

Information Sheet on Ramsar Wetlands

*Categories approved by Recommendation 4.7, as amended by Resolution VIII.13
of the Conference of the Contracting Parties*

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2. Country:

UKRAINE

3. Date:

April 7, 2003

4. Name of the Ramsar site:

Dnipro-Oril Floodplains

5. Map of the Ramsar site:

a) hard copy

yes

b) digital (electronic) format

raster

6. Geographical coordinates:

48°32' N 34°45' E

7. General location:

The region of the confluence of the Oril River and the Dnipro River, near the village of Kirovske of Dnipropetrovskyi Rayon (Dnipropetrovsk District) and the

village of Mukolaiivka of Petrykivskiy Rayon (Petrykivka District) of Dnipropetrovska Oblast (Dnipropetrovsk Region). The site is located 4 km north of the city of Dnipropetrovsk (1 200 thousand inhabitants) and across the Dnipro River – 3 km east of the city of Dniprodzerzhynsk (300 thousand inhabitants), Dnipropetrovska Oblast (Dnipropetrovsk Region).

8. Elevation:

52 m; 52.5-51.5 m above sea level.

9. Area:

2,560 ha

10. Overview:

The Dnipro-Oril Floodplains is one of the most preserved areas of the Dnipro River at its confluence with the Oril River, and thus it was included in Dniprovsko-Orilskiy Nature Reserve. It represents a system of watercourses and their floodplains with numerous lakes, mires, and the well-developed flora of higher plants, including rare communities of *Salvinia natans* and *Trapa natans*, floodplain forests with oak, willow, poplar and alder, which are rare in Europe. The site plays an important role in conservation of the rare flora and fauna species, especially for nesting sites of Oystercatcher *Haematopus ostralegus* (up to 28 individuals), Corncrake *Crex crex* (about 30 cocks), Black Stork *Ciconia nigra* (1-2 pairs), and is one of the key point of Dnipro bird migration route.

11. Ramsar Criteria:

1 2 3 4 7

12. Justification for the application of each Criterion listed in 11. above:

(1) The site is a typical floodplain area of the Dnipro at its confluence with one of its tributaries, the Oril River. It represents a system of watercourses and their floodplains with numerous lakes, mires and islands, floodplain meadows and forested areas. Aquatic vegetation is represented by communities of *Trapa natans*, *Nuphar lutea*, *Potamogeton natans*, *P. crispus*, *P. perfoliatus*, *P. pectinatus*, *Myriophyllum spicatum*, *Vallisneria spiralis*, *Ceratophyllum demersum*, *Nymphaea alba*, *Utricularia vulgaris*, *Lemna trisulca* and *L. minor*, *Spirodela polyrrhiza*, *Elodea canadensis*, *Najas marina*, *Ceratophyllum tanaiticum*, *Stratiotes aloides*, *Hydrocharis morsus-ranae*, *Salvinia natans*; the swamp vegetation is represented by formations of *Phragmites australis*, *Glyceria maxima*, *Carex rostrata*, *C. acutiformis*, *C. acuta*, *C. vesicaria*, *C. riparia*, *Typha latifolia*, *T. angustifolia*, *T. laxmannii*, *Schoenoplectus tabernaemontani*, *Oenanthe aquatica*, *Eleocharis palustris*, etc.

(2) The site is nesting place of rare in Ukraine and Europe Oystercatcher *Haematopus ostralegus* (up to 28 individuals), Black Stork *Ciconia nigra* (1-2 pairs), Corncrake *Crex crex* (about 30 cocks), White-tailed Eagle *Haliaeetus*

albicilla (1 pair nesting); the migration resting site of rare Crane *Grus grus* (up to 40 individuals), Ferruginous Duck *Aythya nyroca* G., Goldeneye *Bucephala clangula*, Osprey *Pandion haliaetus* L., Marsh Sandpiper *Tringa stagnatilis* Bechstein. Among these species, Corncrake *Crex crex* and White-tailed Eagle *Haliaeetus albicilla*, and also otter *Lutra lutra* (6-8 individuals live here permanently) are listed in the European Red List of Globally Threatened Animals and Plants. There are also such reptile species as *Emys orbicularis*, *Vipera ursinii*, amphibians *Bombina bombina* listed in Appendix II (species in need of protection) of the Bern Convention, and the fish *Acipenser ruthenus* listed as vulnerable in the IUCN Red List.

(3) The following species listed in the Red Data Book of Ukraine grow within the site: aquatic species - *Salvinia natans* (L.) All., *Ornithogalum boucheanum* (Kunth) Aschers., *Trapa natans* L. s.l.; hygrophilous: *Orchis palustris* Jacq., *O. militaris* L.; and three species listed in the European Red List of Globally Threatened Animals and Plants: *Tragopodon ucrainicus* Artemcz., *Ceratophyllum tanaiticum* Sapjog., *Senecio borysthenticus* (DC.) Andr.

Also within the site there are rare types of natural habitats identified by Resolution 4 (96) of the Standing Committee of the Bern Convention, namely: Ponto-Sarmatic mixed poplar forests (No 44.66) of the group of Temperate Riverine and Swamp Forests and Bush, Euro-Siberian perennial amphibious communities (No 22.31) among the Standing Fresh Water, Riparian willow formations (No 44.1), Free-floating vegetation with domination of *Stratiotes aloides* (No 22.413) and *Salvinia natans* (No 22.415).

(4) During autumn migrations, more than 10 thousand birds of wetland complex can stay simultaneously within the site, especially Mallard *Anas platyrhynchos*, Garganey *Anas querquedula*, Coot *Fulica atra*, White-fronted Goose *Anser albifrons*. Among others, it is also necessary to mention nesting of Night Heron *Nycticorax nycticorax* (about 70 pairs) and Goshawk *Accipiter gentiles* (5 pairs). In 2001 the local colony of Grey Heron *Ardea cinerea* had 298 nests, and the colony of Little Tern *Sterna albifrons*, 52 nests.

Dniprovsko-Orilskyi Nature Reserve belongs to 138 most valuable areas of Ukraine identified for the Important Bird Area Programme. The value of the site is determined, in particular, by the presence of Night Heron *Nycticorax nycticorax* (70 pairs) and Corncrake *Crex crex* (30 cocks).

(7) The site is the place for spawning and habitation of approximately 40 fish species, including widespread *Esox lucius*, *Leuciscus idus*, *Leuciscus leuciscus*, *Tinca tinca*, *Gobio gobio*, *Abramis brama* and species from the Red Data Book of Ukraine: *Eudontomyzon mariae*, *Barbus barbus borysthenticus*, *Acipenser*

ruthenus.

13. Biogeography:

Biogeographical region on the map of the Emerald Network of Europe: Steppe.

According to geobotanical zoning of Ukraine: Black Sea (Pontic) Steppe Province; European-Asian Steppe Region.

Basin affiliation: Lower reaches of the Dnipro.

14. Physical features of the site:

The site is located on the Precambrian sedimentary-metamorphic and magmatic strata of the southeastern boundary of the Ukrainian Crystalline Shield. According to the physiographic zoning, the territory of the site is located in the Dnipro-Oril Terrace District of the Steppe Province of the Dnipro Lowland. The territory of the site is located on a well-developed floodplain terrace, which extends along the Dnipro for 16 km. The site includes some canals, lakes, and swamps.

Ordinary and southern chernozem, sometimes meadow-chernozem, meadow-solonchic, soddy, and sandy soils occur within the site.

The water level fluctuates not only depending on weather conditions (snow and rain precipitation), but also substantially depends on operations of the Dniprodzerzhynsk Reservoir. However, water goes through the reservoir practically in a transit mode, and in the sites adjacent to the Dnipro the fluctuations of the level during a day does not exceed 0.5-1 m in spring and in the beginning of summer.

The climate of the site is dry and hot. The average January temperature is -5.5°C , and that of July, $+21.5^{\circ}\text{C}$. Annual precipitation is 430 mm.

15. Physical features of the catchment area:

The site is located near the Dnipro riverbed, which is third in its size (after the Volga and the Danube) river of Europe. The Dnieper rises in the Valdai Hills (Russia); its length is 2201 km and drains an area of 504 thousand km^2 . The Oril River, emptying into the Dnipro within the site, has the length of 346 km and the catchment area of 98 000 km^2 (Dnipropetrovsk, Poltava and Kharkiv administrative regions of Ukraine).

16. Hydrological values:

Groundwaters of the upper aquifer (water-bearing horizon) of alluvial and lacustrine-alluvial sandy Quaternary deposits have significant influence on the formation of the natural complex of the site. Underground waters of this horizon are mainly close to the surface, have a direct hydraulic connection with surface waters of the Dnipro, the Oril and numerous watercourses, lakes and bogs. The first (upper) alluvial aquifer is confined to finely and medium-grained quartz sand. The aquifer thickness ranges from 5 to 30 m. The groundwater level in floodplain

meadows is at the depth of 1-2 m from the surface. In spring during intensive atmospheric feed of the aquifer, its water level rises, in summer and winter - is lowered. The amplitude of fluctuations of the level reaches 0.5 m. In the site area, there are several near-bed, near-terrace and central-floodplain lakes: Solone (10.5 ha), Sokilky (29.1 ha), Gorbove (4.6 ha), Lytvynove, Gorikhove, Lopatka (10 ha), Khomuts, etc.

Underground waters of the alluvial aquifer are mainly fresh, with mineralization up to 1 g/l. Sometimes it can reach 1.1 g/l and even more. By their chemical composition, groundwaters basically belong to hydrocarbonate, sulfate-chloride, calcium, and sodium-magnesium types.

17. Wetland Type:

M O Tp L Ts U Xp W Xf

18. General ecological features:

Sedge, willow floodplain and pine forests, grassland, aquatic and riverside vegetation (see i.12) are typical natural habitats. Thickets of *Phragmites australis* are especially widespread along riversides. Forests belong to the long-term floodplain type. Among them the most common are oak forests (*Quercus robur*) with participation of *Acer tataricum* and domination of *Convallaria majalis*, forests with domination of *Salix alba*, *Populus alba*, *Populus tremula*, and *Alnus glutinosa*. Other types of vegetation occur locally, such as shrubby, psammophytic communities and steppe vegetation.

19. Noteworthy flora:

Rare and the most characteristic flora species are mentioned in i.12.

20. Noteworthy fauna:

Besides mentioned in item 12 valuable fauna species (criterion 3), there is a colony of *Castor fiber* (at least 15 individuals), as well as a colony of non-native *Ondatra zibethica* (about 50 individuals).

The site is the place for spawning and habitation of approximately 40 fish species, including *Esox lucius*, *Leuciscus idus*, *Leuciscus leuciscus*, *Tinca tinca*, *Gobio gobio*, *Abramis brama* etc.

21. Social and cultural values:

Use of natural resources is not conducted. There are no social and cultural objects within the site. At the same time, historical events of the Kyiv Rus (Kievan Rus) times (fights with neighboring tribes and events related to further development of the Ukrainian state) were associated with the Oril River.

22. Land tenure/ownership of:

site:

State ownership on the land, transferred into permanent use to Dniprovsko-Orilskyi Nature Reserve. Administration of the Reserve received the Certificate on the right of permanent land use.

surrounding area:

Other lands (predominantly forests and grasslands) are subordinated to the Administration of Dniprovsko-Orilskyi Nature Reserve, lands of the Protection zone (no industrial building and other activities potentially threatening the natural conditions are allowed here) of this Reserve (total area 3 125 ha; lands of the water fund in the Dnipro and lands of the forest fund of state ownership, private agriculture lands: arable land, hayfields, pastures and gardens, state forestry lands); lands of populated areas (private and municipal); beyond them, also other agricultural and forestry lands, lands of populated areas; Dniprodzerzhynsky and Dnipropetrovske reservoirs on the Dnipro.

23. Current land (including water) use:

(a) site:

In the most of the site's area, only scientific research, nature conservation activities and monitoring on the state of environment are conducted. Haymaking is allowed on 38 ha of grasslands.

(b) surroundings/catchment:

Forestry and agricultural activities, fishing, hunting, hydroenergetics. Hunting, fishing, felling is forbidden in the Protection zone of Dniprovsko-Orilskyi Nature Reserve.

24. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

at the site:

In the past: fishing, grazing, haymaking, hunting, fishing.

At present: within Dniprovsko-Orilskyi Nature Reserve only scientific research, nature conservation and monitoring for the state of biological and landscape diversity, environmental education activities are carried out; exceptional cases of illegal visiting of the site area by local population, tourists and recreants are registered.

around the site:

Among external factors, the most essential influence have operation (with changes of the water level on the near-Dnipro areas of the Site up to 0.5-1 m) of the

Dniprodzerzhynskiy Reservoir on the Dnipro; its dam is located ca. 12 km from the Site. Other adverse factors: fishing, navigation, agriculture (first of all, plowing up)

25. Conservation measures taken:

The territory of the site is a part of Dniprovsko-Orilskiy Nature Reserve, created by the Resolution of the Government of Ukraine of 15 September 1990, No. 262.

Biodiversity management is conducted in accordance to the Law of Ukraine “On the Nature Reserve Fund of Ukraine” (1992), and the Regulation (By-law) of the Dniprovsko-Orilskiy Nature Reserve (1998).

26. Conservation measures proposed but not yet implemented:

It is planned to develop a management plan for the territory and protection of natural complexes of Dniprovsko-Orilskiy Nature Reserve. The special management plan on wetlands of international importance will be developed.

27. Current scientific research and facilities:

Ongoing scientific research within the framework of the Chronicles of Nature of Dniprovsko-Orilskiy Nature Reserve are carried out annually. Researches are conducting mainly by research officers of the Reserve and the curator institution, Dnipropetrovsk State University (Dnipropetrovsk).

The staff of the Reserve includes 6 research officers working in the Scientific Department. Among the basic research directions, there is monitoring for the state of the biological and landscape diversity within the frameworks of the annual Program on Chronicles of Nature.

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

Environmental education activities are performed annually among local inhabitants, especially children of adjacent villages, Kirova and Mykolaivky, and tourists nearby Dniprovsko-Orilskiy Nature Reserve. Information leaflets are publishing annually. The administration building of the Reserve in the village of Kirova (Dnipropetrovsk District, Dnipropetrovka Region) is currently used as the Visitors Center.

29. Current recreation and tourism:

The site is not used for recreation and tourism.

Thousands of inhabitants constantly have recreation activities near the site on the Dnipro banks in summer, especially people from the large cities of Dnipropetrovsk and Dniprodzerzhynsk; sports fishing and other activities.

30. Jurisdiction:

Territorial jurisdiction of the site is the State Administration of Dnipropetrovska Oblast (Dnipropetrovsk Region) of Ukraine.

Functionally the site is subordinated to the Administration of Dniprovsko-Orilskyi Nature Reserve of the State Committee of Forestry of Ukraine.

31. Management authority:

Administration of Dniprovsko-Orilskyi Nature Reserve

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32. Bibliographical references:

1. Chronicle of Nature: Dniprovsko-Orilskyi Nature Reserve – 11 volumes (1991 - 2001).
2. Mykytyuk, O. IBA Territories in Ukraine. Kyiv: SoftART, 1999. – 324 pp. ISBN 966-95027-1-3.
3. Red Data Book of Ukraine: Flora - 1996, 608 p.; Fauna - 1994, 464 p. - Kyiv: Ukrainian Encyclopaedia.
4. Reserves and National Nature Parks of Ukraine. – Kyiv: Vyshcha Shkola (Higher School), 1999. – 230 p.