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: Tendrivska Bay

This site as part of site 'Yagorlits and Tendrov Bays' was in the Ramsar List when Ukraine was part of the USSR.

4. Geographical coordinates: 46°14'N 31°56'E

5. Altitude (average and/or max. & min.) 0-2 m

6. Area: (in hectares) 38, 000 ha

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

Tendrivska Bay is salt-water lagoon, separated from the Black Sea by low, narrow and sandy spits. The bay is adjoined by numerous small lakes and temporary waterbodies. They support nesting places for large numbers of waterfowl. The total wintering number of waterfowl of the bay is about 450,000-700,000 individuals.

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: $\underline{\mathbf{A}} \cdot \mathbf{B} \cdot \mathbf{C} \cdot \mathbf{D} \cdot \underline{\mathbf{E}} \cdot \mathbf{F} \cdot \mathbf{G} \cdot \mathbf{H} \cdot \mathbf{I} \cdot \underline{\mathbf{J}} \cdot \mathbf{K}$

inland: $L \cdot M \cdot N \cdot O \cdot P \cdot \mathbf{Q} \cdot R \cdot \mathbf{Sp} \cdot Ss \cdot Tp \cdot Ts$

 \bullet U \bullet Va \bullet Vt \bullet W \bullet Xf \bullet Xp \bullet Y \bullet Zg \bullet Zk

man-made: $1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8 \cdot 9$

Please now rank these wetland types by listing them from the most to the least dominant: A, E, J

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

$$1a \cdot 1b \cdot 1c \cdot 1d \mid 2a \cdot 2b \cdot 2c \cdot 2d \mid 3a \cdot 3b \cdot 3c \mid 4a \cdot 4b$$

Please specify the most significant criterion applicable to the site: 3a, 2c

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

On the page together with Ramsar wetland site 'Yagorlytska Bay'

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

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Under support of the Central Board of National Nature Parks and Reserve Affairs (Director: Mykola P.Stetsenko), Ministry for Environmental Protection and Nuclear Safety of Ukraine / 1, Timiriazevska Street, Central Botanical Garden, Kyiv, 252014, UKRAINE. Tel/Fax 380 44- 295 26 47. E-mail sparks@parks.FreeNet.Kiev.UA

- 12. Justification of the criteria selected under point 9 (please refer to Annex 11 in the Explanatory Note and Guidelines document)
- 2a: The globally threatened duck Aythya nyroca and goose Branta ruficollis winter at the bay.
- 2c: The site provides breeding area for many species of waterfowl (see also 18, faunal values).
- 3a: Tendrivska Bay provides nesting area for an estimated 25,000 to 100,000 pairs of waterfowl. The total wintering population of the bay is about 450,000-700,000 waterfowl.
- 3b: The site regularly supports large numbers of Limicolae and Anatidae, which are indicative for wetland values, productivity or diversity.
- **13. General location:** (include the nearest large town and its administrative region)

Tendrivska Bay is a bay of the Black Sea. This wetland site is situated in Golopristanskyi Rayon (administrative district) of Khersonska Oblast, 60 km south-west from the city Kherson, in border with Ramsar wetland site 'Yagorlytska Bay'.

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)

The Tendrivska Bay is salt-water lagoon with numerous islands, separated from the Black Sea by low, narrow sandy spits. It's adjoined by numerous small lakes and temporary water bodies. The water bodies are extensive, open with silty bottoms. For Tendrivska Bay they are more shallow in the eastern part (average 2 m), while in the western part they are deeper (average 8 m). There are some flat islands of mainland origin, with small saucer-shaped depressions in the central part of the Bay. Majority of islands are of marine origin though, usually extended, made of sand/grinded shell alluvium. The shore of these

islands which faces the open sea, is constantly changing. The shore on the landward side of the bay is low-lying and marshy. In general, the islands have small, centrally located lakes. On the main shore adjoining the bays, in gently sloping depressions, small fresh to saline water lakes and temporary water bodies are scattered.

The hydrological balance of the bays is normally steady, subjected to the influence of winds. The characteristics of the water level and flow in various parts of the bays and the regularity of the daily change in wind direction result in relatively calm conditions. Since 1975, the hydrological balance has been upset by the release of fresh water from irrigation and rice-growing schemes, and the release of saline water from a drainage system near Potiievka.

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

The Yagorlytska Bay together with Tendrivska Bay are separated from the open sea by a long sandy spit and exposed to the Dnipro River run off. Average salinity is from 10 to 14 ‰. During severe winters the water is covered by ice for two-three weeks.

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

The vegetation of the low coast and islands is characterised by brackish and saltwater associations with a predominance of saltwort *Salsola* and marshgrass *Puccinellia* sp. On the steep sloping island shores kelp lies among sparse reedbeds of *Phragmites communis*. Behind the shore there is usually a strip of brackish marsh. Emergent vegetation along the coast consists of *Phragmites communis*, reedmace *Typha* and rush *Scirpus*. The shallow waters support a rich aquatic vegetation, mainly of species like eel-grass *Zosters*, tassel pondweed *Ruppia spiralis*, fennel pondweed *Potamogeton pectinatus* and stoneworts Characeae. The waters also support abundant benthos and nektobenthos, especially the groups of crustaceans, molluscs (*Cradium*, mussels, oysters etc.) and fish, including the small Black Sea species of bullhead *Conns*.

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

There is no other information available than mentioned in point 16. Ecological features.

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

The Tendrivska Bay provides nesting places for large numbers of waterfowl. It supports an estimated 25,000 to 100,000 pairs, notably shelduck *Tadorna tadorna*, gadwall *Anas strepera*, red-breasted merganser *Mergus serrator* (800-900 pairs), redshank *Tringa totanus*, Mediterranean gull *Larus melanocephalus*, slender-billed gull *L. genei* (10,000-20,000 pairs) and sandwich tern *Thalasseus sandvicensis* (max 28,800 pairs). Other breeding species are red-necked grebe *Podiceps grisegena*, *P. cristatus* (150), Eurasian bittern *Botaurus stellaris*, little bittern *Ixobrychus minutus*, purple heron *Ardea purpurea*, grey heron *A. cinerea*, great egret *Egretta alba*, eider *Somateria mollissima*, pied avocet *Recurvirostra avosetta* (250), pratincole *Glareola pratincola*, black-winged pratincole *G. nordmami*, gull-billed tern *Gelochelidon nilotica*, Caspian tern *Sterna caspia* (150 pairs), common tern *S. hirundo* (3,400-4,900 pairs) and little tern *S. albifrons*.

On the wet meadows along the shores of the fresh water lakes and on the temporary water areas, the following species breed: northern lapwing *Vanellus vanellus*, black-winged stilt *Himantopus himantopus* and redshank *Tringa totanus*.

The total wintering population of the bay is in the order of 450,000-700,000 birds of 45 species, mainly Anatidae, Rallidae, Laridae and waders. They are chiefly made up of the swans *Cygnus cygnus* and some 12,000 *Cygnus olor*, surface-feeding ducks - mallard *Anas platyrhynchos* (about 100,000), wigeon *A. penelope* and teal *A. crecca*, diving ducks - pochard *Aythya ferina* (25,000-40,000) and ferruginous duck *A. nyroca*, and coot *Fulica atra* (400,000). Red-breasted goose *Branta ruficollis* is a not uncommon wintering species. Little bustard *Tetrax tetrax*, great bustard *Otis tarda* and slender-blued curlew *Numenius tenuirostris* also occur at the site.

In spring and autumn two bays are in the flyway of large numbers of migrating waterfowl, sometimes up to several hundred of thousand of birds. The most numerous are divers *Gavia* spp., grebes *Podiceps* spp., *Cygnus cygnus*, *C. olor*, greylag goose *Anser anser*, white-fronted goose *A. albifrons* and sandpiper *Calidris* spp. Other quite abundant species are the Limicolae common snipe *Gallinago gallinago* and woodcock *Scolopax rusticola*, and important waders are ruff *Philomachus pugnax* (7,000-10,000), western curlew *Numenius arquata*, whimbrel *N. phaeopus*, black-tailed godwit *Limosa limosa* and snipe *Gallinago gallinago*.

There are fish species from the Red Data Book of Ukraine: *Salmo trutta labrax, Callionymus belenus, C.festimus,* relics *Huso huso ponticus, Acipenser sturio, A.nudiventris,* and also other relic from sturgeons *Acipenser stellatus* (the item of commercial fishery).

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

The site is used for limited exploitation of natural resources (unspecified) and for traditional subsistence fishing by local villagers.

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 no any use of protected area of the Chornomorskyi Biosphere Reserve and there is limited and controlled exploitation of natural resources (fishing, recreation, hunting etc.) outside protected area, including other areas of the Reserve.
- (b) surroundings/catchment area: the same and traditional farming, including grazing of sheep, grape-making, irrigation and cultivation of rice 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: Irrigation projects for rice growing have caused an unnatural inflow of fresh water since 1975. A water drainage system near Potiievka has caused an unnatural inflow of salt water. Both have upset the hydrological balance of the bays, and thus affected the productivity of the system. There is disturbance from commercial fishing during the breeding season, and pollution by industrial and agricultural waste water.
- (b) around the site: Pollution from coasts bays by drainage waters, which contain chemicals, used in an agriculture.
- **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)

The 50,000 ha Chornomorskyi Biosphere Reserve occupies some of the area of the Yagorlytska and Tendrivska bays and gives total protection, including against human exploitation or recreational activities. The protection in these wetland reserves is permanently carried out by the Hunting Service in 12 cordons, both by motorbike and by boat. During the breeding season, 24-hour protection is maintained at the most important breeding sites in the area. In severe winters, additional food is provided at gathering sites of birds.

Ramsar Monitoring Procedure Mission visited the site in 1990, and the site has been placed on the Montreux Record since 16 July 1993.

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

Intensification of the protection regime and expansion of the Chornomorskyi Bioshere Reserve and its protected area (zone) have been proposed.

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

Scientific research is systematically undertaken by the research staff of Chornomorskyi Biosphere Reserve and by the Institute of Biology of Southern Seas, the Institute of Hydrobiology and the Institute of Zoology of the National Academy of Sciences of Ukraine. Regular counts of wintering and nesting birds are made and scientists participated in the international programme for colour-marking of swans in order to elucidate their distribution and movements.

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

The site is used for ecological education, although special educational programs are not present in majority of schools. The nature protection training is provided within the framework of a comprehensive school. Lectures are carried out by experts and scientists for the basic groups of land users, like fanners, fishermen and agricultural and industrial workers.

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

In large parts of the site, recreational activities are not allowed. In other parts, there is some recreation and 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: on protected area of the Chornomorskyi Biosphere Reserve - of the National Academy of Sciences of Ukraine, on other area – of different sectors: Ministry of Agricultural Industry Complexes of Ukraine (farming), State Committee of Forestry (forests), State Committee of Water Resources (water using) etc.

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

Administration of the Chornomorskyi (Black-Sea) Biosphere Reserve (Director: Georgiy B. Mayazkyi. Address: 1 Lermontov Str., 326 640 Gola Prystan, Khersonska Oblast, UKRAINE. Tel./Fax: +380 5539 220-54) on protected area of this Reserve and Land and Resource Users (organizations and institutions and citizens) on the last area and local authorities are executive bodies for environmental protection. Administration of the Chornomorskyi Biosphere Reserve and the State Department of Ecological Safety in Khersonska Oblast (Director: Vyacheslav I. Lutskin. Address: 47 Ushakov Str., 325000 Kherson, UKRAINE. Tel./Fax: +380 5522 631 -95. E-mail: <eco21@eco21.FreeNet.Kiev.UA>) carry out state control for protection on the whole territory.

30. Bibliographical references: (scientific/technical only)

Anon. (1980). National Report of the USSR for the Conference on the Conservation of Wetlands of International Importance Especially as Waterfowl Habitat, Cagliari, Italy, 24-29 November 1980.

Ardamatskaya, T.B. (1970). Wildfowl of the Ukrainian Black Sea Coastal Region. In: *Proceedings of the International Regional Meeting for Conservation of Wildfowl Resources, Leningrad, 25-30 September 1968.* Moscow.

Carp, E. (1980). A Directory of Western Palearctic Wetlands. IUCN, Gland, Switzerland.

IUCN (1987). A Directory of Wetlands of International Importance. IUCN, Gland, Switzerland and Cambridge, UK. 460 pp.

Korziukov, A.I., Koshelev, A.I., and Chernichko, I.I. (eds.)(1991). *Rare Birds of the Black Sea Coastal Area*. Kyiv-Odessa, Lybid. 270 pp.

Lansdown, R.V. (ed.)(1996). A Preliminary Inventory of Wetlands in the Black Sea Coastal Regions of Moldova, Ukraine, Russia and Georgia. Unpublished Report by Wetlands International for TACK under contract number WW.93.05/03.01.BOI5.

Nazarenko, L.F. (1994). Peculiarity of Waterfowl's Wintering in 1994. Life of Birds 1994-1: 7-8

Zaitsev, Yu., Mamaev, V. (1997). Marine Biological Diversity in the Black Sea (An investigation of Change and Decline). United Nations Publications. New York. 208 pp.

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