

Information Sheet on Ramsar Wetlands

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

1. Date this sheet was completed/updated: 5 July 1998

2. Country: **Ukraine**

3. Name of wetland: **Kartal Lake**

4. Geographical coordinates: 45°18'N 28°31' E

5. Altitude (average and/or max. & min.) 1.4-1.6 m

6. Area: (in hectares) 500 ha

7. Overview: (general summary, in two or three sentences, of the wetland's principal characteristics)

Kartal Lake is a fresh water and shallow lake in lower part of the Danube basin with low swampy shores. The wetland site is important for migrating, breeding and moulting birds (up to 40,000 individuals). It is also important as breeding and nursery places for fish and amphibians.

8. Wetland Type (please circle the applicable codes for wetland types as listed in Annex I if 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:

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

1a • 1b • 1c • 1d | 2a • 2b • 2c • 2d | 3a • 3b • 3c | 4a • 4b

Please specify the most significant criterion applicable to the site:

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

On the page together with Ramsar wetland site 'Kugurlui Lake'

11. Name and address of the compiler of this form:

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12. Justification of the criteria selected under point 9 (please refer to Annex 11 in the *Explanatory Note and Guidelines* document)

1a. The Lake Kartal is typical flood-plain reservoir, which is situated in lower reach of Danube with suitable flora and fauna which is characteristic for the largest river deltas in Europe

2c. The territory of wetland provides conditions for breeding and wintering of many bird species of wetland complex. Numbers of rare and protected species of plants grow there

3a. On Lake Kartal during summer period about 25000 pairs of birds make their nest, in autumn-winter period one can find to 40 000 individuals.

3b. On this territory a big number of species of *Anseriformes* and *Charadriiformes* and *Pelecaniformes* are constantly placing, which are indicators of quality of wetland environment.

3c. On the territory of wetland there is more than 1% of European nest population of *Phalacrocrax pygmeus*.

13. General location: (include the nearest large town and its administrative region)

Kartal Lake is situated at the Danube River, near Izmail City in Odeska Oblast of Ukraine, near the Romanian border, closed to Ramsar wetland site 'Kugurlui Lake'.

14. Physical features: (e.g. geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth water permanence; fluctuations in water level; tidal variations; catchment area; downstream area* climate)

Kartal is one of floodland lakes, relating to western group of Danube water bodies. Kartal is connected with the Danube River and with the other water bodies of western group (Kagul, Yalpus, Kugurlui) beside of artificial canals (Vekita, Orlovskyi, Skunda, Repida and others).

The area of a water is 1, 400 ha. An average depth is 1,04 m (maximum – about 3 m). In some years the depth does not exceed 0,6-0,9 m. During drought period the depth reaches to 1,5 m. Sediments are formed with black silt. The mineral composition is changing from hydrocarbonic to chlorid-natrium, and mineralization is shifting between 450-3390 mg/l.

The climate is temperate continental with short mild winter and long hot summer, precipitation equal to 350-400 mm/year while evaporation is 800-900 mm. Sometimes the lake is covered with ice (no longer than one month).

15. Hydrological values: (groundwater recharge, flood control, sediment trapping, shoreline stabilization etc.)

‘Kartal Lake’ is the system of small shallow flood-plain lakes (Kartal and Dervent and Dolgoe lakes), which are connected with each other by shallow branches. Water level in the Kartal Lake depends upon water level in the Danube River.

In connection with a shoaling, the water body well gets warm, that promotes rough development of hydrobionts, being fodder base for fishes and waterfowl birds.

16. Ecological features: (main habitats and vegetation types)

Banks of the waterbody are hidden in the Danube floodplains. The emerged vegetation (mainly *Phragmites australis*, *Typha angustifolia*, *Scirpus lacustris*, *Butomus umbellatus*) occupies the third part of the lake’s surface.

The submerged plant communities (mainly *Potamogeton pectinatus*, *P.crispus*) cover up to 10% and even more of aquatic surface and plant vegetation with floating leaves (*Trapa natans*, *Nuphar lutea*) – 20%.

The fish production of the lake is near 20-50 kg/ha per year.

Breeding sites – floodplains, reed - swamp vegetation with sites of free water. Total amount of a nesting ornithocomplex - about 25 000 pairs. Places of seasonal conglomerations are all aquatic areas with a mosaic reed - swamp vegetation. Total numbers is up to 40.000 individuals.

17. Noteworthy flora: (indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc.)

There are species from the Red Data Book of Ukraine: *Nymphoides peltata*, *Aldrovanda vesiculosa*, *Cladium mariscus*, *Epipactis palustris*, *Leucojum aestivum*, *Orchis palustris*, *Salvinia natans* (relic) and *Trapa natans* (relic).

18. Noteworthy fauna: (indicating, e.g., which species are unique, rare, endangered, abundant or biogeographically important; include count data, etc.)

Territory and water surface of the Lake Kartal and adjacent shallow reservoirs is very important for 140 bird species, from which a lot are entered to the National Red Book and European List of rare bird species. For Kartal very rich avifauna is characteristic. On this territory more than 140 bird species are registered, from which 32 bird species, including *Plegadis falcinellus*, *Platalea leucorodia*, *Phalacrocorax pygmaeus*, *Ardeola ralloides*, *Aythya nyroca*, *Falco cherrug*, *Himantopus himantopus* are entered into the Red Data Book of Ukraine. Three species from this book (*Phalacrocorax pygmaeus* - about 70, *Platalea leucorodia*- 150 breeding pairs and *Rufibrenta ruficolis*) are bird species, which have European natureprotective significance (SPEC), category SPEC 1.

The dominant species on nest are *Fulica atra*, *Podiceps cristatus*, *Aythya ferina*, *Cygnus olor* etc.

19. Social and Cultural Values: (e.g. fisheries production, forestry, religious importance, archaeological site etc.)

The Kartal Lake is important for ecological education, recreation and scientific research. It is also traditional place of fishing for the local population. The important archaeological value (excavations of ancient buriel sites are currently being).

20. Land tenure/ownership of:

(a) site: State and collective ownership

(b) surrounding area: State, collective and private ownership

21. Current land use:

(a) site: There is some limited and controlled exploitation of natural resources at the site - hunting, fish-breeding and fishing, grazing of cattle and sheep, haymaking, recreation etc.).

(b) surroundings/catchment area: the same and traditional farming, including grape-making, cultivation of rice and cutting of reed etc.

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

(a) at the site: Recreation activities and disturbance of waterfowl by commercial fishing are the main unfavorable human influences. The fishing sites coincide with the main breeding, feeding and resting sites of birds. This causes both disturbance and loss of waterfowl due to permanent deployment of fishing tackle. There is also sometime illegal fishing within the wetland, and night spot light poaching of frogs. As a result of all disturbances, the wetland hosts less waterfowl than its capacity allows. Mass moving of exotic fish as *Hypophthalmichthys molitrix* and *Ctenopharyngodon idella* is a unfavorable factor for native species of Pisces in this lake.

(b) around the site: i) the influence of the pesticides and fertilizers from agriculture; ii) the construction of fishponds in different parts of the Danube River floodplains.

23. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes which have been made: management practices; whether an officially approved management plan exists and whether it has been implemented)

Using of natural resources is limited and controlled.

24. Conservation measures proposed but not yet implemented: (e.g. management plan in preparation; officially proposed as a protected area etc.)

It is foreseen to be included during expansion of the Dunaiskyi (Danube) Biosphere Reserve.

25. Current Scientific research and facilities: (e.g. details of current projects; existence of field station etc.)

It is a lot of scientific projects on investigation of waterfowl birds and wetlands by the experts from the Dunaiskyi Biosphere Reserve and Mechnikov State University of Odesa and research institutes of the National Academy of Sciences of Ukraine.

26. Current conservation education: (e.g. visitors centre, hides, information booklet, facilities for school visits etc.)

There is nature protecting education within the framework of the program of a comprehensive school. There is distribution of the information booklets, posters etc. There are lectures and publications of the experts of nature protecting and scientific establishments for the local population.

27. Current recreation and tourism: (state if wetland is used for recreation/tourism; indicate type and frequency/intensity)

There is insignificant unorganized tourism.

28. Jurisdiction: (territorial e.g. state/region and functional e.g. Dept of Agriculture / Dept. of Environment etc.)

Territorial: local Soviets of the Deputies.

Functional jurisdiction: regional administrative authorities of different sectors: State Committee of Forestry (forest use and hunting), Ministry of Agricultural Industry Complexes of Ukraine (farming), State Committee of Fishery (fishing), State Committee of Water Resources (water using) etc.

29. Management authority: (name and address of local body directly responsible for managing the wetland)

Land and Resource Users (organizations and institutions and citizens) and local authorities are executive bodies for environment protection. State Department of Ecological Safety in Odeska Oblast (Director: Inesa D. Loeva. Address: 83 Sverdlov Str., 270 107 Odesa, UKRAINE. Tel./Fax: +380 482 25-13-22. E-mail: <postmaster@eco14.FreeNet.Kiev.UA>) carries out state control for this protection.

30. Bibliographical references: (scientific/technical only)

Dubyna, D.B. (1987). Vegetation of Danube Lakes, it's Floristic Peculiarities and Protection //Ukrainian Botany Journal. - V.44, N6. - P.77-80.

Dubyna, D.B., Shelyag-Sosonko, Y.R. (1989). Floodplains of the Black Sea Coastal Region. - Kyiv: Naukova Dumka. - 269 p.

Inventory and Cadastre Description of Wetlands of the Azov-Black Sea Coast of Ukraine (1993). - Melitopol: Branta. - N1. - 93 p.

Kharchenko, T.A., Tymchenko V.V., Kovalchuk, A.A., etc. (1993). Hydrobiology of Ukrainian Part of the Danube River and Adjacent Reservoirs. Kyiv: Naukova Dumka, 328 p.

Nazarenko, L.F. (1994). Results of the 15-th Meeting of Ornithologists of the Azov-Black Sea Region //Life of Birds. - N2. - P.22-25.

Nazarenko, L.F. (1994). Peculiarity of Waterfowl's Wintering in 1994 //Life of Birds. - N1. - P.7-8.

Polishchuk, V.V. (1974). Hydrofauna of Lower Danube River in Ukrainian Borders. Kyiv: Naukova Dumka, 420 p.

Rare Birds of the Black Sea Coastal Area /Edited by: Korziukov, A.I., Koshelev, A.I., Chernichko, I.I. (1991). - Kyiv-Odesa: Lybid. - 270 p.

Red Data Book of Ukraine /Edited by Shcherbak, N.N. (1994). - Kyiv: Ukr. Encycl. - 357 p.

Rusev, I.T., Zhmud, M.E., Korziukov, A.I., Gerzyk, I.P., Pavlov, A.V., Potapov, O.V. (1996). Wintering of Birds in the North-West Black Sea Coastal Zone //Ecosystems of Wild Nature. - Odesa. - N3. - P.1-40.

Shelyag-Sosonko, Y.R., Stoiko, S.M., Dudin, Y.P. at al. (1987). Perspective Net of Protected areas of Ukraine. - Kyiv: Naukova Dumka. - 292 p.

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