



Ramsar Information Sheet

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Poland

Słowiński National Park



Designation date	24 October 1995
Site number	757
Coordinates	54°42'51"N 17°18'25"E
Area	32 744,00 ha

Color codes

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

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

1 - Summary

Summary

The Słowiński National Park (Słowiński Park Narodowy) is located in Pomorskie Voivodeship near the town of Łeba. The Site has an oblong shape and embraces about 33 km long stretch of the Baltic coast with 2-mile wide belt of shallow coastal waters. A unique combination of landscape features of the Site embraces diverse sand formations – wind-blown, stable and shifting encountered on the spit separating lakes from the sea, brackish coastal lakes as well as mires, meadows and woodland. All these elements create a rare environment supporting rich biodiversity. Of special importance are raised bogs of Baltic type, which, despite former exploitation, have preserved typical traits of rare and endangered wetland habitats. They stretch along with three heathlands and meadows in the vicinity of lakes: Łebsko and Gardno. Respectively, Łeba and Łupawa rivers discharge to those lakes on their way to the Baltic. Characteristic elements of local vegetation are coastal pine forests with *Empetrum nigrum* and swamp conifer forests with *Erica tetralix* and *Myrica gale*. Another important asset of the site is rich avifauna of the lakes. Shallow lake water is densely overgrown with reedbeds and dotted with numerous islands, providing safe nesting and resting places for birds. Of great value for science, and at the same time, an attraction for tourists are highest in Europe moving sand dunes at the shoreline where wind activity reveals fossil soils and traces of ancient forests. The wetland lies on the migration route of many birds – geese, swans, ducks, waders and plovers along the southern coast of the Baltic Sea.

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)	Słowiński National Park
Unofficial name (optional)	Słowiński 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) No information available

(Update) Optional text box to provide further information

In the projects "Restitution and preservation of non-forest ecosystems in the Słowiński National Park" (2009) and "Protection of selected habitats and priority species of the Ostoja Słowińska PLH220023 and Pobrzeże Słowiński PLB220003" the open nature of non-forest habitats in the Słowiński National Park was restored while limiting the decline of biodiversity and counteracting the negative effects of fragmentation of meadow and rush habitats being a breeding and feeding place for water-marsh birds in the Słowiński National Park. As part of the conservation tasks measures like mowing and grazing, as well as agri-environmental programs are implemented. The raid of trees and shrubs in valuable peat ecosystems is removed. The protection of the autochthonous Common Whitefish population is being implemented and a protection program for the species of ichthyofauna is being implemented. The number of invasive animal species, such as American Mink, Raccoon Dog, is monitored and regulated in order to reduce their pressure on nesting species of wetland birds.

(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.

no data

(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 the existing National Park. It follows the shoreline together with a 2 mile stretch of water, between mouths of Łupawa river in the NW and Łeba in the NE. The southern border runs along the peripheries of Gardno and Łebsko lakes and embraces forest tracts on southern shores of Łebsko lake, but excludes the area of the village of Smółdzino.

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
Marine Ecoregions of the World (MEOW)	24. Baltic sea
EU biogeographic regionalization	Continental

Other biogeographic regionalisation scheme

Geobotanical region of deciduous forests of Central Europe at the edge of the East-European region of mixed forests (boreal) – according to the Polish regionalisation by Jerzy Kondracki, 2001: Regional geography of Poland. The region embraces eastern part of Denmark, southernmost Sweden, central and north-eastern Germany and most of the territory of Poland except for its two mountain ranges (Alpine region) and the north-eastern edge of the country, belonging to sub-boreal or East-European mixed forest biogeographic region. Eastern Europe – Waterbird Population Estimates, Wetland International, 2002.

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 Słowiński National Park abounds in water with lakes, rivers and canals of a joint surface of about 10000 ha and the coastal water belt of Baltic sea covering more than 11000 ha and maximal depth of 20 m. Water surface currently takes about 64% of the Park area. Due to a very low elevation of water table in the lakes (Łebsko – only 9 cm a.s.l.) the phenomenon of back flow occurs (pouring of seawater via rivers to the lakes during stormy weather). This results in salinisation of lakes and fluctuations in their water table (up to 18 cm in the Gardno lake). Smaller lakes are silted and do not have a connection to the sea. The waters provide an opportunity for fishing and are used by local inhabitants and visitors to the Park.

Other reasons

The site has a rich variety of strikingly diverse habitats arranged in zones from littoral, to sand beach, moving dunes, lakes, mires, meadows and forests providing for the diversity of ecotones and dynamic spatial relationships. This results in the zonal vegetation pattern reflecting local relief features. Most of the habitats are well developed and preserved on large surfaces, and 27 habitat types are of the European Community importance (Annex I to Habitat Directive) of which 7 are classified as priority habitats. Important types of habitats within the Park include (code corresponds to the NATURA 2000 code): (1130) Estuaries, (1150*) Coastal lagoons, (1330) Atlantic salt meadows (*Glauco-Puccinellietalia maritima*), (2190) Humid dune slacks, (3110) Oligotrophic waters containing very few minerals of sandy plains: *Littorelletalia uniflorae*, (3130) Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*, (3150) Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation, (3160) Natural dystrophic lakes and ponds, 3260 Water courses of plain to montane levels with the *Ranunculion fluitantis* and *Callitriche-Batrachion* vegetation, (7110*) Active raised bogs, (7120) degraded raised bogs still capable of natural regeneration, (7140) transition mires, (4010) Northern Atlantic wet heaths with *Erica tetralix*, (6410) *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*), (91D0*) Bog woodland, (91E0*) Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior*, (91F0*) Riparian mixed forests of *Quercus robur*, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers (*Ulmion minoris*).

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification

The site supports populations of plant species important for maintaining the regional biodiversity including *Luronium natans*, *Linaria odora*, *Liparis loeselii* – species of European importance (Habitat Directive Annex II). It also supports important populations of glacial (boreal) relics such as *Rubus chamaemorus*, *Viola epipsila* and *Linnaea borealis* on raised bogs and transitory mires, plants nationally scarce and endangered elsewhere due to general decline of natural hydrogenic biotopes in the continental region. In SNP, species of the Polish Red Data Book of Plants (2001) – *Littorella uniflora*, *Carex limosa*, *Rhynchospora fusca* and *Isoetes lacustris* have also their noteworthy populations. The wetland also harbours rare species of algae such as - *Hildenbrandtia rivularis* in Łupawa river, and a sponge *Spongilla lacustris* in Smoldzino lake - unique and vulnerable to extinction at continental scale. Within the site there are at least 25 bird species listed in the Annex I of the Birds Directive, above all: *Aegolius funereus*, *Asio flammeus*, *Botaurus stellaris* and *Philomachus pugnax*. 15 bird species are endangered and listed in the Polish Red Data Book of Animals.

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















- Criterion 5 : >20,000 waterbirds

Overall waterbird numbers:

Start year:

Source of data:












































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>Corallorhiza trifida</i>	Early Coralroot; Northern Coralroot; Yellow Coralroot	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Species protected in Poland	
 <i>Dactylorhiza fuchsii</i>	Common Spotted Orchid	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Species protected in Poland	
 <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>Dactylorhiza maculata</i>	Heath Spotted-orchid	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Species protected in Poland	
 <i>Dactylorhiza majalis</i>	Western Marsh Orchid	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Species protected in Poland	
 <i>Epipactis atrorubens</i>	Royal Helleborine; Dark-red Helleborine	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Species protected in Poland	
 <i>Goodyera repens</i>	Creeping Lady's-tresses	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Species protected in Poland	
 <i>Leucobryum glaucum</i>	White Moos	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		Annex 5 of the Habitats Directive (Council Directive 92/43/EEC)
 <i>Linaria odora</i>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	IUCN Red List status (NT), Polish Red Data Book of Plants (EN)	Annex 2,4 of the Habitats Directive (Council Directive 92/43/EEC)
 <i>Menyanthes trifoliata</i>	Bogbean; Buckbean	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LC	<input checked="" type="checkbox"/>	Species protected in Poland	
 <i>Neottia cordata</i>	Lesser Twayblade; Heartleaf Twayblade	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Species protected in Poland	
 <i>Neottia ovata</i>	Common Twayblade	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input checked="" type="checkbox"/>	Species protected in Poland	
 <i>Plantago uniflora</i>		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	Species protected in Poland, Polish Red Data Book of Plants (EN)	
 <i>Rubus chamaemorus</i>	Cloudberry; Knotberry	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	Species protected in Poland. Polish Red Data Book of Plants (EN)	

Criterion 3:
 Lycopodium spp. - Clubmosses; Annex 5 of the Habitats Directive (Council Directive 92/43/EEC)
 Cladonia subgenus Cladonia - Cladonia subgenus Cladonia (Lichens); Annex 5 of the Habitats Directive (Council Directive 92/43/EEC)
 Sphagnum spp. - Peat moss; Annex 5 of the Habitats Directive (Council Directive 92/43/EEC)

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 ¹⁾	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9									
Birds															

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/AVES	 <i>Anas penelope</i>	Eurasian Wigeon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2500	2012-2018			<input type="checkbox"/>	<input type="checkbox"/>		pop. max 2500 i
CHORDATA/AVES	 <i>Anas platyrhynchos</i>	Mallard	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2500	2012-2018		LC 	<input type="checkbox"/>	<input type="checkbox"/>		pop. 2500 i
CHORDATA/AVES	 <i>Anser albifrons</i>	Greater White-fronted Goose	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2000	2012-2018		LC 	<input type="checkbox"/>	<input type="checkbox"/>		pop. 2000 i
CHORDATA/AVES	 <i>Anser fabalis</i>	Bean Goose	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12000	2012-2018		LC 	<input type="checkbox"/>	<input type="checkbox"/>		pop. 12000 i
CHORDATA/AVES	 <i>Aquila chrysaetos</i>	Golden 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"/>	1	2007-2009		LC 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 1 pair
CHORDATA/AVES	 <i>Aythya ferina</i>	Common Pochard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	600	2012-2018		VU 	<input type="checkbox"/>	<input type="checkbox"/>		pop. max 600 i
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"/>		1995-2003		LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 1-2 males
CHORDATA/AVES	 <i>Calidris alpina</i>	Dunlin	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	140	1995-2003		LC 	<input type="checkbox"/>	<input type="checkbox"/>		migration pop. 140 i
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"/>	30	1995-2003		LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: >30
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"/>	5	1995-2003		LC 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: up to 5 pairs
CHORDATA/AVES	 <i>Crex crex</i>	Corn Crake	<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"/>	200	2007-2009		LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the Birds Directive (Council Directive 79/409/EEC)	Important breeding place in biogeographical zone; pop. size: 200-250 breeding males
CHORDATA/AVES	 <i>Cygnus cygnus</i>	Whooper Swan	<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"/>	560	2007		LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	non-breeding, 560 during migrations
CHORDATA/AVES	 <i>Gavia arctica</i>	Arctic Loon; Black-throated Loon	<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"/>		2013		LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	rare, non-breeding
CHORDATA/AVES	 <i>Gavia stellata</i>	Red-throated Diver; Red-throated Loon	<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"/>		2013		LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	rare, non-breeding
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7500	2012-2018		LC 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex I of the Birds Directive (Council Directive 79/409/EEC)	important resting place during migration; pop. size: 45 breeding pairs, 7500 during migration
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"/>		2004-2008		LC 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Annex I Birds Directive	pop. size: 6-7 pairs
CHORDATA/AVES	 <i>Melanitta fusca</i>	White-winged Scoter; Velvet Scoter	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5000	2012-2018		VU 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II Birds Directive	pop. max 5000
CHORDATA/AVES	 <i>Mergellus albellus</i>	Smew	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2100	2012-2018		LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex I of the Birds Directive (Council Directive 79/409/EEC)	Important resting place during migration; pop. size: 2100 during migration
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"/>		1995-2003		LC 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: 0-1
CHORDATA/AVES	 <i>Milvus milvus</i>	Red 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"/>		2006-2009		NT 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive, Polish Red Data Book of Animals (NT)	pop. size: 5-6 pairs
CHORDATA/AVES	 <i>Phalacrocorax carbo</i>	Great Cormorant	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4500	2012-2018		LC 	<input type="checkbox"/>	<input type="checkbox"/>		pop. max 4500 i.
CHORDATA/AVES	 <i>Podiceps auritus</i>	Horned Grebe	<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"/>		2013		VU 	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	rare, non-breeding

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/ 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"/>	10	1995-2003	LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: >10 males	
CHORDATA/ AVES	 <i>Sterna hirundo</i>	Common 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"/>		1995	LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop. size: <10 pairs	
CHORDATA/ AVES	 <i>Stemula albifrons</i>	Little 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"/>		1995	LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	pop size: 0-1 pairs	
CHORDATA/ AVES	 <i>Tringa glareola</i>	Wood Sandpiper	<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"/>	350	1995-2003	LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex I Birds Directive	non-breeding	
Fish, Mollusc and Crustacea																		
CHORDATA/ ACTINOPTERYGII	 <i>Coregonus lavaretus</i>	Lavaret	<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"/>		2013	VU 	<input type="checkbox"/>	<input type="checkbox"/>	Annex 5 of the Habitat Directive (Council Directive 92/43/ EEC);	Important place in biogeographical zone., common in the site	
CHORDATA/ CEPHALASPIDOMORPHI	 <i>Lampetra fluviatilis</i>	Lampern; Lampern	<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"/>		2013	LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II Habitats Directive, Polish Red Data Book of Animals (EN)		
CHORDATA/ CEPHALASPIDOMORPHI	 <i>Lampetra planeri</i>	European Brook Lamprey	<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 Habitats Directive, Polish Red Data Book of Animals (NT)	few ind.	
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, Polish Red Data Book of Animals (NT)		
CHORDATA/ ACTINOPTERYGII	 <i>Pelecus cultratus</i>	Sabrefish; Sabre Carp; Knife	<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"/>		2013	LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II Habitats Directive, Polish Red Data Book of Animals (NT)	very rare	
CHORDATA/ CEPHALASPIDOMORPHI	 <i>Petromyzon marinus</i>	Lamprey Eel	<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"/>		2013	LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II Habitats Directive, Polish Red Data Book of Animals (EN)	rare	
CHORDATA/ ACTINOPTERYGII	 <i>Rhodeus amarus</i>	European 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"/>		2013	LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II Habitats Directive, Polish Red Data Book of Animals (NT)	common	
CHORDATA/ ACTINOPTERYGII	 <i>Salmo salar</i>	Silver Salmon	<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"/>		2013		<input type="checkbox"/>	<input type="checkbox"/>	Annex II Habitats Directive	very rare	
Others																		
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"/>	120	2013	LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II, IV, V Habitats Directive		
CHORDATA/ MAMMALIA	 <i>Halichoerus grypus</i>	Gray Seal	<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"/>		2013	LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II, IV Habitats Directive, Polish Red Data Book of Animals (EN)	rare	
ARTHROPODA/ INSECTA	 <i>Leucorhina pectoralis</i>	Yellow-spotted Whiteface	<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"/>		2013	LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II Habitats Directive		
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"/>		2013	NT 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Annex II, IV Habitats Directive	common	
ARTHROPODA/ INSECTA	 <i>Ophiogomphus cecilia</i>	Green Snaketail	<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"/>		2013	LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II Habitats Directive		
ARTHROPODA/ INSECTA	 <i>Osmoderma eremita</i>	Hermit Beetle	<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"/>		2013	NT 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II Habitats Directive, Polish Red Data Book of Animals (VU)		
CHORDATA/ MAMMALIA	 <i>Phocoena phocoena</i>	Harbor Porpoise	<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"/>		2013	LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II, IV Habitats Directive, Polish Red Data Book of Animals (LC)	very rare	
CHORDATA/ AMPHIBIA	 <i>Triturus cristatus</i>	Northern 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"/>		2013	LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II, IV Habitats Directive, Polish Red Data Book of Animals (NT)	very rare	

1) Percentage of the total biogeographic population at the site

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
1330 Atlantic salt meadows, 1340 Inland salt meadows	<input checked="" type="checkbox"/>	42 ha; Puccinellio-Spergularietum salinae Junicetum gerardi	Habitat listed on Annex I Habitats Directive
2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> ('white dunes')	<input checked="" type="checkbox"/>	~1060 ha; <i>Elymo-Ammophiletum honckenietosum</i> , <i>Elymo-Ammophiletum arenariae typicum</i>	Habitat listed on Annex I Habitats Directive
2130 Fixed coastal dunes with herbaceous vegetation ('grey dunes')	<input checked="" type="checkbox"/>	~131 ha; <i>Helichryso-Jasonietum litoralis</i>	Habitat listed on Annex I Habitats Directive
2140 Decalcified fixed dunes with <i>Empetrum nigrum</i>	<input checked="" type="checkbox"/>	~3 ha; <i>Carici arenariae-Empetrum nigri Empetrum nigrum-Vaccinium vitis idaea</i>	Habitat listed on Annex I Habitats Directive
2170 Dunes with <i>Salix repens ssp argentea</i> (<i>Salicion arenariae</i>)	<input checked="" type="checkbox"/>	<1 ha; <i>Salicion arenariae</i>	Habitat listed on Annex I Habitats Directive
7110 Active raised bogs	<input checked="" type="checkbox"/>	~156ha; <i>Erico-Sphagnetum medii</i> ; Community <i>Eriophorum vaginatum</i> – <i>Sphagnum fallax</i> , community with <i>Molinia caerulea</i>	Habitat listed on Annex I Habitats Directive
6510 Lowland hay meadows (<i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i>)	<input checked="" type="checkbox"/>	>6ha; <i>Arrhenatherion elatioris</i>	Habitat listed on Annex I Habitats Directive
6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)	<input checked="" type="checkbox"/>	60ha; <i>Junco-Molinietum</i>	Habitat listed on Annex I Habitats Directive
3260 Water courses of plain to montane levels with the <i>Ranunculon fluitantis</i> and <i>Callitricho-Batrachion</i> vegetation	<input checked="" type="checkbox"/>	<i>Raunculetum fluitantis</i>	Habitat listed on Annex I Habitats Directive
9110 <i>Luzulo-Fagetum</i> beech forests	<input checked="" type="checkbox"/>	<130 ha; <i>Deschampsio-Fagetum</i>	Habitat listed on Annex I Habitats Directive
3130 Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or of the <i>Isoeto-Nanojuncetea</i>	<input checked="" type="checkbox"/>	<146 ha; <i>Myriophyllo-Littorelletum</i>	Habitat listed on Annex I Habitats Directive
9190 Old acidophilous oak woods with <i>Quercus robur</i> on sandy plains	<input checked="" type="checkbox"/>	>3000 ha; <i>Betulo pendulae-Quercetum roboris</i> , <i>Empetro nigri-Pinetum</i>	Habitat listed on Annex I Habitats Directive
mix 2190, 4010, 7140, 7150	<input checked="" type="checkbox"/>	>3ha, <i>Ericetum tetralicis Rynchosporietum albae Carici canescentis-Agrostietum caninae Vaccino ulginosi-Empetretum nigri Myrico-Salicetum auritae Myricetum gale</i>	Habitat listed on Annex I Habitats Directive
3150 Natural eutrophic lakes with <i>Magnopotamion</i> or <i>Hydrochariton</i> - type vegetation	<input checked="" type="checkbox"/>	~7ha; <i>Elodeetum canadensis, Nymphaeion: Nupharo-Nymphetum albae, Polygonetum natantis, Hydrocharitetum morsus ranae, Lemnion gibbae: Spirodelletum polyrhizae, Lemnetum trisulcae</i>	Habitat listed on Annex I Habitats Directive

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
1150 Coastal lagoons	<input checked="" type="checkbox"/>	9608 ha; Phragmitetum australis, Scirpetum lacustris, Glycerietum maxime, Acretum calami, Equisetum limosae, Sagittario-Sparganietum emersiPhalaridetum arundinaceaeCicuto-Caricetum pseudocyperiiThelypteridi-PhragmitetumCaricetum acutiformisCaricetum	Habitat listed on Annex I Habitats Directive
mix 7110, 7140, 7150	<input checked="" type="checkbox"/>	279ha; Rynchosporetum albae, Eriophoro angustifolii-Sphagnetum fallax Caricetum lasiocarpae, Carici canescentis-Agrostietum caninae, Calletum palustris Community with Menyanthes trifoliata Community with Comarum palustre	Habitat listed on Annex I Habitats Directive
91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	<input checked="" type="checkbox"/>	122 ha; Fraxino-Alnetum	Habitat listed on Annex I Habitats Directive
91D0 Bog woodland	<input checked="" type="checkbox"/>	~1600 ha; Vaccinio ulginosi-Betuletum pubescentis Vaccinio ulginosi-Pinetum	Habitat listed on Annex I Habitats Directive
9160 Sub-Atlantic and medio-European oak or oak-hornbeam forests of the Carpinion betuli	<input checked="" type="checkbox"/>	~7 ha; Stellario-Carpinetum	Habitat listed on Annex I Habitats Directive
9130 Asperulo-Fagetum beech forests	<input checked="" type="checkbox"/>	<3 ha; Galio odorati-Fagetum	Habitat listed on Annex I Habitats Directive

Optional text box to provide further information

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

4.1 - Ecological character

The present landform of the site has been shaped during the last glaciation (Baltic Glacial Period) and later in Holocene under the impact of coastal processes of the Baltic Sea. Wave and wind activities led to the formation of Gardęńsko-Łebska Spit which closed original marine bays with a sand bar to form large coastal estuaries, the remnants of which are now Łebsko and Gardno lakes. Intensification of dune formation process on the sand spit contributed to development of the highest in Europe (up to 65 m) mobile dune system. Tidal variation at the Baltic coast is almost invisible. The degree of water salinity is low: 3 – 4 ‰. Since both lakes at the site are connected to sea through rivers, fluctuations in lake water level occur frequently during storms when sea water pushes upstream. In the Preboreal period (ca 10.000 years ago), peat forming processes were initiated at the watershed area between lakes, and former lakes were later filled in with organic sediments. As a result vast peatlands of the depth to around 6 m were formed in areas adjacent to existing lakes, what, in turn, led to lake overgrowing and shallowing. The processes are still in place. Peatlands were partially drained in 19th and 20th centuries. Lakes are shallow and eutrophic, their depth not exceeding 6 m (Łebsko lake). The more or less degraded peatlands take about 17% of the Park area. In the Park, after the abandonment of regular agricultural activities about 20 – 25 years ago, most of the ditches become clogged with vegetation debris which reversed the aridization trend and resulted in the rise of groundwater level. The present soils are either gley podsols developed from sands of marine and alluvial origin or peat soils displaying various degree of degradation. Transition-mire soils dominate in the Park. The climate is of maritime character with mild winters, moderately warm summers, a high degree of air moisture and little annual precipitation (annual average 655 mm). The average annual temperature is +7.5°C. Most of the habitats are well developed and preserved on large surfaces, and are of the European Community importance (listed in Annex I to Habitats Directive). The Site supports also numerous other plant species important for maintenance of biodiversity in the continental region. The wetland is a European Important Bird Area. The wetland is also internationally important as a site providing habitats for animal species from Annex II and IV of Habitats Directive.

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

Marine or coastal wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
A: Permanent shallow marine waters		2	2000	Representative
E: Sand, shingle or pebble shores		3	175	Rare
F: Estuarine waters		4	5	Representative
J: Coastal brackish / saline lagoons		1	9608	Representative

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		4	19	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		3	162	Representative
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		3	130	Representative
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		2	824	Representative
Fresh water > Lakes and pools >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		4		Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		2	824	Representative
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		0		Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		1	1957	Representative
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		1	1957	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
3: Irrigated land		3	250	Representative
4: Seasonally flooded agricultural land		3		Representative
6: Water storage areas/Reservoirs		4		Representative
7: Excavations		4		Representative
9: Canals and drainage channels or ditches		3	48	Representative

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
urbanised area	200
forests (on dry soils)	1848
coastal dunes	2330
fresh meadows, heaths, grygrasslands	350

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	IUCN Red List	Position in range / endemism / other
<i>Angelica archangelica</i>	Garden Angelica		Species protected in Poland
<i>Carex arenaria</i>	Sand Sedge		Species protected in Poland
<i>Centaureum erythraea</i>	Common Centaury		Species protected in Poland
<i>Chimaphila umbellata</i>	Common Pipsissewa		Species protected in Poland
<i>Daphne mezereum</i>	Mezereon		Species protected in Poland
<i>Dianthus arenarius</i>	Finland Pink		Species protected in Poland
<i>Digitalis grandiflora</i>	Large Yellow Foxglove		Species protected in Poland
<i>Diphasiastrum complanatum</i>	Complanate Club Moss		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 helleborine</i>	Broad-Leaved Helleborine		Species protected in Poland
<i>Epipactis palustris</i>	Marsh Helleborine		Species protected in Poland
<i>Erica tetralix</i>	Cross-Leaved Heath		Species protected in Poland
<i>Eryngium maritimum</i>	Sea Holly		Species protected in Poland
<i>Glaux maritima</i>	Glaux		Species protected in Poland
<i>Helichrysum arenarium</i>	Everlasting Sandcudweed		Species protected in Poland
<i>Hierochloa odorata</i>	Sweet Grass		Species protected in Poland
<i>Linnaea borealis</i>	Common Sea-Buckthorn		Species protected in Poland
<i>Lonicera periclymenum</i>	Common Honeysuckle		Species protected in Poland
<i>Myrica gale</i>	Bog Myrtle		Species protected in Poland
<i>Nymphaea alba</i>	European White Waterlily		Species protected in Poland
<i>Nymphaea candida</i>	Small Water Lily		Polish Red Data Book of Plants (NT), Species protected in Poland
<i>Osmunda regalis</i>	Royal Fern		Species protected in Poland
<i>Platanthera bifolia</i>	Lesser Butterfly Orchid		Species protected in Poland
<i>Rhododendron tomentosum</i>	Marsh Tea, Ledum Crystaltea		Species protected in Poland

Invasive alien plant species

Scientific name	Common name	IUCN Red List	Impacts	Changes at RIS update
<i>Acer negundo</i>	Box Elder		Actually (minor impacts)	unknown
<i>Alnus incana rugosa</i>	Speckled Alder (subsp. Rugosa)		Actually (minor impacts)	unknown
<i>Impatiens parviflora</i>	Small Balsam		Actually (minor impacts)	unknown
<i>Picea sitchensis</i>	Menzies spruce		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>Reynoutria japonica</i>	Japanese Knotweed		Actually (minor impacts)	unknown
<i>Reynoutria sachalinensis</i>	Giant Knotweed		Actually (minor impacts)	unknown
<i>Robinia pseudoacacia</i>	False Acacia; Black Locust		Actually (minor impacts)	unknown
<i>Rosa rugosa</i>	rugosa rose		Actually (minor impacts)	unknown
<i>Salix daphnoides</i>			Actually (minor impacts)	unknown
<i>Solidago gigantea</i>	Giant Goldenrod		Actually (minor impacts)	unknown

4.3.2 - Animal species

Invasive alien animal species

Phylum	Scientific name	Common name	IUCN Red List	Impacts	Changes at RIS update
ARTHROPODA/MAXILLOPODA	<i>Balanus improvisus</i>	Bay Barnacle		Actually (minor impacts)	No change
CHORDATA/ACTINOPTERYGII	<i>Carassius gibelio</i>	Prussian Carp		Actually (major impacts)	No change
MOLLUSCA/BIVALVIA	<i>Dreissena polymorpha</i>	Zebra Mussel		Actually (minor impacts)	unknown
ARTHROPODA/MALACOSTRACA	<i>Eriocheir sinensis</i>	Chinese Mitten Crab; Shanghai Hairy Crab; Chinese Freshwater Edible Crab		Actually (minor impacts)	No change
ARTHROPODA/MALACOSTRACA	<i>Gammarus tigrinus</i>			Actually (minor impacts)	No change
ANNELIDA/POLYCHAETA	<i>Marenzelleria neglecta</i>	Red Gilled Mud Worm		Actually (minor impacts)	No change
MOLLUSCA/BIVALVIA	<i>Mya arenaria</i>	Long Necked Clam		Actually (minor impacts)	No change
CHORDATA/ACTINOPTERYGII	<i>Neogobius melanostomus</i>	Round Goby; Round Goby; Round Goby		Actually (minor impacts)	No change
CHORDATA/MAMMALIA	<i>Neovison vison</i>	American Mink		Actually (major impacts)	decrease
CHORDATA/MAMMALIA	<i>Nyctereutes procyonoides</i>	Raccoon Dog		Actually (major impacts)	No change
ARTHROPODA/MALACOSTRACA	<i>Orconectes limosus</i>	Spinycheek Crayfish		Actually (minor impacts)	No change
ARTHROPODA/MALACOSTRACA	<i>Palaemon elegans</i>	Common Prawn		Actually (minor impacts)	unknown

Optional text box to provide further information

IUCN Red List status (LC): *Dreissena polymorpha*, *Neogobius melanostomus*, *Neovison vison*, *Nyctereutes procyonoides*, *Orconectes limosus*

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.

Łeba river, Łupawa river, Baltic Sea

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)

Soils of the Ramsar site represent mainly podsoles, peat-soils, arenosole and degraded peat-soils.

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 type="checkbox"/>	No change
Water inputs from surface water	<input checked="" type="checkbox"/>	No change
Marine water	<input type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
Feeds groundwater	No change
Marine	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels fluctuating (including tidal)	No change

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

Due to a very low elevation of water table in the lakes (Łebsko – only 9 cm a.s.l.) the phenomenon of back flow occurs (pouring of seawater via rivers to the lakes during stormy weather). This results in salinisation of lakes and fluctuations in their water table (up to 18 cm in the Gardno lake). Smaller lakes are silted and do not have a connection to the sea.

4.4.5 - Sediment regime

Significant erosion of sediments occurs on the site

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

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

Alkaline (pH>7.4)

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

Unknown

Please provide further information on pH (optional):

Water pH of Łebsko and Gardno Lakes varies from 7,0 to 8,0, Dolgie Wielkie Lake 6,4 - 9,7, Dolgie Male Lake 5,9- 7,8.

4.4.7 - Water salinity

Mxohaline (brackish)/Mxosaline (0.5-30 g/l)

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

Unknown

Please provide further information on salinity (optional):

Medium water salinity in Łebsko Lake was 1,285 g/l (CL-) and 0,506 g/l (CL-) in Gardno Lake.

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic

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

Dystrophic

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

Unknown

Please provide further information on dissolved or suspended nutrients (optional):

Lakes are shallow and eutrophic, their depth not exceeding 6 m (Łebsko lake).

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	Timber	Low
Wetland non-food products	Fuel wood/fibre	Low
Wetland non-food products	Livestock fodder	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	High
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	Major scientific study site	High
Scientific and educational	Long-term monitoring site	High
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	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:

Recreation and tourism:
 The site is visited annually by about 500.000 visitors. In the Słowiński National Park marked trails, viewing towers 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. An absolute ban on the use of dunes is mandatory. Organized groups can visit the Park with an authorized guide. At some specially selected areas navigation and windsurfing may be practiced on waters of Łebsko and Gardno lakes. It is restricted only to some seasons of the year to minimize wildlife disturbance. Boat and shore angling is also allowed in a part of the Park aquatic bodies, on purchasing a special license.

Biodiversity:
 The Park activity is crucial for survival many rare plants, animals and microorganisms and through genes they contain.

Spiritual and inspirational:
 The site contributes in maintaining local culture and historical tradition, supports local artists and nature photographers organizing photo and art-works exhibitions.

Within the site: 500000

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

Land in the Park is used extensively for agriculture, fishing and forestry. To preserve open ecosystems of the Park, Human activities include bush removal and non-intensive haymaking are undertaken.

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

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

Description if applicable

The area is used extensively for agricultural purposes. To preserve open park ecosystems, activities such as removing bushes, grazing and extensive hay harvesting are carried out. Agricultural activity is carried out by local farmers.

- 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 checked="" type="checkbox"/>
Public land (unspecified)	<input checked="" type="checkbox"/>	<input 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"/>

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 majority is in the State Treasury ownership: in perpetual usufructuary of Słowiński National Park 21 274,6 ha, Marine waters in Słowiński National Park management 11 171,1 ha, other management– 61,0 ha, private owners and other types – 237,3 ha.

5.1.2 - Management authority

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

Słowiński National Park

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

Marek Sobocki, Director of the Słowiński National Park

Postal address:

ul. Bohaterów Warszawy 1A, 76-214 Smoldzino, Poland

E-mail address:

sekretariat@slowinski.pn.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
Commercial and industrial areas		unknown impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	unknown
Tourism and recreation areas	unknown impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

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 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		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
Fishing and harvesting aquatic resources	unknown 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	unknown 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		unknown impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Dams and water management/use	unknown impact		<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Vegetation clearance/land conversion	unknown 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	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

Climate change and severe weather

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

Please describe any other threats (optional):

Within the Ramsar site, the main threatening factors are:

- heavy touristic pressure, especially intensive during summer at the coast and dunes vicinity (about 500.000 tourists visit Słowiński National Park every year) that result in dune trampling, habitat destruction and breeding birds disturbance. To prevent that Słowiński National Park canalize tourists organizing and supporting tourist infrastructure system: parking places, marked trails, view points,
- water level decreasing and eutrophication of lakes caused by polluted river waters from the surrounding area, canalization and river regulation,
- invasive species.

5.2.2 - Legal conservation status

Global legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
UNESCO Biosphere Reserve	Biosphere Reserve "Słowiński National Park"		whole

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	SCI PLH220023 Ostoja Słowińska		whole
EU Natura 2000	SPA PLB220003 Pobrzeże Słowińskie		partly
EU Natura 2000	SPA PLB990002 Przybrzeżne wody Bałtyku		partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Park	Słowiński National Park		whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	PL019 Ostoja Słowińska		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
Habitat manipulation/enhancement	Implemented
Hydrology management/restoration	Implemented
Catchment management initiatives/controls	Implemented

Species

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

Human Activities

Measures	Status
Fisheries management/regulation	Implemented
Harvest controls/poaching enforcement	Implemented
Regulation/management of recreational activities	Implemented
Research	Implemented
Communication, education, and participation and awareness activities	Implemented

Other:

Other specific single species or species group management programmes - partially 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:

Museum of Nature of the Słowiński National Park in Smoldzino presents the nature of the most characteristic Park eco-systems: beaches and dunes, lakes and forests. In the museum, special rooms have been prepared for temporary photographic exhibitions. In the didactic room, educational classes, museum lessons, multimedia presentations, photo-slides and nature film shows are conducted for organised groups by the employees of the Park. Additionally, in summer, the theme exhibitions are organised for visitors in Rąbka near Łeba and Rowy. Słowiński National Park provides ecological training for school youth with the use of 8 educational trails, educating in plant sociology, ecology and culture and ornithology. The interpretation service is provided by the Park staff with the aim to raise awareness on natural phenomena presented against the background of historical and present economic activity of local society.

URL of site-related webpage (if relevant): <http://slowinski.pn.pl/en/the-museum-of-nature.html>

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Yes, there is a plan

5.2.7 - Monitoring implemented or proposed

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

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

The bibliography is attached in 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

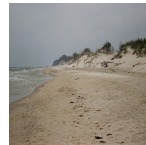
Please provide at least one photograph of the site:



Peatbog buried by dune (*Paulina Dzierża, 18-06-2015*)



Bulrush in Gardno Lake (*Słowiński National Park Archive, 21-08-2009*)



Sea coastal waters (*Magdalena Hadwiczak, 08-07-2017*)



Peatbog (*Słowiński National Park Archive, 13-09-2007*)



Alder forest (*Grzegorz Jędro, 09-04-2015*)



Gardno Lake (*Grzegorz Jędro, 16-08-2014*)



Gardno Lake (*Grzegorz Jędro, 28-11-2013*)



Sea coastal waters (*Grzegorz Jędro, 03-09-2013*)



Peatbog (*Magdalena Hadwiczak, 27-05-2016*)



Peatbog buried by dune (*Magdalena Hadwiczak, 30-04-2016*)



Peatbog (*Magdalena Hadwiczak, 16-08-2017*)



Wet forest (*Słowiński National Park Archive, 11-05-2008*)



Vaccinio uliginosi-Betuletum pubescentis (*Słowiński National Park Archive, 19-09-2007*)



Peatland regenerating after peat extraction (*Słowiński National Park Archive, 13-08-2008*)



Peatland regenerating after peat extraction (*Słowiński National Park Archive, 30-05-2007*)



Salt marshes (*Słowiński National Park Archive, 12-09-2007*)



Sea coastal waters (*Słowiński National Park Archive, 08-01-2009*)



Peatbog Krakulice (*Słowiński National Park Archive, 13-08-2008*)



Peatbog Krakulice (*Słowiński National Park Archive, 13-08-2008*)



Shrubs with bog-myrtle (*Słowiński National Park Archive, 18-06-2009*)



Alder forest buried by dune (*Paulina Dzierża, 16-06-2015*)



bog woodland (*Słowiński National Park Archive, 01-10-2007*)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1995-10-24