarina*, the black tern *Chlidonias niger*. During migration season flocks of geese (mainly the bean goose *Anser fabalis* and the white-fronted goose *Anser albifrons*) and numerous cranes *Grus grus* gather on the Oświn Lake. The Lake was found to be the last site in the eastern part of Warmińsko-Mazurskie Voivodeship where native crayfish *Astacus leptodactylus* can still be encountered. Among the very rare species requiring particular protection is the pond turtle *Emys orbicularis* (Annex II of Habitats Directive). Two other species of European interest are amphibians - *Bombina bombina* and *Triturus cristatus* (listed in Annex II to Habitat Directive). The site supports numerous populations of at least 10 amphibian species. Three fish species occurring in the lake are under strict protection: *Rhodeus sericeus*, *Cobitis taenia* and *Misgurnus fossilis* (all species of the Habitat Directive Annex II). In the reserve, two herds of the "Polish konik" are held, of ca 40 individuals. "Koniks" are used for active conservation of the site: horse grazing partially prevents forest succession on meadows on the lake shores.

### 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		2		Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		4		Representative
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		1		Representative
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		3		Representative
Fresh water > Lakes and pools >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		1		Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		2		Representative
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		1		Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		2		Representative
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		3		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
9: Canals and drainage channels or ditches		1		Representative

#### Other non-wetland habitat



Other non-wetland habitats within the site	Area (ha) if known
9170 Subcontinental oak-hornbeam forests (Galio-Carpinetum, Tilio-Carpinetum)	
6510 Lowland hay meadows (Alopecurus prate)	

### 4.3 - Biological components

#### 4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Daphne mezereum</i>	February Daphne/Mezereon	Species protected in Poland
<i>Drosera rotundifolia</i>	Common Sundew/Round-leaved Sundew	Species protected in Poland

#### 4.3.2 - Animal species

<no data available>

### 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.

Pregola river basin.

#### 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)

Podsol soils developed from boulder and medium clays as well as from sands of diverse clay content dominate within the site. In the stream valleys and trough-like local depressions, shallow and moderately thick peats occur. Medium mud and mud-silt soils are spread along the river valley.

#### 4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	unknown

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"/>	unknown
Water inputs from groundwater	<input type="checkbox"/>	unknown
Water inputs from rainfall	<input type="checkbox"/>	unknown

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.

Almost entire Oświn catchment area is intersected with a dense network of draining ditches discharging water to Rawda and Ruda rivers. The lake water level is highly dependent upon the amount and inflow of groundwater whose level occurs at the depth of 0.6 – 6.0 m. The lake plays important role in local recharge since its surface is more than 300 ha, length 5.3 km, width 2.0 km, and maximal depth 3.5 m. Due to the low level of lake water (shallowness), it can only be immediately supplied by the shallow first level of groundwater through the layer remaining in close contact with organic formations. The deeper main groundwater level is separated from the upper one by a layer of compact sediments and has no contact with surface water. Thus the lake level depends much on the inflow of shallow groundwater what is to some extent conditioned by the runoff in draining ditches. Water level at the lake is regulated by the weir on Oświnka to safeguard the area against excessive loss of water.

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

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

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

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
Erosion protection	Soil, sediment and nutrient retention	High
Hazard reduction	Coastal shoreline and river bank stabilization and storm protection	High

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	Medium
Scientific and educational	Major scientific study site	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High

Supporting Services

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

Other ecosystem service(s) not included above:

**Research and Education**  
 Scientists from Warsaw University conduct environmental monitoring, inventory of woodland, meadow and mire areas adjacent to reserve as well as ornithological research in the Site. Diverse studies in the area have also been conducted by the Ornithology Department of the Polish Academy of Sciences in Gdańsk, Ecological Agriculture and Animal Conservative Breeding Research Station of Polish Academy of Sciences in Popielno and by Warmińsko-Mazurski and Łódzki Universities.

**Recreation and tourism**  
 The Ramsar site attracts mainly nature-enthusiasts and birdwatchers - the reserve and birds can be watched from the hills located at the western border of the site.

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
Public land (unspecified)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
National/Federal government	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Provincial/region/state government	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Local authority, municipality, (sub)district, etc.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

##### Private ownership

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

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

The majority of the site area is in public ownership managed by The State Forests National Forest Holding (Forest Inspectorates Borki and Srokowo). A small area of the site is private.

#### 5.1.2 - Management authority

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

The Regional Directorate for Environmental Protection in Olsztyn

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

Agata Moździerz, Regional Director for Environmental Protection

Postal address:

ul. Dworcowa 60, 10-437 Olsztyn, Poland

E-mail address:

sekretariat.olsztyn@rdos.gov.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	unknown impact		<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	unknown
Housing and urban areas	unknown impact		<input type="checkbox"/>	No change	<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		<input checked="" type="checkbox"/>	unknown	<input checked="" type="checkbox"/>	unknown
Water abstraction	unknown impact		<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	unknown

#### Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Non specified		unknown impact	<input checked="" type="checkbox"/>	unknown	<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
Hunting and collecting terrestrial animals	unknown impact		<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	unknown
Fishing and harvesting aquatic resources	unknown impact		<input checked="" type="checkbox"/>	unknown	<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	unknown impact	unknown impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	unknown

## 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	unknown impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Problematic native species	unknown 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	unknown impact		<input checked="" type="checkbox"/>	unknown	<input checked="" type="checkbox"/>	unknown
Garbage and solid waste	unknown impact		<input checked="" type="checkbox"/>	unknown	<input checked="" type="checkbox"/>	unknown

Please describe any other threats (optional):

Other: Overgrowing open habitats, an actual threat within the site.

The main threat within the Ramsar site is shallowing and shrinking of water surface, overgrowing with marshland vegetation and eutrophication caused by agricultural effluents. A big threat to the lake ecosystem poses an increase in fish poaching, particularly during spawning season. The expansion of alien species – American mink and racoon dog - and penetration by poachers has a similar effect on the site. Main threats in the surrounding area are: development of summer-resorts on the reserve's west border and planned urban development areas to the east of the reserve.

## 5.2.2 - Legal conservation status

## Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	Ostoja nad Oświnem PLH280044		partly
EU Natura 2000	Oświn Lake and surroundings PLB280004		whole

## National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Landscape Protection Area	of Oświn Lake (Obszar chronionego krajobrazu Jeziora Oświn)		partly
Nature reserve	Lake of Seven Islands Nature Reserve (Rezerwat przyrody "Jezioro Siedmiu Wysp"		whole

## Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Oświn Site PL034		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	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? In preparation

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

## 5.2.6 - Planning for restoration

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

## 5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Plant community	Implemented
Animal community	Implemented

1. Rusczyńska J., 2014: Inwentaryzacja zbiorowisk wodno-błotnych w otoczeniu jeziora Oświn na terenie rezerwatu przyrody „Jezioro Siedmiu Wysp”
2. Ciecierska H., Dynowski P., 2014: Roślinność jeziora Oświn
3. Kozłowski J., Kozłowski K., Dynowski P., Wolter K., 2015: Sprawozdanie z badań ichtiofauny i astakofauny rezerwatu „Jezioro Siedmiu Wysp”
4. Świączkowska J., 2014: Inwentaryzacja lądowych zbiorowisk roślinnych rezerwatu przyrody „Jezioro Siedmiu Wysp”

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

The bibliography is attached in the point 6.1.2 vi

#### 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:



Lake of Seven Islands ( Magdalena Hadwiczak, 03-05-2014 )



Lake of Seven Islands ( Magdalena Hadwiczak, 03-05-2014 )



Lake of Seven Islands ( Magdalena Hadwiczak, 03-05-2014 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1984-01-03