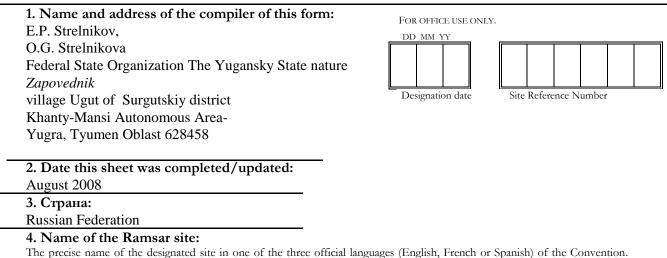
Information Sheet on Ramsar Wetlands (RIS) – 2006-2008 version

Available for download from http://www.ramsar.org/ris/key_ris_index.htm.

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

Notes for compilers:

- 1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands.* Compilers are strongly advised to read this guidance before filling in the RIS.
- 2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
- 3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.



Alternative names, including in local language(s), should be given in parentheses after the precise name.

Lower Dvuobje (No. 677)

5. Designation of new Ramsar site or update of existing site:

This RIS is for (tick one box only):

a) Designation of a new Ramsar site \Box ; or

b) Updated information on an existing Ramsar site 🗵

"This updated version of the RIS has been accepted under the condition that the Secretariat's comments originally provided on this RIS will be taken into account during the preparation of the next update. Cartographic materials provided are schematic maps."

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area

The Ramsar site boundary and site area are unchanged:

or If the site boundary has changed: i) the boundary has been delineated more accurately ; or ii) the boundary has been extended ; or iii) the boundary has been restricted**

and/or

If the site area has changed:

i) the area has been measured more accurately ; or ii) the area has been extended ; or iii) the area has been reduced** •

** **Important note**: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site: No major changes to the ecological character identified.

7. Map of site:

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

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

i) a hard copy (required for inclusion of site in the Ramsar List): 🗷;

ii) an electronic format (e.g. a JPEG or ArcView image) 🗷;

iii) a GIS file providing geo-referenced site boundary vectors and attribute tables 🗷.

b) Describe briefly the type of boundary delineation applied:

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

The borders of the Bolsheobsky and Kunovatsky extensions coincide with those of the Kunovatsky State nature *Zakaznik* of federal level. The Beryozovsky extension is located on the Ob River floodplain: from the Kazym and Vogulka river mouths to the border of the Khanty-Mansi Autonomous Area (Khanty-Mansi AA). Part of the territory belongs to the Beryozovsky State *zakaznik* of regional level.

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

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

Beryozovsky extension: north: 64°35' N, 66°02' E

west: 63°57' N, 65°00' E south: 63°46' N, 65°23' E east: 64°27' N, 66°14'E Bolsheobsky extension: 65°25' N, 65°17' E

Kunovatsky extension: 65°05′ N, 66′40′ E

Approximate centre of the whole site: 64°32' N, 65'46' E

9. General location:

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

The site is located in the lower reaches of the Ob River and consists of three extensions: Beryozovsky, Bolsheobsky, and Kunovatsky.

The **Beryozovsky** extension is located on the Ob River floodplain at stretches from the Kazym and Vogulka river mouths to the border of the Khanty-Mansi Autonomous Area (64°33' N). It belongs to the Beloyarsky and Beryozovsky administrative rayons of the Khanty-Mansi AA. The rayon village of Beryozovo (6,700 inhabitants) is situated in the direct proximity of the extension (off southwest border); the village of Beloyarsky (17,900 inhabitants) is located 45 km southwest.

The **Bolsheobsky** extension is located in the Ob River valley between parallels 65 and 66. Administratively, it belongs to the Shuryshkarsky rayon of Yamalo-Nenets Autonomous Area (Yamalo-Nenets AA). The rayon village of Muzhi is located 12 km of the site border.

The **Kunovatsky** extension is located in the Kunovat River catchment; it comprises its lower reaches and a large portion of its tributary river – the Logasjegan. This extension administratively belongs to the Shuryshkarsky rayon of the Yamalo-Nenets AA. Distance to the rayon village of Muzhi is 82.5 km northwest.

10. Elevation: (in metres: average and/or maximum & minimum) Bolsheobsky and Beryozovsky extensions: 4-15 m a.s.l.; Kunovatsky extension – up to 70 m a.s.l.

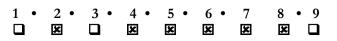
11. Area: (in hectares) 540,000 ha

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland. The Bolsheobsky and Beryozovsky extensions are located in the Ob River valley. A pronounced patterned structure and high biological productivity of habitats in combination with good protective properties and a favorable north-south situation created a unique area that is a very important stopover site of migratory waterbirds. It is also a breeding and moulting area of many waterbird species; as well as spawning grounds and a spawning migration route of most commercial fish species of the Ob catchment. The Kunovatsky extension is very important for the critically endangered Ob population of the Siberian Crane *Grus leucogeranus*.

13. Ramsar Criteria:

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



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

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

Criterion 2. The Bolsheobsky and Beryozovsky extensions lie on a flyway and are used as stopover sites by the following rare passage migrants included in the IUCN Red Data List: the Lesser White-fronted Goose *Anser erythropus*, Red-breasted Goose *Branta ruficollis*; in the Red Data Book of the Russian Federation: the Bewick's Swan *Cygnus bewickii*, Lesser White-fronted Goose *Anser erythropus*, Red-breasted Goose *Branta ruficollis*; White-tailed Eagle *Haliaeetus albicilla*, Oystercatcher *Haematopus ostralegus*; in the Red Data Book of the Yamalo-Nenets AA and Khanty-Mansi AA: the Bean Goose *Anser fabalis fabalis*. 5 to 30 breeding pairs and non-breeding individuals of the White-tailed Eagle *Haliaeetus albicilla* were registered at the site in different years, as well as 30-50 Oystercatchers *Haematopus ostralegus* (Golovatin 2006). A breeding Siberian White Crane was registered in the Kunovatsky extension (Sorokin, Kotyukov 1982).

Criteria 4 and 5. The site (Bolsheobsky and Beryozovsky extensions) is important for moulting waterbirds. Up to 200,000 waterbirds gather here in favorable years (Golovatin 2006). Predominant species are the Northern Pintail, Wigeon, Tufted Duck, Black Scoter, Common Teal, Garganey, Shoveler and others. Count data for some commonest species are given in Table 1.

		limonest species are gr	Table 1
Species	Year	min	max
Whooper Swan	1977-2001	70	200
Cygnus cygnus			
Bewick's Swan	1989-2001	25	70
Cegnus bewickii			
Common Teal	1989-2001	900	13000
Anas crecca			
Wigeon	1989-2001	4000	35000
Anas penelope			
Northern Pintail	1989-2001	9000	58 000
Anas acuta			
Garganey	1989-2001	600	13 500
Anas querquedula			
Shoveler	1989-2001	1000	9500
Anas clypeata			
Tufted Duck	1989-2001	3500	23000
Aythya fuligula			
Scaup	1989-2001	3000	10000
Aythya marila			
Common Scoter	1989-2001	7000	20000
Melanitta nigra			
Smew	1989-2001	260	2500
Mergus albellus			
Ruff	1989-2001	1000	2150
Philomachus pugnax			
Little Gull	1989-2001	5000	8500
Larus minutus			
Black-headed Gull	1989-2001	1500	2000
Larus ridibundus			

Criterion 6. Until recently, the Kunovatsky extension supported habitats of the Siberian White Crane of the West Siberian population (Sorokin, Kotyukov 1982). According to the most optimistic estimates, the number of these critically endangered birds does not exceed 10 individuals. 2 to 3 breeding pairs (i.e. over 1% of the total population) of the Siberian White Crane were observed on the Kunovat River until 2002. No breeding pairs have been registered in latest years, but 4 birds were

seen in the Bolsheobsky extension in autumn 2006.

Criteria 7 and 8. The site is one of the richest whitefish habitats and supports large populations of surprisingly many species: *Stenodus leucichthys, Coregonus sardinella, Coregonus tugun, Coregonus peled, Coregonus nasus, Coregonus lavaretus,* and *Coregonus muksun.* Other important fish species are *Acipenser baeri, Acipenser ruthenus,* and *Salvelinus alpinus.* The site is used by most of the above listed species as feeding grounds and a spawning migration route.

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

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region: The Kunovatsky extension is located in the forest tundra; Bolsheobsky and Beryozovsky - in the northern taiga zone.

b) biogeographic regionalisation scheme (include reference citation):

A.A. Tishkov. Biosphere functions of natural ecosystems in Russia. 2005. 309 p.p. in Russian (Tishkov A.A. Biosfernye funktsii prirodnykh ekosistem Rossii. Moskva, Nauka. 2005. 309 s.)

16. Physical features of the site:

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

The **Bolsheobsky** and **Beryozovsky** extensions are located on the floodplain of the Ob River. The river divides to numerous channels and distributaries that are sometimes as broad and deep as the mainstream Ob. Major watercourses of the Beryozovsky extension are the Bolshaya Ob, Malaya Ob, and Severnaya Sosva. The Bolsheobsky extension is bordered by the Bolshaya Ob (2 to 3 km wide) in the east, and smaller channels that enter the Malaya Ob downstream, in the west. The floodplain is 45 km wide.

A peculiar feature of the lower reaches of the Ob is that floodplain islands there have *sor* hollows in their centers. The *sors* occupy a very large area in this portion of the floodplain (up to 40% of the total area).

The Lower Ob floodplain is a typical accumulative terrace with a deep cover (26-28 m) of alluvial sediments predominated by loams. Alluvium and soil formation processes have run simultaneously. Floodplain soils can be divided to two large groups depending on the inundation character and degree by both ground water and flood water: floodplain meadow soils and floodplain bog soils.

The channel-and-island character of the floodplain almost completely removes its horizontal division to the channel, central, and terrace portions that are usual for most other rivers. Typical of such a floodplain is the vertical division to ecological levels, or altitudinal belts, depending on the topography and floodplain regime (Shennikov 1941). Each level has specific groups of vegetation communities similar in their ecological and dynamic properties and forming certain ecological-dynamic series. Three ecological levels are identified in the Lower Ob floodplain between Salekhard and Beryozovo (Baryshnikov 1961, Ilyina 1976).

The lower floodplain is associated with the extensive *sor* depressions that sometimes cover several hundreds of square kilometers and increase in size further downstream. Relative heights of *sor* surface above the mean long-term low-water level reach 2-3.5 m. Compared with the rest of the floodplain, the *sors* are flooded for the longest period: 80 to 100 days.

Stretches of the medium floodplain level rise to 3.5 to 5 m above the low-water level. They remain flooded for 70 to 75 days on the average. Stretches of this level are long gentle slopes tilted towards *sor* depressions; low flat ridges that fringe smaller channels; and lower slopes of high channel ridges.

They high floodplain is associated with natural levees on the banks of large channels, tops and upper slopes of high ridges. Their average height above the low-water level exceeds 5 m. These sites are annually flooded for 25 to 40 days.

The **Kunovatsky extension** is located between the Poluiskaya Upland on the east, Nizhneobskaya Lowland on the west, and Siberian Uvaly knaps on the south. The Poluyskaya Upland comprises riverheads of the Kunovat, Logasjegan, and Aijegan. Typical of these rivers are: a moderately slow current, meandering watercourse, large sandy shallows, and low banks. The floodplain elements remain flooded for various periods depending on their height. The highest parts of the floodplain are flooded for 20 days on the average. Lower relief elements remain waterlogged for a longer time, up to 90 days.

The area has two lake types: glacial lakes and floodplain lakes. The formation of the former is associated with the accumulation of moraine deposits and washout of land by glacier meltwater. They are located on watersheds and usually have a rounded shape. Floodplain lakes are more numerous; they are river oxbows, usually elongated, narrow, with muddy shores and bottom. The area is paludified to 25-50%.

Predominating soil types are the taiga surface-gley soils, podzol forest-tundra soils, cryptopodzol iron pan soils, floodplain sod soils, and floodplain sod-gley soils.

The climate is extreme continental. The winter lasts for 6-6.5 months. The spring is usually rapid (30 days), cold, with abrupt weather changes and frequent frosts. The vegetation period lasts for 130 days. The autumn is usually warm, but short, with an unstable atmospheric pressure gradient, abrupt temperature changes and frequent early frosts. Mean temperature of the warmest month (July) is $+15^{\circ}$ C; mean temperature of the coldest month (January) is -20 to -25° C; mean annual precipitation is 450 mm. Prevailing wind directions in winter are southerly and southwesterly; in summer – northerly and northeasterly. A stable snow cover forms in the first ten days of October. Rivers freeze by mid-October, and open up in the middle or end of May.

17. Physical features of the catchment area:

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

The catchment of the Ob-Irtysh river system covers an area of $2,990,000 \text{ km}^2$. The Ob River catchment is clearly asymmetrical. The left-bank part covers 67% of the total catchment area, while the right-bank part covers a mere 33%. The Ob is mainly fed by snowmelt that comprises 70% of the total annual discharge. The flood begins in May, with a peak between mid June and beginning of July. Then the water level decreases till the end of August, or, in the lower reaches of the river, till the formation of an ice cover. There is virtually no summer low-water period. The autumn ice formation begins in the lower reaches of the Ob, from where it gradually expands up the river. The stable ice cover lasts for 190-200 days.

18. Hydrological values:

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

The Ob catchment is one of the largest in Eurasia. Ob river transports heat and dissolved matter that affects the climate and vegetation of the area, as well as ice cover of northern seas neighboring the river's mouth.

19. Wetland Types

a) presence:

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

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

Inland:	L Vt	•	M W	•	N Xi	•	O Xj	• p •	P Y	•	Q Zg	• g•	R Zi	• k(b)	Sf)) •	Ss	•	Tj	р	Ts•	U	•	Va•
Human-m	ade:	1	•	2	•	3	•	4	•	5	•	6	•	7	•	8	•	9	•	Zk	(c)			

b) dominance:

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

M; N; P; O; Ts; Tp; Xp: Xf; U

20. General ecological features:

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

Beryozovsky and Bolsheobsky extensions

The vegetation composition of these extensions demonstrates a clear connection with altitudinal belts of the floodplain. Areas of the low ecological level in the northern portion of the Lower Ob floodplain are typically occupied by *sor* meadows combined with patches of dwarf willow mires. These mires cover central parts of floodplain islands and have flat or slightly concave surfaces. They are very hummocky and waterlogged; the peat layer is 30 to 50 cm deep. *Salix lanata* of 0.5 to 1.5 in height is the predominant willow species. The hummocks are formed by sedges *Carex aquatilis* and *C. cespitosa*. Small numbers of *Petasites frigidus* and *Comarum palustre* are found between the hummocks. On higher, but poorly drained flats of the low ecological level, dwarf willow mires give way to waterlogged hummocky sedge meadows formed by the same species – *Carex cespitosa* and *C. aquatilis*. They are similar to mires by their vegetation composition, but lack shrub willows and have a greater density of sedge stands. These mires cover an insignificant area.

The low ecological level is dominated by *sor* depressions that grow over and become covered by *sor* meadow vegetation. After the flood recession, lowest portions in *sor* centers become occupied by scarce groups of *Eleocharis, Equisetum, Beckmannia,* and *Argostis*. As the soil dries, denser associations of *sor* meadows (*Arctophila, Beckmannia, Agrostis*) are formed at the sites. Largest areas are overgrown by meadows of *Agrostis stolonifera*. They usually have a closed grass canopy with a projective coverage of 80 to 90%, with heights of generative shoots not exceeding 15 or 20 cm. The herbage is dominated by *Argostis* (70-80%). Present in small amounts are also *Beckmannia eruciformis, Equisetum fluviatile, Stachys palustris, Ranunculus acris, Rorippa sylvestris, Galium palustre, Achillea ptarmica, Inula britannica, Alisma plantago-aquatica, and Myosotis palustris.*

Sor depressions on all floodplain islands are surrounded by extensive gently sloping surfaces that are flooded for shorter periods and belong to the medium ecological level of the floodplain. They typically develop associations of sedge and reed-grass meadows and willow scrubs combined with *sor* meadows in depressions.

The central association of this series is a hummocky sedge meadow of *Carex aquatilis* on extensive gently sloping surfaces tilted towards *sor* depressions. Hummocks 25-30 cm high and 20 cm in diameter cover almost 1/3 of the surface. Herbage is up to 100 cm high, with a projective cover of 90%. The predominant species is *Carex aquatilis*; occasional findings between hummocks are *Galium palustre, Cardamine pratensis,* and *Agrostis stolonifera*.

Very similar habitats are occupied by hummocky reed-grass meadows that are, however, more diverse in terms of herbage composition; predominant species are *Calamagrostis langsdorffii*, *Carex aquatilis*, and *Poa pratensis*. Small-hummock meadows of *Carex aquatilis* and *Calamagrostis langsdorffii* cover the largest areas on medium-level floodplain.

Also widespread are hummock-free bluegrass-reedgrass and ribbongrass-reedgrass meadows; they are confined to broad flat ridge crests along smaller channels, where they alternate with willow groves of *Salix viminalis* and *S. cinerea*.

Meadows of the medium-level floodplain form large continuous massifs on large floodplain islands only. On smaller islands and on ridges along minor channels, they alternate with *sor* meadows in depressions.

Typical of rougher ridged areas of the medium-level floodplain islands located in the mainstream Ob and larger channels are communities of herb-grass meadows and willow groves (scrubs and parklands) combined with sedge meadows between the ridges. Meadow phytocenoses are the first link in this succession. The most important species in these meadows are *Calamagrostis langsdorffii*, *Poa palustris*, *P. pratensis*, *Alopecurus pratensis*, *Beckmannia eruciformis*, *Agrostis gigantean*, and *Phalaroides arundinacea*.

Reedgrass meadows of *Calamagrostis langsdorffii* and especially bluegrass meadows of *Poa pratensis* cover large areas on upper slopes of channel ridges and belong to the high-level floodplain. Reedgrass meadows often alternate with willow scrubs.

The latter form dense groves of *Salix viminalis* and *S. cinerea* up to 2-3 m high. The highest areas, such as flat tops of the ridges, are covered by reedgrass willow parklands and, in more southerly areas, by ribbongrass willow groves.

Areas of the high-level floodplain are the smallest in this stretch of the Lower Ob. Typical of high channel ridges located closer to water are associations of willow scrubs, willow parklands, and willow grass forests. Willow-birch, birch, and sometimes mixed grass forests develop deep in floodplain massifs.

Deciduous and conifer forests are very rare on the floodplain of this stretch of the Lower Ob River. These communities cover large areas on remnant floodplain terraces located among floodplain islands.

Mixed birch-larch and birch-spruce forests on the high-level floodplain and remnant floodplain terraces support taiga mosses (*Plaurozium schreberi, Polytrichum commune*), dwarf shrubs (*Vaccinium vitis-idaea, Ledum palustre*), and, occasionally, floodplain herbs, such as *Mentha arvensis, Lactuca sibirica, Galium boreale*, and *Veronica longifolia*.

Kunovatsky extension

The largest portion of the Kunovatsky stretch is forested. They are predominated by larch-spruce and spruce dwarf-shrub-sphagnum with *vernik* (low birch thickets) open forests alternating with dwarfshrub-moss-lichen flat-mound and large-mound mires. Typical features of these forests are scarce tree stands (density 0.3 to 0.5) of spruce with an admixture of birch (2-3 trees) and occasional larches and aspens. The trees are suppressed, with crooked trunks covered by epiphytic mosses and lichens (Parmelia sp., Usnea barbata). There are many dead trees. Spruces are 9-12 m tall, 12-18 cm in diameter; birches are about the same height -9 to 10 m. Larches are somewhat taller: 13 to 15 m. The regrowth is very scarce and suppressed; it consists of spruces, occasional pines, and more numerous coppice birches. The undergrowth consists of yernik groups. The herb and dwarf-shrub story is predominated by oligotrophic dwarf shrubs: Vaccinium uliginosum, Chamaedaphne calyculata, Ledum palustre; occasionally found are Empetrum nigrum, Oxycoccus quadripetalis, Vaccinium vitis-idaea; rather numerous are Carex globularis and Rubus chamaemorus. The dense moss cover is dominated by sphagna mosses Sphagnum angustifolium, S. fuscum; numerous are also the common hair moss (Polytrichum sp.) and green mosses Pleurozium schreberi, Ptilium crista-castrensis. Lichen cover is patchy. Common lichen species are Peltigera aphthosa, Nephroma arcticum, and Cladina rangiferina.

The northern part of the right-bank Logasjegan is occupied by secondary birch dwarf shrub-lichengreen moss forests with stone pine, spruce, and larch that succeeded primary stone pine forests lost to a forest fire. These forests are underlain by permafrost, though its depth is usually smaller than that under primary intact forest communities. The tree composition is dominated by birch *Betula pendula*. It forms, along with larch, spruce, and occasional pines, a more closed (0.6 to 0.7) lower canopy of the forest. The upper canopy bears occasional survivor groups of the primary forest – larches and stone pines. Larches are 15-16 m tall, 18-20 cm in diameter; however, occasional trees of over 300 years old are 50 to 60 cm across. Traces of the wood fire can be seen everywhere (burnt old stumps, some tree trunks). The dwarf shrub story is represented by dogrose *Rosa acicularis*, juniper *Juniperus communis*, and sometimes dwarf birch *Betula nana*. The ground cover is dominated by synusia of hypo-Arctic and boreal dwarf shrubs, mosses and lichens. Very small areas at the Logasiegan River mouth are occupied by larch-spruce-stone pine lichen-green moss-dwarf shrub forests. Vegetative communities forming this group are confined to well-drained watershed areas built by cryptopodzol gleyey peaty loams. Very typical of these habitats is an underlying permafrost layer. These forests have a scarce canopy (density 0.5 to 0.6). Predominant trees - stone pine and spruce - do not grow very tall here; mature trees (100-150 years old) form a canopy of 12-15 m high. Larches are usually higher, growing to 18 to 20 m. As a rule, these forests develop an admixture of birch (Betula pubescens, B. pendula) and sometimes pine (Pinus sylvestris) that form a lower canopy. A natural restocking under the canopy of the north taiga larch-spruce-stone pine forest is slow; the regrowth is suppressed and usually predominated by spruce. The undergrowth is poorly developed. Occasional plants or small groups of Duschekia fruticosa, Juniperus communis, Sorbus sibirica, and Rosa acicularis can be observed there. The herb-dwarf shrub story is formed by hypo-arctic and boreal dwarf shrubs. Their projective density is relatively great (60 to 70%). The commonest species are Ledum palustre, Vaccinium uliginosum, Empetrum nigrum, Vaccinium vitisidaea; less common are Vaccinium myrtillus and Linnaea borealis. Common herbs are club mosses, Equisetum sylvaticum, Carex globularis, but their participation is insignificant. Mosses and lichen patches form a continuous cover predominated by Pleurozium schreberi and Polytrichum alpestre. Lichen patches (Cladina stellaris, Stereocaulon paschale, Peltigera aphthosa) are more or less evenly distributed and provide a tessellation of the soil cover.

Mires are more common than forests at the site. The commonest mires are large-mound and flat-mound sphagna mires; *yernik*-cloudberry-sphagna ridge mires; sedge-sphagna and sedge-hypnum pool mires.

Flat-mound mires cover large areas on the watershed and alternate with larch-spruce forests. They are formed by groups of flat peat mounds with *ersey* pools in between; the ratio of their areas may vary. Mounds are 0.5 to 1 m high and measuring from several meters to several tens or sometimes even hundreds of meters across. The flat mounds are dominated by dwarf shrubs and lichens; the *ersey* pools are overgrown by sedges, sphagnum and hypnum mosses.

Yernik-cloudberry-sphagna ridge mires, sedge-sphagna and sedge-hypnum pool mires occupy shallow depressions on the watershed and slopes. They are found in the central and southwest portions of the site. Individual massifs of these mires are fan-shaped with a concave surface and tilt towards the Logasjegan and Kunovat rivers. Most of these mires are occupied by ridge-and-hollow and ridge-and-pool complexes. Typical of them are arch-shaped ridges alternating with elongated waterlogged hollows with pools in the center. The hollows cover considerably larger areas than the ridges (up to 70-80%). The ridges are overgrown with dwarf shrubs and sphagna mosses; predominant plants are *yernik Betula nana* and cloudberry *Rubus chamaemorus*; sometimes found are also cotton-grass, dwarf sedges, sphagnum (*Sphagnum magellanicum, S. angustifolium* and others) and hypnum mosses (*Dicranum, Polytrichum strictum*), occasional lichens. Waterlogged hollows between the ridges are occupied by *Carex rotundata* and *C. limosa, Eriophorum russeolum, Menyanthes trifoliata, Comarum palustre*. The moss cover consists of sphagnum and hypnum mosses with some liverworts.

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.* No data available

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplied as supplementary information to the RIS.*

Siberian White Crane (*Grus leucogeranus*) – an endangered species included in the IUCN Red List and the Red Data Book of the Russian Federation. An occasional passage migrant in the Bolsheobsky and Beryozovsky extensions. Breeds in the Kunovatsky extension.

Lesser White-fronted Goose (*Anser erythropus*) – an endangered species included in the IUCN Red Data List and the Red Data Book of the Russian Federation. An occasional stopover visitor on migration.

Red-brested Goose (*Rufibrenta ruficollis*) – an endangered species included in the IUCN Red Data List and the Red Data Book of the Russian Federation. An occasional stopover visitor on migration.

Bewick's Swan (Cygnus bewickii) – a rare species included in the Red Data Book of the Russian Federation, Red Data Books of Yamalo-Nenets AA and Khanty-Mansi AA. An occasional stopover visitor on migration.

Siberian sturgeon (*Acipenser baeri*) – a rare species included in the Red Data Book of the Russian Federation, Red Data Books of Yamalo-Nenets AA and Khanty-Mansi AA.

Whitefish: Stenodus leucichthys, Coregonus sardinella, Coregonus tugun, Coregonus peled, Coregonus nasus, Coregonus lavaretus, and Coregonus muksun are valuable commercial species.

23. Social and cultural values:

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

An important fishing area of Coregonidae, in particular the Bolsheobsky extension that comprises mouths of major spawning rivers of whitefish species. The extensions located on the Ob floodplain (Beryozovsky and Bolsheobsky) include migration routes and feeding grounds of most commercial fish species.

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

If Yes, tick the box **D** and describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

a) within the Ramsar site: State ownership (lands of the state reserve, water, and forest funds).

b) in the surrounding area:

25. Current land (including water) use: a) within the Ramsar site:

The mainstream Ob and all large channels are used for navigation in the frost-free season: both by power boats and large passenger and cargo vessels.

Commercial fishing is practiced on the Ob floodplain by partnerships and communities of indigenous people.

b) in the surroundings/catchment:

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects: No data available

27. Conservation measures taken:

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

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

The Bolsheobsky and Kunovatsky sites are the extensions of the Kunovatsky state *zakaznik* of federal level. The *zakaznik* covers an area of 220,000 ha.

Part of the Beryozovsky extension lies within the Beryozovsky State *zakaznik* of regional level. The Beryozovsky State *zakaznik* of regional level covers an area of 43,320 ha. It was established on 17 October 1978. Since 01 July 2002, the Beryozovsky *zakaznik* reports to the organization United Specially Protected Areas of Administration of the Khanty-Mansi Autonomous Area. Address of the organization: 628012 Khanty-Mansiisk, ul. Studencheskaya d. 2 kab. 620. Phone/Fax: 7(3456)126294.

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia \Box ; Ib \Box ; II \Box ; III \Box ; IV \boxtimes ; V \Box ; VI \Box

c) Does an officially approved management plan exist; and is it being implemented?: No.

d) Describe any other current management practices:

The borders and Statute of the Ramsar wetland were adopted by the Administration of Khanty-Mansi Autonomous Area on 31/08/1995 (Decree No. 176) and by the Governor of the Yamalo-Nenets Autonomous Area on 05/07/1995 (Decree No. 283).

Spring counts of waterbirds and Red List species, winter transect counts of elks and badgers have been carried out every year.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc. It would be wise to coordinate and strengthen conservation and land use supervision measures on the wetland and approve these at the federal and regional levels.

29. Current scientific research and facilities:

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

The Kunovatsky state *zakaznik* reserve is a model area in the UNEP/GEF project *The Development of* a wetland site and flyway network for the conservation of the Siberian Crane and other migratory birds in Asia (UNEP/GEF Siberian Crane project).

Moreover, large portions of the Bolsheobsky and Beryozovsky extensions located in the Ob floodplain are designated as the important bird area "Dvuobye". The IBA "Dvuobye" extends between the Severnaya Sosva mouth and the confluence of the Malaya and Bolshaya Ob. The IBA programme of the Russian Bird Conservation Union does not plan changes in the protection status of the site, but to carry out monitoring work.

The Tyumen State University made and inventory of the Beryozovsky State *zakaznik* of regional level. They described vegetation and wildlife of the reserve and Ramsar wetland and developed a monitoring programme on territory of the *zakaznik* and the Ramsar site.

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

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc. Numerous booklets and other information materials have been published in the framework of the UNEP/GEF Siberian Crane project. All major events with participation of general public are carried out in Salekhard.

31. Current recreation and tourism:

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

No organized recreation or tourism is practiced.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc. Government of the Khanty-Mansi Autonomous Area, Government of the Yamalo-Nenets Autonomous Area, Ministry of Natural Resources and Environment of the Russian Federation

33. Management authority:

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

As to protected areas of federal level: Ministry of Natural Resources and Ecology of the Russian Federation, Federal Supervisory Natural Resources Management Service (*Rosprirodnadzor*). As to protected of regional level: competent agency of executive authority of the administrative region of the Russian Federation; local authorities.

1. Департамент охраны окружающей среды и экологической безопасности Ханты-Мансийского а.о. - Россия, 628012, г. Ханты-Мансийск, ул. Студенческая, 2

or

Правительство Ханты-Мансийского а.о. - Россия, 628006, г. Ханты-Мансийск, ул. Мира, 5

2. Управление Росприроднадзора по Ханты-Мансийскому автономному округу- ул. Студенческая, 2, г.Ханты-Мансийск, 628012

34. Bibliographical references:

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

- Головатин М.Г., 2006. Ямало-Ненецкий автономный округ. //Ключевые орнитологические территории России. Том2.М., с. 56-72
- Головатин М.Г., Пасхальный С.П. 1999. Летнее население птиц верхнего течения реки Сорум. //Материалы к распространению птиц на Урале, в Приуралье и Западной Сибири. С. 82-87.
- Головатин М.Г., Пасхальный С.П. 2004. Заметки о фауне птиц Двуобья. //Материалы к распространению птиц на Урале, в Приуралье и Западной Сибири. С. 75-80.
- Ильина И.С., Лапшина Е.И., Лавренко Н.Н. и др. 1985. Растительный покров Западно-Сибирской равнины. Новосибирск. Наука. 221с.

Иоганзен Б.Г., Тюменцев Н.Ф. 1968. Пойма Оби. Зап.-Сиб. книжное издательство.158с.

Красная книга Тюменской области. 2004. Издательство Уральского университета. Екатеринбург. 495с.

Природа Тюменского Севера. 1991.Средне-Уральское книжное изд-во. 191с.

Сорокин Г.А., Котюков Ю.В. 1982. Обнаружение гнездовой обской популяции стерха. - Журавли в СССР. Ленинград. С.15-18.

Шенников Н.П. 1941. Луговедение. Л.: Изд-во Ленинградского ун-та. 156с.

Экология Ханты-Мансийского округа. 1997.СофтДизайн, Тюмень, 286с.

Югория. Энциклопедия Ханты-Мансийского автономного округа. Том1. Ханты-Мансийск. 2000. 399с.

Please return to: Ramsar Convention Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • e-mail: ramsar@ramsar.org