## **Information Sheet on Ramsar Wetlands (RIS)**

## - 2006-2008 version

Available for download from http://www.ramsar.org/ris/key\_ris\_index.htm.

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

1. Name and address of the compiler of this form	:
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& Jadwiga Sienkiewicz,	DD MM YY
Institute of Environmental Protection, 00-548 Warsaw	
00-340 Walsaw	
2. Date this sheet was completed/updated:	Designation date Site Reference Number
21.03.2007	
3. Country: Poland	
4. Name of the Ramsar site:	
The precise name of the designated site in one of the three Alternative names, including in local language(s), should be give	official languages (English, French or Spanish) of the Convention. ren in parentheses after the precise name.
Świdwie Lake Nature Reserve (Rezerwat przyro	dy "Jezioro Świdwie")
5. Designation of new Ramsar site or update of ex	xisting site:
This RIS is for (tick one box only):	
a) Designation of a new Ramsar site □; or	
b) Updated information on an existing Ramsar si	te ⊠
6. For RIS updates only, changes to the site since	its designation or earlier undates
o. For KIS updates only, changes to the site since	ns designation of earlier update.
a) Site boundary and area	
The Ramsar site boundary and site area ar	e unchanged: ⊠
or	
If the site boundary has changed:	
i) the boundary has been delineated more accu	urately □; or
ii) the boundary has been extended $\Box$ ; or	
iii) the boundary has been restricted** $\Box$	
and/or	
If the site area has changed:	
i) the area has been measured more accurately	; or
ii) the area has been extended $\Box$ ; or	
iii) the area has been reduced** □	

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the

application of the Criteria, since the previous RIS for the site:

No major change in ecological character of the site was observed.

#### 7. Map of site:

Refer to Annex III of the *Explanatory Note and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

## a) A map of the site, with clearly delineated boundaries, is included as:

- i) a hard copy (required for inclusion of site in the Ramsar List):⊠;
- ii) an electronic format (e.g. a JPEG or ArcView image) ⊠;
- iii) a GIS file providing geo-referenced site boundary vectors and attribute tables  $\Box$ .

## b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The boundary of the site is the same as the boundary of the existing nature reserve Jezioro Świdwie.

## **8. Geographical coordinates** (latitude/longitude, in degrees and minutes):

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

 $53^{\circ}32^{\circ} - 53^{\circ}35^{\circ}N$ ,  $14^{\circ}21^{\circ} - 14^{\circ}23^{\circ}E$  appr. centre  $53^{\circ}33^{\circ}N$   $014^{\circ}22^{\circ}E$ 

#### 9. General location:

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

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

3 m – 17.21 m above sea level **11. Area:** (in hectares): 891 ha

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

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

The nature reserve Świdwie is located at the border of Wkrzańska Primeval Forest and protects shallow, overgrown, eutrophic Świdwie Lake and surrounding area. The lake is located in oval trough and is surrounded by wide band of reeds occupying ca 75% of lake area. The wetland is important for waterfowl and other birds. The vegetation cover is varied reflecting the diversity of local habitats – from aquatic assemblages to reedbeds and shrubs and to small patches of wet meadows and woodland – alder carrs, fresh conifer forests and mixed oak-linden forests. The site supports rare and endangered plants. Świdwie Lake and surrounding area are breeding, feeding, moulting, wintering and resting site for numerous species of waterfowl, including many rare and threatened by extinction. The reserve is regular preying area for birds of prey: white-tailed eagle *Haliaeetus albicilla* and osprey *Pandion haliaetus*, which nest in the area. Numerous flocks of migrating birds, especially geese, gather on the lake during spring and autumn migrations. Otter *Lutra lutra* dwells permanently in the area (species listed by Annex II to Habitat Directive). Numerous species of amphibians and reptiles can be found in the wetland, including *Coronella austriaca* and *Vipera berus* (both protected under Polish law). The occurrence of rare species of invertebrates: *Colias palaeno* and *Papilio machaon* was also ascertained.

## 13. Ramsar Criteria:

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

1 •	2 •	<b>3</b> •	4 •	5 •	6 •	7	8 •	9
	X	X	X					

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

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

- 2. The wetland supports numerous endangered and rare aquatic species of plants, such as: *Nymphoides peltata, Nuphar lutea, Drosera rotundifolia* and *Najas marina* (protected nationally) as well as birds listed in the Polish Red Data Book of Animals and in the Birds Directive Annex I including: little gull *Larus minutus*, bittern *Botaurus stellaris*, little bittern *Ixobrychus minutus*, black stork *Ciconia nigra*, white-tailed eagle *Haliaeetus albicilla*, hen harrier *Circus cyaneus*, red kite *Milvus milvus*, lesser spotted eagle *Aquila pomarina*, bluethroat *Luscinia svecica* and little crake *Porzana parva* while wigeon *Anas penelope* is protected as species of Birds Directive Annex II.
- **3.** The contribution of the wetland to the maintenance of biodiversity in significant since it regularly supports 1% of individuals in the national population of bittern *Botaurus stellaris* (Birds Directive Annex I). It belongs to the group of birds of special care whose population in the entire Europe does not exceed 50000 pairs.
- **4.** Świdwie Lake and surrounding area are breeding, feeding, moulting, wintering and resting site for numerous species of wetland birds. During breeding season the territory is occupied by over 4% of breeding population of little crake *Porzana parva* (Birds Directive Annex I) and at least by 1% of domestic population of such bird species as: red-necked grebe *Podiceps grisegena*, ruff *Philomachus pugnax*, black tern *Chlidonias niger*, greylag goose *Anser anser*, moorhen *Gallinula chloropus*, little gull *Larus minutus*, spotted crake *Porzana porzana* and water rail *Rallus aquaticus*(listed in Birds Directive Annex I and II).

During migration season at least 1% of the migratory population of bean goose *Anser fabalis* rest here; the occurrence of white-fronted goose *Anser albifrons* and crane *Grus grus* is relatively numerous (ca 1% of the migrating population).

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

## a) biogeographic region:

continental - according to EEA,

geobotanical region of deciduous forests - according to Kondracki,

Eastern Europe – according to regionalisation used by Waterbird Population Estimates 2002, Third Edition Global Series 12.

## b) biogeographic regionalisation scheme (include reference citation):

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.

According to EEA – the region is identified as "continental" (EEA publication 2002: Europe's biodiversity – biogeographical regions and seas).

## 16. Physical features of the site:

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

The site is located on Pobrzeże Szczecińskie, within Równina Wkrzańska (Wkrzańska Plain). The Świdwie Lake is situated in an oval trough to the south of the forest and is surrounded by wide band of reedbeds and peatlands. The building material of the area consists of alluvial cone material accumulated during postglacial period in a 8 m thick fine-grained sand layer.

The climate is of subatlantic type, i.e. a temperate maritime climate with mild, humid winters and cool summers and substantial amount of precipitation. The west and northwest winds dominate; average temperature in July is  $+18^{\circ}$ C and in January:  $-1^{\circ}$ C; average annual precipitation is 561 mm.

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

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

The site is located in the left side Basin of Odra. Many small watercourses of Zaodrze, flowing from morainic plateau: Osówka, Warszowiec, Bukowa and Glinianka constitute local hydrological network. Gunica, a tributary of Odra, flowing through Duże Świdwie Lake is one of the larger rivers. The area of Wkrzańska Primeval Forest constitutes wide sand plain, diversified by dunes reaching a few dozen meters in height. The area, built by material of Odra alluvial cone – fine-grained sand of 8 m thickness, was formed at the end of Pleistocene, in the form of few terrace steps reaching from 3 to 19 m above sea level. In the highest terrace, called Wkrzańska Primeval Forest, the pine forest with the addition of beech and oak dominates. Soil cover consists of podsolic-, brown-, black-earth, alluvial- and hydrogenic soils.

The climate of the basin, because of its location and surface features, is principally of Atlantic type. The west and north-west winds dominate, and annual precipitation is about 750 mm.

#### 18. Hydrological values:

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

Świdwie Lake is located at the south border of Wkrzańska Primeval Forest, in the Gunica Basin. Similar to other small lakes of this area, the Świdwie Lake is of melt-out type. The water surface is maintained at 3 m above sea level and it is fed through canals and drainage ditches draining water from the surrounding fields and forests. The area is important for flood control and receiving and channelling the freshet water.

## 19. Wetland Types

#### a) presence:

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

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

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

#### b) dominance:

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

Tp (75%), M, O, , W, Xp

## 20. General ecological features:

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

The wetland vegetation cover consists of habitat mosaic and includes eutrophic and overgrown with rush beds Świdwie Lake and surrounding reedbeds, meadows and alder carrs. The reserve shelters many aquatic communities of *Myriophyllo-Nupharetum* and *Nymphaeetum* belonging to types of endangered habitats listed in Annex I to Habitat Directive (3150) natural eutrophic lakes with *Hydrocharition* type vegetation and (3270) rivers with muddy banks with *Chenopodion rubri* p.p. and *Bidention* p.p.vegetation. Shrub and woodland constitute alder carrs with *Alnus glutinosa* in the tree layers. Vast reedbeds provide excellent shelter for nesting birds. Świdwie Lake and surrounding area are breeding, feeding, moulting, wintering and resting site for numerous species of waterfowl, including many rare and threatened by extinction. 21 species listed in Annex I to Birds Directive and 13 species listed in Polish Red Data Book of Animals are present in the reserve. The reserve supports several birds of prey with more numerous populations of black kite *Milvus migrans* (2 pairs), red kite *M. milvus* (3 pairs), white-tailed eagle *Haliaeetus albicilla* and osprey *Pandion haliaetus*, which nest in the area. Lesser spotted eagle *Aquila pomarina* was estimated to have 3 pairs in the

area. Numerous flocks of migrating birds, especially geese, gather on the lake during spring and autumn migrations. white-fronted goose *Anser albifrons* population may attain about 8 000 individuals and bean goose *Anser fabalis* up to 5 000 individuals on migration stopover at the site and its surroundings.

#### 21. Noteworthy flora:

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

The vegetation of the reserve embraces types which are subject to habitat protection in the continental region of Europe, especially the aquatic habitats with associations *Hydrocharo-Stratiotetum* and *Myriophyllo-Nupharetum*. To the endangered at European scale belong also some forest communities of linden-oak forests - (9160) sub-Atlantic and medio-European oak-hornbeam forests of the *Carpinion betuli* and alluvial forests of Alliances *Alnion incanae* and *Salicion albae*. All of them are listed in Annex I to Habitat Directive as endangered and vulnerable.

The rare plant species growing in the reserve include: Nymphoides peltata, Nuphar lutea, Drosera rotundifolia and Najas marina.

#### 22. Noteworthy fauna:

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

The site enters the larger territory of the Bird Area of European Importance. At least 41 species of Annex I Birds Directive were found in the place. It is a nesting place for rare in Poland species such as little gull *Larus minutus*. It provides irregular nesting place for such rare birds as avocet *Recurvirostra avosetta* and black-winged stilt *Himantopus himantopus*.

The most interesting nesting species include birds listed in Annex I to Birds Directive: bittern *Botaurus stellaris*, peregrine falcon *Falco peregrinus*, little bittern *Ixobrychus minutus*, crane *Grus grus*, corncrake *Crex crex*, little crake *Porzana parva*, spotted crake *Porzana porzana*, little gull *Larus minutus*, common tern *Sterna hirundo* and golden plover *Pluvialis apricaria* in addition to greylag goose *Anser anser*, wigeon *Anas penelope* and shoveler *Anas clypeata* of Birds Directive Annex III.

During migration season at least 1% of bean goose *Anser fabalis* migration population rests in the site while crane Grus grus populations attain up to 200 - 300 individuals (ca 1%).

## 23. Social and cultural values:

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

In the vicinity of Świdwie Lake the archaeological sites from Stone Age were discovered – the remains of reindeer hunters dwelling site.

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

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

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:

iv) sites where relevant non-material values such as sacred sites are present and their existence is strong linked with the maintenance of the ecological character of the wetland:	gly
24. Land tenure/ownership:	
a) within the Ramsar site:	
- State Treasury ownership: ca 95%,	
- private property: ca 5%.	
b) in the surrounding area:	
State Treasury and private property.	

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

a) within the Ramsar site:

The site area is used for tourist purposes and, in restricted scope, for agricultural purposes (cattle grazing, meadow mowing)

b) in the surroundings/catchment:

The surrounding area is mostly used for agricultural purposes and forestry.

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

a) within the Ramsar site:

In past and present the threat to ecological characteristic of the reserve pose:

- insufficient control of hunting,
- fish and mammal poaching,
- expansion of tourist infrastructure in the vicinity of the lake.

The potential threat to reserve can be increasing border motor traffic and implementation of realisation of planned new border crossing in Dobieszyn.

b) in the surrounding area:

The threats in the vicinity:

- intensive selling of agricultural land for residential buildings,
- the dynamic development of recreation,
- clearing of old-growth forests and hollow trees, removing of timber from the forest,
- planting of monoculture trees in Primeval Forest; it can lead to decreasing of forest birds population,
- water pollution,
- land drainage.

#### 27. Conservation measures taken:

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

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

The site is protected as:

- Nature Reserve Świdwie, since 1978, in 1988 it was extended to the current area,
- Natura 2000 Site Świdwie PLB320006; 6157.1 ha,
- Ramsar Site Jezioro Świdwie since 1984; 891.21 ha.
- **b)** If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

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

The protection plan is in preparation.

d) Describe any other current management practices:

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

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

The extension of reserve and establishment of trans-boundary complex of protected areas Świdwie-Gottesheide is being planned. Also, the preparation of proposal for transformation of reserve into Krajobrazowy Park (Landscape Park) "Świdwie", in the framework of Natura 2000, is being planned by the Reserve Management.

#### 29. Current scientific research and facilities:

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

In the settlement of Bolków, in the grounds of reserve, the Ornithological Station and Educational -Museum Centre "Świdwie" are located. In the surrounding area towers for birds observation were built and the educational path was marked. On the site territory archaeological and ornithological research are conducted by the Ornithological Station "Świdwie" of Ecology Centre of the Polish Academy of Sciences in Szczecin. The site is research area for researchers and students from the Agricultural Academy in Szczecin, e.g.:

- Wojciech Wł. Kowalski, Wanda Bacieczko: Charakterystyka geobotaniczna rezerwatu faunistycznego "Jezioro Świdwie" [Geobotanical characteristic of the "Jezioro Świdwie" faunistic nature reserve], s. 97-124,
- Wanda Bacieczko, Wojciech Wł. Kowalski: Roślinność wodna i szuwarowa rezerwatu faunistycznego Jeziora Świdwie koło Szczecina [Water and rush vegetation in the faunistic nature reserve "Jezioro Świdwie" near Szczecin], s. 125-142.

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

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

Educational activities are carried by the Station staff: after previous agreement they guide excursions through the reserve. On the site territory Educational-Museum Centre "Świdwie" is located. Świdwie Lake is inaccessible, the area surrounding lake is wetland, the area of reserve can be viewed from viewing towers and educational path.

## 31. Current recreation and tourism:

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

Annually, the reserve is visited by more than 20 thousands visitors, mainly Polish citizens, but the site is also popular among German and Scandinavian tourists. The easy bicycle route leads from Szczecin to the reserve.

#### 32. Jurisdiction:

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

Zachodniopomorskie Voivodeship, Voivode of Zachodniopomorskie Voivodeship.

## 33. Management authority:

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

Voivode of Zachodniopomorskie Voivodeship

Office of the Zachodniopomorskie Voivodeship

ul. Wały Chrobrego 4, 70-502 Szczecin, Poland.

## 34. Bibliographical references:

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

- Czerwona lista zwierząt ginących i zagrożonych w Polsce. 1992. Red. Z. Głowaciński Z. PAN, Kraków.
- Dobrowolski K., Lewandowski K. 1998. Ochrona środowisk wodnych i błotnych w Polsce. Instytut Ekologii PAN.
- Gromadzki M. et al 1994. Ostoje ptaków w Polsce. Ogólnopolskie Towarzystwo Ochrony Ptaków, Biblioteka Monitoringu Środowiska, Gdańsk.
- Polska Czerwona Księga Roślin. 2001 (Polish Red Data Book of Plants in Polish). Instytut Ochrony Przyrody im W. Szafera. Kraków 2001.
- Siodło P.O., Błaszkowska B., Chylarecki P. (red.) 2004. Ostoje ptaków o randze europejskiej w Polsce. Ogólnopolskie Towarzystwo Ochrony Ptaków, Warszawa.
- Walczak M., Radziejowski J., Smogorzewska M., Sienkiewicz J., Gacka-Grzesikiewicz E., Pisarski Z. 2001. Obszary chronione w Polsce. IOŚ, III wyd., Warszawa.
- Waterbird Population Estimates, Fourth Edition, Wetland International 2006.
- Zyska P. 2002. Plan Ochrony Rezerwatu Świdwie operat ochrony fauny. Opracowanie na zlecenie BKP w Szczecinie.
- http://www.ramsar.org/
- http://natura2000.mos.gov.pl/natura2000/pl/

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