



Ramsar Information Sheet

Published on 13 July 2016

Update version, previously published on 21 October 2002

Belarus

Kotra



Designation date	21 October 2002
Site number	1216
Coordinates	53°56'39"N 24°33'28"E
Area	10 463,50 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 is situated in the upper stream of the Kotra River (the Neman River basin) and is a transboundary wetland. The site is the only weakly disturbed natural forest-mire complex in the North-Western part of the Belarus. It plays important water protection and water regulating function, the source of the Kotra River, the complex of waterlogged forests, fens, transition mires and bogs are situated within the site.

The high diversity of the natural habitats creates favourable conditions for many rare protected plant and animal species.

The Kotra Ramsar site together with the adjacent Lithuanian Ramsar site Chapkeliay are very important for biodiversity support and conservation in the region.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	M.E. Nikiforov, M.V. Maximenkov, A.V. Kozulin, O.S. Beliatskaya
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2.1.2 - Period of collection of data and information used to compile the RIS

From year	2002
To year	2010

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Kotra
Unofficial name (optional)	Котра

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 <input checked="" type="radio"/> No <input type="radio"/>
(Update) The boundary has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) B. Changes to Site area	the area has decreased
(Update) The Site area has been calculated more accurately	<input checked="" type="checkbox"/>

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?	No
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2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Boundaries description (optional)

The border of the site on the North goes along the forestry quarters to the East, until the State border. On the East the border follows the State border until the edge of the population locality Romanovo, then goes along the borders of this locality, along forestry quarters to the State border and further along the State border. On the South the border goes along the edge of the forest-mire massif, following the forestry quarters. On the West - to the northern direction along the forest planning glades, cutting off the drained lands, until the State border, and further along the State border with Lithuania, which is the middle of the Kotra river's bed. The channel of the Kotra River is a border of the site with the adjacent Lithuanian Reserve and Ramsar Site "Cepkeliai" on the North-West.

The Ramsar site Kotra was created in 2002 with an area of 10584 ha. In 2003 the Ramsar site Kotra was designated as Landscape Reserve of National Importance, it's border was delineated more accurately and the area was calculated to be 10463.5 ha.

2.2.2 - General location

a) In which large administrative region does the site lie?	Grodno Oblast, Shchuchyn District
b) What is the nearest town or population centre?	Shchuchyn

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

idem No

d) Transboundary Ramsar Site name:

2.2.4 - Area of the Site

Official area, in hectares (ha):

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

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Continental

Other biogeographic regionalisation scheme

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	<p>1. The site plays important water protection and water regulating function for the transboundary wetland complex.</p> <p>2. The source of the Kotra River, the complex of waterlogged forests, fens, transition mires and bogs are situated within the site.</p>
Other ecosystem services provided	<p>The Kotra Ramsar site together with the adjacent Lithuanian Ramsar site Chapkeliay are very important for biodiversity support and conservation in the region. The Kotra site is the only slightly transformed forest-mire complex in the North-Western Belarus.</p> <p>The peat accumulation processes are ongoing in the site. The capacity of the peat deposit does not exceed 20-30 cm.</p>
Other reasons	<p>The site is a particularly good example of a wetland typical of Northwest Belarus and Eastern Baltic region as a whole, and is represented by a single wooded wetland including oversaturated watershed forests, bogs, transition bogs, fen mires, inundated meadows and forests, creek valleys, network of overgrow forest channels. The site is the only virtually unused wooded wetland in Northwest Belarus.</p>














- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification	<p>The Kotra site is the most important area for conservation of biological diversity of northwest region of Belarus (the northern border of the Continental Biogeographical region). Due to variety of habitats the area supports wide assemblage of rare animal and plant species.</p> <p>There are 635 species of higher vascular plants related to 346 genera and 91 families were registered within the site. Among them are 6 species of club moss, 6 horsetails, 9 ferns, 4 gymnosperms and 608 angiosperms. 15 of site's plant species are listed in the National Red Data Book of Belarus.</p> <p>The animal life of the Ramsar site Kotra is specific in many aspects, which is stipulated by heavy saturation of both Belarusian and the neighboring Lithuanian sides. Low anthropogenic load, bogs, mires, hard-to-reach intact waterlogged forests and dry patches create favorable conditions for existence of many kinds of animals. The proximity of Lithuanian protected sites, and of the Cepkeliay Reserve in particular, also positively affects the development of animal population in the region.</p> <p>The studied territory is known to have in total 125 terrestrial vertebrates, 26 of which are mammals, 86 – birds, 5 – reptiles and 8 amphibian species. 2 mammal species, 13 bird species, 1 amphibia, 1 fish and 9 insect species are listed in the National Red Data Book.</p>
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- 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	CITES Appendix I	Other status	Justification
<i>Berula erecta</i> 		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	LC 	<input type="checkbox"/>	National Red List - VU	
<i>Cardamine bulbifera</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - NT	
<i>Dactylorhiza majalis</i> 		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - VU	
<i>Dactylorhiza viridis</i> 		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - VU	
<i>Gladiolus imbricatus</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - NT	
<i>Huperzia selago</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - NT	
<i>Iris sibirica</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - NT	
<i>Lilium martagon</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - NT	
<i>Liparis loeselii</i> 		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - Endangered	
<i>Neottia ovata</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - NT	
<i>Platanthera chlorantha</i> 		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - VU	
<i>Pulsatilla pratensis</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - NT	

There are 635 species of higher vascular plants related to 346 genera and 91 families were registered within the site, which is 35% of all Belarussian plant species. Among them are 6 species of club moss, 6 horsetails, 9 ferns, 4 gymnosperms and 608 angiosperms. 15 of site's plant species are listed in the National Red Data Book of Belarus.

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	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA / AVES	<i>Aquila pomarina</i>	Lesser Spotted Eagle	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	National Red List - WJ	on breeding and as foraging ground
CHORDATA / AVES	<i>Botaurus stellaris</i>	Eurasian Bittern	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - WJ	
CHORDATA / AVES	<i>Bubo bubo</i>	Eurasian Eagle-Owl	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - EN	
CHORDATA / AVES	<i>Ciconia nigra</i>	Black Stork	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3				<input type="checkbox"/>	<input type="checkbox"/>	National Red List - WJ	breeding pairs. Criterion 4: on breeding and as foraging ground
CHORDATA / AVES	<i>Crex crex</i>	Corn Crane	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - WJ	
CHORDATA / AVES	<i>Falco tinnunculus</i>	Common Kestrel; Eurasian Kestrel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2				<input type="checkbox"/>	<input type="checkbox"/>	National Red List - WJ	breeding pairs
CHORDATA / AVES	<i>Gallinago media</i>	Great Snipe	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	20			NT	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - EN	males
CHORDATA / AVES	<i>Grus grus</i>	Common Crane	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15			LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - WJ	breeding pairs, on breeding
CHORDATA / MAMMALIA	<i>Lynx lynx</i>	Eurasian Lynx	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - EN	
CHORDATA / MAMMALIA	<i>Meles meles</i>	European Badger	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - WJ	
CHORDATA / AVES	<i>Picoides tridactylus</i>	Eurasian Three-toed Woodpecker; Three-toed Woodpecker	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - NT	
CHORDATA / AVES	<i>Picus viridis</i>	European Green Woodpecker	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - WJ	

The animal life of the potential Ramsar site Kotra is specific in many aspects, which is stipulated by heavy saturation of both Belarusian and the neighboring Lithuanian sides. Low anthropogenic load, bogs, mires, hard-to-reach intact waterlogged forests and dry patches create favorable conditions for existence of many kinds of animals. The proximity of Lithuanian protected sites, and of the Cepakliai Reserve in particular, also positively affects the development of animal population in the region.

The studied territory is known to have totally 156 terrestrial vertebrates, 26 of which are mammals, 117 – birds (39.3% of all the bird species, registered in Belarus), 5 – reptiles and 8 amphibian species. 2 mammal species, 13 bird species, 1 amphibia, 1 fish and 9 insect species are listed in the National Red Data Book.

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
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Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
open Caricetum limosae communities	<input type="checkbox"/>	It is unique community of open fen mires.	Disruptions of hydrological regime (drainage) lead to displacement of vulnerable Carex Limosa by ecologically more mobile and widespread species with participation of shrubs. This could result in disappearance of this community.
Aboriginal old pine forests	<input type="checkbox"/>	Old pine forests (100 and more years) on raised bogs and transitional mires	
Aboriginal upland oak woods	<input type="checkbox"/>	oak woods with nemoral biotic complex	
Ash communities	<input type="checkbox"/>	This is rare for the territory and the whole region community.	
Maple forests	<input type="checkbox"/>	Rare for the region	
Aboriginal old spruce forest	<input type="checkbox"/>	Zonal old climax spruce forest (more than 90 years old)	
Old pine forests on dry sand soil	<input type="checkbox"/>	The age of pine stands is more than 90 years. Grows on dry sand soils (ancient eolian formations).	
Aboriginal old Betula pubescens forest	<input type="checkbox"/>	Rare for the region old aboriginal Betula pubescens forest (more than 75 years old), with presence of valuable and rare for the region Quercus robur and Fraxinus excelsior	
Old Betula verrucosa forest	<input type="checkbox"/>	Rare for the region old Betula verrucosa forest (older than 70 years) of nemoral and nemoral-boreal structure with row of rare plants of Betula complex	
Aboriginal old Black alder forest	<input type="checkbox"/>	Older than 60 years	
Old Aspen forest	<input type="checkbox"/>	Rare for the site.	
7230 Alkaline fens	<input checked="" type="checkbox"/>	occupy 92.6 ha	Annex 1 of the Habitat Directive
3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition - type vegetation	<input checked="" type="checkbox"/>	occupy 1.8 ha	Annex 1 of the Habitat Directive
3160 Natural dystrophic lakes and ponds	<input checked="" type="checkbox"/>	occupy 0.5 ha	Annex 1 of the Habitat Directive
7160 Fennoscandian mineral-rich springs and springfens	<input checked="" type="checkbox"/>	occupy 2.6 ha	Annex 1 of the Habitat Directive
9010 * Western Taiga	<input checked="" type="checkbox"/>	occupy 6320.7 ha	Annex 1 of the Habitat Directive, high-priority habitat

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
9020 * Fennoscandian hemiboreal natural old broad-leaved deciduous forests (Quercus, Tilia, Acer, Fraxinus or Ulmus) ric	<input checked="" type="checkbox"/>	occupy 4.8 ha	Annex 1 of the Habitat Directive, high-priority habitat
9050 Fennoscandian herb-rich forests with Picea abies	<input checked="" type="checkbox"/>	occupy 194.7 ha	Annex 1 of the Habitat Directive
9080 * Fennoscandian deciduous swamp woods	<input checked="" type="checkbox"/>	occupy 1141.5	Annex 1 of the Habitat Directive, high-priority habitat
91D0 * Bog woodland	<input checked="" type="checkbox"/>	occupy 1060.3 ha	Annex 1 of the Habitat Directive, high-priority habitat
91E0 * Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae)	<input checked="" type="checkbox"/>	occupy 1163.3 ha	Annex 1 of the Habitat Directive, high-priority habitat
9170 Galio-Carpinetum oak-hornbeam forests	<input checked="" type="checkbox"/>	occupy 0.3 ha	Annex 1 of the Habitat Directive

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

4.1 - Ecological character

The site is a particularly good example of a wetland typical of Northwest Belarus and Eastern Baltic region as a whole, and is represented by a single wooded wetland including waterlogged floodplain forests, raised bogs, transition and fen mires, floodplain meadows, small rivers' floodplains, network of overgrown canals.

The territory is ecologically divided into three ecotopes: forests, wetlands, and floodplain meadows. Forest vegetation prevails in the site and is diverse: from dry heather and lichen-moss pine forests to Spiraea - black alder forests and sparse pine forest in the bogs. The site's forests are characterized by high waterlogging. Indigenous forest types amount for 84.7% of the total forested area, which is very high for Belarus.

Raised bogs are concentrated in the central part of the site. These are mainly covered by pine and white birch forests. Black alder forests grow on fen mires and White birch stands - on transition mires. Open fens and transition mires are located mainly in the rivers' floodplains and are represented by sedge communities.

The mire forests are hard to reach, quite old with various-aged mixed forest stands, and they play an important environment-shaping role of sustaining water regime for the territory. They are also concentration places of biota's hygrophilous components, habitats of rare plant and animal species.

The activity of beavers has a considerable environment-forming impact on the natural complexes of the site. The beaver inhabits almost all permanent watercourses of the site thus radically transforming the surrounding landscape. First of all the transformations are caused by changes in the hydrological regime of the adjacent area, inundation of floodplain phytocenoses, reduction of run-off rate.

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 > Flowing water >> M: Permanent rivers/ streams/ creeks				
Fresh water > Flowing water >> N: Seasonal/ intermittent/ irregular rivers/ streams/ creeks				
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		3		
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		4		
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands				
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands				
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		1		Representative
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		2		Representative

Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
4: Seasonally flooded agricultural land				
9: Canals and drainage channels or ditches				

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Arnica montana</i>		
<i>Betula humilis</i>		
<i>Dactylorhiza majalis baltica</i>		
<i>Eleocharis quinqueflora</i>		
<i>Lathyrus linifolius</i>		
<i>Malaxis monophyllos</i>		
<i>Polemonium caeruleum</i>		
<i>Salix lapponum</i>		

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	<i>Aegolius funereus</i>	Boreal Owl				Is rare within the site, is registered among wet mixed forests in the central part of the site
CHORDATA/MAMMALIA	<i>Alces alces</i>	moose				
CHORDATA/AVES	<i>Anser anser</i>	Greylag Goose				The species was registered in the floodplain of the Kotra river during spring migrations in years with high spring floods.
CHORDATA/AVES	<i>Bucephala clangula</i>	Common Goldeneye	2			pairs
CHORDATA/MAMMALIA	<i>Canis lupus</i>	gray wolf;Wolf				
CHORDATA/MAMMALIA	<i>Castor fiber</i>	Eurasian Beaver	52			Beavers occupy almost all constant watercourses within the site, significantly transforming the surrounding landscapes, causing changes of hydrological regime, flooding of floodplain phytocenoses, and reduction of water run-off.
CHORDATA/MAMMALIA	<i>Cervus elaphus</i>	elk;wapiti or elk				
CHORDATA/AVES	<i>Columba palumbus</i>	Common Wood Pigeon				
CHORDATA/AVES	<i>Falco subbuteo</i>	Eurasian Hobby;Northern Hobby				
CHORDATA/AVES	<i>Lanius excubitor</i>	Great Grey Shrike;Northern Shrike				
CHORDATA/MAMMALIA	<i>Lutra lutra</i>	European Otter				
CHORDATA/AVES	<i>Lyrurus tetrix</i>					
CHORDATA/AVES	<i>Nucifraga caryocatactes</i>	Spotted Nutcracker	10			pairs, is found throughout the whole site in places with spruce occurrence.
CHORDATA/AVES	<i>Scolopax rusticola</i>	Eurasian Woodcock				
CHORDATA/AVES	<i>Tetrao urogallus</i>	Western Capercaillie				2 small lekking grounds are known in the North-western part of the site
CHORDATA/AVES	<i>Tringa glareola</i>	Wood Sandpiper				Is found during spring migrations

4.4 - Physical components

4.4.1 - Climate

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

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

Upper part of river basin

More than one river basin

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.

The site is situated in the upper reaches of the Kotra river. The Kotra River is the right tributary of the Neman River (The Baltic sea basin). One of hydrological features of Kotra River is that its waters flow in different directions. In the second half of XIX c. as a result of bifurcation process the river Pelesa has divided into two rivers - Kotra and Ula. The Kotra's riverbed in its source was also cut as a result of ameliorative works, and part of water from the source of the Kotra river started to flow to the Ula River through the Nizianka river. Then Ula flows into the Myarkis river, which is tributary of Neman.

4.4.3 - Soil

Mneral

Organic

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

Please provide further information on the soil (optional)

The soil cover of the site is represented by sod-podsol automorphic, sod-podsol semi-hydromorphic and hydromorphic, sod hydromorphic, peat-gley and gleyish, floodplain types. Mire soil formation is represented by all types: fen and bog types are dominating. The capacity of the peat deposit does not exceed 20-30 cm.

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	
Usually seasonal, ephemeral or intermittent water present	

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from rainfall	<input checked="" type="checkbox"/>	No change
Water inputs from groundwater	<input type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
To downstream catchment	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels largely stable	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 main source of water for the site's mires is atmospheric precipitation, but groundwaters also play significant role. The surface run-off within the site is directed in the western, as well as in the northern directions. Kotra river is the main watercourse of the site, flowing along the border of Belarus and Lithuania and forming the site's border in the North-west. The length of the river within the site is 27 km. The river's valley is poorly defined, its floodplain is low, flat, highly waterlogged. The riverbed at the beginning is slightly meandering, than forms loops, oxbows and lakes. The river flow is weak. The average water height during spring flood is about 3.3 m. The left tributary - Skorbjanka river - flows into the Kotra river within the site. Its channel is canalized throughout the whole length (1968). There are numerous drainage canals within the site. They are overgrowing with shrubs, but still drain the territory.

4.4.5 - Sediment regime

Sediment regime unknown

4.4.6 - Water pH

Circumneutral (pH: 5.5-7.4)

Please provide further information on pH (optional):

Water in the Kotra river has pH about 7.10-7.30. Water, flowing out of mires has lower indicators of pH - 6.3 - 6.6.

4.4.7 - Water salinity

Fresh (<0.5 g/l)

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic

Mesotrophic

Oligotrophic

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

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

Surrounding area has greater urbanisation or development

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Wetland non-food products	Timber	Low
Wetland non-food products	Peat	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	High
Hazard reduction	Flood control, flood storage	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Low
Recreation and tourism	Nature observation and nature-based tourism	Medium
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium

Other ecosystem service(s) not included above:

Forestry activities are practiced on the territory of 10,347 ha. Non-forested lands are used as hay fields (about 1.1%) and for ploughing (less than 0.1%). Local people practice grazing and mowing in some places in the floodplain of the Kotra river.

The territory is used for hunting (under management of Schuchin regional hunting society). Local people collect berries and mushrooms.

Peat extraction is carried out in adjacent to the site area, in South-east of the forest massif.

Currently within the site there is a governmentally protected memorial site marking the place where in 1943 the village was burned down along with 147 local people. On the left bank of the Kotra River on the ancient aeolian dunes there were found two settlements dating back to the Stone and Bronze Ages. In the future, there is a perspective of international ecological tourism development, including water tourism along the Kotra river.

Within the site:

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

<no data available>

4.6 - Ecological processes

(ECD) Carbon cycling	The peat accumulation is ongoing on the site.
(ECD) Vegetational productivity, pollination, regeneration processes, succession, role of fire, etc.	The decrease of ground water table results in encroachment of shrubs on the Kotra floodplain. Rare grasses are extruded by more flexible shrubs, there is noticeable reduction in biological diversity of meadows and capacity of hayfields.
(ECD) Notable aspects concerning migration	There are intensive migration of mammals within the transboundary wetland, defined by seasonal foraging and reproduction features, as well as by hunting activities on the Belarussian side.

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

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Local authority, municipality, (sub)district, etc.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

5.1.2 - Management authority

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

The State nature conservation authority "The State Landscape Reserve Kotra" manages the site. The site is under jurisdiction of Schuchin regional executive committee.

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

Tadeush Iosifovich Lutkevich, the director of the State nature conservation authority "The State Landscape Reserve Kotra"

Postal address:

Shkolnaya 5
village Pervomaiskaya
Schuchin district
Grodno region

E-mail address:

zakaznik-kotra@mail.ru

5.2 - Ecological character threats and responses (Management)

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

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Drainage			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
Canalisation and river regulation			<input checked="" type="checkbox"/>		<input type="checkbox"/>	

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Livestock farming and ranching			<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	

Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Mining and quarrying			<input type="checkbox"/>		<input checked="" type="checkbox"/>	

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hunting and collecting terrestrial animals			<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Logging and wood harvesting			<input checked="" type="checkbox"/>		<input type="checkbox"/>	

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Fire and fire suppression			<input checked="" type="checkbox"/>		<input type="checkbox"/>	
Vegetation clearance/ land conversion			<input checked="" type="checkbox"/>		<input type="checkbox"/>	

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Agricultural and forestry effluents	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Please describe any other threats (optional):

Irrational use of floodplain and meliorated lands in agriculture, including ploughing, reseeding, early mowing, intensive grazing, leads to degradation of floodplain communities, as well as pollution of rivers with organic matter.
Overgrowth of open floodplain with shrubs.
Changes of hydrological regime as a result of influence of adjacent melioration systems.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National landscape	Kotra	http://zakaznik-kotra.wix.com/kotra	whole

5.2.3 - IUCN protected areas categories (2008)

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

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

Habitat

Measures	Status
Catchment management initiatives/controls	Proposed
Habitat manipulation/enhancement	Proposed
Hydrology management/restoration	Proposed

Human Activities

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

Other:

It is proposed to conduct restoration works (repeated waterlogging) on drained peatland adjacent to the Ramsar site in the South-East, after the peat extraction is finished.

5.2.5 - Management planning

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

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

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

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

The information centre is organised in the building of the State Nature Conservation Facility "Republican Landscape Reserve Kotra". 2 touristic routes are organized, 14.6 km long. The 2 km long ecological trail is established and equipped. There are 8 rest places.

URL of site-related webpage (if relevant): <http://zakaznik-kotra.wix.com/kotra>

5.2.6 - Planning for restoration

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

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water regime monitoring	Proposed
Plant community	Proposed
Plant species	Proposed
Birds	Proposed

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

1. Lishtvan I.I., Bambalov N.N. Yaroshevich L.M. 1991. Scientific-engineering solving of Polessia reclamation problems / The problems of Polessia region. Vol. 14. - P. 3-25. (In Russian).
2. Climate of Belarus. 1996. Ed. Loginov V.F. - Minsk. - 234 p. (In Russian).
3. Parfenov V.I., Kim G.A. 1976. Dynamics of meadow-mire flora and vegetation influenced by drainage. - Minsk, Science and technics edition. - 191 p. (In Russian).
4. Pygachevsky A.V. Grodno oblast forests: structure, conditions, use. Status and problems of nature conservation and tourism development in Grodno oblast. Grodno, Selected papers. P. 16-24. (In Russian).
5. Dolbik M., Fedushin, 1967. Birds of Belarus, 520 pp. (In Russian).
6. Doroveef A.M. (chief ed.) 1993. Red Data Book of the Republic of Belarus. Rare and endangered animal and plant species. Minsk: Belaruskaya Encyclopedia. 559 pp. (In Belarussian).
7. Saulus Svaras, Linas Balciauskas, Eugenius Drobelius, Liutauras Raudonikis. Important wetlands in Lithuania. Wilnus, 1999. 199 pp.
8. Semenchenko V., Maximenkov M., Skuratovich A.. State and Perspective of Widening of protected Areas in Zone (Belarus –Lithuania). Status and problems of nature conservation and tourism development in Grodno oblast. Grodno, Selected papers. P. 3-15. (In Russian).
9. The Red Data Book of the Republic of Belarus: rare and threatened plant species / L.I. Choruzik, L.M. Suschena, V.I. Parfenov and others. – 2nd edition – Minsk: BelEn, 2006. – 456 p. (In Russian).

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

<1 file(s) uploaded>

vi. other published literature

<no file available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Raised bog (*Saulius Svazas, 2004*)



Raised bog (*Saulius Svazas, 2004*)



the State border on the Katra/Kotra River (*Saulius Svazas, 2004*)



young Osprey in the nest. (*Saulius Svazas, 2004*)



Lake Druksiai/Drisyaty (*Saulius Svazas, 2004*)



Siline/Klevitsa site: landscape. (*Saulius Svazas, 2004*)



extensive forest swamp (*Tobias Salathe, 2004*)



Since the abandonment of traditional agriculture in the floodplain of the slow-flowing Kotra river, vegetation succession is slowly closing the former open areas. Thus, management measures are urgently needed. (*Tobias Salathe, 2004*)



The nest of White Stork on abandoned tractor used for wetlands drainage. (*Saulius Svazas, 2004*)

6.1.4 - Designation letter and related data

Designation letter

<no file available>

Transboundary Designation letter

<1 file(s) uploaded>

Date of Designation