34. Information Sheet on Ramsar Wetlands

Categories approved by Recommendation 4.7 of the Conference of the Contracting Parties.

NOTE: It is important that you read the accompanying Explanatory Note and Guidelines document before completing this form.

1. comp	Date leted/upda	this ited:	sheet	was	FOR OFFICE USE ONLY.										
Septer	mber 1997														
2. Country: Russian Federation					Designation date				Site Reference Number						

3. Name of wetland: Brekhovsky Islands in

the Yenisei estuary

4. Geographical coordinates: 70°30'N, 82°45'E

5. Altitude: floodplain and islands: < 10 m; **6. Area:** *c.* 1,400,000 ha

bedrock coast: up to 118 m a.s.l.

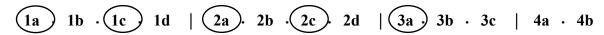
7. Overview: An estuarine wetland complex, incorporating a network of rivers, streams, channels and lakes, as well as islands, floodplains and terraces covered with tundra vegetation. The area is internationally important for breeding, staging and moulting birds, in particular for red-breasted goose *Branta ruficollis*.

8. Wetland Type (please circle the applicable codes for wetland types as listed in Annex I of the *Explanatory Note and Guidelines* document.)

marine-coastal: $A \cdot B \cdot C \cdot D \cdot E \cdot F \cdot G \cdot H \cdot I \cdot J \cdot K$ inland: $L \cdot M \cdot N \cdot O \cdot P \cdot Q \cdot R \cdot Sp \cdot Ss \cdot Tp \cdot Ts$ $U \cdot Va \cdot Vt \cdot W \cdot Xf \cdot Xp \cdot Y \cdot Zg \cdot Zk$

Please now rank these wetland types by listing them from the most to the least dominant: L,Ts,U,W,O,M.

9. Ramsar Criteria: (please circle the applicable criteria; see point 12, next page.)



Please specify the most significant criterion applicable to the site: 1c

10. Map of site included? Please tick yes \square -or- no \square

(Please refer to the Explanatory Note and Guidelines document for information regarding desirable map traits).

11. Name and address of the compiler of this form: E.E.Syroechkovsky Jnr.

Research Institute for Ecology and Evolution, Russian Academy of Sciences 33 Leninsky Prospect, Moscow 117071, Russia.

- **12.** Justification of the criteria selected under point 9, on previous page: 1c a good example of an estuarine wetland complex which plays an important role in the natural functioning of the Yenisei River Basin and coastal system.
- **13. General location:** In North Asia, Taimyr Autonomous Area. The village of Karaul, a district centre, is located within the borders of the site.
- 14. Physical features: The wetland complex of the Lower Yenisei comprises an extensive network of channels and streams, which divide the marshy lowland into a great number of islands. Islands adjacent to the left bank of the Yenisei are composed of riverine and lacustrine alluvial sediments dated from the Upper Pleistocene and Holocene. These sediments are mainly represented by the loams and loamy sands interlayered with detritus, peat and ice veines. Islands located closer to the right bank are composed of the Upper Pleistocene glacial-marine sediments: loams interspersed with sand, shingle, peat and ice veines. The high terraces situated above the Yenisei floodplain are built up from sand-stone. There are outcrops of Cretaceous sediments on the high right bank, where slope processes are intense, with solifluction and frequent landslides.

The area has an arctic continental climate. The average annual air temperature is -11°C, with a recorded minimum of -56°C in January and a maximum of +31°C in July. The mean July temperatures are between +11° and +13°C. Annual precipitation is about 375 mm. Snow cover persists for 244 days, from early October till early June.

The annual flow of the Yenisei River through its estuary comprises 600 km³. The river is fed mainly by snow melt. The flood occurs from mid-May till early June. The Yenisei waters carry in the Kara Sea about 10.5 million tonnes of suspended sediments annually.

The tundra lakes are mainly shallow: two to three metres deep, but there are also several large lakes 15-20 m deep. The tundra communities are situated on gley and tundra-gley soils with high humus content. In the warmest summers, the permafrost is found at a depth of 1.5-2 m, but usually at 1-1.3 m.

- **15. Hydrological values:** The wetland plays an important role in the natural functioning of the Yenisei River Basin and coastal system. The annual flow of the Yenisei River through its estuary comprises 600 km³. The annual load of suspended sediment is about 10.5 million tonnes.
- **16. Ecological features:** The islands are dominated by meadow communities with brushes of willows and alders. The trees are up to 1-1.5 m high. The watershed areas are mainly occupied by the shrub tundras. To the north of the Tanama River mouth, the typical south-tundra communities occur. The bushy tundra with *Betula exilis*, *B. nana* and *B. middendorfii* is found in the watershed areas, lake depressions and on the terraces
- **17. Noteworthy flora:** The flora of the islands is poorly known. As part of the 1994 International Arctic Expedition, Dr Yu.P.Kozhevnikov (Biological Institute, St.Petersburg) carried out a brief botanical survey in the area. The information has not been published so far.
- **18. Noteworthy fauna:** There are 112 species of bird listed in the faunistic descriptions of the area, 56 of these are breeding species. Geese are the most plentiful, in particular white-fronted goose *Anser albifrons* and bean goose *Anser fabalis*. The rare and threatened bird species listed in the Russian Red Data Book are represented by white-billed diver *Gavia adamsi*, Bewick's swan *Cygnus columbianus bewickii*, lesser white-fronted goose *Anser erythropus*, red-breasted goose *Branta ruficollis*, white-tailed

eagle *Haliaeetus albicilla* and peregrine falcon *Falco peregrinus*. Red-breasted goose is a common breeding species at the Tanama, Yara, Muksunikha and some other rivers. It also occurs in large concentrations during the migration periods. Breeding and young non-breeding Bewick's swans occur in the northern portion of the site and along the Lower Tanama River. According to the locals, the populations of these two species are increasing. Peregrine falcons nest on the precipitous banks of the Yenisei River and along the meandering rivers of Muksunikha, Tanama, Lakurya, Pelyatka and some others. No counting work has ever been conducted at the site.

The Yenisei estuary provides important habitats for whitefish *Coregonus* sp. and Siberian sturgeon *Acipencer baeri*.

- **19. Social and cultural values:** The area is populated by the indigenous people of Enets, which practically do not occur anywhere else. For centuries, the Lower Yenisei region has had a multicultural population, including also Dolgans, Nenets and Russians who settled in the area in the 17th century. The total human population is about 5,000. This population depends on the use of wetland resources, mainly fish stocks. There are many historical and sacred objects at the site.
- **20. Land tenure/ownership:** Most of the land is owned by the users who have collective proprietary rights. A small area in the northern part of the site is state owned.
- **21. Current land use:** Traditional activities include fishing, reindeer-breeding and hunting for Arctic fox in winter. There are about a hundred places throughout the site where fishing is carried out regularly. This causes disturbance to waterbirds, especially due to the use of motor boats.
- **22.** Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects: The Lower Yenisei is a busy year-round waterway and the water pollution with oil is quite common. Besides, along its 4130 km length the Yenisei River receives large amounts of polluted industrial and domestic water. Accidental discharges also occur. Poaching poses a major threat for the migrating population of red-breasted goose *Branta ruficollis*.
- **23.** Conservation measures taken: The area has no national protection status.
- **24.** Conservation measures proposed but not yet implemented: Based on the results of the 1993 International Arctic Expedition, the Research Institute for Ecology and Evolution has proposed to establish a nature reserve in the area. This project is under development now.
- **25.** Current scientific research and facilities: A number of ornithological surveys have been carried out in the area in the beginning of this century (*e.g.* Popham, 1897, 1898, 1901; Tugarinov, 1908, 1910; Havilend, 1915). In the 1970s, the ornithologists E.S.Ravkin, I.I.Gleikh and A.S.Martynov worked in the southern part of the area. They have published short articles on bird population. Some information about the site may be found in the overviews by E.E.Syroechkovsky and E.V.Rogacheva (1980) and by E.V.Rogacheva (1988, 1992). As part of the International Arctic Expeditions, organized by the Research Institute for Ecology and Evolution, E.E.Syroechkovsky Jnr., V.N.Karpov, Yu.P.Kozhevnikov, V.V.Yakimenko and other ornithologists carried out fieldwork in the area during two summers of 1993 and 1994.

26. Current conservation education: Very small-scaled. During the International Arctic Expeditions, a number of presentations have been made for local people. Posters to identify the Arctic birds have been distributed. There is a need for some awareness and education programme to persuade the local people not to shoot rare birds, in particular red-breasted geese.

27. Current recreation and tourism: None

28. Jurisdiction:

Territorial: Administration of Taimyr (Dolgano-Nenets) Autonomous Area (35 Sovetskaya Street, Dudinka, Taimyr AO 663210, Russia).

Functional: State Committee of the Russian Federation for Environmental Protection (4/6 Bolshaya Gruzinskaya Street, Moscow 123812, Russia).

29. Management authority: Regional Committee for Environmental Protection (29 Lenin Street, Dudinka, Taimyr AO 663210, Russia).

30. Bibliographical references:

Atlas of the Arctic. 1985. Moscow, GUGK Publishers. (In Russian)

Havilend, M. 1915. A summer on the Yenisey. Edward Arnold Pub., London. 328 p.

Geology of the USSR. 1958-1970. Vol.16, 26. Moscow, Niedra Publishers. (In Russian)

Guidebook on climates of the USSR. 1967-1969. Part 2-4 (18,21). Leningrad. Gidrometeoisdat Publishers. (In Russian)

Martynov, A.S. 1983. Water birds in Krasnoyarsky Krai. Ph.D. thesis. Moscow. 17 pp. (In Russian) Materials of the International Arctic Expedition IEMEG RAS (IPEE RAS). 1991-1994. Unpublished report. (In Russian)

Popham, H.L. 1897. Notes on birds observed on the Yenisey River, Siberia in 1895. - Ibis, p. 89-108.

Popham, H.L. 1898. Further notes on birds observed on the Yenisey River, Siberia. - Ibis, p.489-520.

Ravkin, E.S., and I.I.Gleikh. To the comparison of bird populations in the anthropogenically-modified areas of the Yenisei tundra. 1981. Pages 66-75 *in:* Anthropogenic Impact on the Tundra Natural Environment. Moscow. (In Russian)

Rogacheva, E.V. Birds of Central Siberia. 1988. Moscow, Science Publisheres. 310 pp. (In Russian) Rogacheva, H. 1992. The birds of Central Siberia. Husum Druck. 737 p.

Syroechkovsky, E.E., and E.V.Rogacheva.1980. The Animals of Krasnoyarsky Krai. Krasnoyarsk. 359 pp. (In Russian)

Taimyr-Severosemelskaya Oblast. 1970. Leningrad, Gidrometeoisdat. (In Russian)

Tugarinov, A.Ya. 1908. In the Lower Yenisei. The Preliminary Report on the Trip to Turukhansky Region in summer 1907. Pages 97-138 *in* News of the Krasnoyarsk Branch of the Russian Geographical Society. Krasnoyarsk. Vol. 2 (34). (In Russian)

Tugarinov, A.Ya. 1910. Geese of the Lower Yenisei. Pages 44-49 *in* Ornithological Bulletin. (In Russian) Tugarinov, A.Ya. Anseriformes. Fauna of the USSR. Birds. 1941. Moscow - Leningrad, USSR Academy of Sciences. Vol.1. 383 pp. (In Russian)

Tugarinov, A.Ya., and S.A.Buturlin. 1911. Materials on birds in Yenisei Region. *In* Notes of Krasnoyarsk Branch of the Russian Geographical Society. Krasnoyarsk. Vol.1(24). 440 pp. (In Russian)