Ramsar Information Sheet

Published on 9 May 2018

Poland

Peat bogs in the Tatra National Park

Designation date	11 December 2017
Site number	2341
Coordinates	49°13'43"N 19°57'35"E
Area	741,00 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 Site consists of four separate areas representing diverse types of mountain wetlands of European importance and almost all typical Carpathian wetland types such as mountain raised bogs (Toporowy Staw Wyżni, Wielka Pańszczycka Młaka), transition mires and quaking bogs (Wyżnia Pańszczycka Młaka), small dystrophic lakes (Toporowe Stawki, Smreczyński Staw, Żabie Oko) and Bazzanio-Piceetum spruce forest (Toporowe Stawki). It comprises wetlands in the High Tatra Mountains, a bigger forest area in Pańszczyca and Sucha Woda Valleys as well as wetlands in the Western Tatra Mountains.

Transitional mires are located in the marginal zones of small mountain raised bogs (Wielka Pańszczycka Młaka) while at separate localities - acid fens are located amongst montane belt grasslands and in upper montane spruce forests (Wyżnia Pańszczycka Młaka). Some of peatlands had their origin as the result of vegetation succession in water bodies (e.g. Toporowy Staw Wyżni).
The majority of acid fens are characterized with a significant proportion of typical raised bog species (Carex pauciflora, Drosera rotundifolia, Oxycoccus palustris). In the herb layer on the clearings in montane belt, there are characteristic fen species, as well as species typical for wet pastures and Nardus grasslands.

The valuable wetlands occur mainly in the depressions on acid and poor habitats and they are supplied by rainfall. Flora is dominated by numerous Sphagnum species and Cares sp. (including rare species – Carex pauciflora and Carex limosa). There are also interesting animal species linked to such habitats, eg. numerous populations of amphibians (with rare Lissotriton montandoni) and dragonflies (eg. Aeshna subarctica, Somatochlora alpestris, Somatochlora arctica). Spruce forests in Pańszczyca Valley, Toporowe Stawy and Smerczyński Staw region are habitats for the greatest of Carpathian gallinaceans - the western capercaillie Tetrao urogallus.

The Site is located entirely within the borders of the Tatra National Park, which is a popular tourism destination for picnics, touring, nature observation as well as for monitoring and science.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Wojciech Mróz
Institution/agency	Wojciech Mróz
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Compiler 2

Name	Antoni Zięba, Paweł Kauzal
Institution/agency	Tatra National Park
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Phone	+48182023214

2.1.2 - Period of collection of data and information used to compile the RIS

From year	2007
To year	2018

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Peat bogs in the Tatra National Park
Unofficial name (optional)	Torfowiska Tatrzańskiego Parku Narodowego

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<4 file(s) uploaded>

Former maps	0

Boundaries description

The Site consists of four parts, located in the West Tatra Mountains dystrophic lake Smreczyński Staw with adjacent spruce forest (in the south) and complex of raised bogs, transition mires and spruce forest along Tomanowy Potok (in the north) as well as located in the the High Tatra Mountains a large fragment of forest complex (in the north) and a small area with Rybie Stawki - minor reservoirs, with Rybi Potok stream together with adjacent transition mires, dwarf-pine scrub and spruce forest (in the south).

Both small areas in the Western Tatras are located close to each other, between banks of Pyszniański Potok and Tomanowy Potok. The northern part includes a depression parallel to the course of Tomanowy Potok. Its southern edge leads the tourist trail over Smreczyński Staw. The southern part includes Smreczyński Staw together with the adjacent spruce forest on peat. This forest stretches at the foot of Jafer Ridge (Jaferowy Grzbiet).

The large forest complex is mostly located in a bifurcation of two streams: Sucha Woda and Pańszczycki Potok. The western boundary runs on the orographically left bank of Sucha Woda, it goes north in the region of Wielka Szatra, it runs along the western edge of transition mires, raised bogs and spruce forest with dystrophic Toporowe Stawy and reaches edge of moraine (on the altitude of a settlement Brzeziny). From this point, the boundary runs south-east, passing the Kobyły peak from the south and reaches Pańszczycki Potok, along which it runs east encompassing Pańszczyckie Młaki: Wielka and Wyżnia with a complex of transition mires, raised bogs and spruce forest.The boundary reaches the western slope of Ostry Wierch, where it turns south and encompasses two clearings: Waksmundzka Polana and wetland part of Waksmundzka Równia. On both clearings, there is a complex of transition mires, raised bogs and meadow habitats, Nardus grasslands and tall herb communities. There, the boundary turns south-west, encompasses clearings from the south and runs along the boundary between upper montane coniferous forests zone and subalpine dwarf-pine belt, reaching Sucha Woda Valley north from Pańszczycka Skałka mountain. The Site includes a number of small mires and patches of spruce forest.

The southern part's boundary runs from the west along tourist path to Morskie Oko, then it crosses Rybi Potok and turns south together with the valley bottom to leave Rybi Potok above Rybie Stawki lakes where it reaches back to the tourist path.

2.2.2 - General location

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

b) What is the nearest town or population centre? Zakopane

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): 741

Area, in hectares (ha) as calculated from GIS boundaries: 741.82

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Alpine

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

Other ecosystem services provided	The Site has important cultural and scientific functions. It is also included in the national monitoring of nature. Some parts of the site are located near often visited tourist trails. Moreover, the site has an important role in the maintenance of the Carpathian wetlands biodiversity.
Other reasons	The Site comprises the significant area of typical, very well-preserved mountain fens, mires and bogs and small dystrophic lakes which are very rare in the Carpathians.

☑ Criterion 2 : Rare species and threatened ecological communities

☑ Criterion 3 : Biological diversity

Justification	The international importance of the Site for biodiversity arises from the occurrence of plant and animal species important for the preservation of Alpine biogeographical region biodiversity in this part of Europe. Importance of the site is also signified by the occurrence of species important for the European Union, mentioned in appendices to Birds Directive (Western Capercaillie) and Habitats Directive (Carpathian newt, Varnished Hook-moss). The population of Western Capercaillie in the Tatra Mountains is crucial for the functioning of its population in the whole Polish Carpathian Mountains, and together with the Slovakian part of the population, it is the main refugium of this species in the Western Carpathians. The Site is also of high importance for the preservation of habitats of Carpathian newt - a species endemic for the whole Carpathian Arch. In Tatras, it occurs on the border of its vertical and horizontal range. The varnished Hook-moss's refugium is the only one in the Polish part of the Carpathian mountains. Next example from Toporowe Stawy is the only refugium of the floating bur-reed in the Polish Carpathians. In the Slovakian Tatra mountains, the species is known from just from one refugium. Within the Site, there are also unique plant and animal species for the Carpathian mountains (among others, relict species of a dragonfly - the bog hawker). Some of them reach the border of their cohesive range here.

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
Carex limosa	bog sedge	☑	☑	☐	LC	☐	Red Book of Polish Carpathian-EN; Polish Red List-NT; European Red List and Global Red List- LC	
Carex pauciflora	few-flowered sedge	☑	☑	☐	LC	☐	Polish Red List EN; Polish Red Book- EN; Red Book of Polish Carpathian-EN	
Hamatocaulis vernicosus	varnished hook-moss	☑	☑	☐		☐	Habitat Directive Annex II Red Data Book of European Bryophytes-K	
Sparganium angustifolium	floating bur-reed	☑	☑	☐	LC	☐	Polish Red Book- EN Polish Red List EN Red Book of Polish Carpathian-CR	

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	3	5	7	8								
Birds																		
CHORDATA / AVES	*Tetrao urogallus*	Western Capercaillie	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Polish Red Book-CR, Birds Directive Annex I	
Others																		
ARTHROPODA / INSECTA	*Aeshna subarctica*	Bog Hawker	☐	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Protected by Polish law, partial protection	
CHORDATA / AMPHIBIA	*Bombina variegata*	Yellow-bellied toad	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	Habitats Directive Annex II species	
CHORDATA / AMPHIBIA	*Lissotriton montandoni*	Carpathian newt	☑	☐	☐	☐	☑	☐	☐	☐				LC	☐	☐	Habitats Directive Annex II species	
ARTHROPODA / INSECTA	*Somatochlora alpestris*	Alpine Emerald	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	Polish Red Book-EN	

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
Carici-Agrostietum caninae	☑	The transition mire community (habitat 7140 listed in the Habitats Directive)	Typical and representative for wetlands in the Carpathians
Oxycocco-Sphagnetea, Sphagnion magellanici	☑	The raised bog alliance (habitat 7110 listed in the Habitats Directive)	Very rare in the Carpathians
Caricetum limosae	☑	The transition mire community (habitat 7140 listed in the Habitats Directive)	Rare and typical for the Carpathian wetlands
Carex rostrata-Sphagnum fallax	☑	The transition mire community (habitat 7140 listed in the Habitats Directive)	Typical and representative for wetlands in the Carpathians
Caricetum nigrae	☑	The transition mire community (habitat 7140 listed in the Habitats Directive)	Typical and representative for wetlands in the Carpathians
Sphagno-Piceetum s. l., Bazzanio-Piceetum s. l., Pino mugo-Sphagnetum	☑	91D0 * Bog woodland	Very rare and typical for the Carpathian wetlands

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

4.1 - Ecological character

Within the site there are almost all typical Carpathian wetland types, eg.: raised bogs (Natura 2000 code – 7110, Toporowy Staw Wyżni, Wielka Pańszczycka Młaka), transition mires and quaking bogs (7140, Wyżnia Pańszczycka Młaka), Bazzanio-Piceetum spruce forest (Toporowe Stawki) and dystrophic lakes (Toporowe Stawki, Smreczyński Staw, Żabie Oko). The valuable wetlands occur mainly in the depressions on acid and poor habitats, supplied with rainfall. Flora is dominated by numerous Sphagnum species and Cares sp. (including rare species – Carex pauciflora and Carex limosa). There are also interesting animal species linked to such habitats, eg. numerous populations of amphibians (with rare Triturus montandoni) and dragonflies (eg. Aeshna subarctica, Somatochlora alpestris, Somatochlora arctica).

The wetlands in the site are very diverse. There are e.g. transitional mires in the marginal zones of small mountain raised bogs (Wielka Pańszczycka Młaka) but also separate localities - acid fens, located amongst montane belt grasslands and in upper montane belt spruce forests (Wyżnia Pańszczycka Młaka). Some of the wetlands had their origin as the result of terrestrialization of water bodies (like Toporowy Staw Wyżni).
The majority of fens are characterized by a significant proportion of typical raised bog species (Carex pauciflora, Drosera rotundifolia, Oxycoccus palustris). On the forest clearings in montane belt, in the herb layer, except characteristic fen species, there are also species typical for wet pastures and Nardus grasslands.

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

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Marshes on inorganic or peat soils >> Va: Montane wetlands	Górskie obszary wodnobłotne	1	20	Rare

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
4070 - subalpine Pinus mugo shrub	
6150 - acid alpine grasslands	
6520 - mountain hay meadows	
9410 - mountain spruce forest	

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Drosera rotundifolia	common sundew	Near threatened
Eriophorum angustifolium	common cottongrass	Typical
Pinguicula vulgaris	common butterwor	Rare
Scheuchzeria palustris	pod grass	Rare
Vaccinium oxycoccos	cranberry	Typical

4.3.2 - Animal species

<no data available>

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
H: Highland	H: Highland (-)

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres): 1050

a) Maximum elevation above sea level (in metres): 1550

- 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.

Czarny Donajec, Biały Dunajec, Białka

4.4.3 - Soil

- Mineral ☑
- Organic ☑
- No available information ☐

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes ○ No ◉

4.4.4 - Water regime

Source of water that maintains character of the site

Presence?	Predominant water source
Water inputs from rainfall	☑
Water inputs from surface water	☐
Water inputs from groundwater	☐

Water destination

Presence?
Feeds groundwater
To downstream catchment

Stability of water regime

Presence?
Water levels largely stable

4.4.5 - Sediment regime

- Significant erosion of sediments occurs on the site ☐
- Significant accretion or deposition of sediments occurs on the site ☐
- Significant transportation of sediments occurs on or through the site ☐
- Sediment regime is highly variable, either seasonally or inter-annually ☐
- Sediment regime unknown ☐

<no data available>

4.4.6 - Water pH

- Acid (pH<5.5) ☑
- Circumneutral (pH: 5.5-7.4) ☑
- Alkaline (pH>7.4) ☐
- Unknown ☐

Please provide further information on pH (optional):

Monitoring of dystrophic lakes showed that pH in Niżni Toporowy Staw is within the range 4-5,6. However in other wetlands pH can be diverse, so both categories are marked.

4.4.7 - Water salinity

Fresh (<0.5 g/l) ☑
Mixohaline (brackish)/Mixosaline (0.5-30 g/l) ☐
Euhaline/Eusaline (30-40 g/l) ☐
Hyperhaline/Hypersaline (>40 g/l) ☐
Unknown ☐

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic ☐
Mesotrophic ☑
Oligotrophic ☑
Dystrophic ☑
Unknown ☐

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar ◉ ii) significantly different ○

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	High
Recreation and tourism	Nature observation and nature-based tourism	High
Scientific and educational	Educational activities and opportunities	Low
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	High
Scientific and educational	Long-term monitoring site	High
Scientific and educational	Major scientific study 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
Nutrient cycling	Carbon storage/sequestration	High

Within the site: 1000
Outside the site: 3000000

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes ○ No ○ Unknown ◉

4.5.2 - Social and cultural values

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

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

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

iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland ☐

<no data available>

4.6 - Ecological processes

<no data available>

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

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	☑	☑

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

The state-owned grounds managed by the Tatra National Park.

5.1.2 - Management authority

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

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

Postal address: Tatrzański Park Narodowy
Kuźnice 1, 34-500 Zakopane

E-mail address: sekretariat@tpn.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	In the surrounding area
Tourism and recreation areas		Low impact	☐	☑

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Recreational and tourism activities	Medium impact		☑	☑

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Problematic native species	Low impact	Medium impact	☑	☐

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	In the surrounding area
Garbage and solid waste	Low impact		☑	☐

5.2.2 - Legal conservation status

Global legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
UNESCO Biosphere Reserve	Tatra Transboundary Biosphere Reserve (Polish-Slovakian)	http://www.unesco.org/mabdb/br/brdir/directory/biores.asp?mode=all&code=POL-SLO+01	whole

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	PLC120001 Tatry	http://n2k-ws.gdos.gov.pl/wyszukiwarkaN2k/webresources/pdf/PLC120001	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
national park	Tatra National Park	www.tpn.pl	whole

5.2.3 - IUCN protected areas categories (2008)

Ia Strict Nature Reserve ☐

Ib Wilderness Area: protected area managed mainly for wilderness protection ☐

II National Park: protected area managed mainly for ecosystem protection and recreation ☑

III Natural Monument: protected area managed mainly for conservation of specific natural features ☐

IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention ☐

V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation ☐

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

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Human Activities

Measures	Status
Regulation/management of recreational activities	Implemented
Communication, education, and participation and awareness activities	Partially implemented
Research	Partially implemented

5.2.5 - Management planning

Is there a site-specific management plan for the site? In preparation

Has a management effectiveness assessment been undertaken for the site? Yes ○ No ◉

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes ○ No ◉

5.2.6 - Planning for restoration

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

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Plant community	Implemented
Water regime monitoring	Implemented

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Piękoś-Mirkowa H., Mirek Z.. 1996. Zbiorowiska roślinne. W: Mirek Z. red. Przyroda Tatrzańskiego Parku Narodowego. Tatrzański Park Narodowy.
Wit-Jóźwikowa K., Ziemońska Z. 1962. Hydrografia Tatr Polskich. W: Szafer W. (red. Tatrzański Park Narodowy. Zakład Ochrony Przyrody PAN, Wyd. popularnonauk.., 21:125-138.
Łajczak A., 1996. Hydrologia. W: Mirek Z. red. Przyroda Tatrzańskiego Parku Narodowego. Tatrzański Park Narodowy.
Oleksynowa K., Komornicki T., 1996. Chemizm wód. W: Mirek Z. red. Przyroda Tatrzańskiego Parku Narodowego. Tatrzański Park Narodowy.

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:

peatbog in the Tatra National Park (*Paweł Kauzal, 25-05-2015*)

6.1.4 - Designation letter and related data

Designation letter
<1 file(s) uploaded>

Date of Designation 2017-12-11