

Information Sheet on Ramsar Wetlands (RIS) – 2006 version

Available for download from http://www.ramsar.org/ris/key_ris_index.htm.

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX.22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

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

Zoltán Hegyi Ph.D. (zoological supervisor)
László Nagy (ranger of Ócsa Landscape Protection Area)
Katalin Sipos (head of Nature Protection Department)
Duna-Ipoly National Park Directorate
H-1021 Budapest, Hűvösvölgyi út 52., Hungary
Post address: 1525 Budapest, Pf.: 86.
Phone: (36-1) 200-4033, 200-4066
Fax: (36-1) 200-1168
Email: DINPI@DINPI.HU

FOR OFFICE USE ONLY.

DD MM YY

--	--	--

Designation date

--	--	--	--	--	--

Site Reference Number

2. Date this sheet was completed/updated:

April, 2006

3. Country:

Hungary

4. Name of the Ramsar site:

The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.

Ócsai Turjános

5. Designation of new Ramsar site or update of existing site:

This RIS is for (tick one box only):

- a) Designation of a new Ramsar site ; or
b) Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area

The Ramsar site boundary and site area are unchanged: X

or

If the site boundary has changed:

- i) the boundary has been delineated more accurately ; or
- ii) the boundary has been extended ; or
- iii) the boundary has been restricted**

and/or

If the site area has changed:

- i) the area has been measured more accurately ; or
- ii) the area has been extended ; or
- iii) the area has been reduced**

** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

No significant change to the site since the last update.

7. Map of site:

Refer to Annex III of the *Explanatory Note and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

- i) a hard copy (required for inclusion of site in the Ramsar List): ;
- ii) an electronic format (e.g. a JPEG or ArcView image) ; X
- iii) a GIS file providing geo-referenced site boundary vectors and attribute tables ;

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary follows physical boundaries (road, canal), as well as boundaries of land registration plots.

8. Geographical coordinates (latitude/longitude, in degrees and minutes):

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

N border: 47° 13' 15" S border: 47° 18' 05"

E border 19° 11' 10" W border 19° 18' 35"

Approximate Center of the wetland : 47° 15' 60"

19° 14' 73"

9. General location:

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town. In the center of Hungary, Pest county, 28-40 km South-West of Budapest, near the villages Ocsa, Dabas and Inárcs.

10. Elevation: (in metres: average and/or maximum & minimum)

98-110 m above sea level

11. Area: (in hectares) 1078 ha

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The area is a remnant of the ancient Danube valley having survived in small spots for today. The so called 'bog fen' which has various habitats and wonderful landscape sight, gives home for several rare and strictly protected plant and animal species, and plays significant part in the migration of birds. The surrounding villages are rich in architectural and other cultural values, therefore this territory is one of the best targets for sustainable ecotourism. The wide variety of bird species gives the opportunity to organize bird migration research, which has a serious past of more than two decades in the district. On the other hand Ócsa is called the 'botanists paradise'.

13. Ramsar Criteria:

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked.

<u>1</u>	•	<u>2</u>	•	<u>3</u>	•	<u>4</u>	•	5	•	6	•	7	•	8	•	9
<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

1.: In biographic region this wetland contains rare and unique natural wetland types: permanent freshwater marshes and peat swamp forests. In the beginning of the last century these wetland types were much larger than nowadays.

Habitat types from the Habitats Directive Annex I: 6410 *Molinia* meadows on calcareous, peaty or clayey-silt-laden soils (*Molinioncaeruleae*), 6440 Alluvial meadows of river valleys of the *Cnidion dubii*, 6510 Lowland hay meadows (*Alopecurus pratensis*, *Sanguisorba officinalis*), 7230 Alkaline fens as well as the both priority types 91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*) and 91I0 Euro-Siberian steppic woods with *Quercus* spp.

2.: This wetland supports critically endangered species of plants and animals. For example the protected Viviparous Lizard (*Zootoca vivipara*) (*LR/lc IUCN Red list + Annex IV Habitats Directive*) is a characteristic threatened reptile species, which is genetically different from other populations in Hungary (or elsewhere). The site is the last Hungarian refuge of False Ringlet (*Coenonympha oedippus*), which has a viable population in several locations scattered within the site.

The species is threatened throughout Europe. *Adenophora* (*Adenophora liliifolia*), a European/Western Siberian subcontinental species, declining in its European range, has one of its last Hungarian strongholds here. (Annex provides full list of animal species)

3.: This wetland has an important role for maintaining the biological diversity of the biogeographic region.

The local population of Viviparous Lizard (*Lacerta vivipara*) is genetically different from other populations in Hungary (or elsewhere). This is the only site for *Coenonympha oedippus* in Hungary and one of the very few sites for *Adenophora liliifolia*. The strong populations of European Mudminnow (*Umbra krameri*) and Weatherfish (*Misgurnus fossilis*) are also important for maintaining biological diversity.

4.: This area supports plants of marshes and bogs and different species of birds associated to marshes. The vegetation period and the breeding season are connected mainly to seasonally and annually varying water conditions.

Important breeding bird species: *Ardea cinerea*, *Ardea purpurea* (4-6 pairs) *Botaurus stellaris* (15-20 pairs), *Egretta alba* (up to 100 pairs), *Egretta garzetta* (occasionally), *Platalea leucorodia* (occasionally), *Nycticorax nycticorax* (occasionally), *Aythya nyroca* (10-15 pairs), *Circus aeruginosus*, *Circus pygargus* (3-4 pairs), *Porzana porzana*, *Porzana parva*, *Rallus aquaticus*, *Crex crex*, *Numenius arquata*, *Limosa limosa*, *Tringa tetanus*, *Vanellus vanellus*, *Acrocephalus melanopogon*.

Important wintering bird species: *Circus cyaneus*, *Asio flammeus*.

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Pannonic

b) biogeographic regionalisation scheme (include reference citation):

Biogeographic regionalisation scheme of the EU Habitats Directive/Bern Convention (European Commission DG Environment webpage)

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Geology:

The geological past of the protected area is similar to the other sites of the Great Plain with the exception that it was strongly affected by the river Danube from the Pleistocene, as the river was floating here that time. Later by the changing of the floating direction of the Danube, the area started to fill up. The bogs were formed in the old Holocene by the bank up of a Danube's branch floating in the southeast direction. This filled up low laying territories in the border of Ócsa, Dabas and Bugyi villages are surrounded by river bank sand dunes. The non-flowing parts continued to fill up, which formed the smooth peat stratum of the bogs. Under the peat there is old Holocene sand, Pleistocene river pebbles and Pannon aged clay stratum. Above the peat an average fifty centimeters thick bog soil formed. Today the bogland is mainly flat. From north and south it is bordered by sand hills. The village of Ócsa lays on one of them.

Geomorphology:

The Ramsar areas are situated between the villages of Ócsa and Dabas, in the bogland with the length of approximately 10 kilometers and the width of approximately 1 kilometer. It is mainly flat with the height of 100 meters above the sea level. The lower laying parts of the territory are found at the height of approximately 98 meters above the sea level. The highest of the sand hills bordering the area, reaches the height of 110 meters above the sea level.

The soils of the territories were influenced by the permanent water, the anaerobe circumstances and the constitution of plant societies. The dominant soil type is the meadow and bog meadow soil, but there are also sand soils in the surrounding parts of the area. Some of the peat was under mine cultivation during the post war decades.

Natural and artificial effects are responsible together for the present day form of the landscape. Water regulation causes serious changes in the constitution of plant societies and has great impact on the animals. The tunnels still exist and bring the water of the area towards main tunnels and rivers. This process leads to the drying out of the area, the exact impact of which is inestimable.

Hydrology:

The area gains up the water flowing from the upper laying territories. This water fills up the pools formed by the ancient Danube and supplies the bogs. The protected area is originally non-floating. According to writings from the beginning of the last century most of the area was covered with water. In the beginning of our century serious tunnel building works started in order to dry out the wet territories of the Great Plain. This caused the disappearance of most of the Great Plain's wetlands. In the northern part of the area there are clear ground water sources. These sources maintain the water need of the pools, saving them from drying out in hot summers. The water is continuously moving towards the Danube river which is a natural process, but the tunnels cut out the natural steps of the surface, fastening the flowing of the water to rivers. The aim of the management is to hold back the water and keep up the wetland.

Soil type:

The deeper parts are covered by hygromorph soil types, loam soils while the upper regions are mainly covered by brown forest soils.

Climate:

The climate of the territory is moderately warm and dry. The annual average temperature is 10,1 C^o. The hottest temperatures measured here are between 34,0 and 34,2 C^o, the lowest temperatures are between -15,5 and -15,8 C^o. The number of sunny hours is 2000 hours a year. The annual rainfall is 550-580 millimeters. The ground is covered with snow for about 30-33 days a year, the average thickness of the snow is approximately 20 centimeters. The characteristic wind direction is northwestern, the average speed of the wind is 2.5-3.0 meters/second.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

Geology and Geomorphology:

See 14. point.

Hydrology:

The area descending from the Gödöllői Hills towards Duna Valley is divided by parallel streams flowing into Duna. The depth of ground water increases from 2 meters to 6 meters from the north to the south direction. In drier periods, the area is stricken by significant water deficit.

Climate:

The catchment area is characterized by 2000 sunny hours (800 hours in summer, 180 hours in winter).

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

The water level of the marshes and canals have significant role in balancing groundwater system of this region. The rainfalls gain up in the lower laying parts of the area. It supplies the groundwater system and controls the water of the territories in close surrounding. The relevant level of the water in the bogs is especially important for amphibians and waterfowls. Rare plant species requiring bog habitats are also strongly depend on the water level. In the canals there are valuable, rare water plant species and these are the living places of the European water turtle, which is found in large numbers here.

19. Wetland Types

a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the *Explanatory Notes & Guidelines*.

Marine/coastal: A • B • C • D • E • F • G • H • I • J • K • **Zk(a)**

Inland: L • M • N • O • P • Q • R • Sp • Ss • **Tp** Ts • U • Va • Vt • W • Xf • Xp • Y • Zg • **Zk(b)**

Human-made: 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • **Zk(c)**

b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

U, Xp, 4, W, Tp, 9, 2.

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Tp

The northern part of the area is an open marshland with pools. The pools are surrounded with reeds so they give resting opportunity for thousands of birds during their migration. These reeds are the places of breeding for several rare bird species. Some ponds' water is circulated by ground sources, so that they do not freeze over in the wintertime. These ponds are the living places of the European otter. By the side of the marshland there are wet meadows and bog meadows. These are partly covered with water in the springtime, and are the places of nutrition for migrating birds and species nesting here. They are the habitats of rare continental orchid and iris species.

U

At some parts of the northern marshland there are open bogs with shrubs. These make the habitat more diverse which is shown by the wide variety of songbirds and waterfowls nesting here. The most characteristic plant species is the *Salicetum cinereae*. While the open marshlands are entirely covered with water, these habitats have dry or wet parts, which are not, or just permanently covered with water.

Xp

Alder and willow bogs occur in permanently water-logged depressions. The largest forested bog is placed in the southern part of the Landscape Protection area. Endangered and protected species are the most abundant in this type of wetland here. So far these are not used heavily for commercial purpose.

Dominant plant communities are alder bog (*Dryopteridi – Alnetum*) and willow bog (*Calamagrostio – Salicetum cinereae*)

Characteristic species: *Alnus glutinosa*, *Salix cinerea*, *Carex elata*.

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Biogeographically important communities are alder bog (*Dryopteridi- Alnetum*), willow bog (*Calamagrostio - Salicetum cinereae*), sedge fen (*Caricetum elatae*) and several species of rear water macrophytes (*Utricularia vulgaris* and *Hottonia palustris*). These plant communities are very vulnerable and endangered throughout Hungary.

Endangered, biogeografically important or rare species are the following ones:

Aspidiaceae

Dryopteris dilatata

Thelypteridaceae

Thelypteris palustris

Urticaceae

Urtica kioviensis

Sparganiaceae

Sparganium minimum

Valerianaceae

Valeriana dioica

Cyperaceae

Schoenus nigricans

Gentianaceae

Centaurium littorale

Centaurium pulchellum

Gentiana pneumonanthe

Gramineae

Molinia coerulea

Festuca pseudovina

Plantaginaceae

Plantago maritima

Campanulaceae

Adenophora liliifolia

Caryophyllaceae

Dianthus superbus

Orchidaceae

Dactylorhiza incarnata

Orchis laxiflora

Orchis militaris

Epipactis palustris

Gymnadenia conopsea

Iridaceae

Iris sibirica

Iris spuria

Ranunculaceae

Clematis integrifolia

Primulacea

Hottonia palustris

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

The fauna is an interesting heritage of the Great Plain's ancient wildlife. The various habitats let one to take a glance into almost all types of living places, and to know the typical animals of the Carpathian steppe. Some of the species found here are post glacial remnant species, which are characteristic to the lower laying wet territories. The western part of the area is bordered with hot, dry habitats, their communities have interesting, mainly Mediterranean species.

Odonata - Zygoptera:

Leucorhinia pectoralis, *Somatochlora metallica*

Coleoptera:

Megopis scabricornis, *Carabus coriaceus*, *C. ullrichi*

Lepidoptera:

Chamaesphaecia palustris, *Maculinea alcon*, *Rhyaroides flavides*

Endangered vertebrates:

Pisces -, Teleostei -, Clupeiformes:

Umbra krameri,

Teleostei -, Cypriniformes :

Misgurnus fossilis,

Teleostei -, Perciformes:

Gymnocephalus baloni, *G. schraetzer*, *Aspro zingel*, *A. streber*, *Cottus poecilopus*

Amphibia - Amura:

Bufo bufo, *Bufo viridis*, *Bombina bombina*, *Rana esculenta*, *R. dalmatina*, *R. arvalis*,
Pelobates fuscus, *Hyla arborea*, *Rana lessonae*
Caudalia: *Triturus vulgaris*, *Triturus cristatus*

Reptilia - Squamata -Lacertilia:

Podarcis taurica, *Lacerta vivipara*, *Lacerta agilis*, *Lacerta viridis*, *Anguis fragilis*

Squamata - Ophidia:

Natrix natrix, *Coronella austriaca*, *Elaphe longissima*,

Chelonia :

Emys orbicularis

Aves:

Ciconiiformes:

Egretta garzetta, *Egretta alba*, *Ciconia ciconia*, *Ciconia nigra*, *Ardea purpurea*, *Nycticorax nycticorax*, *Botaurus stellaris*, *Platalea leucorodia*

Anseriformes:

Aythya nyroca

Accipitriformes

Circus pygargus

Falconiformes:

Falco cherrug

Gruiformes

Crex crex

Charadriiformes:

Numenius arquata, *Limosa limosa*, *Tringa totanus*

Strigiformes:

Asio flammeus

Coraciiformes:

Merops apiaster

Mammalia - Placentalia - Chiroptera :

Rhinolophus hipposideros, *Myotis myotis*, *Eptesicus serotinus*, *Pipistrellus pipistrellus*, *Myotis daubentoni*, *Nyctalus noctula*, *Pelecotus auritus*

Placentalia - Carnivora:

Martes martes, *Mustela erminea*, *Mustela nivalis*, *Lutra lutra*

23. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

The ancient landscape contains settlements which have relevant historical past, especially the village of Ócsa. The cultural values are in close connection with land use and sustainable economy. The tools and methods of land use in the end of the last century and in the first half of our century are shown in a folk museum in the village of Ócsa. Just beside the museum there is a

Roman church from the 13th century. The old building was recently renovated and won the Europa Nostra Prize. By the side of the southern part of the district, there is a row of vine cellars including about 90 buildings of traditional architecture.

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No

If Yes, tick the box and describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

a) within the Ramsar site:

Site :

The Ramsar site is a part of the Ócsa Landscape Protection District and is partly owned by the Duna-Ipoly National Park Directorate, and partly privately owned.

b) in the surrounding area: Surrounding area :

The structure of land tenure in the surrounding area is very diverse including private agricultural sites and territories of economic societies.

25. Current land (including water) use:

a) within the Ramsar site:

In the northern part of the area there is (or planned to be) extensive reed harvesting. Some meadows are utilized only by pasturage, others by hay-making or both. There are strictly protected territories where the presence of endangered associations do not allow us to make use of the land. In the recent years hay-making fields have been cultivated by paid mowers or by our staff. Bog woods do not require intensive works. The Pilis Park Forestry restores natural damages.

Population of neighboring settlements:

Alsónémedi	4511
Dabas	14800
Inárcs	3306
Kakucs	2374
Ócsa	7903

b) in the surroundings/catchment:

Most of the surrounding area is agricultural land (ploughlands, woods, pastures). The dominant management is the agricultural small-scale production. These areas are continuously causing agricultural chemical pollution. Those parts, which are in close connection with the Ramsar sites are using intensively the ground water of the area and cause water lacking in the dry seasons. In one part of the area there is intensive sheep grazing and breeding.

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

a) within the Ramsar site:

The aim of the regulations done in the marshlands during the last century (drying up territories, building tunnels etc.) was the following:

- flood prevention of neighboring settlements
- gain new agricultural land and free surroundings from floods
- gain constant sprinkling-water for agricultural use

As a result of the regulations the outflow of the marsh-waters, the level of the ground water lowered and the degree of the floods decreased. These factors changed the water management of the area. The wells along the wet sites of the area caused more decrease in the groundwater level. The degradation of the region might speed up.

Communal sewage pollution might cause problems in the groundwater system, industrial sewage pollution does not occur at threatening numbers. The present economical recession suppressed the usage of artificial fertilizers and other chemicals. Thus the negative effects of these are not burdening the region nowadays.

b) in the surrounding area:

27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

Ócsa Landscape Protection Area includes the Ócsai Turjános Ramsar site as a conclave

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ; Ib ; II ; III ; IV ; V ; VI

c) Does an officially approved management plan exist; and is it being implemented?: No officially approved management plan exists.

d) Describe any other current management practices:

The site is part of the Ócsa Landscape Protection District, which is under protection since 1975. The two localities are strictly protected areas which means that the Directorate of the National Park supervises any human activity on them. Parts of the District are owned by individuals or economic societies. The most valuable territories -important from natural point of view- are planned to be bought by the Directorate in order to enclose to the District.

The drying up of the territories is controlled by reconstruction projects. A water retention dam has already been built at Dabas, and water governing facilities (sluices, etc.) are planned in the near future.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

After the total hydrological reconstruction of the area, it is planned to involve the sites into an ecotourism and education project. Therefore new tourist resting-place is proposed to be built, and a birdwatching tower in the border of Nagy-Turján is to be stood up. In our later future plans there is a study-path around the area of Öreg-Turján. Open water surfaces are planned in the Öreg-Turján marsh (careful reed-cutting, dredging).

29. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

In the south/eastern corner of Öreg-Turján there is a bird-ringing station, which operates throughout the year. It is one of the most significant ornithological surveys in Hungary, organised by the Bird-ringing department of the Hungarian Ornithological Association. The workers of the research organise study camps every year, which gives the opportunity for youngsters and students to learn about birds and nature conservation in practice. The camp is visited by foreign ornithologists from all over the world.

The Herpetologist department of the Hungarian Ornithological Association has started to take measures of the amphibian and reptile fauna of the territory. This work is planned to be a long-term project, and will be involved to the Hungarian herpetofauna monitoring system.

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

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

There are great opportunities of giving practical knowledge to students learning in connection with nature conservation or ecology. The latter mentioned bird-ringing station is able to give accommodation and semi-nomad supply to nature lovers, students and workers, and to help in organising their work. The Agency of Ócsa Landscape Protection District accepts visitors and gives help in any nature conservation projects or gives information about the wildlife of the sites and their surroundings.

The District is the scene of several competitions of nature conservation and environment studies. Two nature trails exist in the site.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

At the present time the area is not utilized by tourism. We are planning a cycling road by the side of the area. A study path is also required with a new resting-place. There are several plans, but further steps towards realization and financial support has to be taken. The final aim is to create the basis of well-organized sustainable ecotourism. This would mean financial and propaganda support for the area in the future, and bring prosperity to the villages in the surrounding.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

The Közép-Duna-völgyi Authority for Environmental Protection, Nature Conservation and Water Management is the first instant authority of the Ministry for Environment and Water.

1077 Budapest, Nagydiófa utca 10-12.

1447 Budapest, Pf. 541

Telefon: 478-4400

Fax: 478-4520

E-mail: kozepdunavolgyi@zoldhatosag.hu

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Duna-Ipoly National Park Directorate
H-1021 Budapest, Húvösvölgyi u. 52., Hungary
Post address: 1525 Budapest, Pf. 86.
Phone: (36-1) 200-4033, 200-4066, 200-4101
Fax: (36-1) 200-1168
Email: DINPI@DINPI.HU

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

- Dudich E., Loksa I. (1975): Állatrendszertan
(Tankönyvkiadó)
- Forró L., Nagy B., Sziráki Gy. (1993): Rákok (Crustacea), Egyenesszárnyúak (Orthoptera), Szitakötők (Odonata) és Recésszárnyúak (Neuropteroidea)
(A Duna-Ipoly Nemzeti Park zoológiai állapotfelmérése)
- Haraszthy L. et al. (1998): Magyarország madárvendégei
(Natura Könyvkiadó)

Please return to: Ramsar Convention Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland
Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • e-mail: ramsar@ramsar.org

Annex of protected and strictly protected animal species in various international lists of protection (justification to criterion 2)

Adenophora liliifolia Annex II and IV Habitats Directive
Dactylorhiza incarnata EU-CITES B-II
Epipactis palustris EU-CITES B-II
Gymnadenia conopsea EU-CITES B-II
Leucorhinia pectoralis Annex II Habitats Directive
Coenonympha oedippus Bern Appendix II., Annex II and IV. Habitats Directive
Maculinea alcon LR/nt IUCN Red list
Umbra krameri VU IUCN Red list + Bern Appendix II, Annex II Habitats Directive
Misgurnus fossilis LR/nt IUCN Red list + Bern Appendix III, Annex II Habitats Directive
Gymnocephalus baloni DD IUCN Red list + Bern Appendix III, Annex II Habitats Directive
G. schraetzer VU IUCN Red list + Bern Appendix III, Annex II Habitats Directive
Zingel zingel VU IUCN Red list + Annex V Habitats Directive
Zingel streber VU IUCN Red list + Annex II Habitats Directive
Cottus poecilopus LR/lc IUCN Red list
Bufo bufo LC IUCN Red list Bern Appendix III
Bufo viridis LC IUCN Red list + Annex IV Habitats Directive Bern Appendix II
Bombina bombina LC IUCN Red list + Bern Appendix II, Annex II Habitats Directive
Rana esculenta LC IUCN Red list, Bern Appendix III,
Rana dalmatina LC IUCN Red list + Bern Appendix II, Annex IV Habitats Directive

Rana arvalis LC IUCN Red list + Bern Appendix II, Annex IV Habitats Directive
Rana lessonae LC IUCN Red list + Bern Appendix III, Annex IV Habitats Directive
Pelobates fuscus LC IUCN Red list + Bern Appendix II, Annex IV Habitats Directive
Hyla arborea NT IUCN Red list + Bern Appendix II, Annex IV Habitats Directive
Triturus vulgaris LC IUCN Red list Bern Appendix III,
Triturus cristatus (cristatus) LC IUCN Red list+ Bern Appendix II, Annex II Habitats Directive
Podarcis taurica Annex IV Habitats Directive Bern Appendix II,
Lacerta vivipara LR/lc IUCN Red list + Bern Appendix III, Annex IV Habitats Directive
Lacerta agilis Annex IV Habitats Directive Bern Appendix III,
Lacerta viridis Annex IV Habitats Directive Bern Appendix III,
Natrix natrix LR/lc IUCN Red list + Annex IV Habitats Directive Bern Appendix III,
Coronella austriaca Annex IV Habitats Directive Bern Appendix II,
Elaphe longissima Annex IV Habitats Directive Bern Appendix II,
Emys orbicularis LR/nt IUCN Red list + Annex II Habitats Directive Bern Appendix II,
Egretta garzetta LC IUCN Red list + Annex I Birds Directive
Egretta alba Annex I Birds Directive

Nycticorax nycticorax Annex I Birds Directive, Bern Appendix II,
Botaurus stellaris Annex I Birds Directive, Bern Appendix II, Bonn Appendix II,
Ardea purpurea LC IUCN Red list + Annex I Birds Directive
Ciconia nigra LC IUCN Red list + Annex I Birds Directive
Ciconia ciconia LC IUCN Red list + Annex I Birds Directive

Platalea leucorodia Annex I Birds Directive, Bern Appendix II, Bonn Appendix II, EU-CITES A-II.

Aythya nyroca NT IUCN Red list + Annex I Birds Directive
Milvus migrans LC IUCN Red list + Annex I Birds Directive
Circus pygargus LC IUCN Red list + Annex I Birds Directive
Falco cherrug EN IUCN Red list
Crex crex NT IUCN Red list + Annex I Birds Directive
Numenius arquata Annex II/2 Birds Directive, Bern Appendix III, Bonn Appendix II,
Limosa limosa Annex II/2 Birds Directive, Bern Appendix III, Bonn Appendix II,
Tringa totanus Annex II/2 Birds Directive, Bern Appendix III, Bonn Appendix II,
Tyto alba LC IUCN Red list
Athene noctua LC IUCN Red list
Asio flammeus LC IUCN Red list + Annex I Birds Directive
Merops apiaster LC IUCN Red list
Rhinolophus hipposideros LC IUCN Red list + Annex II Habitats Directive
Myotis myotis LR/nt IUCN Red list + Annex II Habitats Directive
Eptesicus serotinus LR/lc IUCN Red list + Annex IV Habitats Directive
Pipistrellus pipistrellus LC IUCN Red list + Annex IV Habitats Directive
Myotis daubentonii LR/lc IUCN Red list + Annex IV Habitats Directive
Nyctalus noctula LR/lc IUCN Red list + Annex IV Habitats Directive
Plecotus auritus LR/lc IUCN Red list + Annex IV Habitats Directive
Martes martes LR/lc IUCN Red list
Mustela erminea LR/lc IUCN red list
Mustela nivalis LR/lc IUCN red list
Lutra lutra NT IUCN Red list + Annex II Habitats Directive
