

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:

András Schmotzer & József László Mercsák,
Bükk National Park Directorate
H-3304, Eger Sánc u. 6. e-mail: schmotzer@bnp.kvvm.hu

FOR OFFICE USE ONLY.

DD MM YY

--	--	--

Designation date

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

Site Reference Number

2. Date this sheet was completed/updated:

18 May 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.

Bodrogzug

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:

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 major change has occurred since. Criterion 6 also applied on recent census data.

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) ;
submitted by Hungarian Focal Point in a GIS layer for Hungary's Ramsar sites in 2005
- 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 area is the Bodrozug part of the Tokaj-Bodrozug Landscape Protection Area (separated by the two rivers Bodrog and Tisza from the Tokaj part)

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.

48°11'10"N, 21°24'58"E (WGS84)

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.

The Ramsar Site is situated in NE-Hungary, in Borsod-Abaúj-Zemplén County. Surrounded by Bodrogkeresztúr, Bodrogszegi, Olaszliszka, Tarcál, Tokaj villages. The closest large towns are Nyíregyháza in Szabolcs-Szatmár-Bereg County (approx. 35 km) and Miskolc in Borsod-Abaúj-Zemplén County, 55 kilometres to the west from the Site.

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

94-98 metres above sea level

11. Area: (in hectares)

3,782 ha

The area size on the RIS follows the officially (nationally) designated site size (which is based on the land registration data). Unfortunately the map submitted previously was not correct and the outlines did not follow precisely the land parcel boundaries. So only the map was improved and the area size did not change.

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 the common floodplain of rivers Tisza and Bodrog, regularly flooded twice a year, in late winter and early summer /green flood/. Lowland with oxbow lakes and marshes, at higher places remnants of oak-ash-elm forests and poplar plantations.

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.

1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9

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).

Criterion 1 – The site includes one of the best-preserved open flood plain riparian areas in the country due to the regular floods of river Tisza and Bodrog, a wetland of international significance. It is an outstandingly important bird migration route.

Habitat types listed on Annex I of the Habitats Directive:

3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition type

3160 Natural dystrophic lakes and ponds

3270 Rivers with muddy banks with *Chenopodium rubri* p.p. and *Bidention* p. p.

6440 Alluvial meadows of river valleys of the *Cnidion dubii*

6510 Lowland haymeadows (*Alopecurus pratensis*, *Sanguisorba officinalis*)

91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

91F0 Riparian mixed forest of *Quercus robur*, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia* along the great rivers

Criterion 2 – High number of protected plants and animal species occur.

Priority site from the viewpoint of protection of fish populations, such as *Aspius aspius*, *Cobitis taenia*, *Gobio albipinnatus*, *Gymnocephalus schraetzer*, *Misgurnus fossilis*, *Rhodeus sericeus*, *Sabanejewia aurata*, *Umbra krameri* (all listed on Annex II. HD).

The site plays an important role for the protection of Otter – *Lutra lutra* (listed on Annex II. HD)

Other internationally protected species:

Anisus vorticulus Annex II Habitats Directive

Unio crassus Annex LR/nt IUCN Red list + Annex II Habitats Directive

Theodoxus transversalis DD IUCN Red list + Annex II Habitats Directive

Lycaena dispar LR/nt IUCN Red list + Annex II Habitats Directive

Euphydryas maturna DD IUCN Red list + Annex II Habitats Directive

Brenthis ino Hungarian Red Book

Boloria selene Hungarian Red Book

Rana ridibunda LC IUCN Red list

Rana dalmatina LC IUCN Red list + Annex IV Habitats Directive
Bufo viridis LC IUCN Red list + Annex IV Habitats Directive
Bombina bombina LC IUCN Red list + Annex IV Habitats Directive
Hyla arborea NT IUCN Red list + Annex II Habitats Directive
Triturus cristatus LC IUCN Red list + Annex II Habitats Directive
Natrix natrix LR/lc IUCN Red list + Annex IV Habitats Directive
Natrix tessellata Annex IV Habitats Directive
Emys orbicularis LR/nt IUCN Red list + Annex II Habitats Directive
Tachybaptus ruficollis LC IUCN Red list
Podiceps nigricollis LC IUCN Red list
Podiceps cristatus LC IUCN Red list
Podiceps grisegena LC IUCN Red list + Annex I Birds Directive
Botaurus stellaris LC IUCN Red list + Annex I Birds Directive
Ixobrychus minutus LC IUCN Red list + Annex I Birds Directive
Nycticorax nycticorax LC IUCN Red list + Annex I Birds Directive
Egretta alba Annex I Birds Directive
Egretta garzetta LC IUCN Red list + Annex I Birds Directive
Ardea cinerea LC IUCN Red list
Ardea purpurea LC IUCN Red list + Annex I Birds Directive
Platalea leucorodia LC IUCN Red list + Annex I Birds Directive
Anser anser LC IUCN Red list
Anser fabalis LC IUCN Red list
Anser albifrons LC IUCN Red list + Annex I Birds Directive
Aythya nyroca NT IUCN Red list + Annex I Birds Directive
Pernis apivorus LC 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
Aquila heliaca. VU IUCN Red list + Annex I Birds Directive
Falco subbuteo LC IUCN Red list
Crex crex NT IUCN Red list + Annex I Birds Directive
Porzana porzana LC IUCN Red list + Annex I Birds Directive
Porzana parva LC IUCN Red list + Annex I Birds Directive
Grus grus LC IUCN Red list + Annex I Birds Directive
Philomachus pugnax LC IUCN Red list + Annex I Birds Directive
Chlidonias hybridus LC IUCN Red list + Annex I Birds Directive
Chlidonias niger. LC IUCN Red list + Annex I Birds Directive
Asio flammeus LC IUCN Red list + Annex I Birds Directive

Lutra lutra. NT IUCN Red list + Annex II Birds Directive

Criterion 3 – Hygrophilous communities are well represented, dynamic and continuous mosaic-pattern of vegetation is characteristic. The site comprises one of the best-preserved open flood plain riparian areas in the country. It is an outstandingly important bird migration route. The site is also noteworthy for the fish fauna as a spawning site.

Criterion 4 – The site is an important place for nesting waterbirds such as Great White Egret – *Egretta alba*, Little White Egret – *Egretta garzetta*, Little Grebe – *Podiceps ruficollis*, Black-necked Grebe – *P. nigricollis*, Great-Crested Grebe – *P. cristatus*, Red-necked Grebe – *P. grisegena*, Corncrake – *Crex crex*, Spotted Creeke – *Porzana porzana*, Little Crane – *P. parva*, Bittern – *Botaurus stellaris*, Little Bittern – *Ixobrychus minutus*, Grey Heron – *Ardea cinerea*, Purple Heron – *A. purpurea*, Night Heron – *Nycticorax nycticorax*, Spoonbill - *Platalea leucorodia*, Ferruginous Duck – *Aythya nyroca*, Whiskered Tern – *Chlidonias hybridus*, Black Tern – *Ch. niger*.

Raptors breeding in the area: Short-eared Owl - *Asio flammeus*, Montagu's Harrier - *Circus pygargus*), Black Kite - *Milvus migrans*, Hobby - *Falco subbuteo* while some others use the area as a feeding place,

e.g. Honey Buzzard - *Pernis apivorus*, Imperial Eagle – *Aquila heliaca*, Lesser Spotted Eagle – *Aquila pomarina*.

Passing through over 10000 migratory birds, such as Common Crane – *Crus grus*, Black Stork (up to hundreds), Ruff – *Philomachus pugnax*, Bean Goose – *Anser fabalis*, Greylag Goose – *A. anser*, White-fronted Goose – *A. albifrons*.

Criterion 5 – Very important site for migratory birds (esp. crane, geese, ducks), because of its undisturbed, “closed” character.

Information from the Natura 2000 Standard Data Form:

Grus grus 10 000 individuals

Philomachus pugnax : 20 000 individuals

Criterion 6 - supports more than 1% of the migrating population of:

Grus grus 10 000 individuals (1% = 600 ind.)

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):

European Commission DG Environment webpage

The site is situated in the Carpathian Basin along riverlines, southward from the foothills of the Zemplén mountains (“Hegyalja”).

European Commission DG Environment webpage

Bern Convention/ EU Habitats Directive

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.

The Bodrogszig is the southernmost, lowest alluvial plain of the region Bodrogeköz, surrounded by the river Tisza from the south and the river Bodrog from the east. The landscape is criss-crossed by oxbow- and floodplain lakes with inactive riverbeds (Nagy-Nádas Lake, Nádas Lake, Nyárjas Lake, Kapitány Lake, Szada Lake, Bogdány Lake, Nagy Lake, Kerek Lake, Nagy Kovács Lake, Tökös Lake, Sáros Lake, Fűzes Lake, Fekete Lake, Longi-ér, etc.). The brooks of Zemplén Mountains played an important role in the development of the present surface. Fluvial sand dunes developed on the surface of the alluvial fan made up of sandy sediments originating from the mountains. The spectrum of the soil types is variable: it is a mixture of Holocene fluvial sediments such as floodplain mud, meadow soils and partly fluvial sand. The climate of the area is moderately warm, moderately dry, with typical continental features. The average number of sunny hours is 1900-1950 per year. The average temperature is approx. 9.5 °C. Dominant windtype is from the north-east, which makes this area one of the windiest regions of the country. The average annual rainfall is 550-580. The wettest period is in June (65-75 mm) while the driest is in January (18-35 mm). Early spring is typically arid, in March this area is one of the driest parts of the country. The proportion of days with snow cover is also very low (cc. 30 days per year).

17. Physical features of the catchment area:

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

The present, favorable conditions of the Bodrogszig have been partly created by human activity. Without the Tiszalök dam, wetlands would dry out in years when no floods occur. Haymaking is also important for the haymeadows not to get overgrown. It is very important, however, that the dam should

maintain proper water levels in the area. Presently, there are efforts by water management to lower water levels by 1-2 m in order to help agricultural cultivation and hybrid poplar plantations. Artificially fast draining of the area also favours grazing, which is favourable for conservation. Wildlife can be stunned by sudden draining, especially fish. The best spawning sites along the river Tisza therefore sometimes become fish traps.

Today, haymeadows are mown by machines in the Bodrogzug flood plain. Some areas have been abandoned, because they were too soggy for machinery. Unfortunately, mowing machines kill many ground-nesting birds. The sudden change of microclimate is a shock to many invertebrates in the meadows

Most of the wooded vegetation in and around the site consists of hybrid poplar plantations. As soon as a wood reaches maturity for final cutting, it is cut, but reforestation is only possible with native tree species in a natural species composition.

18. Hydrological values:

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

The hydrology of the site is determined by the Bodrog from two major rivers. Due to the floods normally all the area is under water for 40-50 days per year (or in moister years 100-150 days per year!). The canals carry away the floods, while the settlements are saved by secondary summer-dikes mostly built after the last huge flood in 1999. From hydro-geological point of view the present mount of Bodrog and Tisza rivers at Tokaj is fairly young. It changed a lot in the pleistocenian - holocenian periods due to the situation of infilling and subsidence. Both rivers follows structural tectonic line, deeply incised meander, with typical middle-course features. The high groundwater level results from the effects of the dam at Tiszalök.

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.

Tp – permanent freshwater marshes/pools: approx. 60%

P – Seasonal/inter mittent freshwater lakes: 5%

W – shrub-dominated wetlands: approx. 5%

O – permanent freshwater lakes: approx. 3%

Xf – freshwater, tree-dominated wetlands: approx. 1%

other: approx. 25%

(Data based upon the Corine Land Cover Database)

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.

The most important non-forested wetland habitats are the following: (1). Natural eutrophic lakes with Magnopotamion or Hydrocharition-type vegetation (e.g. Salvinio-Spirodeletum, Hydrochari-Stratiotetum,

Nymphaetum albo-luteae, Trapa natantis, Nymphoidetum peltatae); (2). reedbed and marsh habitats (Scirpo-Phragmitetum, Typhaetum latifoliae, T. angustifoliae, Schoenoplectetum lacustris, Glycerietum maximae, Caricetum gracilis, C. ripariae, C. acutiformis); (3). wet meadow communities (Agrostetum albae, Alopecuretum pratensis, Cirsio cani-Festucetum pratensis). The most valuable and vulnerable forest habitats are the following: (1). Riverine willow-poplar woodlands (mostly Leucojo-Salicetum albae); (2). willow-bush (Calamagrostio-Salicetum cinereae); (3). Riverine oak-elm-ash woodlands (Querco-Ulmetum).

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.*

Protected or strictly protected plants at national level: Gentiana pneumonanthe, Iris sibirica, Leucorum aestivum, Leucanthemum serotinum Orchis laxiflora subsp. elegans are characteristic botanical highlights of wet meadows. Nymphoides peltata, Nymphaea alba, Salvinia natans, Trapa natans form vast carpets of floating vegetation over water surfaces. Vitis sylvestris is a rare creeping vine in riparian forests.

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.*

Noteworthy fauna includes the following species: Rich invertebrate fauna belonging to rivers: Anisus vorticulus, Unio crassus, Theodoxus transversalis (all listed on Annex II. HD) and Tisza-Mayflower - Palingenia longicauda. In the meadows: Mantis religiosa, Carabus coriaceus, Calosoma sycophanta, Iphiclidus podalirius, Papilio machaon, Lycaena dispar, Brenthis ino, Boloria selene. Wetlands: Dytiscus latissimus. Riparian forests: Apatura ilia, Euphydryas maturna.

A wide range of amphibian and reptile populations occur: Rana esculenta group, R. ridibunda, R. dalmatina, R. arvalis, Bufo viridis, Bombina bombina, Hyla arborea, Triturus cristatus, T. vulgaris and Natrix natrix, N. tessellata, Emys orbicularis.

The greatest ornithological value is the Corncrake population that fluctuates around 100 pairs (perhaps the most important stronghold in Hungary).

The site plays an important role for the protection of Otter – Lutra lutra. The Beaver (Castor fiber) has been re-introduced successfully.

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 ruins of the Rákóczi Castle are situated at the confluence of the rivers Tisza and Bodrog, just outside the site. It was built at the same place where a former castle made of timber and mud stood which was destroyed by the Tartars in 1241. In the Middle Ages it played an important role in the Hungarian history, especially guarding the important trade-routes for the famous Tokaji wine to the east. Nowadays the ruins are in very untidy condition totally overgrown by the vegetation.

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:

state property – 90% (owned by the state and managed by the Bükki National Park Directorate).

co-operative and unmanaged property – 5%

private property – 5%

b) in the surrounding area:

No precise data available. The property of state property is much more smaller due to the lack of protected area. Dominance of private property is evident.

25. Current land (including water) use:

a) within the Ramsar site:

In the Ramsar site – which belonging to the Tokaj-Bodrozug PLA – most of the co-operative lands were bought for nature conservation purpose and the state manager is the Bükki National Park Directorate (80%). Approx. 10% of the site – also in state property – is belonging to the water management bodies. The management of the protected areas are realized by contract with the farmers and agricultural companies (mostly with farm leasing for 5-years period). The dominant land-usage is mowing and grazing in drier habitats. Agriculture and forestry are not so characteristic at this site. The riverside is used by anglers.

b) in the surroundings/catchment:

No precise data available. Due to the drier conditions the amount of arable land is bigger, playing more significant role in the landscape management.

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:

Unregulated hunting – poaching – also occur, which cause special problems for the protection of migratory wildfowls. Tourism also indicates some problems, e.g. littering, disturbing of nesting, etc. *Amorpha fruticosa* is one of the most dangerous invasive shrub species which occurs on meadows and hayfields.

In forest communities the role of *Fraxinus pennsylvanica* and *Acer negundo* is similar.

The cyanide pollution of the rivers Szamos and Tisza in January 2000 was caused by AURUL, an Australian-Romanian joint venture. The passage of the polluted water plume has caused serious ecological damage, both in the Szamos River and in the Tisza River, which cannot yet be determined with exactitude. The ecological auto-recovery from the protected Bodrozug area was quite quick and effective. Significant damage occurred in the fish stock. More information:

<http://www.rec.org/REC/Programs/PublicParticipation/DanubeInformation/Tisza.html>

b) in the surrounding area:

Plans for “opening” of this closed area are also appeared (e.g. with reconstruction of former destroyed bridge through the Bodrog river).

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.

The site totally fully overlaps with the alluvial subunit of the Tokaj-Bodrogzug Protected Landscape Area (IUCN Category V.). It was founded in 1986 (id. number 183/TK/86.). The Bükk National Park Directorate proposed the Ramsar site and adjacent alluvial area to the north along the Bodrog as a pSCI site (HUBN20071 “Bodrogzug és Bodrog hullámtér”) and SPA site (HUBN10001 “Bodrogzug – Kopasz-hegy – Taktaköz”). The designation of the sites were declared at national level (government order nr. 275/2004).

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?:

The draft version of the management plan of the PLA (included Ramsar site) was elaborated, but not yet finished or approved legally.

d) Describe any other current management practices:

28. Conservation measures proposed but not yet implemented:

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

Proposal for enlarging the Ramsar site was made by scientists from the University of Debrecen, but not yet taken. This above-mentioned area now belongs to the Natura 2000 site.

29. Current scientific research and facilities:

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

The botanical survey of the Bodrogzug has been done. The vegetation map of the PLA made by botanists from the University of Debrecen in 1993. Within the framework of the National Biodiversity-monitoring System the actual habitat map (25 square kilometres) was elaborated in 2002. The survey coordinated by the Hungarian Birdlife Society for the Corncrake has been running from 1990s.

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.

Due to the special conditions of the site the authority doesn't plan visitors' centre within the site. The introduction of the natural values take place at the Tokaji Ferenc Secondary Grammar School, which is in partnership with the Bükk National Park Directorate.

31. Current recreation and tourism:

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

The tourism in the site is poor, mostly professional-like. The importance of water tourism is increasing in the Bodrog and Tisza river as well. The regulations for tourism are not yet solved, but the “Visiting Regulation” of the PLA will be operated from 2005.

32. Jurisdiction:

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

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

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.

Bükk National Park Directorate
H-3304, Eger Sánc u. 6.
e-mail: schmotzer@bnp.kvvm.hu

34. Bibliographical references:

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

- Andó M. - Bába K. 1962: Malaco-coenological investigation a connected with microclimatological observations on the shores of the rivers Tisza, Bodrog and Kraszna. - *Acta Biol. Hung.* 12 Suppl.4.:1-27.
- Bodrogekő Gy. 1962: Die Vegetation des Theiss-Wellenraumes. I. Zönologische und ökologische Untersuchungen in der Gegend von Tokaj. *Acta Biol., Szeged* 8: 3-44.
- Dóka K. 1977: A Bodrog szabályozása. [The regulation of the river Bodrog.] - *A Herman Ottó Múzeum Évkönyve XVI.*: 105-131.
- Harka Á. - Bănărescu, P.M. 1999: Fish fauna of the Upper Tisa. - *Tiscia monographs*, Szeged p. 439-454.
- Harka Á. - Koščo, J. - Wilhelm S. 2000: A bodrog vízrendszerének halfaunisztikai vizsgálata. [Ichthyological survey of the river Bodrog catchment area]. - *Halászat* 93 (3): 130-134., (4): 182-184.
- Harka Á. - Sallai Z. - Koščo, J. 2003: Az amúrgéb (*Percottus glenii*) terjedése a Tisza vízrendszerében. [Spreading of *Percottus glenii* in the Tisza river-system.] - *Puszta* 2001: 49-55.
- Hoitsy Gy. 1995: A Bodrog és a Bodrogzug hal-öko-faunisztikai felmérése. [Ichtyo-ecological survey of the river Bodrog and Bodrogzug Area.] - *Halászat* 88(3): 100-104.
- Kalocsa B. - Tamás E. 2002: Status of black storck (*Ciconia nigra*) in Hungary in 2000. - *Aquila* 107-108.: 207-213.
- Keve A. - Sage, B.L. 1967: Ornithological observations near the rivers Bodrog and Tisza. - *Tiscia* 3:91-92.
- Kis G. - Tuba Z. 2000: Contributions to the Bryoflora of the Bodrogekő (NE Hungary). - *Acta Bot. Hung.* 42 (1-4): 193-203.
- Lovászi P. (ed.) 2002: Javasolt különleges madárvédelmi területek Magyarországon. - *Magyarország és Natura 2000 - II. MME, Bp.*
- Molnár A. - Sulyok J. - Vidéki R. 1993: A Tokaj-Bodrogzug TK vegetációja. [The vegetation of the Tokaj-Bodrogzug Protected Landscape Area.] - Manuscript
- Nagy Szabolcs 1998: Fontos madárelőhelyek Magyarországon - MME Könyvtár, Bp.
- Sőregi J. 1958: Adatok a Bodrogekő madárvilágához. [Data to the avifauna of the Bodrogzug.] - *Aquila* pp. 320-321.
- Szegedi Zs. - Frank T. 2002: Fekete gólyák fészkelése a Zempléni-hegységben és a Bodrogekőben. - *Aquila* 107-108.: 233-240.
- Szemere L. 1919: A kócsag hajdani fészkelése és tenyésztése a Bodrogekőben. [The former breeding of Little Egret and its domestication]. - *Aquila* pp.105-106.
- Waliczky Z. (ed.) 1991: Európai jelentőségű madárelőhelyek Magyarországon. - MME Könyvtár, Bp.

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