

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:** *Kyliiske Mouth*

This site as 'Kylijske Gyrlo' was in the Ramsar List when Ukraine was part of the USSR.

4. **Geographical coordinates:** 45°23'N 29°36'E

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

6. **Area:** (in hectares) 32, 800 ha, enter into the Dunaiskyi (Danube) Biosphere Reserve to be created (after expansion of the territory of the Natural Reserve 'Dunaiski Plavni (Danube Floodplains)') by the Resolution of the President of Ukraine dated August 10, 1998.

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

Kyliiske Mouth (Kyliiske Hyrlo) is the delta of Kyliiskyi Arm (Kyliiska Delta) of the Danube River. It is situated along the Black Sea near border Ukraine with Romania. This wetland comprises a lot of arms, islands, fresh water lakes and sandy spits, which enclose bays on the seaward side of the delta. The wetland is important site for biodiversity conservation including wintering, migrating, breeding and moulting birds as well 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: F, M, A, E, O

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: 2c, 3a, 4b.

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

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)

2a: The wetland is a nesting site for the threatened waterbirds *Pelecanus crispus* and *Aythya nyroca*, and is a wintering site for the threatened red-breasted goose *Branta ruficollis*.

2c: Kyliiske Mouth is very important to large numbers of breeding, wintering and migrating waterfowl, as spawning and nursery places for fish and as breeding site for amphibians.

2b, 2c: It is one from several wetlands in Europe, where existing floristic complexes are submitted by rare, relict and endemic species *Trapa natans* (relic), *Salvinia natans* (relic), *Nymphaea alba*, *Nuhpar lutea*, *Nymphoides peltata*, *Caulinia minor*, *Lemna gibba*, *Wolggia arrhiza*, *Leymus sabulosus*, *Apera maritima*, *Polygonium patulum*.

3a: Kyliiske Mouth supports far over 20, 000 waterfowl, both in winter, during migration and breeding season.

3b: The site regularly supports large numbers of Ciconiiformes, Sternidae and Anatidae, which are indicative for wetland values.

3c: On the territory of the site more than 1 % of European populations of *Phalacrocorax pygmaeus* and *Haliaeetus albicilla* is registering regularly.

4b: The wetland is important as spawning and nursery places for fish.

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

Kyliiske Mouth is a part of the Danube River delta and is situated near Vylkove Town (Kyliiskyi Rayon – administrative district) in Odeska Oblast of Ukraine, closed to the wetland site ‘Sasyk Lake’, near the Romanian wetland site ‘Danube Delta’.

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 Kyliiske Mouth area is the main Danube River mouth. This wetland comprises channels, alluvial islands, fresh water lakes and low sandy spits which enclose bays on the seaward side of the delta. The wetland includes many islands, most of which are situated between the Ochakivskiy and Staro-Stambulskiy arms, and also a kilometre-wide belt of the Black Sea along the seaward edge of the delta.

The flat islands of alluvial origin are separated from each other by small and large channels. In the lower coastal zone, the channels open into a system of shallow open bays, divided from the sea by low silty-sandy spits and underwater bars. In the arm’s streams are strong. The islands are inundated at high water levels, and they usually have residual stagnant waters existing in their inland parts. All the water bodies of the delta are fresh, only the sea shallows have a variable degree of salinity, depending mainly on the strong easterly winds. The flow of sediment depends on the weather conditions in the Danube basin.

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

The level of water in the delta depends on seasonal phenomenons, which the main is a flood. The flood usually comes in March. The highest level of water is observed at the end of March and continuing about 2-3 weeks. Thus, there is 95 % of the territory of delta under water. Average height of water’s level between floods — 80-180 cm. In July-August the superficial drain decreases. In September-October steady balance comes. A level of water, especially in water bodies of east part of wetland, caused by winds. The fluctuations of a level of water reach 90 cm per day.

The Danube water chemical structure is moderately hard — with average mineralization. The contents of oxygen within the limits of normal saturation, but in some cases is observed its deficiency in a winter period and abundance in the summer. The hydrochemical regime of water bodies of wetland is characterized by inconstancy. Especially sharp its fluctuations, in particular salinities and temperatures, in the near-mouth areas. The river water has a salinity 1,8 ‰ here. Mudness of Danube water is 325 g/m³ in average. Especially muddy water is in sleeves and connected with them channels. Less muddy water is in the open bays, in close and half-close bays — mudness is significant less. The most muddy water is in June, least is in October-November.

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

This wetland, which consists beside branches of the river number of swamp areas, floodplain forests, complex of lakes, sandy ridges etc. Danube delta area is ecotonic zone like type ‘river-sea’ and characterized by high diversity of species and coenosis. Among hydrobionts fresh water species prevail, but relic ‘pontian-caspian’ complex (e.g. *Heterocope caspia*, *Dreissena polymorpha*) and Mediterranean-Sea immigrants (e.g. *Eurytemora affinis*, *Eurytemora vorax* etc.) are also represented well. Pisces consist a lot of native species including passable and half-passable species. Many water birds nest and stop during migrations here, sea birds come to feed. Vegetation is very diverse, hydrophil alignments prevail in it. The estuarine islands support lake and marsh vegetation, and the waters support rich aquatic and submerged vegetation. Dune and salt-tolerant plants grow on the sandy soils which are extending by accretion into the sea.

The warmed shallows of the bays and the islands which become submerged during spring and summer high water are highly productive, with rich plankton, nekton and benthos (especially crustaceans, molluscs and larvae of waterside insects). The combination of various aquatic biotopes, favourable climatic conditions, high productivity of the water bodies, good protective conditions and the proximity of areas of cereal growing result in a high biological capacity in the delta for waterfowl. The shallow region south of the Kurilski Isles, which has a great numbers of submerged sandbanks that are uncovered at low water, are a site of waterfowl concentrations during all seasons.

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

The estuarine islands support lake and marsh vegetation composed mainly of reedbeds of *Phragmites communis*, reedmace *Typha augustifolia*, burreed *Sparganium* and sedges *Carex* spp., with thickets of white willow *Salix alba*, moisture-loving comfrey *Symphytum* and woody nightshade *Solanum dulcamara* in higher areas. The waters are rich in aquatic and submerged vegetation with extensive stands of wild celery *Vallisneria spiralis*, floating water lily *Nymphaea*, sea lettuce *Salvinia natans* (relic), water chestnut *Trapa natans* (relic), naiad *Najas* and hornwort *Ceratophyllum demersum*. On the dried out sandy and silty spits, the predominant plants are saltwort *Salsola*, lymegrass *Elymus arenarius*, *Xanthium* and coltsfoot *Tussilago farfara*. Along the sea edge of some of the larger islands, large beds of sea buckthorn *Hippophae rhamnoides* occur, at an area of 60 ha over a 12 km stretch.

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

There are following important nesting birds at the Kyliiske Mouth: white pelican *Pelecanus onocrotalus*, spoonbill *Plateale leucorodia* (60 pairs) and globally threatened Dalmatian pelican *Pelecanus crispus* (1-12 unsuccessful breeding pairs) and pygmy cormorant *Phalacrocorax pigmaeus*. It was noticed here as a rare migrant the slender-billed curlew *Numenius tenuirostris* - globally threatened species.

In total, 19,000 to 20,000 pairs of waterfowl breed at this wetland. The most numerous are common tern *Sterna hirundo* (10,000 - 11,000 pairs), sandwich tern *S. sandvicensis* (2,000 pairs), and little tern *S. albifrons* (50 pairs), coot *Fulica atra* (6,000 pairs), mallard *Anas platyrhynchos*, ferruginous duck *Aythya nyroca* and red-crested pochard *Netta rufina* (about 1,000 pairs), night

heron *Nycticorax nycticorax*, glossy ibis *Plegadis falcinellus* (100 pairs), grey heron *Ardea cinerea* (25 pairs), little egret *Egretta garzetta* (about 150 pairs), great egret *E. alba* (40 pairs), purple heron *Ardea purpurea* (400 pairs), squacco heron *Ardeola ralloides* (50 pairs), pied avocet *Recurvirostra avosetta* (60 pairs), Kentish plover *Charadrius alexandrinus* (100 pairs) and oystercatcher *Haematopus ostralegus* (20 pairs).

It is also a major moulting site for mute swan *Cygnus olor* (800 birds), coot, greylag goose *Anser anser* and mallard.

Overwintering birds include mainly dabbling ducks (predominantly mallard), gulls (black-headed gull *Larus ridibundus*, herring gull *L. argentatus* and mew gull *L. conns*), mute swan *Cygnus olor* and whooper swan *Cygnus cygnus*, greylag goose (3,000 birds), white-fronted goose *Anser albifrons* (10,000 birds), red-breasted goose *Branta ruficollis*, Eurasian curlew *Numenius arquata*, ferruginous duck, coot, wigeon *Anas penelope*, teal *A. crecca* and pochard *Aythya ferina*. In periods of rare cold spells, birds wintering in the northern Caspian region and the Azov Sea area migrate to the Danube Delta. During autumn and spring migrations 133 species of birds migrate over the wetland. Waterfowl includes Anseriformes, Laridae, grebes, waders, Ciconiidae and Pelecanidae. Among the waterfowl, the following species are common or numerous: mallard, tufted duck *Aythya fuligula*, pochard, greater scaup *Aythya marila*, northern pintail *Anas acuta*, teal *A. crecca*, garganey *A. querquedula*, white-fronted goose, greylag goose, red-breasted goose, mute swan, whooper swan, black-headed gull, herring gull, little gull *L. minutus*, common tern, Caspian tern *Sterna caspia*, ruff *Philomachus pugnax*, black-tailed godwit *Limosa limosa*, redshank *Tringa tetanus*, Eurasian curlew, whimbrel *Numenius phaeopus*, pied avocet *Recurvirostra avosetta*, oystercatcher, black-winged stilt *Himantopus himantopus*, night heron, grey heron, great egret, purple heron, pygmy cormorant *Phalacrocorax pygmaeus*, great cormorant *P. carbo*, white pelican and Dalmatian pelican. Migration occurs mainly along the coastal part of the wetland, with resting sites in the bays and on the sand spits. The total amount of migrants is 2 to 3 million birds. The warmed shallows of the bays are mass migration, spawning and nursery places of the fry of Cyprinidae and Danube herring, and breeding, wintering and nursery places for frogs, which occur in very large numbers.

On the territory the wetland annually breeding 5-7 pairs and wintering about 20 individuals of *Haliaeetus albicilla*.

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

There is Vylkove Town in the Kyliiske Mouth, largest part of it stands on the delta's islands. Thus, there are numerous channels and canals in the town as usual streets. Because of using boats and motorboats on the "streets" people named the territory 'Ukrainian Venice'. Vylkove is one of the centres of representatives of the christian religious community forbidden by king Peter I more than 200 years ago. The community representatives are fishing traditionally in the Danube River.

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 on protected area of the Dunaiskyi Biosphere Reserve and there is limited and controlled exploitation of natural resources (hunting and fishing, grazing of cattle and sheep, haymaking, catch of frogs, recreation etc.) outside protected area, including other areas of the Reserve.
- (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: Disturbance by commercial fishing activities is the main unfavorable human influence for waterfowl. 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 illegal fishing within the wetland sometime, and night spot light poaching of frogs. As a result of all disturbances, the wetland hosts less waterfowl than its capacity allows.
- (b) around the site: There is considerable organic and toxic pollution of the Danube River water and pollution of water in floodplains from local rice fields etc.

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 entire site is protected as a biosphere reserve (to August 10, 1998. Administration of this reserve ensures protection of wetland site. Outside protected area limited and controlled use of natural resources is carried out.

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

It has been proposed to create a non-disturbance area for the waterfowl, the fish nursery places, and breeding sites for amphibians, and at the same time will allow some more human activities at parts of the wetland that are less important for waterfowl, frogs and fish.

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

The research staff of the Dunaiskyi Biosphere Reserve studies ecological conditions of the area for many years. There are regular censuses of nesting and wintering waterfowl. The Reserve participates in the international programme for colour marking of swans to study their movements and distribution.

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

In the framework of the GEF Project on creation of the Dunaiskyi Biosphere Reserve the Visitors Center was organized here and some materials (booklets, magazines, etc.) published. Some TV programs were shown on the regional and state TV. The project on conservation of environment in the region should start soon also under the support of the WWF.

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

The ecotourism is organized in the Kyliiske Mouth within borders of the Dunaiskyi Biosphere Reserve.

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 Dunaiskyi 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 Dunaiskyi Biosphere Reserve (Director Dr. Olexandr M. Voloshkevych, Address: 4 Nakhimova Str., 272626 Vylkove, Odeska Oblast, UKRAINE. Tel./Fax: +380 4843 3-11-95) on protected area of this Reserve and Land Users (organizations and institutions and citizens) on the last area and local authorities are executive bodies for environmental protection. Administration of the Dunaiskyi Biosphere Reserve and the 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>) carry out state control for protection on the whole territory.

30. Bibliographical references: (scientific/technical only)

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