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: 26 November1997

2. Country: Ukraine

3. Name of wetland: Kylijske Gyrlo (=Danube Delta)

4. Geographical coordinates: 45°22'N 29°42'E

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

6. Area: (in hectares) 32,800 ha, incl. 14,851 ha of Nature Reserve Dunaysky Plavni.

7. Overview: (general summary, in two or three sentences, of the wetland's principal characteristics)
Kylijske Gyrlo (Danube Delta, last name) is situated along the Black Sea near Danube River mouth. This wetland are channels, islands, freshwater lakes and sandy spits, which enclose bays on the seaward side of the delta. The wetland is important for wintering, migrating, breeding and moulting birds, who prefer shallow waters. It is also important as breeding and nursery grounds for fish and amphibians. There are many people ale living here also.

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, next page.)

la • **1b** • lc • 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* ❻ -or- *no* ■

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12. Justification of the criteria selected under point 9, on previous page, (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: Kylijske Gyrlo is very important to large numbers of breeding, wintering and migrating waterfowl, as spawning and nursery grounds for fish and as breeding site for amphibians.

2b, 2c: One of a few in Europe wetlands, where kepted floristic complexes submitted by rare, relict and endemic species *Trapa Natans, Salvinia natans, Nymphaea alba, Nupar lutea, Nymphoides peltata, Caulinia minor, Lemna gibba, Wolggia arrhiza, Leymus sabulosus, Apera maritima, Polygonium patolum*.

3a: Kylijske Gyrlo 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. In territory of the site is registering regularly more than 1 % of European populations of *Phalacrocores pygmeus* and *Haliaeetus albicilla*.

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

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

Kylijske Gyrlo is situated at the Danube River mouth, in Odessa District (Oblast), 150 km to south-west from Odessa, near the Romanian border.

14. Physical features: (e.g. geology, geomomtology; 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 Kylijske Gyrlo area is situated along the Black Sea near the main Danube River mouth. This wetland omprises channels, alluvial islands, freshwater 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 Ochakivsky and Staro-Stambulsky channels, 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 channel's strems are strong. The islands are inundated at high water levels, and usually they 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 a delta depends on seasonal phenomena, 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 continue about 2-3 weeks. Thus under water there is 95 % of the territory of delta. Average height of water's level between floods — 80-180 cm. In July-August the superficial drain decreases. In September-October there comes steady balance. 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 mineralisation. 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 here has a salinity 1,8 ‰. Mudness of Danube water is 325 g/m^3 in average. Especially muddy water in sleeves and connected with them channels. Less muddy it in the opened bays, in closed and half-closed 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)
The vegetation at the landward part of the site is typically riverine. The estuarine islands support lake and marsh vegetation, and the waters support rich aquatic and submerged vegetation, zoo- and phytoplankton, and fish. 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, nektobenthos 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 Islands, which has a great number of submerged sandbanks that are uncovered at low water, are a place of waterfowl concentrations at 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 Phragmifes communis,* reedmace *Typha augustifolia ,* burreed *Sparganium* and sedges *Carex* spp., with thickets of white willow *Salix albs,* moisture-loving comfrey *Symphyfum* and woody nightshade *Solarium dulcamare* 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,* water chestnut *Trapa natans,* 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 *Tussilagofarfara.* 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 Kylijske Gyrlo: white pelican *Pelecanus onocrotalus,* spoonbill *Plateala leucorodia* (60 pairs) and globally threatened Dalmatian pelican *Pelecanus crispus (1-12 unsuccesful breeding pairs)* and pygmy cormorant *Phalacrocorax pigmaeus* . It was notised here as a rare migrant the slender-billed curlew *Numenius tenuirostris* - globally threatened spesies .

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 falcineHus* (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 include Anseriformes, Laridae, grebes, waders, Cicomidae 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 pugnox*, 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 number of migrants is 2 to 3 million birds. The warmed shallows of the bays are mass migration, spawning and nursery grounds of the fry of Cyprinidae and Danube herring, and a breeding, wintering and nursery grounds for frogs, which occur in very large numbers.
In 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, forestty, religious importance, archaeological site etc.)
There is Vilkovo Town in the Kylijske Gyrlo, which largest part is stand on the delta's islands. Thus, there are numerous channels and canals are settled in the town as usual streets. Because of use boats and motorboats on the "streets" people named the territory as "Ukrainian Venice". Vilkovo 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 fishering traditionally on Danube River.

20. Land tenure/ownership of:
(a) site: State of Ukraine
(b) surrounding area: State of Ukraine

21. Current land use:
(a) site: There is some limited and controlled exploitation of natural resources at the site. Other activities are hunting and commercial and subsistence fishing.
(b) surroundings/catchment area: excepting traditional agricultural manufacture on bordering to the wetland territories is cultivated a rice.

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 of waterfowl by commercial fishing activities is the main unfavourable human influence. The fishing sites coincide with the main breeding, feeding and resting places of birds. This causes both disturbance and loss of waterfowl due to permanent deployment of fishing tackle. There is also sometime illegal fishing in the wetland, and night spot light poaching of frogs. As a result of all disturbance, the wetland hosts less waterfowl than its capacity allows.
(b) around the site: Pollution from the rice fields.

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 site used to be part of the Yagorlitz and Tendrov Bays Ramsar site when Ukraine was still part of the USSR. The entire site is protected as a zapovednik (state nature reserve), which implies a strict protection regime for the island part of the territory. In 1996 the area of reserve was increased on 34000 ha. The site is protected by staff from the Hunting Service.
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 grounds, and breeding sites for amphibians, and at the same time 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 cultent projects; existence offleld station etc.) The research staff of the state nature reserve has been studying the area for many years. There are regular censes 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 framework of the WB Project on creation of the Biosphere Reserve "Dynays'ky Plavny" the Visitors Center was organized here and some materials (booklets, magazines, etc.) was published. Some TV programs was shown in the regional and state TV. The project on conservation on environment in the region should started soon also under support of WWF.

27. Current recreation and tourism: (state ifwctland is used for recreation/tourism; indicate type and frequency/intensity)
The ecotourizm is not organised in the Kylijske Gyrlo, excluded territory of the reserve.

28. Jurisdiction: (territorial e.g. state/region and functional e.g. Dept of Agriculture / Dept. of Environment etc.)
The site is the property of the state. In the whole territory a primary landuser is Forestry State Committee, except territory of Zapovednik which is under umbpella of the National Academy of Sciences.

29. Management authority: (name and address of local body directly responsible for managing the wetland)
There is no special structure engaged for the wetland management here. Therefore the management is carried out by land users.

30. Bibliographical references: (scientific/technical only)

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