

Ramsar Information Sheet

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SerbiaPestersko polje



Designation date 19 March 2006 Site number 1656 Coordinates 43°04'54"N 20°07'42"E

Area 3 421,30 ha

https://rsis.ramsar.org/ris/1656 Created by RSIS V.1.6 on - 18 May 2020

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

Peštersko polje is the largest and highest karst field of the Balkan Peninsula, at the altitude of approx. 1150 m a. s. l. It is located on SE part of Serbia, on the Pešter Plateau, covering a surface of approx. 50 km². In the recent geological history, the whole plateau of Peštersko polje was field with water, but the former lake vanished through the shafts that were made in the karst. Currently, the flooded zone can only be found in the lowest depressions, in the NE and SE parts of Peštersko polje, forming large peat bogs and making this wetland habitat a biodiversity hotspot. The area of the Ramsar site "Peštersko polje" is approx. 34 km².

The main wetland types include non-forested peatlands, permanent rivers and lakes and seasonal freshwater marshes on inorganic soils. The vast peatland, probably the largest one in Serbia, is the most prominent feature of Peštersko polje, supporting the survival of a number of endangered species. In the lower parts of Peštersko polje a permanent lake can be found. Aquatic and peatland vegetation grows in the newly-formed lake, channels and watercourses, while emerse vegetation covers the coastal area of the lake and the channels, levees, pools etc. Peštersko polje is an excellent example of a Balkanic high-mountain peatland. Peatlands are rare and endangered in this region, occurring mainly on high mountains, on specific places with waterlogged conditions.

The disappearing, partly subterranean, river Boroštica flows through this typical karst field of many shafts and represents the main water source responsible for the formation of mineral-marshy soil and peat in Peštersko polje. The fossil riverbed of the Boroštica River is of particular significance, with underwater parts during most of the year.

Harsh temperate-continental climate, modified by mountain climate elements, distinguishes the Pešter area as the coldest region in Serbia, with the minimum temperature of -39°C, for which reason is often referred to as "the Balkan Siberia".

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Compiler 2

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

From year 2006

To year 2016

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

Pestersko polje

Unofficial name (optional)

Peštersko polje

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 O 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?

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<3 file(s) uploaded>

Former maps 0

Boundaries description

Ramsar site Peštersko polje is centered around the main wetland in Pešter Plateau. The Site boundaries for the most part run along the local roads which surround this wetland, avoiding the settlements or other types of land use, except for peat exploitation fields, which have the central position on the Site. Although SNR Peštersko polje and Ramsar site are centered around the same wetland area, having the similar shape and size, the boundaries of the two do not align, with SNR following the cadaster.

2.2.2 - General location

a) In which large administrative region does the site lie? County of Zlatibor, County of Raška b) What is the nearest town or population Sjenica, Novi Pazar and Tutin

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other Yes O No

Yes O No countries?

centre?

b) Is the site adjacent to another designated Ramsar Site on the Yes O No (9) territory of another Contracting Party?

2.2.4 - Area of the Site

Official area, in hectares (ha): 3421.3

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

3421.632

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Other scheme (provide name below)	Central-South European Montane biogeographic region, Central European Montane subregion and the Dinaric province
EU biogeographic regionalization	Alpine
EU biogeographic regionalization	Continental

Other biogeographic regionalisation scheme

The area of the Pešter Plateau belongs to the Central-South European Montane biogeographic region, Central European Montane subregion and the Dinaric province (STEVANOVIĆ, 1995).

Stevanović, V. (1995): Biogeografska podela Jugoslavije (Biogeographic regionalisation of Yugoslavia) - In: Stevanović, V., Vasić, V. (eds): Biodiverzitet Jugoslavije sa pregledom vrsta od međunarodnog značaja (Biodiversity of Yugoslavia with a review of internationally significant species) -) - Faculty of Biology, Belgrade, Ecolibri, Belgrade

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

Until 1972, the Boroštica River was the only influence on the hydrological conditions of the area of Peštersko polje, when through hydro-ameliorative activities, a levee was built in order to protect some parts of the terrain from the spring floods. A channel was dug to change Boroštica River course and a tunnel was made to direct its water into the Vapa River and Uvac River catchments, with the purpose of sustaining the hydropower plants. The construction of the levee formed borrow pits which left a depression filled with water - the Lake (Jezero), which is now one of the most distinctive features of this area. Boroštica River and the Lake are the two most important hydrological units of Peštersko polje, on which all the surrounding grassland ecosystems depend, due to the highly porous karst terrain which is effectively waterless, in spite of the large number of watercourses (Boroštica River, Derekarska River, Vapa River, Uvac River, Veljušnica River, Dubočica River, Grabovica River, Jablanica River, Štavaljska River etc.). This feature ranks the Pešter Plateau among the driest areas of the Dinaric karst region. The local communities of the Pešter Plateau are prominently based on the traditional cattle breeding, due to the natural characteristics of this area, with its endless pastures and meadows. The water present in the wetland area of Peštersko polje determines the productivity of the pastures and meadows of the wider surrounding area.

Other ecosystem services provided

The peatlands are significant ecosystems to preserve, not only for its biodiversity, but also for the provision of clean drinking water and climate regulation. Due to their capacity to store carbon dioxide, peatlands are becoming increasingly more important in tackling climate change.

Peštersko polje represents an outstanding example of a specific wetland habitat, which is extremely rare and endangered in this region - a peatland. The largest preserved peatbog in Serbia, formed on the largest karst field in Serbia, can be found in Peštersko polje at the altitude of approx. 1150m a.s.l. The distribution of peatlands is reaching its southern borders in Serbia and on Balkan Peninsula. All the peatland (mire) vegetation in Serbia is classified under Scheuchzerio-Caricetea fuscae (Nordh. 1936) R. Tx. 1937. vegetation class and is represented by a number of small to very small peatlandd in the mountainous regions. (Lazarević 2013). These areas are biodiversity hotspots, especially in regard to the plant and vegetation diversity, particularly of the boreal flora.

Otner reaso

The Peštersko polje peatbog is one of the largest and most well preserved peatbogs in Serbia. Its size is significant since large peatbogs are rare in this climate. It is a mesophilous peatbog (TEŠIĆ et al., 1979). Waters running through this bog in the past carried a large number of mineral salts, which influenced current bog and mire vegetation.

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

Peštersko polje provides habitat for the survival of valuable plants and animals populations, significant for conservation of biodiversity in this region. These include: species of the genus Sphagnum, Galium boreale, Menyanthes trifoliata, Pedicularis palustris, Scorzonera purpurea, Ciconia ciconia, Circus pygargus, Vanellus vanellus, Tringa totanus, Asio flammeus, Lutra lutra, Canis lupus etc.

The following unique peatland (mire) vegetation communities are present in Peštersko polje:

- Sphagno-Menyanthetum trifoliatae P. Lazarević 2016 (Sphagnum fallax, S. subsecundum, S. contortum, S. denticulatum, Menyanthes trifoliate, Comarum palustre, Equisetum fluviatile, Warnstorfia fluitans, Comarum palustre, Carex vesicaria, C. acuta, C. stellulata, C. curta, Agrostis canina, Scutellaria galericulata, Drosera rotundifolia)

Justificatio

- Caricetum davalliano-hostianae P. Lazarević 2016 (Carex hostiana, C. davalliana, C. hostiana, C. panicea, C. flava subsp. lepidocarpa, Cratoneuron commutatum, Campylium stellatum, Molinia caerulea, Ranunculus auricomus, Eriophorum latifolium, Valeriana simplicifolia, Triglochin palustris, Juncus articulatus, J. inflexus, Blysmus compressus, Epipactis palustris)
- Carici paniceae-Eriophoretum latifoliae P. Lazarević 2016 (Utriculario-Carici paniceae-Eriophoretum latifoliae P. Lazarević 2016 & Valeriano-Carici paniceae-Eriophoretum latifoliae P. Lazarević 2016) Carex panicea, C. distans, C. flacca, C. hostiana, C. lepidocarpa, C. echinata, C. paniculata, C. nigra, Eleocharis quinqueflora, E. palustris, Utricularia minor, Valeriana simplicifolia, Valerina dioica subsp. simplicifolia, Molinia caerulea, Eriophorum latifolium, Juncus articulatus, Potentilla erecta, Succisa pratensis, Campylium stellatum, Cratoneuron filicinum, Eriophorum latifolium, Blysmus compressus, Eleocharis quinqueflora, Triglochin palustris, Parnassia palustris.

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

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

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	Other status	Justification
Anacamptis coriophora			2			Rare in Serbia	
Anacamptis laxiflora			V			Rare in Serbia	
Anacamptis morio			 ✓			Rare in Serbia, NT IUCN Red List	
Dactylorhiza incarnata			2			Rare in Serbia	
Fumana bonapartei						Rare in Serbia	
Galium boreale						Rare in Serbia	
Halacsya sendtneri						Rare in Serbia	
Knautia midzorensis						Rare in Serbia	
Linum tauricum serbicum						Rare and endemic for Serbia	
Menyanthes trifoliata					LC	Rare in Serbia	
Neotinea tridentata			✓			Rare in Serbia	
Orchis spitzelii cazorlensis						Rare in Serbia	
Pedicularis palustris			✓		LC	Rare in Serbia	
Potentilla visianii			₽			Rare in Serbia	
Ranunculus flammula					LC	Rare in Serbia	
Salix rosmarinifolia			₽			Rare in Serbia	
Verbascum nicolai			✓			Rare in Serbia	

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

Phylum	Scientific name	Common name	Species qualifies under criterion 2 4 6 9	Species contributes under criterion	Size	Period of pop. Est.	IUCN Red List	CMS Appendix I	Other Status	Justification
Birds										
CHORDATA/ AVES	Acrocephalus paludicola	Aquatic Warbler					W	/		
CHORDATA/ AVES	Acrocephalus palustris	Marsh Warbler		2 000			LC			Presence during the summer on this mountain plateau (1150-1200m) at the farthest SW part of Serbia, representing a new region to their previously known distribution.
CHORDATA/ AVES	Acrocephalus schoenobaenus	Sedge Warbler		2 000			LC			Presence during the summer on this mountain plateau (1150-1200m) at the farthest SW part of Serbia, representing a new region to their previously known distribution.
CHORDATA/ AVES	Actitis hypoleucos	Common Sandpiper					LC			

Phylum	Scientific name	Common name	Species qualifies under criterion	Species contribute under criterion	Size Period of por	% occurrenc 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Alcedo atthis	Common Kingfisher					LC				
CHORDATA/ AVES	Anas acuta	Northern Pintail					LC				
CHORDATA/ AVES	Anas clypeata	Northern Shoveler									
CHORDATA/ AVES	Anas crecca	Green-winged Teal; Eurasian Teal					LC				Supports migration.
CHORDATA/ AVES	Anas penelope	Eurasian Wigeon									
CHORDATA/ AVES	Anas platyrhynchos	Mallard					LC				
CHORDATA/ AVES	Anas querquedula	Garganey									Supports migration.
CHORDATA/ AVES	Anas strepera	Gadwall									
CHORDATA/ AVES	Anser albifrons	Greater White- fronted Goose					LC				
CHORDATA/ AVES	Anser anser	Greylag Goose					LC			NT (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Anthus campestris	Tawny Pipit					LC				
CHORDATA/ AVES	Anthus cervinus	Red-throated Pipit					LC				
CHORDATA/ AVES	Anthus spinoletta	Water Pipit					LC				
CHORDATA/ AVES	Aquila chrysaetos	Golden Eagle					LC			VU (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Ardea cinerea	Grey Heron					LC				
CHORDATA/ AVES	Ardea purpurea	Purple Heron					LC			VU (Red Book of fauna of Serbia III - Birds)	Supports migration.
CHORDATA/ AVES	Ardeola ralloides	Squacco Heron					LC				Supports migration.
CHORDATA/ AVES	Asio flammeus	Short-eared Owl					LC				Presence during the summer on this mountain plateau (1150-1200m) at the farthest SW part of Serbia, representing a new region to their previously known distribution.
CHORDATA/ AVES	Aythya ferina	Common Pochard					VU				
CHORDATA/ AVES	Aythya nyroca	Ferruginous Duck					NT		/		
CHORDATA/ AVES	Botaurus stellaris	Eurasian Bittern					LC			NT (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Bubo bubo	Eurasian Eagle- Owl					LC			NT (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Buteo rufinus	Long-legged Buzzard					LC				Presence during the summer on this mountain plateau (1150-1200m) at the farthest SW part of Serbia, representing a new region to their previously known distribution.
CHORDATA/ AVES	Calidris alpina	Dunlin					LC				
CHORDATA/ AVES	Calidris ferruginea	Curlew Sandpiper					NT				
CHORDATA/ AVES	Calidris minuta	Little Stint					LC				

Phylum	Scientific name	Common name	Species qualifies under criterion 2 4 6	under	Size Period of pop. Es	% occurrence		CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Calidris temminckii	Temminck's Stint					LC				
CHORDATA/ AVES	Carpodacus erythrinus	Common Rosefinch					LC				
CHORDATA/ AVES	Charadrius dubius	Little Ringed Plover					LC				
CHORDATA/ AVES	Charadrius hiaticula	Common Ringed Plover					LC				
CHORDATA/ AVES	Chlidonias hybrida	Whiskered Tern					LC				
CHORDATA/ AVES	Chlidonias leucopterus	White-winged Tern					LC				
CHORDATA/ AVES	Chlidonias niger	Black Tern					LC			CR (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Chroicocephalus ridibundus	Black-headed Gull									
CHORDATA/ AVES	Ciconia ciconia	White Stork					LC				White stork (Ciconia ciconia) is present in Peštersko polje, which is veryrare in the mountainous parts of Europe, while Peštersko polje represents a feeding base of a large part of this species population in this region, during both nesting and migrating periods.
CHORDATA/ AVES	Ciconia nigra	Black Stork					LC			NT (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Circaetus gallicus	Short-toed Snake Eagle					LC			NT (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Circus aeruginosus	Western Marsh Harrier					LC			NT (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Circus pygargus	Montagu's Harrier	2 20				LC			EN (Red Book of fauna of Serbia III - Birds)	The population abundance of Montagu's harrier Circus pygargus is significant. Besides the northern part of Vojvodina, this is the only nesting region of this species in Serbia.
CHORDATA/ AVES	Corvus moneduloides	New Caledonian Crow					LC				
CHORDATA/ AVES	Crex crex	Corn Crake					LC				Peštersko polje provides survival during unfavorable periods for Crex crex, which is a nesting bird species of the wet meadows in the wider area of the Sjenica- Pešter Plateau.
CHORDATA/ AVES	Cygnus columbianus	Tundra Swan					LC				
CHORDATA/ AVES	Egretta garzetta	Little Egret					LC				
CHORDATA/ AVES	Emberiza cia	Rock Bunting					LC				
CHORDATA/ AVES	Emberiza schoeniclus	Common Reed- Bunting; Reed Bunting; Common Reed Bunting					LC				
CHORDATA/ AVES	Eremophila alpestris balcanica									EN (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Falco naumanni	Lesser Kestrel					LC		J		
CHORDATA/ AVES	Falco peregrinus	Peregrine Falcon					LC	\checkmark		EN (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Falco vespertinus	Red-footed Falcon					NT		V		Supports migration.

Phylum	Scientific name	Common name	Species qualifies under criterion 2 4 6 9	Species contributes under criterion	Pop. Size	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Fulica atra	Eurasian Coot					LC				
CHORDATA/ AVES	Gallinago gallinago	Common Snipe					LC			CR (Red Book of fauna of Serbia III - Birds)	Presence during the summer on this mountain plateau (1150-1200m) at the farthest SW part of Serbia, representing a new region to their previously known distribution.
CHORDATA/ AVES	Gallinula chloropus	Common Moorhen					LC				Supports migration.
CHORDATA/ AVES	Glareola pratincola	Collared Pratincole					LC				
CHORDATA/ AVES	Grus grus	Common Crane					LC				
CHORDATA/ AVES	Ichthyaetus melanocephalus	Mediterranean Gull									
CHORDATA/ AVES	lxobrychus minutus	Little Bittern					LC				
CHORDATA/ AVES	Limicola falcinellus	Broad-billed Sandpiper									
CHORDATA/ AVES	Limosa limosa	Black-tailed Godwit					NT			CR (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Locustella luscinioides	Savi's Warbler					LC				Presence during the summer on this mountain plateau (1150-1200m) at the farthest SW part of Serbia, representing a new region to their previously known distribution.
CHORDATA/ AVES	Lullula arborea	Woodlark					LC				
CHORDATA/ AVES	Mergus merganser	Common Merganser					LC			VU (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Microcarbo pygmeus	Pygmy Cormorant									
CHORDATA/ AVES	Monticola saxatilis	Rufous-tailed Rock Thrush					LC				
CHORDATA/ AVES	Motacilla alba	White Wagtail					LC				
CHORDATA/ AVES	Motacilla flava	Western Yellow Wagtail					LC				
CHORDATA/ AVES	Numenius arquata	Eurasian Curlew					NT				
CHORDATA/ AVES	Numenius phaeopus	Whimbrel					LC				
CHORDATA/ AVES	Nycticorax nycticorax	Black-crowned Night-Heron; Black-crowned Night Heron	0000				LC				
CHORDATA/ AVES	Oenanthe oenanthe	Northern Wheatear					LC			NT (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Phalacrocorax carbo	Great Cormorant					LC				
CHORDATA/ AVES	Phalaropus lobatus	Red-necked Phalarope					LC				
CHORDATA/ AVES	Philomachus pugnax	Ruff									Supports migration.
CHORDATA/ AVES	Platalea leucorodia	Eurasian Spoonbill					LC			NT (Red Book of fauna of Serbia III - Birds)	Supports migration.
CHORDATA/ AVES	Plegadis falcinellus	Glossylbis					LC			CR (Red Book of fauna of Serbia III - Birds)	

Phylum	Scientific name	Common name	Species qualifies under criterion	СО	Species ntributes under riterion	Size Period of pop. Es	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA/ AVES	Pluvialis apricaria	European Golden- Plover; European Golden Plover		V]		LC				
CHORDATA/ AVES	Pluvialis squatarola	Black-bellied Plover			ممم]		LC				
CHORDATA/ AVES	Podiceps cristatus	Great Crested Grebe			مام			LC				Supports migration.
CHORDATA/ AVES	Podiceps nigricollis	Eared Grebe; Black-necked Grebe	2 000	V]		LC			VU (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Porzana parva	Little Crake			ممم]						
CHORDATA/ AVES	Porzana porzana	Spotted Crake				3		LC			VU (Red Book of fauna of Serbia III - Birds)	Supports migration.
CHORDATA/ AVES	Pyrrhocorax graculus	Alpine Chough]		LC				
CHORDATA/ AVES	Rallus aquaticus	Water Rail]		LC				
CHORDATA/ AVES	Recurvirostra avosetta	Pied Avocet			ممم]		LC				
CHORDATA/ AVES	Remiz pendulinus	Eurasian Penduline Tit			ممم]		LC				
CHORDATA/ AVES	Riparia riparia	Bank Swallow			ممم]		LC				
CHORDATA/ AVES	Saxicola rubetra	Whinchat			ممم]		LC				
CHORDATA/ AVES	Sterna hirundo	Common Tern]		LC			VU (Red Book of fauna of Serbia III - Birds)	Supports migration.
CHORDATA/ AVES	Tachybaptus ruficollis	Little Grebe]		LC				Supports migration.
CHORDATA/ AVES	Tringa erythropus	Spotted Redshank]		LC				
CHORDATA/ AVES	Tringa glareola	Wood Sandpiper]		LC				
CHORDATA/ AVES	Tringa nebularia	Common Greenshank		V				LC				
CHORDATA/ AVES	Tringa ochropus	Green Sandpiper]		LC				
CHORDATA/ AVES	Tringa stagnatilis	Marsh Sandpiper]		LC				
CHORDATA/ AVES	Tringa totanus	Common Redshank						LC			EN (Red Book of fauna of Serbia III - Birds)	
CHORDATA/ AVES	Turdus pilaris	Fieldfare]		LC				
CHORDATA/ AVES	Vanellus vanellus	Northern Lapwing		V				NT				
	and Crustacea											
CHORDATA/ ACTINOPTERYGI		Bystranka										
MOLLUSCA/ GASTROPODA	Anisus spirorbis											
MOLLUSCA/ GASTROPODA	Aplexa hypnorum	moss bladder snail		V								
CHORDATA/ ACTINOPTERYGI		Terek stone loach European stone loach; Siberian stone loach						LC				

Phylum	Scientific name	Common name	Species qualifies under criterion	under	Pop. Size Period of pop	% o. Est. occurrence	IUCN Red List	CITES Appendix	CMS Appendix	Other Status	Justification
OLIOPP ATA			2 4 6	9 3 5 7 8		, i	List		•		
CHORDATA/ ACTINOPTERYGI	Barbus peloponnesius	Peloponnese barbel					LC				
MOLLUSCA/ GASTROPODA	Bythinella pesterica									Stenoendemic sprecies	
MOLLUSCA/ GASTROPODA	Galba truncatula	dwarf pond snail; dwarf mud snail					LC				
MOLLUSCA/ GASTROPODA	Lymnaea stagnalis	great pondsnail; swamp lymnaea					LC				
CHORDATA/ ACTINOPTERYGI	Perca fluviatilis	Redfin perch					LC				
CHORDATA/ ACTINOPTERYGI	Phoxinus	Common minnow; Common minnow					LC				
MOLLUSCA/ GASTROPODA	Planorbarius corneus	great ramshorn; horn-colored ram's horn; trumpet shell					LC				
MOLLUSCA/ GASTROPODA	Planorbis planorbis	margined ramshom; common ramshom; margined trumpet shell; ram's horn; ramshom					LC				
MOLLUSCA/ GASTROPODA	Radix auricularia	ear pond snail					LC				
MOLLUSCA/ GASTROPODA	Segmentina nitida	the shining ram's- horn; shiny ram's horn; shining ramshom snail									
MOLLUSCA/ GASTROPODA	Stagnicola corvus	giant pondsnail					LC				
MOLLUSCA/ GASTROPODA	Stagnicola fuscus	marsh pond snail; brown pondsnail					LC				
MOLLUSCA/ BIVALVIA	Unio crassus	common Central European river mussel; common river mussel	Ø00				EN				
MOLLUSCA/ GASTROPODA	Valvata cristata	crested valve snail; flat valve snail									
Others		orian.									
ARTHROPODA/ INSECTA	Aeshna affinis	Southern migrant hawker; Blue-eyed Hawker					LC				
ARTHROPODA/ INSECTA	Aeshna caerulea	Azure Hawker					LC				
ARTHROPODA/ INSECTA	Aeshna cyanea	Blue Hawker					LC				
INSECIA	Aesnna mixta	Migrant Hawker					LC				
ARTHROPODA/ INSECTA	hipuntulatun										
ARTHROPODA/ INSECTA	Agabus guttatus										
	Agabus paludosus										
ARTHROPODA/ INSECTA	lutescens										First record of the species in Serbia
ARTHROPODA/ INSECTA	Anax imperator	Emperor dragonfly					LC				

Phylum	Scientific name	Common name	Species qualifies under criterion	under	Size Period of pop. Est.	% occurrence 1)	IUCN Red / List	CITES Appendix I	CMS Appendix I	Other Status	Justification
ARTHROPODA/ INSECTA	Calopteryx splendens	Banded Demoiselle					LC				
ARTHROPODA/ INSECTA	Calopteryx virgo	Beautiful Demoiselle					LC				
ARTHROPODA/ INSECTA	Coelostoma orbiculare										First record of the species in Serbia
ARTHROPODA/ INSECTA	Coenagrion puella	Azure damselfly					LC				
ARTHROPODA/ INSECTA	heros	Balkan Goldenring					NT				
ARTHROPODA/ INSECTA	Dytiscus marginalis										
	Enallagma cyathigerum	Common Bluet; Common blue damselfly					LC				
ARTHROPODA/ INSECTA	Enochrus affinis										First record of the species in Serbia
ARTHROPODA/ INSECTA	Enochrus fuscipennis		000								First record of the species in Serbia
CLITELLATA	Erpobdella octoculata										
ARTHROPODA/ INSECTA	viridulum	Small Redeye					LC				
	Glossiphonia complanata										
ARTHROPODA/ INSECTA	vulgatissimus	Club-tailed dragonfly					LC				
ARTHROPODA/ INSECTA	granularis										
ANNELIDA/ CLITELLATA	Helobdella stagnalis										
ARTHROPODA/ INSECTA	Helochares lividus										First record of the species in Serbia
ARTHROPODA/ INSECTA	Helochares obscurus										
	fuscipes										
	discretus										First record of the species in Serbia
ARTHROPODA/ INSECTA	Hydroporus erythrocephalus										
ARTHROPODA/ INSECTA	Hydroporus palustris										First record of the species in Serbia
ARTHROPODA/ INSECTA	Hydroporus planus										First record of the species in Serbia
ARTHROPODA/ INSECTA	Hydroporus thracicus										First record of the species in Serbia
ARTHROPODA/ INSECTA	Hygrotus inaequalis										First record of the species in Serbia
ADTHDODODA /											First record of the species in Serbia
ARTHROPODA/ INSECTA	Ischnura elegans	Blue-tailed damselfly					LC				

Phylum	Scientific name	Common name	Specie qualific unde criteric 2 4 6	es or on 9 3	un crite	ibutes der erion 7 8	Pop. Size	% occurrence 1)	IUCN Red List	CITES Appendix I	1	Other Status	Justification
ARTHROPODA/ INSECTA	bipunctatus												
ARTHROPODA/ INSECTA	Laccophilus hyalinus												First record of the species in Serbia
ARTHROPODA/ INSECTA	Lestes barbarus	Migrant Spreadwing; Shy emerald damselfly			00				LC				
INSECTA	Lestes dryas	Emerald Spreadwing							LC				
ARTHROPODA/ INSECTA	Lestes sponsa	Common Spreadwing							LC				
ARTHROPODA/ INSECTA	Libellula depressa	Broad-bodied Chaser							LC				
ARTHROPODA/ INSECTA	Libellula quadrimaculata	Four-spotted Chaser							LC				
IVAVIVALIA	Lutra lutra	European Otter							NT	√			
ARTHROPODA/ INSECTA	Onychogomphus forcipatus	Small Pincertail			0				LC				
ARTHROPODA/ INSECTA	Orthetrum brunneum	Southern Skimmer			0				LC				
ARTHROPODA/ INSECTA	Orthetrum coerulescens	Keeled Skimmer			0				LC				
	maculatus				70								First record of the species in Serbia
	pennipes	Blue Featherleg							LC				
	nymphula	Large Red Damsel							LC				
	flavomaculata	Yellow-spotted Emerald			0				LC				
	meridionalis	Balkan Emerald			0				LC				
ARTHROPODA/ INSECTA	Sympetrum flaveolum	Yellow-winged Darter			0				LC				
INSECTA	Sympetrum fonscolombii	Nomad			0				LC				
INSECTA	Sympetrum sanguineum	Ruddy Darter							LC				
ARTHROPODA/ INSECTA	Sympetrum striolatum	Common Darter			0				LC				

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
Juniperetum communis			
Salicetum cinereae			
Salicetum rozmarinifoliae			
Salicetum purpureae			

¹⁾ Percentage of the total biogeographic population at the site

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Erico-pinetum serpentinicum			
Charion fragilis	✓		
Nymphaeion albae			
Potametum natantis			
Potametum fluitantis			
Batrachietum trichophylli			
Ranunculetum aquatilis			
Phragmition communis			
Scirpetum lacustris			
Typhetum latifoliae			
Typhetum angustifoliae			
Phragmitetum communis			
Equisetetum fluviatilae			
Sparganio-Glycerietum fluitantis			
Caricetum gracilis			
Caricetum vesicariae			
Caricetum vulpinae			
Caricetum davallianae			
Molinio coeruleae-Caricetum hostianae			
Heleocharetum acicularis			
Nanocyperion flavescentis			
Molinietum coeruleae			
Lathyreto-Molinietum caeruleae			
Equiseto-Eriophoretum latifolii			
Scirpetum silvaticii			

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Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Junco-Deschampsietum caespitosae			
Cynosuretum cristati			
Festuco-Agrostetum			
Poa molinieri-Plantaginetum holostei			
Nardetum strictae			
Sphagno-Wenyanthetum trifoliatae	V	Fen vegetation plant community with following species composition: Sphagnum fallax, S. subsecundum, S. contortum, S. denticulatum, Menyanthes trifoliate, Comarum palustre, Equisetum fluviatile, Warnstorfia fluitans, Comarum palustre, Carex vesicaria, C. a	Peatlands in this region are especially significant, located at the southern limit of peatland distribution, usually in high-mountain landscape and small in size. At the same time, these habitats represent one of the last refugia for the boreal flora and
Caricetum davalliano-hostianae	Ø	Fen vegetation plant community with following species composition: Carex hostiana, C. davalliana, C. hostiana, C. panicea, C. flava subsp. lepidocarpa, Cratoneuron commutatum, Campylium stellatum, Molinia caerulea, Ranunculus auricomus, Eriophorum latifol	Peatlands in this region are especially significant, located at the southern limit of peatland distribution, usually in highmountain landscape and small in size. At the same time, these habitats represent one of the last refugia for the boreal flora and
Carici paniceae-Eriophoretum latifoliae	v	Fen vegetation plant community with following species composition: Carex panicea, C. distans, C. flacca, C. hostiana, C. lepidocarpa, C. echinata, C. paniculata, C. nigra, Eleocharis quinqueflora, E. palustris, Utricularia minor, Valeriana simplicifolia,	Peatlands in this region are especially significant, located at the southern limit of peatland distribution, usually in highmountain landscape and small in size. At the same time, these habitats represent one of the last refugia for the boreal flora and

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

4.1 - Ecological character

Present ecological conditions are predominantly influenced by historical human activities. Laying in the forest altitudinal belt, before any human influence, this mountain plateau was covered with coniferous forests of spruce, fir and pines, which still remain in very small fragments. Cattle breeding and grazing, combined with timber exploitation and a very harsh climate, extinguished the former forests and gave the whole landscape a physiognomy of a mountainous steppe.

The character, structure and arrangement of the recent vegetation are determined by the hydrological features, which were greatly modified in 1972. The richness and diversity of microecological features generated an extensive patchiness of plant communities. A detailed study of LAZAREVIĆ (2000-2005) revealed a large number of plant communities. This document can be found in the Additional materials. Aquatic vegetation (C1.2 – Permanent mesotrophic lakes, ponds and pools - LAKUŠIĆ et al., 2005) forms in the newly formed lake, the watercourses and the channels, but also in the fossil riverbed of the Boroštica River. These are communities of the alliance Potamion eurosibiricum with submersed and rooted plant species. The shallower pools, channels and smaller stagnant tributaries of the former Boroštica River riverbed are characterized with the presence of Myriophyllum spicatum, Lemna minor, Callitriche palustris, Ranunculus circinatus, Chara contraria, but also Utricularia australis and Nymphaea alba.

Water-fringing reedbeds and tall helophytes other than canes type of vegetation (C3.2 — LAKUŠIĆ et al., 2005) develops in the coastal area of the lake and along channels, levees, water pools and similar structures. Communities of the alliance Phragmition communis are the most frequent. Such habitats are often inhabited by Equisetum ramosissimus, Alisma plantago-aquatica and Caltha palustris. Distribution of these communities is determined by the water level fluctuation and trophic regime.

A particular feature of Peštersko polje is the great peatbog area, probably the greatest remaining peatbog in Serbia (D2.3 – Transition mires and quaking bogs - LAKUŠIĆ et al., 2005). The wettest parts of the peatland, forming around water pools, old riverbeds and the channels with fluctuating water level, which are often dried out during the summer, are covered with communities of the alliance Magnocaricion, with edificator species: Carex gracilis, Carex vesicaria, Eryophorum angustifolium and other.

The largest part of Peštersko polje is covered with wet meadows of the alliance Molinion caeruleae and Nardion stricta, with the edificatory species Molinia coerulea, Deschampsia caespitosa and Nardus stricta. They have a rich and diverse floristic composition, with a large number of boreal plant taxa, for which the Balkan Peninsula represents the southernmost part of their range in Europe. Most of them are rare and endangered in this region. The habitats are classified as: E3.4 – Moist or wet eutrophic and mesotrophic grassland (LAKUŠIĆ et al., 2005). The remaining forest vegetation consists of populations of Salix rosmarinifolia, a rare species in Serbia. The scrub vegetation in the Salicion triandrae alliance develops on parts of the fossil riverbed of the Boroštica River, with the edificatory species of Salix purpurea and Salix cinerea. Such types of habitats are classified as: F9.25 – Mountain boggy willows with Salix rosmarinifolia and F9.1 – Riverine and lakeshore Salix scrub.

Contrary to the dominant wet and aquatic habitats, the dry and rocky Trojan Hill (1271m a.s.l.) dominates the north-eastern part of Peštersko polje, with a serpentinite substrate. It is inhabited by a specific vegetation of the order Halacsyetalia sendtneri with edificatory species Halacsya sendtneri and Plantago carinata, with a large number of characteristic endemic taxa. Such types of habitats are classified as E1.2B – Serpentine steppes.

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

Inland wetlands

nland 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		3		
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		4		
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		3		
Fresh water > Marshes on peat soils >> U: Permanent Nonforested peatlands		1		Representative
Fresh water > Marshes on inorganic or peat soils >> Va: Montane wetlands		2		Rare
Fresh, saline, brackish or alkaline water > Subterranean >> Zk(b): Karst and other subterranean hydrological systems		4		Unique

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
4: Seasonally flooded agricultural land		2		
7: Excavations		3		
9: Canals and drainage channels or ditches		4		

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Montane pastures and medows	

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Agrostis canina		

Scientific name		
	Common name	Position in range / endemism / other
Alchemilla flabellata		
Anthoxanthum odoratum		
Aulacomnium palustre		
Blysmus compressus		
Bryum pseudotriquetrum		
Bryum schleicheri		
Calliergon cordifolium		
Calliergonella cuspidata		
Caltha palustris palustris		
Cardamine glauca		
Cardamine raphanifolia		
Carex canescens canescens		
		protected in Serbia
Carex davalliana		
Carex distans		
Carex echinata		
Carex echinata echinata		
Carex flacca		
Carex flava		
Carex hostiana		
Carex lepidocarpa		
Carex nigra		
Carex panicea		
Carex paniculata		
Carex rostrata		
Carex vulpina		
Cirsium pannonicum		
		protected in Serbia
Comarum palustre		
Cratoneuron filicinum		
Crepis froelichiana dinarica		endemic
		protected in Serbia
Dactylorhiza cordigera bosniaca		protected in Serbia
Deschampsia cespitosa		
cespitosa		
Eleocharis palustris		
Eleocharis quinqueflora		
Equisetum fluviatile		
Equisetum palustre		
Eriophorum latifolium		
Festuca rubra		
Filipendula ulmaria		
Fissidens adianthoides		
Fontinalis antipyretica		
Gentiana linearis		
Geum rivale		
Gournvale		protected in Co-ti-
Gymnadenia frivaldii		protected in Serbia
Gymnadenia frivaldii		protected in Serbia endemic
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum		
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum		endemic
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus		endemic
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus		endemic
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa		endemic
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthemum vulgare		endemic
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthemum vulgare Linum catharticum		endemic
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthemum vulgare Linum catharticum Lysimachia punctata		endemic
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthemum vulgare Linum catharticum Lysimachia punctata Lysimachia terrestris		endemic
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthemum vulgare Linum catharticum Lysimachia punctata Lysimachia terrestris Molinia caerulea		endemic
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthemum vulgare Linum catharticum Lysimachia punctata Lysimachia terrestris Molinia caerulea Myosotis laxa cespitosa		endemic
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthemum vulgare Linum catharticum Lysimachia punctata Lysimachia terrestris Molinia caerulea Myosotis laxa cespitosa Palustriella commutata		endemic
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthemum vulgare Linum catharticum Lysimachia punctata Lysimachia terrestris Molinia caerulea Myosotis laxa cespitosa Palustriella commutata Parnassia palustris		endemic
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthernum vulgare Linum catharticum Lysimachia punctata Lysimachia terrestris Molinia caerulea Myosotis laxa cespitosa Palustriella commutata Parnassia palustris Philonotis calcarea		endemic
Gymadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthernum vulgare Linum catharticum Lysimachia punctata Lysimachia terrestris Molinia caerulea Myosotis laxa cespitosa Palustriella commutata Parnassia palustris Philonotis fortana		endemic
Gymnadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthernum vulgare Linum catharticum Lysimachia punctata Lysimachia terrestris Molinia caerulea Myosotis laxa cespitosa Palustriella commutata Parnassia palustris Philonotis calcarea Priilonotis fortana		endemic
Gymnadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthernum vulgare Linum catharticum Lysimachia punctata Lysimachia terrestris Molinia caerulea Myosotis laxa cespitosa Palustriella commutata Parnassia palustris Philonotis calcarea Priilonotis fontana Podospermum purpureum Potentilla erecta		endemic
Gymnadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthernum vulgare Linum catharticum Lysimachia punctata Lysimachia terrestris Molinia caerulea Myosotis laxa cespitosa Palustriella commutata Parnassia palustris Philonotis calcarea Philonotis fontana Podospermum purpureum Potentiila erecta Prunella vulgaris		endemic
Gymnadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthernum vulgare Linum catharticum Lysimachia punctata Lysimachia terrestris Molinia caerulea Mysootis laxa cespitosa Palustriella commutata Parnassia palustris Philonotis calcarea Philonotis fontana Podospermum purpureum Potentiila erecta Prunella vulgaris Ranunculus auricomus		endemic
Gymnadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthernum vulgare Linum catharticum Lysimachia punctata Lysimachia terrestris Molinia caerulea Mysootis laxa cespitosa Palustriella commutata Parnassia palustris Philonotis calcarea Philonotis fontana Podospermum purpureum Potentiilla erecta Prunella vulgaris Ranunculus auricomus Salix alba		endemic
Gymnadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthemum vulgare Linum catharticum Lysimachia punctata Lysimachia terrestris Molinia caerulea Mysostis laxa cespitosa Palustriella commutata Parnassia palustris Philonotis calcarea Philonotis fontana Podospermum purpureum Potentiilla erecta Prunella vulgaris Ranunculus auricomus Salix alba Salix aurita		endemic
Gymnadenia frivaldii Gypsophila spergulifolia Heliosperma pusillum albanicum Holcus lanatus Juncus articulatus Leskea polycarpa Leucanthernum vulgare Linum catharticum Lysimachia punctata Lysimachia terrestris Molinia caerulea Mysootis laxa cespitosa Palustriella commutata Parnassia palustris Philonotis calcarea Philonotis fontana Podospermum purpureum Potentiilla erecta Prunella vulgaris Ranunculus auricomus Salix alba		endemic

Scientific name	Common name	Position in range / endemism / other
Sanguisorba officinalis		
Scorpidium scorpioides		
Scutellaria galericulata		
Sphagnum contortum		protected in Serbia
Sphagnum denticulatum		protected in Serbia
Sphagnum fallax		protected in Serbia
Sphagnum flexuosum		protected in Serbia
Sphagnum subsecundum		protected in Serbia
Succisa pratensis		
Syntrichia ruralis		
Tomentypnum nitens		
Triglochin palustris		protected in Serbia
Utricularia minor		protected in Serbia
Valeriana dioica		protected in Serbia
Valeriana simplicifolia		protected in Serbia
Willemetia stipitata albanica		

4.3.2 - Animal species

Other noteworthy animal species

Other noteworthy animal specie	S					
Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	Accipiter gentilis	Northern Goshawk				
CHORDATA/AVES	Accipiter nisus	Eurasian Sparrowhawk				
CHORDATA/AVES	Alauda arvensis	Sky Lark; Eurasian Skylark				
CHORDATA/AVES	Anthus pratensis	Meadow Pipit				
CHORDATA/AVES	Arenaria interpres	RuddyTurnstone				
CHORDATA/AVES	Asio otus	Long-eared Owl				
CHORDATA/AVES	Buteo buteo	Common Buzzard				
CHORDATA/ACTINOPTERYGII	Carassius auratus	Native carp;New Zealand				
CHORDATA/AVES	Carduelis carduelis	European Goldfinch;Eurasian Goldfinch				
CHORDATA/AVES	Chloris chloris	European Greenfinch				
CHORDATA/ACTINOPTERYGII	Chondrostoma nasus	Undermouth				
CHORDATA/AVES	Circus cyaneus	Northern Harrier				
CHORDATA/AVES	Columba oenas	Stock Dove				
CHORDATA/AVES	Coturnix coturnix	Common Quail				
CHORDATA/AVES	Cuculus canorus	Common Cuckoo				
CHORDATA/AVES	Dendrocopos major	Great Spotted Woodpecker				
CHORDATA/AVES	Emberiza hortulana	Ortolan Bunting				
CHORDATA/AVES	Erithacus rubecula	European Robin				
CHORDATA/AVES	Falco subbuteo	Northern Hobby				
CHORDATA/AVES	Falco tinnunculus	Eurasian Kestrel;Common Kestrel				
CHORDATA/AVES	Ficedula albicollis	Collared Flycatcher				
CHORDATA/AVES	Fringilla coelebs	Common Chaffinch				
CHORDATA/AVES	Galerida cristata	Crested Lark				
CHORDATA/AVES	Gallinago gallinago	Common Snipe				
CHORDATA/AVES	Garrulus glandarius	Eurasian Jay				
CHORDATA/ACTINOPTERYGII	Gobio gobio	Gudgeon;Gudgeon;Gudgeon;	Gudgeon;Gudgeon			

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	Gyps fulvus	Griffon Vulture				
CHORDATA/AVES	Hirundo rustica	Barn Swallow				
CHORDATA/AVES	Jynx torquilla	Eurasian Wryneck				
CHORDATA/AVES	Lanius collurio	Red-backed Shrike				
CHORDATA/AVES	Lanius minor	Lesser Grey Shrike				
CHORDATA/AVES	Lanius senator	Woodchat Shrike				
CHORDATA/AVES	Merops apiaster	European Bee-eater				
CHORDATA/AVES	Parus major	Great Tit				
CHORDATA/AVES	Periparus ater	Coal Tit				
CHORDATA/AVES	Pernis apivorus	European Honey Buzzard				
CHORDATA/AVES	Phoenicurus ochruros	Black Redstart				
CHORDATA/AVES	Phylloscopus collybita	Common Chiffchaff				
CHORDATA/AVES	Phylloscopus trochilus	Willow Warbler				
CHORDATA/AVES	Picus viridis	European Green Woodpecker				
CHORDATA/ACTINOPTERYGII	Salmo trutta	The Brown Trout				
CHORDATA/MAMMALIA	Spalax leucodon	Lesser Blind Mole Rat;Lesser Mole Rat				
CHORDATA/ACTINOPTERYGII	Squalius cephalus	European chub				
CHORDATA/AVES	Sylvia atricapilla	Eurasian Blackcap				
CHORDATA/AVES	Sylvia communis	Common Whitethroat				
CHORDATA/ACTINOPTERYGII	Thymallus thymallus	European grayling;European grayling;European grayling				
CHORDATA/AVES	Turdus merula	Eurasian Blackbird;Common Blackbird				
CHORDATA/AVES	Turdus philomelos	Song Thrush				
CHORDATA/AVES	Turdus viscivorus	Mistle Thrush				
CHORDATA/AVES	Upupa epops	Eurasian Hoopoe;Common Hoopoe				

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cfb: Marine west coast (Mild with no dry season,
	warm summer)

Peštersko polje is distinguished with temperate-continental climate, modified with elements of the mountainous climate, unique on the Balkans, for which this area is called the "Balkan Siberia". This is a mountainous landscape with harsh climate, characterised with very long winters, and it represents the coldest area in Serbia, with the minimum temperature of -39°C. The spring and autumn are short in comparison to the summer and winter, hence the climate changes are very abrupt. The average annual air temperature is 7°C, which is one of important ecological features significant for the development of specific vegetation. The summer is characterised with high temperature amplitudes between day and night. Night frosts are common during the summer months. However, temperature is sufficiently high in the summer (do +35°C), which prevents development of transition peatbogs into high peatbogs.

4.4.2 - Geomorphic setting

Entire river basin
Upper part of river basin \square
Middle part of river basin \Box
Lower part of river basin
More than one river basin \square
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.

Hydrography of the analysed area is predominantly karstic. The hydrographic network across the area has a different density. The most interesting part is certainly the bog complex of approx. 500 ha, with the locality Jezero and the river mouth of the Boroštica River.

4.4.3 - Soil

Organic 🗹

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

No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)?

Please provide further information on the soil (optional)

Besides the mineral-marshy soil, large areas of the field are made of peat. The area of the peatbog covers approx. 450 ha, and the thickness of peat deposits reaches an average of 2 m. References show that there are many data on the composition of this peat, since it has been analysed by GIGOV (1960) and TEŠIĆ et al. (1960). According to GIGOV (1960) its characteristic profile is T1-T2-G. It contains around 80% of organic matter. At certain places there is a layer of semi-peat below the layer of peat, and at depths below 2 m there is a layer of lake mud. There is no lime even in the mud layer. TEŠIĆ et al. (1979) cite that the peat is rich or very rich with organic matter (more than 80% or even more than 90 %). Its pH level ranges from acidity to mild acidity and low acidity.

4.4.4 - Water regime

14/-4----

vvaler permanence	
Presence?	Changes at RIS update
Usually permanent water present	No change

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from surface water	>	unknown
Water inputs from rainfall		unknown
Water inputs from groundwater		unknown

Water destination

Presence?	Changes at RIS update	
To downstream catchment	No change	

Stability of water regime

outsing of fruits 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.

The Boroštica River and Jezero are the most important hydrographic units of Peštersko polje, and the state of surrounding pastures and natural ecosystems depend on them.

Until 1972, the Boroštica River run through Peštersko polje and influenced the main hydrographical conditions in the area. Through hydroameliorative activities, a levee was built in order to protect parts of the terrain from spring floods, a channel was dig through to change the river course towards another direction, and a tunnel was made to direct waters into catchments of the Vapa River and the Uvac River for the purposes of hydroelectric power plants. Borrow pits for the construction of the levee in Peštersko polje were sited on the very terrain, and a depression, formed in this way, was filled with water, creating a "lake", which now represents on of the most distinct characteristics of the area. Stones for levee building were brought from the surrounding hills.

(ECD) Connectivity of surface waters and of groundwater	Existing.
(ECD) Stratification and mixing regime	Not aplicable (peatbog).

4.4.5 - Sediment regime

Sediment regime unknown

<no data available>

4.4.6 - Water pH

Acid (pH<5.5) ☑

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

Circumneutral (pH: 5.5-7.4)

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

Unknown

Please provide further information on pH (optional):

The peat is acid (pH=5.58), and acidity rises with depth (pH=4.95 at depth of 2.75 m).

4.4.7 - Water salinity

Unknown

<no data available:

4.4.8 - Dissolved or suspended nutrients in water

Unknown

<no data available>

449-1	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 O ii) significantly different ⊚

Surrounding area has greater urbanisation or development $\hfill\Box$

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use $\ensuremath{\checkmark}$

Surrounding area has significantly different land cover or habitat types \qed

Please describe other ways in which the surrounding area is different:

The main difference is in the water regime - peatbog is formed over the area where the water stagnates, whereas on the surrounding dry terrain is covered with mountain pastures and meadows, with still widely present cattle grazing.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

1 TO NOTOTHING COT NOCO		
Ecosystem service	Examples	Importance/Extent/Significance
Wetland non-food products	Livestock fodder	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	Medium
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climactic processes	Medium

Cultural Services

Cultulal Sel vices				
Ecosystem service	Examples	Importance/Extent/Significance		
Recreation and tourism	Recreation and tourism Picnics, outings, touring			
Recreation and tourism	Nature observation and nature-based tourism	Medium		
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium		
Spiritual and inspirational	Spiritual and religious values	Medium		
Scientific and educational	Major scientific study site	Medium		
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium		
Scientific and educational	Educational activities and opportunities	Medium		

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	Medium

Other ecosysten	n service(s)	not included	above:
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See additional material for further information

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

character of the wetland

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	4

their existence is strongly linked with the maintenance of the ecological $\hfill\square$

<no data available>

4.6 - Ecological processes

(ECD) Pressures and trends concerning any	
of the above, and/or concerning ecosystem	Peat exploitation
integrity	·

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	/	/

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	>	✓

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

a) Site:

More than 90% of the land is state and public owned. Private enclaves exist mainly in the eastern and northern parts of the area, where arable land is present. All of the Level III Protection regime of SNR Peštersko polje (143ha 52a 30m2) is privately owned land intended for peat exploitation.

b) Surrounding area:

Around 60% is state owned, but public and private properties are also present. Private enclaves exist mainly around the outskirts of the plateau, where villages are concentrated.

5.1.2 - Management authority

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

Tourism organization of Sjenica - the manager of both Special nature reserve Peštersko polje and the Ramsar site

http://sr.turizamsjenica.com/

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

Mihajlo Tripković - director, TO Sjenica

Postal address:

N.N. Svetozara Markovića Square

36310 Sjenica

Republic of Serbia

E-mail address: srp.pesterskopolje@gmail.com

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	High impact	High impact	2	No change		No change	
Water regulation							
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes	
Drainage	Medium impact	Medium impact	✓	No change		No change	

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Livestock farming and ranching	Medium impact	Medium impact	2	No change	/	No change

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Unspecified	High impact	High impact	✓	No change		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	Medium impact	Medium impact	2	No change		No change
Vegetation clearance/ land conversion	High impact	High impact	2	No change	2	No change

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Unspecified	Medium impact	Medium impact		No change	✓	No change

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Droughts	Medium impact	Medium impact	✓	No change		No change

Please describe any other threats (optional):

a) within the Ramsar site:

A significant negative anthropogenic influence is present in the area, due to the commercial exploitation of the peat. Physical removals of mire vegetation along with the surface water drainage are the main negative effects of peat exploitation on this wetland. Drying out of the peatbog through the hydro-ameliorative activities has a direct influence on the vegetation and the floristic diversity, exploitation, in spite of the immediate economic profit, has very unpredictable long-termed consequences, not only for these fragile ecosystems, but for the ecological stability of entire mountain area they are located in. Exploitation of peat is located only in Level III Protection Regime of SNR Peštersko polje, with annual dynamics of approx. 15 000 m3, but is insufficiently controlled.

Intensive grazing of sheep and cattle is present on the pastures and the meadows are mown. The crops close to the peatland pose as an indirect risk, due to the impact of the fertilization and the chemical protection of crops.

The main threats and negative influences include:

- drainage of the peatbog and the surrounding wetlands changes of the water regime and disturbance of existing ecosystems
- climate change causes reduction of atmospheric precipitation in the critical periods
- exploitation of the peat causes habitat devastation and peat extracting mechanization causes disturbance of birds
- burning of pastures can harm the peatland when the water levels are low
- cattle breeding farms cause habitat fragmentation and isolation of rare and vulnerable species.

b) in the surrounding area:

Main influence of agriculture to ecological character of the surrounding area is the ploughing of the grasslands and change of land-use by cultivation of vegetables, wheat etc. Hunting affects the populations of wild animals, mainly wolves. More serious threat is the wolf-poisoning by the hunters who leave out poisonous meat, which kills vultures as well.

5.2.2 - Legal conservation status

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Other international designation	Emerald network site		partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Special Nature Reserve	Peštersko polje		partly

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area			partly
Important Plant Area			partly
Other non-statutory designation	Prime Butterfly Area		partly

5.2.3 - IUCN protected areas categories (2008)

la Strict Nature Reserve □
lb 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 of romservation through management intervention
VProtected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
VI Managed Resource Protected Area: protected area managed mainly

5.2.4 - Key conservation measures

Legal protection

Legal protection		
	Measures	Status
	Legal protection	Implemented

Habitat

Measures	Status
Habitat manipulation/enhancement	Implemented

Species

op coloc		
	Measures	Status
	Threatened/rare species	Proposed
	management programmes	Порозса

Human Activities

Measures	Status
Research	Partially implemented
Regulation/management of wastes	Partially implemented
Communication, education, and participation and awareness activities	Proposed
Management of water abstraction/takes	Proposed
Harvest controls/poaching enforcement	Partially implemented

Other

A partial assessment of the natural values of the Pešter Plateau was done during 1990's and again in 2005, for the purpose of its protection at a national level. The Study on Nature Protection of the Pešter Plateau was prepared and published by the Institute for Nature Conservation of Serbia in 1994, but with no Protected Area establishment as the outcome. However, in 2005 a new initiative for the protection of the area emerged, as well for its inclusion on the lists of internationally significant areas (Ramsar, IBA, IPA, SPA) was launched. Research done in this area has provided the necessary data for Ramsar site designation in 2006 and later for IPA, IBA, PBA and Emerald site designations, but still without protection at a national level. Finally, in 2013 the Institute publishes an updated Study on Nature Protection of the Peštersko polje, which was the scientific basis for the adoption of the protection act in late 2015, which came into force by the beginning of 2016, establishing the Special Nature Reserve Peštersko polje in the Pešter Plateau, the protected area of total area of 3117ha 96a 81m2, greatly overlapping with the designated Ramsar site. Out of three regimes of national protection (level IIII, in decreasing order of protective enforcement), only two are present in this protected area: level III protection regime (95,40% of total territory) and level III protection regime (4,60% of total territory). Only in level III protection regime is the peat exploitation allowed and carried out.

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?

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:

Due to infrastructural confinement and a small number of inhabitants living in closed communities "in harmony with nature", there was no initiatives for visitor or educational programmes in the past. However, the trends of infrastructural development of this area, as well as the establishment of a nationally protected area, has opened the possibility of launching adequate educational programmes and setting up a visitor facility, as well as programmes for raising public awareness of the necessity to protect the unique nature assets of Pešter Plateau area.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No, but restoration is needed

Further information

The restoration plan, as conditioned by Law on Agricultural Land, was first developed in 2018, but only for a small area, due to the land partition on the ownership bases. In proposed document the basic restoration itself was poorly covered. Integral and detailed peatbog restoration plan is needed.

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Butorac, B., Krizmanić, I., Panić, I., Savić, D., Zlatković, B. (1996): Predlog za stavljanje pod zaštitu tresave Sjeničko-pešterske visoravni (Proposal for the protection of the Sjenica-Pešter Plateau peatbog). V Kongres ekologa Jugoslavije. Zbornik sažetaka: 137. Društvo ekologa Srbije u saradnji Društvom ekologa Crne Gore, Beograd.

Diklić, N. (1999): Dracocephalum ruyschianaL. In: Stevanović, V. (ed) Crvena knjiga flore Srbije I (Red Book of Flora of Serbia I). Ministarstvo za životnu sredinu republike Srbije, Biološki fakultet univerziteta u Beogradu, Zavod za zaštitu prirode Srbije. Beograd. 70-71.

Dušković, V. (1992): Svadbeni običaji (Wedding customs). In: Sjeničko-pešterska visoravan, 352-378, Izdavač Etnografski muzej, Beograd. Flade, M. (1997): Savi's Warbler - Locustella luscinioides. Pp. 562-563. In: Hagemeijer, W. & Blair, M. (eds.): The EBCC Atlas of European Breeding Birds. T & A D Poyser, London.

Glue, D., Korpimaki, E. (1997): Short-eared Owl - Asio flammeus. Pp. 418-419. In: Hagemeijer, W. & Blair, M. (eds.): The EBBC Atlas of European Breeding Birds. T & A D Poyser, London.

Ham, I., Marinković, S. (2000): Eja livadarka (Circus pygargus) (Montagu's harrier (Circus pygargus)). Pp. 81-86. - In: Puzović, S. (ed.): Atlas ptica grabljivica Srbije, mape rasprostranjenosti i procene populacija (Atlas of birds of prey of Serbia, with maps of distribution and population estimates) 1977-1996. Zavod za zaštitu prirode Srbije, Beograd.

Janković, M., Pantić, N., Mišić, V., Diklić, N., Gajić, M. (1984): Vegetacija SR Srbije, I (Vegetation of SR Serbia, I). SANU, Beograd. Lazarević, P. (2009): Florističko-ekološka studija tresave Peštersko polje u jugozapadnoj Srbiji. Magistarski rad. Biološki fakultet, Univerzitet u Beogradu, Beograd. (manuscript);

Lazrević, P. (2013): Mires of Serbia - distribution characteristics. Botanica Serbica 37 (1): 39-48, Beograd.

Lazarević, P., Lazarević, M., Krivošej, Z., Stevanović, V. (2009): On the distribution of Dracocephalum ruyschiana (Lamiaceae) in the Balkan Peninsula. Phytologia Balcanica 15 (2): 175 – 179, Sofia.

Lazarević, P. (2016): TRESAVE SRBIJE KLASE SCHEUCHZERIO-CARICETEA FUSCAE (NORDH. 1936) R. TX. 1937. – FLORISTIČKO VEGETACIJSKE KARAKTERISTIKE, UGROŽENOST I ZAŠTITA. Biološki fakultet. Univerzitet u Beogradu. Doktorska disertacija (manuscript). Radišić, D., Vasić, V., Puzović, S., Ružić, M., Šćiban, M., Grubač, B., Vujić, A. eds. 2018. Red book of fauna III - Birds. Belgrade: Institute for Nature Conservation of Serbia, University of Novi Sad, Faculty of Sciences, Department of Biology and Ecology and Bird Protection and Study Society of Serbia.

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<1 file(s) uploaded>

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

<1 file(s) uploaded>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<2 file(s) uploaded>

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:



Traditional manner of keeping the cattle grazing (Ivana Jovanović, INCS, 15-05-2017)



Exploitation of peat (Ivana Jovanović, INCS, 15-05-2017)



Exploitation of peat (Ivana Jovanović, INCS, 15-05-2017)



Exploitation of peat (Ivana Jovanović, INCS, 15-05-2017)



Exploitation of peat (Ivana Jovanović, INCS, 15-05-



Wetlands near the Trojan Hill (Ivana Jovanović, INCS, 15-05-2017)



Wetlands (Ivana Jovanović, INCS, 15-05-2017)



Wetlands (Ivana Jovanović, INCS, 15-05-2017)



Landscape (Ivana Jovanović, INCS, 15-05-2017)



The Trojan Hill, the highest peek on the Pešter Plateau (1351m a.s.l.) (Ivana Jovanović, INCS, 15-05-2017)



Djurdjevica spring (Ivana Jovanović, INCS, 15-05-2017)



Djurdjevica spring (Ivana Jovanović, INCS, 15-05-2017)



The Trojan Hill, the highest peek on the Pešter Plateau (1351m a.s.l.) (*Ivana Jovanović*, *INCS*, *15-05-*2017



The view of peat exploitation parcels from Trojan Hill (Ivana Jovanović, INCS, 15-05-2017)



The view from Trojan Hill of the area surrounding Peštersko polje (*Ivana Jovanović*, *INCS*, *15-05*-2017)



The view of Peštersko polje from Trojan Hill (Ivana Jovanović, INCS, 15-05-2017)



The view of Peštersko polje from Trojan Hill (*Ivana Jovanović*, *INCS*, *15-05*-2017)



Landscape (Ivana Jovanović, INCS, 15-05-2017)



Landscape (Ivana Jovanović, INCS, 15-05-2017)



Landscape (Ivana Jovanović, INCS, 15-05-2017)

RIS for Site no. 1656, Pestersko polje, Serbia



Landscape (Ivana Jovanović, INCS, 15-05-2017)



Landscape (Ivana Jovanović, INCS, 15-05-2017)



Landscape (Ivana Jovanović, INCS, 15-05-2017)



Landscape (Ivana Jovanović, INCS, 15-05-2017)



Local architecture (Ivana Jovanović, INCS, 15-05-2017)



Landscape (Ivana Jovanović, INCS, 15-05-2017)



Landscape (Ivana Jovanović, INCS, 15-05-2017)



Landscape (Ivana Jovanović, INCS, 15-05-2017)



Landscape (Ivana Jovanović, INCS, 15-05-2017)



Djurdjevica spring (*Ivana Jovanović, INCS*, 15-05-2017)



zip (Ivana Jovanović, INCS, 15-05-2017)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2006-03-19