

# Ramsar Information Sheet

Published on 24 January 2019 Update version, previously published on : 1 January 2007

# **Poland**Milicz Fishponds Nature Reserve



Designation date
Site number
Coordinates
Area

24 October 1995
758
51°31'34"N 17°14'05"E
5 298,15 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

Milicz Fishponds Nature Reserve (Rezerwat przyrody "Stawy Milickie") is located in Dolnośląskie Voivodeship. The Site covers the total area of the "Stawy Milickie" Nature Reserve (Milicz Ponds). It is one of the biggest nature reserves in Poland. It covers five separate enclaves with fish ponds' complexes, that have been in place in this region since several centuries, and a part composed of surrounding marshlands, meadows and forests. Most ponds are surrounded by a wide belt of rushes. The Site is one of the largest wetland waterbird sites in Europe with their nesting, feeding and resting places. The ornithofauna of the reserve includes 137 breeding species, including many rare ones, over 50 further species appear here during their migratory flights. Numerous common species are found here in significant numbers. Large flocks of ducks and geese as well as other waterbirds gather here during their spring and autumn migrations. There are also numerous species of rare plants found in the reserve, mainly aquatic species.

# 2 - Data & location

# 2.1 - Formal data

2.1.1	-	Name	and	address	of	the	compiler	of	this	RIS
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inoutation/agonoy	Tradownia Trzyodnioza
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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)	Milicz Fishponds Nature Reserve
Spanish)	
Unofficial name (optional)	Rezerwat przyrody "Stawy Milickie"

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 <b>®</b> No O
<sup>(Update)</sup> The boundary has been delineated more accurately ✓
(Update) The boundary has been extended
(Update) The boundary has been restricted
(Update) B. Changes to Site area the area has decreased
(Update) The Site area has been calculated more accurately □
(Update) The Site has been delineated more accurately ✓
(Update) The Site area has increased because of a boundary extension
(Update) The Site area has decreased because of a boundary restriction

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?

# 2.2 - Site location

#### 2.2.1 - Defining the Site boundaries

b) Digital map/image

<3 file(s) uploaded>

Former maps   U	Former maps

Boundaries description

The Ramsar site covers the area of the nature reserve "Stawy Milickie".

2.2.2 - General location

a) In which large administrative region does	Dolnośląskie
the site lie?	
b) What is the nearest town or population centre?	Milicz

# 2.2.3 - For wetlands on national boundaries only

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

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?

# 2.2.4 - Area of the Site

Official area, in hectares (ha): 5298.15

Area, in hectares (ha) as calculated from GIS boundaries 5303.6

# 2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region								
Udvardy's Biogeographical Provinces	11. Mddle European Forest								
Bailey's Ecoregions	20 Hot Continental Division								
WWF Terrestrial Ecoregions	Temperate broadleaf and mixed forest								
EU biogeographic regionalization	Continetal								

# 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

The Milicz Ponds are artificial, man-made but already considerably naturalised water reservoirs. The Barycz River, which supplies water to the ponds, flows across the central part of the lowland, creating numerous oxbows and surrounded by wetland meadows. The Milicz Ponds are a source of drinking water for humans and/or livestock, water for irrigated agriculture and water for energy production. Milicz Ponds are also important for maintaining the hydrological regimes of the region and water purification.

#### Research

Ornithological research is carried out on the reserve's area by scientists from the Ornithological Station of the University of Wrocław – inter alia, constant monitoring of the distribution of selected bird species in the breeding period, and research on the population of waterbirds in all phenological phases.

Other ecosystem services provided

Others benefits

The site provides also food products (fish) and other products, like timber reeds. Moreover, cultural significance of the site is also important, the site belongs to the oldest fish pond complexes in central

The approximate number of people who directly benefit from the ecological services provided by this site is 10 000.

The site represents an area of wetland which is typical of this region of Poland and Central Europe and Other reasons provides a very good example of wetlands used as fish ponds for many centuries.

- ☑ Criterion 2 : Rare species and threatened ecological communities
- ☑ Criterion 3 : Biological diversity

The Milickie Ponds site constitutes a very important feeding and resting place for marshland waterbirds during their spring and autumn migrations: this in particular relates to geese and ducks (Anatidae), Large flocks of waterfowl gather within the site during migrations. The numbers of waterbirds within the site regularly exceed the threshold established by Criterion 5. During migration seasons flocks of Bean Goose Anser fabalis gather at the site with the population app.30000 birds, what accounts for app. 7 % of the estimated Central, Southern and Western European population of that species.

- Criterion 4 : Support during critical life cycle stage or in adverse conditions
- ☑ Criterion 5 : >20.000 waterbirds

Overall waterbird numbers 54000

Start year 2006

Source of data: Data from Regional Directorate of Environmental Protection in Wroclaw

- ☑ Criterion 6 : >1% waterbird population
- 3.2 Plant species whose presence relates to the international importance of the site

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
Coleanthus subtilis	Moss Grass	<b>2</b>			LC • ST • STR		Annex II Habitats Directive (Council Directive 92/43/EEC)	
Elatine hexandra	Six-Stamened Waterwort	<b>/</b>					Polish Red Data Book of Plants (VU)	
Elatine triandra	Threestamen Waterwort	<b>2</b>			LC Str		Polish Red Data Book of Plants (VU)	
Lindernia procumbens	Prostrate False Pimpernel	<b>2</b>			LC •\$* •\$*		Annex IV Habitats Directive, Polish Red Data Book of Plants (CR)	
Nymphoides peltata	Yellow Floating Heart	V			LC © TSF		Polish Red Data Book of Plants (VU)	

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

3.3 - Anima	al species wh	nose present	ce relates	to the ir	nterna	itional impor	tance of	the	site			
Phylum	Scientific name	Common name	Species qualifies under criterion	Species contributes under criterion	Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Birds												
CHORDATA/ AVES	Alcedo atthis	Common Kingfisher	<b>2</b> 000	0000	33	2013		LC ©			Annex I Birds Directive	pop. size: 33 pairs
CHORDATA/ AVES	Anser albifrons	Greater White- fronted Goose		0000	10000	2006	1	LC ●数 ●際				important resting place during migration, pop size: 10000 individuals during migrations (N-E European population)
CHORDATA/ AVES	Anser fabalis	Bean Goose			28000	2006	7	LC ©SP				important resting place during migrations, pop. size: 28000 ind during autumn migration (N-E European population)
CHORDATA/ AVES	Ardea alba	Great Egret	<b>2</b> 000	0000	2000	2013		LC St Other			Annex I Birds Directive, Polish Red Data Book of Animals (LC)	up to 2000 ind migrants
CHORDATA/ AVES	Aythya nyroca	Ferruginous Duck	2200	<b>2</b> 000	32	2013		NT ●舒 ●翻	V		Annex I Birds Directive (Directive 2009/147/EC) Polish Red Data Book of Animals (EN)	One of the most important breeding places in Poland pop. size: 32 pairs
CHORDATA/ AVES	Botaurus stellaris	Eurasian Bittern	<b>2</b> 000	<b>2</b> 000	22	2013		LC			Annex I Birds Directive (Directive 2009/147/EC) Polish Red Data Book of Animals (LC)	pop. size: 22 males
CHORDATA/ AVES	Chlidonias hybrida	Whiskered Tern	<b>2</b> 000		74	2013		LC ●歌			Annex I Birds Directive, Polish Red Data Book of Animals (LC)	pop. size: 7 pairs
CHORDATA/ AVES	Chlidonias niger	Black Tern	<b>2</b> 000	0000	37	2013		LC St Other			Annex I Birds Directive	pop. size: 37 pairs
CHORDATA/ AVES	Ciconia ciconia	White Stork	<b>2</b> 000	0000	3	2013		LC			Annex I Birds Directive	pop. size: 3 pairs
CHORDATA/ AVES	Ciconia nigra	Black Stork						LC Sir			Annex I Birds Directive	feeding site
CHORDATA/ AVES	Circus aeruginosus	Western Marsh Harrier	<b>2</b> 000		21	2013		LC Sign			Annex I Birds Directive	pop. size: 21 pairs
CHORDATA/ AVES	Crex crex	Corncrake	<b>2</b> 000	0000	2	2013		LC ©SF			Annex I Birds Directive	pop. size: 2 males
CHORDATA/ AVES	Cygnus cygnus	Whooper Swan	<b>2</b> 000	0000	4	2013		LC Sign			Annex I Birds Directive	pop. size: 4 pairs
CHORDATA/ AVES	Dendrocopos medius	Middle Spotted Woodpecker									Annex I Birds Directive	pop. size: 10-20 pairs

Phylum	Scientific name	Common name	Species qualifies under criterion	Species contributes under criterion 3 5 7 8	Pop. Size	Period of pop. Est.	% occurrence 1)		CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Grus grus	Common Crane			43	2013		LC ©SS			Annex I Birds Directive	pop. size: 43 pairs
CHORDATA/ AVES	Haliaeetus albicilla	White-tailed Eagle				2013		LC Sign	<b></b>	$\checkmark$	Annex I Birds Directive, Polish red Data Book of Animals (LC)	pop. size: 1 pair, feeding site for 4-5 pairs
CHORDATA/ AVES	Ichthyaetus melanocephalus	Mediterranean Gull				2013					Annex I Birds Directive	pop. size: 0-4 pairs
CHORDATA/ AVES	Ixobrychus minutus	Little Bittern			35	2013		LC ●部			Annex I Birds Directive (Directive 2009/147/EC), Polish Red Data Book of Animals (VU)	pop. size: 35 males
CHORDATA/ AVES	Milvus migrans	Black Kite				2013		LC Sign			Annex I Birds Directive	feeding site for 3-4 pairs
CHORDATA/ AVES	Milvus milvus	Red Kite				2013		NT			Annex I Birds Directive	feeding site for 3-4 pairs
CHORDATA/ AVES	Panurus biarmicus	Bearded Reedling			20	2013		LC Single			Annex I Birds Directive	pop. size: 20 pairs
CHORDATA/ AVES	Pernis apivorus	European Honey Buzzard						LC om			Annex I Birds Directive	feeding site
CHORDATA/ AVES	Picus canus	Grey-headed Woodpecker	<b>2</b> 000			2013		LC OSF			Annex I Birds Directive	pop. size: 6-10 pairs
CHORDATA/ AVES	Porzana parva	Little Crake			22	2013					Annex I Birds Directive, Polish Red Data Book of Animals (EN)	pop. size: 22 males
CHORDATA/ AVES	Porzana porzana	Spotted Crake				2013		LC OBF			Annex I Birds Directive	pop. size: 0-2 pairs
CHORDATA/ AVES	Sterna hirundo	Common Tern				2013		LC			Annex I Birds Directive	pop. size: 10 pairs, 495 in the surroundings
Fish, Mollusc a	and Crustacea											
CHORDATA/ ACTINOPTERYGI		Spine Loach						LC Sign			Annex II Habitats Directive	
CHORDATA/ ACTINOPTERYGI	Misgurnus fossilis	Mud Loach	<b>2</b> 000					LC OSS			Annex II, IV Habitats Directive, Polish red Data Book of Animals (NT)	
CHORDATA/ ACTINOPTERYGI	Rhodeus sericeus	Amur Bitterling; Amur Bitterling									Annex II, IV Habitats Directive, Polish red Data Book of Animals (NT)	
CHORDATA/ ACTINOPTERYGI	Sabanejewia aurata	Golden Spined Loach; Aral Spined Loach						LC			Annex II, IV Habitats Directive, Polish red Data Book of Animals (EN)	
Others												
CHORDATA/ AMPHIBIA	Bombina bombina	Fire-bellied Toad						LC Sign			Annex IV Habitats Directive	
CHORDATA/ MAMMALIA	Castor fiber	Eurasian Beaver						LC			Annex II, IV Habitats Directive, Polish Red Data Book of Animals (NT)	
ARTHROPODA/ INSECTA	Cerambyx cerdo	Great Capricorn Beetle						VU ●\$‡ ●SW			Annex II, IV Habitats Directive, Polish red Data Book of Animals (VU)	up to 200 refuge
CHORDATA/ MAMMALIA	Eptesicus serotinus	serotine; Common Serotine						LC			Annex IV Habitats Directive	

Phylum	Scientific name	Common name	Species qualifies under criterion  2 4 6	C	Species ontribut under criterio	Pop Size	% occurrence		CITES Appendix I	CMS Appendix I	Other Status	Justification
ARTHROPODA/ INSECTA	Lucanus cervus	Stag Beetle	<b>2</b> 00								Annex II, IV Habitats Directive, Polish red Data Book of Animals (VU)	
CHORDATA/ MAMMALIA	Lutra lutra	European Otter						NT ©®	V		Annex II, IV Habitats Directive	
ARTHROPODA/ INSECTA	Lycaena dispar	Large Copper									Annex II, IV Habitats Directive, Polish red Data Book of Animals (LR)	about ten refuge
CHORDATA/ MAMMALIA	Myotis bechsteinii	Bechstein's Myotis						NT OTH			Annex II, IV Habitats Directive	
CHORDATA/ MAMMALIA	Myotis dasycneme	Pond Bat; Pond Myotis	<b>2</b> 00					NT ●# ●##			Annex II, IV Habitats Directive, Polish Red Data Book of Animals (EN)	
CHORDATA/ MAMMALIA	Myotis daubentonii	Daubenton's Myotis						LC ●部			Annex IV Habitats Directive	
CHORDATA/ MAMMALIA	Myotis myotis	Mouse-eared Bat; Mouse-eared Myotis						LC ●部			Annex II, IV Habitats Directive	
CHORDATA/ MAMMALIA	Myotis mystacinus	Whiskered Myotis; Whiskered Bat						LC ●部			Annex IV Habitats Directive	
CHORDATA/ MAMMALIA	Myotis nattereri	Natterer's Bat; Natterer's Myotis						LC			Annex IV Habitats Directive	
CHORDATA/ MAMMALIA	Nyctalus noctula noctula										Annex IV Habitats Directive	
ARTHROPODA/ INSECTA	Ophiogomphus cecilia	Green Snaketail						LC Sign			Annex II, IV Habitats Directive	
ARTHROPODA/ INSECTA	Osmoderma eremita	Hermit Beetle						NT			Annex II, IV Habitats Directive, Polish red Data Book of Animals (VU)	more than ten refuge
CHORDATA/ MAMMALIA	Pipistrellus nathusii	Nathusius's Pipistrelle	<b>2</b> 00					LC Sign			Annex IV Habitats Directive	
CHORDATA/ MAMMALIA	Pipistrellus pipistrellus	Common Pipistrelle	Ø00					LC Sign			Annex IV Habitats Directive	
CHORDATA/ MAMMALIA	Pipistrellus pygmaeus	Soprano Pipistrelle	<b>2</b> 00					LC Sign			Annex IV Habitats Directive	
CHORDATA/ MAMMALIA	Plecotus austriacus	Grey Long-eared Bat	<b>2</b> 00					LC ●辭			Annex IV Habitats Directive	
CHORDATA/ AMPHIBIA	Triturus cristatus	Great Crested Newt						LC ©BF			Annex II, IV Habitats Directive, Polish red Data Book of Animals (NT)	

<sup>1)</sup> Percentage of the total biogeographic population at the site

The Milicz Fishponds site constitutes a very important feeding and resting place for marshland waterbirds during their spring and autumn migrations; this in particular relates to geese and ducks (Anatidae). Large flocks of waterfowl gather within the site during migrations. The numbers of waterbirds within the site regularly exceed the threshold established by Criterion 5. During migration seasons flocks of Bean Goose Anser fabalis gather at the site with the population app. 30000 birds, what accounts for app. 7 % of the estimated Central, Southern and Western European population of that species.

# 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
9110 Luzulo-Fagenion forests	<b>Ø</b>	2,69 ha	Annex I of the Habitats Directive (Council Directive 92/43/EEC)
91E0* Riparian forests Salicetum albae, Populetum albae, Alnenion glutinoso-incanae	<b>2</b>	195,90 ha	AnnexI of the Habitats Directive (Council Directive 92/43/EEC)
9170 Galio-Carpinetum, Tilio-Carpinetum orests	<b>2</b>	37,66 ha	AnnexI of the Habitats Directive (Council Directive 92/43/EEC)
3130 Edges or drained reservoirs` bottoms with the communities of Litorelletea, Isoeto- Nanojuncetea	<b>2</b>		Annex1 of the Habitats Directive (Council Directive 92/43/EEC)
6510 Lowland hay meadows (Arrhenatheretum medioeuropaeum)	<b>2</b>	182,98 ha	Annex I of the Habitats Directive (Council Directive 92/43/EEC)

Optional text box to provide further information					

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

# 4.1 - Ecological character

The site covers a large complex of fish ponds, located on a flat wetland with numerous natural marginal waters. They form postglacial drainage-like basins created as a result of the disappearing glacier, surrounded by moraine highlands and hills. Artificial ponds, that have been built as early as since the end of the 13th century, took advantage of natural depressions or developed with the use of artificial dikes. The numerous moraine sand dunes and hills that are surrounding the valley are mostly covered with forests and meadows. Sandy soils, podsols and sandy muds are the dominating soil types. The climate of the Barycz River Valley is moderately warm and humid. The average annual temperature is 7.7°C, with annual precipitation amounting to around 600 mm.

The Milicz Ponds lie in the catchment area/basin of the Barycz River and are supplied with its waters. The lack of industry and low population density contributed to the rather good quality of waters in the Barycz River and the Milicz Ponds. The Barycz River is a typical lowland watercourse with a small gradient (bed vertical declines), and an average annual water flow of 27.5 m3/s. The extreme flooding water levels occur in early spring and are connected with snow melting. The river is mostly regulated and controlled by 15 impounding dams, directing waters to fish ponds and irrigating nearby meadows.

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

#### Inland wetlands

riiariu weliarius				
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 > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		1		Representative
Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools		2		Representative
Fresh water > Lakes and pools >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		3		Representative
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		3		Representative
Fresh water > Marshes on inorganic soils >> W: Shrub- dominated wetlands		2		Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		2		Representative

#### Human-made wetlands

	Tidirian Illado Hodaliao				
Wetland types (code and name)  Local name		Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1	
	1: Aquaculture ponds		1		Representative

#### Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Settlements (Ruda Milicka, Ruda Sułowska, Potasznica, Radziądz, Grabownica)	
Dryforests (Galio-Carpinetum, Tilio-Carpinetum forests Luzulo-Fagenion forests )	
Meadows and pastures (Lowland hay meadows Arrhenatherion elatioris)	

# 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
Dactylorhiza incarnata  Early Marsh Orchid			Partially protected species under Polish Law
Dactylorhiza majalis Western Marsh Orchid			Partially protected species under Polish Law
Daphne mezereum	Mezereon		Protected species under Polish Law
Epipactis helleborine	Broad-leaved Helleborine		Partially protected species under Polish Law
Iris sibirica	Siberian Iris		Partially protected species under Polish Law
Lycopodium clavatum	Wolfs-foot Clubmoss		Protected species under Polish Law
Ophioglossum vulgatum	Southern Adderstongue		Protected species under Polish Law
Osmunda regalis	Royal Fern		Protected species under Polish Law
Salvinia natans	Floating Fern		Protected species under Polish Law

Invasive alien plant species

irivasive alieri piarit species				
Scientific name	Common name	<b>IUCN Red List</b>	Impacts	Changes at RIS update
Impatiens parviflora	Small-flowered Touch-me-not		Potentially	unknown
Prunus serotina	Black Cherry		Potentially	unknown

#### Optional text box to provide further information

Potential threat: solidago species (Solidago sp.), knotweet species (Reynoutria sp.)

#### 4.3.2 - Animal species

Invasive alien animal species

Phylum	Scientific name	Common name	<b>IUCN Red List</b>	Impacts	Changes at RIS update
CHORDATA/MAM/WALIA	Neovison vison	American Mink		Actually (major impacts)	unknown

# 4.4 - Physical components

# 4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude	Dfb: Humid continental (Humid with severe winter, no dry season, warm
diffiate with cold wifiters	summer)

# 4.4.2 - Geomorphic setting

a) Mnimum 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 $\square$
More than one river basin $\Box$
Not in river basin $\square$
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.

basin of the Barycz River			

4.4.3 - Soil

		Mineral ☑	
	(Update) Changes	at RIS update No change O	Increase O Decrease O Unknown
		Organic 🗹	
	(Update) Changes	at RIS update No change O	Increase O Decrease O Unknown ●
		ole information	
Are soil types subject to condition	change as a result of changin ons (e.g., increased salinity or	ng hydrological acidification)?	
Please provide further inform	mation on the soil (optional)		
Sandy soils, podsols	and sandy muds are the	dominating soil types.	
4.4.4 - Water regime			
Water permanence			
Presence?	Changes at RIS update		
Usually permanent water present	unknown		
Source of water that maintain	s character of the site		
Presence?	Predominant water source	Changes at RIS update	
Water inputs from rainfall	✓	unknown	
Water inputs from surface water	✓	unknown	
Water inputs from groundwater		unknown	
Water destination			
Presence?	Changes at RIS update		
To downstream catchment	unknown		
Stability of water regime			
Presence? Water levels largely stable	Changes at RIS update unknown		
4.4.5 - Sediment regim	۵		
_		a	
Significant accretion of	r deposition of sediments occ		Increase O Decrease O Unknown ⊚
Codimont regime is highly	_		increase O Decrease O Oriknown 9
Sediment regime is nigni	y variable, either seasonally or		0.000
			Increase O Decrease O Unknown <b>⊚</b>
	Sediment reg	gime unknown 🗆	
4.4.6 - Water pH			
	Circumneutra	I (pH: 5.5-7.4 ) ☑	
			Increase ○ Decrease ○ Unknown ⑨
		aline (pH>7.4)	indease o bedease o dividum o
			Increase O Decrease O Unknown <b>⊚</b>
	V. Changes	Unknown	indease O Decrease O Officioni O
		OHNIOWIT	
4.4.7 - Water salinity			
•	F	Fresh (<0.5 g/l) 🗹	
			Increase O Decrease O Unknown <b>⊚</b>
	Changoo	Unknown	
4.4.8 - Dissolved or sus	spended nutrients in wat	er	
		Eutrophic 🗹	
			Increase O Decrease O Unknown ●
	3-5	Mesotrophic ☑	
	(Update) Changes		Increase O Decrease O Unknown <b>⊚</b>

#### 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 O site itself

# 4.5 - Ecosystem services

#### 4.5.1 - Ecosystem services/benefits

#### Provisioning Services

-Tovisioning Services					
Ecosystem service	Examples	Importance/Extent/Significance			
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	High			
Fresh water	Drinking water for humans and/or livestock	Low			
Fresh water	Water for irrigated Low agriculture				
Fresh water	Water for energy production (hydro-electricity)	Low			
Wetland non-food products	Timber	Low			
Wetland non-food products	Fuel wood/fibre	Low			
Wetland non-food products	Reeds and fibre	Medium			

#### Regulating Services

Regulating Services		
Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Low
Erosion protection	Soil, sediment and nutrient retention	Low
Pollution control and detoxification	Water purification/waste treatment or dilution	Low

#### **Cultural Services**

Ecosystem service	Examples	Importance/Extent/Significance	
Recreation and tourism	Picnics, outings, touring	Medium	
Recreation and tourism	Recreational hunting and fishing	High	
Recreation and tourism	Nature observation and nature-based tourism	High	
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium	
Scientific and educational	Major scientific study site	High	
Scientific and educational	Educational activities and opportunities	Medium	
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High	
Scientific and educational	Long-term monitoring site	High	

#### Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganizms, the genes they contain, and the ecosystems of which they form a part	High

Within the site: 10000

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site?

#### 4.5.2 - Social and cultural values

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

## Description if applicable

The biodiversity of this natural feature is largely influenced by the fishing economy that has been carried out for years on the ponds. Extensive fishery management is indispensable for the proper functioning of the reserve, and its abandonment or intensification may lead to deterioration of birds habitat conditions. Nowadays the Site is an example of extensively used fish ponds aimed at maintaining the richness of flora and fauna.

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

#### Description if applicable

The Milicz Ponds are of a major historical, social and cultural value as wetlands managed since the 12th century and used for developing fish ponds. They have served that purpose until now and are continuously used for extensive fish breeding.

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

#### Description if applicable

The specificity of the reserve is that it exists on the land on which the fishing economy is run. The fisheries economy implemented by the joint stock company Milka Ponds, to which about 70% of the area belongs. At the meeting point of breeding and nature protection due to divergent interests of owners and land managers, conflicts arise which must be skillfully mitigated and liquidated on the basis of substantive and practical knowledge. This area has a rich tourist offer, whose continuous development (activities of the local population, Partnership for the Barycz Valley) contributes to the orientation of tourism in a way that allows maintaining ecological values of the area.

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

ı ub	lic owners	u III

Category	Within the Ramsar Site	In the surrounding area	
National/Federal government	✓	✓	
Provincial/region/state government		✓	
Local authority, municipality, (sub)district, etc.		V	
Other public ownership		✓	

#### Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<b>/</b>	<b>2</b>
Cooperative/collective (e.g., farmers cooperative)		<b>2</b>

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

State public company (Stawy Milickie S.A) and the private owner are the owners of the land within the site.

# 5.1.2 - Management authority

agency or organization responsible for	Regional Directorate of Environmental Protection in Wrocław
managing the site:  Provide the name and title of the person or	
people with responsibility for the wetland:	Wojciech Rejman, Regional Director of Environmental Protection in Wrocław
Postal address:	Al. Jana Matejki 6, 50-333 Wrocław, Poland
E-mail address:	sekretariat.wroclaw@rdos.gov.pl

# 5.2 - Ecological character threats and responses (Management)

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

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Water abstraction	unknown impact		✓	unknown	✓	unknown

### Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Non specified	unknown impact		✓	unknown		No change

#### Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Unspecified		unknown impact	✓	unknown	✓	unknown

# 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		✓	No change		No change
Unspecified/others	unknown impact		✓	unknown		No change

#### Invasive and other problematic species and genes

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		✓	unknown	<b>✓</b>	unknown
Problematic native species	unknown impact		✓	unknown	✓	unknown

#### Please describe any other threats (optional):

Agriculture and aquaculture: non specified - plant succession

Biological resource use: unspecified - poaching

Human intrusions and disturbance: unspecifies/others - illegal penetration of the site

#### 5.2.2 - Legal conservation status

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	Dolina Baryczy (Barycz Valley) PLB 20001	http://crfop.gdos.gov.pl/CRFOP/w idok/viewnatura2000.jsf?fop=PL.Z IPOP.1393.N2K.PLB020001.B	whole
EU Natura 2000	Ostoja nad Baryczą (Barycz Refuge) PLH 020041	http://crfop.gdos.gov.pl/CRFOP/w idok/viewnatura2000.jsf?fop=PL.Z IPOP.1393.N2K.PLH020041.H	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Landscape Park	Park Krajobrazowy Dolina Baryczy (Barycz Valley Landscape Park)		whole
Nature Reserve	Rezerwat Przyrody Stawy Mlickie (Mlicz Fishponds Nature Reserve)	www.stawymilickie.pl	whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Dolina Baryczy (Barycz Valley) PL092	www.ostojeptakow.pl	whole

#### 5.2.3 - IUCN protected areas categories (2008)

	la Strict Nature Reserve	
Ib Wilderness Area: protected area manag	ed mainly for wilderness	$\Box$

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

M Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

#### 5.2.4 - Key conservation measures

Legal protection

Logar protoctorr		
Measures	Status	
Legal protection	Implemented	

#### Habitat

Measures	Status
Habitat manipulation/enhancement	Implemented
Catchment management initiatives/controls	Implemented
Improvement of water quality	Implemented
Hydrology management/restoration	Implemented
Re-vegetation	Implemented
Land conversion controls	Implemented

Human Activities

	01.1
Measures	Status
Harvest controls/poaching enforcement	Partially implemented
Regulation/management of wastes	Implemented
Livestock management/exclusion (excluding fisheries)	Implemented
Fisheries management/regulation	Implemented
Regulation/management of recreational activities	Implemented
Communication, education, and participation and awareness activities	Implemented
Research	Implemented

#### 5.2.5 - Management planning

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

Has a management effectiveness assessment been undertaken for the site? Yes O No  $\odot$ 

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning Yes O No 

processes with another Contracting Party?

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

Nature trails have been established within the boundaries of the site; there are also two sightseeing spots with observation towers. The ornithological Station of the University of Wrocław located in Ruda Milicka at the reserve's boundary plays a significant educational and informative role.

URL of site-related webpage (if relevant): www.stawymilickie.pl

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

Ornithological research is carried out on the reserve's area by scientists from the Ornithological Station of the University of Wrocław – inter alia, constant monitoring of the distribution of selected bird species in the breeding period, and research on the population of waterbirds in all phenological phases.

# 6 - Additional material

#### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Atlas Klimatu Polski (Climate in Poland – Atlas). IMGW. Warszawa 2005

Baza danych gatunków inwazyjnych w Polsce (Database of invasive species in Poland) http://www.iop.krakow.pl/ias

Birds Directive (Directive 2009/147/EC)

BirdLife International 2004 Birds in Europe Population estimates, trends and conservation status

Dobrowolski K., Lewandowski K. 1998. Ochrona środowisk wodnych i błotnych i błotnych w Polsce (Wetland protection In Poland).

Dokumentacja przyrodnicza rezerwatu "Stawy Milickie" – praca zbiorowa pod kier. J. Witkowskiego

(maszynopis) (Nature documentation of the "Milickie Ponds").

Głowaciński Z. (red.). 2001. Polska czerwona księga zwierząt. Kręgowce. PWRiL, Warszawa, 2001. (Polish Red Data Book of Animals). Habitats Directive (Council Directive 92/43/EEC)

Important Bird Areas, Dolina Baryczy (Barycz Valley) PL092 www.ostojeptakow.pl

Information Sheet on Ramsar Wetlands Milicz Fishponds Nature Reserve (Rezerwat przyrody "Stawy Milickie"), Institute of Environmental Protection, Warsaw 2007

Mazurski K. M. "Kraina Stawów Milickich" Zakład Wydawniczo – Propagandowy PTTK Warszawa.

(The Milickie Ponds Region).

Ostoje ptaków o znaczeniu europejskim w Polsce, red. P.O. Sidło, B. Błaszkowska i P. Chylarecki. OTOP, Warszawa 2004. (Bird sites of European importance in Poland).

Natura 2000 Site Dolina Baryczy (Barycz Valley) PLB 20001http://natura2000.mos.gov.pl/natura2000/pl/

Polska Czerwona Księga Roślin. 2001. Instytut Ochrony Przyrody im W. Szafera. Kraków 2001. (Polish

Red Data Book of Plants - in Polish).

Obszary chronione w Polsce. Instytut Ochrony Środowiska, Warszawa 2001. (Protected areas In Poland).

Ramsar convention on wetlands http://www.ramsar.org/

Rąkowski G., Wójcik J., Walczak M., Smogorzewska M., Janczewska A., Pisarski Z.: Parki

krajobrazowe w Polsce (Landscape parks in Poland). Instytut Ochrony Środowiska, Warszawa 2002.

Świerkosz. K Identyfikacja rozmieszczenia i stanu zachowania siedlisk przyrodniczych z załącznika I Dyrektywy 92/43/EEC na terenie rezerwatu "Stawy Milickie" (Identification of the distribution and conservation status of the natural Habitats of Annex I of the Directive 92/43/EEC in the reserve "Stawy Milickie"). Wrocław 2012.

Tomiałojć L., Śtawarczyk T. Wrocław 2003. Awifauna Polski, rozmieszczenie, liczebność i zmiany (Birds of Poland, distribution, numbers, changes).

Waterbird Population Estimates. Fourth Edition. Wetlands International 2006

#### 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

<no file available>

<no data available>

#### 6.1.3 - Photograph(s) of the Site

# Please provide at least one photograph of the site



Fishermen in Mlicz Fishponds ( Wojciech Lewandowski, 18-10-2012 )



Fishermen in Mlicz Fishponds ( Wojciech Lewandowski, 18-10-2012 )



Fishermen in Mlicz Fishponds ( Wójciech Lewandowski, 21-11-2017 )



Milicz Fishponds ( Paweł Kucharski, 15-10-2010 )



Milicz Fishponds ( Dariusz Ogłoza, 31-05-2011 )



Milicz Fishponds ( Dariusz Ogłoza 26-10-2011 )



Mlicz Fishponds ( Darius:



Milicz Fishponds ( Dariusz



Milicz Fishponds ( Dariusz Ogłoza, 25-09-2012 )



Mlicz Fishponds ( *Dariusz* Ogłoza, 20-09-2012 )



Mlicz Fishponds ( Paweł Kucharski, 10-10-2014 )



Mlicz Fishponds ( Paweł Kucharski, 28-10-2014 )



Milicz Fishponds ( Paweł Kucharski, 15-10-2014 )



Grabownica ( Paweł Kucharski, 10-10-2014 )



Stary Staw ( Paweł Kucharski, 10-10-2014 )

# 6.1.4 - Designation letter and related data

#### Designation letter

<1 file(s) uploaded>

Date of Designation 1995-10-24