

14. 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. **Date this sheet was completed/updated:**
August 1997

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Designation date

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Site Reference Number

2. **Country:** Russian Federation

3. **Name of wetland:** Upper Dvuobje

4. **Geographical coordinates:** 62°27'N, 66°03'E (northernmost point); 60°57'N, 68°18'E (southernmost point)

5. **Altitude:** 13-31 m a.s.l.

6. **Area:** 470,000 ha

7. **Overview:** Upper Dvuobje is an extensive network of the Ob River tributaries, permanent and seasonal lakes and marshes, as well as islands covered with high taiga forests and meadows, which interact to form a complex and unique mosaic of terrestrial and aquatic habitats. These habitats support large breeding, moulting and migrating populations of waterbirds, including globally threatened species.

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 . B . C . D . E . F . G . H . I . J . K

inland: L . M . N . O . P . Q . R . Sp . Ss . Tp . Ts
U . Va . Vt . W . Xf . Xp . Y . Zg . Zk

man-made: 1 . 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9

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

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

1a . 1b . 1c . 1d . ³ 2a . 2b . 2c . 2d . ³ 3a . 3b . 3c . ³ 4a . 4b

Please specify the most significant criterion applicable to the site: 3a

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

(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:**

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Losinoostrovskaya Lesnaya Dacha-18, Moscow 129347, Russia

12. Justification of the criteria selected under point 9, on previous page: 3a - The site is one of the richest waterbird habitat and nesting areas in the world.

13. General location: In Khanty-Mansi Autonomous Area, Western Siberia. The site covers the Ob River floodplain between the parallels of 60°57' and 62°27'.

14. Physical features:

Relief and hydrography

The geological evolution of the West Siberian Plain has created a vast floodplain in the Ob River valley, larger than that along any of the other great rivers in northern Eurasia (e.g. the Lena, Yenisei, Amur and Volga). The formation of this vast floodplain is connected with the predominance of negative tectonic movements in modern times. The significant thickness of the alluvial deposits reveals the great duration of the process. River flow is very slow due to the extremely low gradient of the land surface (1.5 m per 100 km), and this promotes intensive accumulation of alluvium and the predominance of lateral erosion.

The floodplain of the Ob River is dissected by a series of river channels of different sizes. The main water course, the Great Ob, in the east is 2-3 km wide. Many smaller channels, ranging in width from several metres to several hundreds of metres, cut through the floodplain in various directions, dividing it into numerous islands of different sizes. The lateral parts of these islands are usually higher than the inner portions, and have a more uneven relief. The lakes and temporary water bodies, or 'sors', formed within the islands, are generally oblong in shape, extending up to 4-5 km.

Climate

The area has a severe, continental climate. The winter lasts for 6-6.5 months, with average January temperatures as low as -18° or -20°C. The spring is usually short (30 days) and cold, with abrupt weather changes and frequent return of light frosts. The growing period for vegetation is 130 days. The average temperature of the warmest month is +14-15°C. The autumn is warm and short, with maximum instability in the baric gradient, abrupt temperature changes and frequent early frosts (Alisov, 1969). The average annual precipitation is 450 mm; precipitation in summer is 2-2.5 times as high as that in winter.

Hydrology

The average annual flow of the Ob River is 394 cubic km. However, the hydrological regime is characterized by significant variations in annual flow, and therefore in the spring-summer water levels and extent of flooding on the floodplain. Different portions of the floodplain are inundated for different periods during the flood. The highest parts of the floodplain are covered with water for an average of 20 days, while lower areas may be flooded for as long as 90 days.

Soils

The seasonal flooding and alluvial activity of the river have played a major role in the evolution of the soils. The repeated accumulation of large amounts of alluvium on any particular area results in the interruption of soil formation, and thus determines soil stratification and poor expression of genetic horizons (Rodnjanskaya, 1973). In areas with a high hypsometric level, a sod soil layer is formed, while at medium levels, meadow soils predominate. Throughout vast areas of the central floodplain depressions, soil formation appears to be in its first stages of evolution. The cause of this phenomenon is to be found in the severe character of the climate, poor vegetation and suppressed activity of microorganisms. Bog soils are not widespread, and are restricted to oxbow lakes covered with vegetation.

15. Hydrological values: No information

16. Ecological features: Four ecological levels, or altitudinal zones, are distinguished within this part of the Ob floodplain, according to the extent to which each of these is affected by the flood regime (Rodnjanskaya, 1958, 1968):

- (1) low-level floodplain, annually flooded for 2.5 to 3 months. This comprises the sor depressions and gently sloping lands;
- (2) lower medium-level floodplain, flooded annually during one to two months;
- (3) higher medium-level floodplain, flooded every two or four years during 1.5 to 2 months. This covers the ridges 6 to 7 metres high; and
- (4) high-level floodplain, which is flooded every seven or eight years for less than 1.5 weeks.

Each of these ecological levels has its own specific series of plant associations. Most of the low-level floodplain is occupied by sors which are covered with sor meadow vegetation, *Carex* and *Calamagrostis* sp. Hummock meadows, with hummocks up to 50 cm high, are formed by *Calamagrostis neglecta*, *Carex cespitosa* and *Poa palustris*.

Associations of the lower medium-level floodplain are dominated *Carex acuta*, *C. aquatilis* and *Phalaroides arundinacea*. Other species present in smaller amounts include *Stellaria graminea*, *Equisetum arvense*, *Lathyrus palustris*, *Ranunculus repens*. The herbage grows to a height of 70 to 80 cm.

Communities of the higher medium-level floodplains are characterized by wet meadows and shrubs. The herb-grass meadows occupy the slopes of the ridges at a height of 5-6 m, and are dominated by *Phalaroides arundinacea* and *Calamagrostis langsdorffii*. Other species include *Poa pratensis*, *Carex acuta*, *Ranunculus repens*, *Inula britannica*, *Stachys palustris*, *Galium palustre*, *Stellaria graminea*, *Lathyrus pratensis* and *Myosotis palustris* (Iljina, 1985). Pure meadows of *Calamagrostis langsdorffii* and groves of shrubby willows (*Salix viminalis*, *S. pentandra* and *S. cinerea*) occur at the tops of the ridges.

The high-level floodplains are occupied by the small-leaved and mixed forests dominated by willow *Salix alba* and birch along the levees of the Ob and major channels, and by coniferous trees at the highest sandy ridges. The pine and cedar forests occur rarely.

17. Noteworthy flora: No information. The flora has not been studied.

18. Noteworthy fauna:

Birds

(a) Migrating species

Dvuobje is located on an important migration route for waterfowl breeding on the vast floodplains of the Ob River and its tributaries, the Yamal tundra and the Taz Peninsula, and wintering in western Europe, southwest Asia and Africa. Under normal conditions, the spring migration is rapid, with most birds stopping only briefly at Dvuobje, but if prolonged cold weather returns in spring, there may be some reversed migration. The total number of waterfowl migrating through the area in spring has been between 500,000 and 3,000,000 individuals.

Ducks are the most numerous waterfowl migrating through the Dvuobje area. Dabbling ducks (northern pintail *Anas acuta*, Eurasian wigeon *A. penelope*, common teal *A. crecca*, mallard *A. platyrhynchos*, garganey *A. querquedula* and northern shoveler *A. clypeata*) account for 80-85% of the total, and diving ducks (tufted duck *Aythya fuligula*, greater scaup *A. marila* and common goldeneye *Bucephala clangula*) 10%. The remaining 5-10% are swans (whooper swan *Cygnus cygnus* and Bewick's swan *C. columbianus bewickii*) and geese (bean goose *Anser fabalis*, white-fronted goose *A. albifrons*, lesser white-fronted goose *A. erythropus*, greylag goose *A. anser* and red-breasted goose *Brenta ruficollis*).

In autumn, the species composition is the same as in spring, but the migration is less intense.

(b) Breeding species

Upper Dvuobje is an important breeding area for waterfowl. The number of breeding birds fluctuates by as much as 3-fold from year to year, depending on the level of inundation (Antipov & Nazarov, 1983). The total number of breeding waterbirds is about 300,000 pairs.

(c) Rare and threatened species

The wetlands provide habitat for five species of birds currently listed in the Russian Red Data Book:

- Bewick's swan *Cygnus columbianus bewickii*: a passage migrant.
- Red-breasted goose *Branta ruficollis*: a passage migrant.
- Osprey *Pandion haliaetus*: a rare breeding species.
- White-tailed eagle *Haliaeetus albicilla*: a breeding species in low numbers.
- Siberian crane *Grus leucogeranus*: a rare breeding species and occasional passage migrant.

Two of these species, *Branta ruficollis* and *Grus leucogeranus*, are listed as globally threatened in the IUCN Red Data Book.

Other fauna

Mammals of economic importance include muskrat *Ondatra zibethicus*, stoat *Mustela erminea*, red fox *Vulpes vulpes* and migrating Arctic fox *Alopex lagopus*. Fish include *Coregonus nasus*, *C. peled*, *C. lavaretus pidschian*, *C. muksun*, *Stenodus leucichthys*, *Acipenser baeri* and *A. ruthenus*.

19. Social and cultural values: The Upper Dvuobje area is an important region for fish production, cattle breeding and shooting for waterfowl.

20. Land tenure/ownership: The water area and part of the land are state owned. Part of the area is municipal property.

21. Current land use: Activities at the site include fishing, waterfowl shooting, hay harvesting and grazing.

22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects: The main impact on the environment of the Upper Dvuobje area has been caused by water transport and oil production.

23. Conservation measures taken: The site include the Elizarovsky nature reserve ('zakaznik'). The reserve has six rangers on the staff.

24. Conservation measures proposed but not yet implemented: None

25. Current scientific research and facilities: Some ornithological research has been carried out, but not on a regular basis (Braude & Dubovik, 1979; Antipov & Nazarov, 1983). Maksimov and Merzlyakova (1990) carried out an analysis of hydrological information.

26. Current conservation education: A significant amount of publicity has been given to the area through the publication of articles in the popular literature, and radio and television programmes.

27. Current recreation and tourism: None at present.

28. Jurisdiction:

Territorial: Administration of Khanty-Mansi Autonomous Area (5 Mira Street, Khanty-Mansiisk 626200, Russia).

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

29. Management authority: Hunting Management Department, Administration of Khanty-Mansi Autonomous Area (212 Gagarina St., Khanty-Mansiisk 626200, Russia).

30. Bibliographical references: Alisov (1969); Antipov & Nazarov (1983); Braude & Dubovik (1979); Iljina (1985); Krivenko *et al.* (1980); Maksimov and Merzlyakova (1990); Rodnjanskaya (1958, 1968, 1973); Shennikov (1941).
