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:

- 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.

	maps.
	1. Name and address of the compiler of this form: Ákos Gáborik conservation officer Duna-Dráva Nemzeti Park Directorate Hungary H-7625 Pécs, Tettye tér 9. FOR OFFICE USE ONLY. DD MM YY DD MM YY Site Reference Number
_	2. Date this sheet was completed/updated:
	8 June 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. Béda-Karapancsa
	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 □X
	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 i) 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 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 since the previous RIS for the site.
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): □X;
ii) an electronic format (e.g. a JPEG or ArcView image) \square ; X
iii) a GIS file providing geo-referenced site boundary vectors and attribute tables \square ;
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.
Follows the boundary of the Béda-Karapancsa unit of the Duna-Dráva NP.
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.
45°40'N - 18°45' E
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 nearest large town is Mohács with approximately 50.000 inhabitants.
10. Elevation: (in metres: average and/or maximum & minimum) 84-88 m
11. Area: (in hectares) 1150 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 rather sketchy 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.

Béda-Karapancsa is a part of the Duna-Dráva National Park, lying on the southernmost part of the river Danube near the boundary of Hungary. It contains typical floodplain habitats.

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).

Justification of Criterion 1: Béda-Karapancsa is a typical representative site for the floodplains of the Danube on the middle part of the river. Its large size, naturalness and richness of habitats provide proper circumstances for the plant and animal communities. It holds the largest Hungarian population of Crataegus nigra, a plant endemic to the lower Danube floodplains. It also holds certain sub-Mediterranean elements that are not found elsewhere in Hungary, such as Lonicera caprifolium, Digitalis ferruginea, the Pontic-sub-Mediterranean Scutellaria altissima, the Balkan-Appenine Helleborus odoratus and the Balkan Linden (Tilia argentea). Typical floating vegetation communities include good stands of Lemneto-Utricularietum and Myriophilleto-Potamogetum with Hydrocharis morsus-ranae, Nymphaea alba, Nuphar lutea and Nymphoides peltata. Another typical habitat comprises mudflats, changing dynamically with flood conditions. In addition to Willow trees (Salix sp.), typical plants are Dichostylis micheliana, Eleocharis acicularis and Gnaphalium luteoalbum. In slightly higher elevation within the flood plain, remnant softwood gallery woodlands are found with Salix sp., somewhat even higher Poplar trees (Populus nigra, P. alba), while the highest elevations within the flood plain are occupied by Fraxino-Pannonicaeulmetum (Ash-Elm hardwood forest). These gallery woodlands have been destroyed by river regulations or converted into hybrid poplar stands in many places in Europe (partially even in Béda-Karapancsa). Habitats of community importance listed for Béda-Karapancsa Natura 2000 site on its Standard Data Form:

3130 Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the *Isoëto-Nanojuncetea*

3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition – type vegetation

3270 Rivers with muddy banks with Chenopodion rubri p.p. and Bidention p.. vegetation

6440 Alluvial meadows of river valleys of the Cnidion rubii

91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior

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

91G0 Pannonic woods with *Quercus petraea* and *Carpinus betulus*

<u>Justification of Criterion 2: The site shelters threatened species:</u>

Egretta garzetta, Annex I. Bird Directive
Botaurus stellaris, Annex I. Bird Directive
Nycticorax nycticorax, Annex I. Bird Directive
Ciconia nigra, Annex I Bird Directive
Anser albifrons, Annex I. Bird Directive
Aythya nyroca, IUCN Red list + Annex I. Bird Directive
Haliaeetus albicilla, IUCN Red list + Annex I. Bird Directive

Milvus migrans, Annex I. Bird Directive

Falco cherrug, IUCN Red list + Annex I. Bird Directive

Crex crex, Annex I. Bird Directive

Alcedo atthis, Annex I. Bird Directive

Marsilea quadrifolia, Annex II Habitats Directive

Lucanus cervus, Annex II Habitats Directive

Lycaena dispar, Annex II Habitats Directive

Osmoderma eremite, Annex II Habitats Directive priority species

Theodoxus transversalis, Annex II Habitats Directive

Unio crassus, Annex II Habitats Directive

Aspius aspius, Annex II Habitats Directive

Gymnocephalus baloni, Annex II Habitats Directive

Gymnocephalus schraetzer, Annex II Habitats Directive

Misgurnus fossilis, Annex II Habitats Directive

Pelecus cultratus, Annex II Habitats Directive

Rhodeus sericeus amarus, Annex II Habitats Directive

Rutilus pigus, Annex II Habitats Directive

Bombina bombina, Annex II Habitats Directive

Emys orbicularis, Annex II Habitats Directive

Barbastella barbastellus, Annex II Habitats Directive

Lutra lutra, IUCN Red list + Annex II. Habitats Directive

Myotis dasycneme, Annex II Habitats Directive

Marsilea quadrifolia, Habitats Directive Annex II

<u>Justification of Criterion 4:</u> the site supports threatened breeding birds

Botaurus stellaris 4-6 pairs

Egretta garzetta 5-6 nesting pairs Nycticorax nycticorax 200 nesting pairs Ciconia nigra 12 nesting pairs Anser anser 70 nesting pairs Anas platyrhynchos 100 nesting pairs Aythya nyroca 22 nesting pairs Anas querquedula 4 nesting pairs Haliaeetus albicilla 6 nesting pairs Milvus migrans 11 nesting pairs Falco cherrug 1 nesting pair Crex crex 4 pairs 15-25 pairs Alcedo atthis

Hippolais pallida - biogeographically important 1 nesting pair

<u>Justification of Criterion 5:</u> Database of the Hungarian Waterbird Monitoring:

Table 16: River Danube between Baja and state border

Faj	Aug	Sept	Okt	Nov	Dec	Jan	Feb	Mar	April	
GAV STE	0	0	3	1	2	1	0	0	0	
GAV ARC	0	0	2	2	0	0	0	0	0	
TAC RUF	0	1	1	1	28	18	6	4	0	
POD CRI	0	1	0	4	12	3	22	31	2	
PHA CAR	158	472	236	665	687	455	196	191	14	
PHA PYG	0	1	0	0	0	0	1	0	0	
ARD CIN	64	57	31	23	28	32	20	10	6	
EGR ALB	15	16	3	142	133	5	8	7	3	
CYG OLO	0	0	1	0	0	0	0	0	0	
ANA PEN	0	2	7	36	297	25	171	174	5	

ANA STR	0	0	0	0	0	0	1	0	0
ANA CRE	0	0	0	7	148	219	238	164	0
ANA PLA	1459	2618	3671	7556	8744	8899	9832	3476	67
ANA ACU	0	0	0	0	0	4	10	17	0
ANA QUE	0	0	0	0	0	0	0	20	9
ANA CLY	0	0	0	0	0	0	0	0	32
NET RUF	0	0	0	0	0	0	1	0	0
AYT FER	0	0	0	2	122	0	525	290	0
AYT FUL	0	0	5	14	68	76	163	30	0
BUC CLA	0	0	0	1	113	21	501	3	0
MER ALB	0	0	0	0	11	2	21	33	0
MER MER	0	0	8	0	22	11	66	24	0
HAL ALB	0	5	7	16	11	9	29	6	11
FUL ATR	0	0	0	0	13	65	260	117	0
Total of									
individuals	1696	3173	3975	8470	10439	9845	12071	4597	149
Total of species	4	9	12	14	16	16	19	17	9

Other waterbird species in addition to the data summarised in the Hungarian Waterbird Monitoring Database:

Anser anser	170	600	500	600	715	1000	664	401	400	
Anser fabalis	0	100	200	300	500	1500	400	0	0	

No data exists for several waterbird species, such as gulls, and thus the total of waterbirds can be around 20 000.

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

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.

Topography: being a floodplain, Béda-Karapancsa has a flat topography with a few meter differences on the surface. River branches, oxbow lakes can be found on the site.

Climate: the climate is humid continental. Summers are usually hot, and winters are very cold. The yearly precipitation is about 600-650 mm, annual mean temperature is between 10-11 degrees Celsius.

Geology and geomorfology: on the surface mainly riverine alluvial sediment layers can be found at a different width. These are quaternary gravel, sand and clay deposits.

Soils: characteristic: soils are floodplain, meadow and peat-like soils depending on the local circumstances.

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 site is situated on the active floodplain of the Danube river, the water regime of the branches, oxbow lakes and other backwater types depend on the main course of the river. The floodplain is formed by alluvial sediments, sand and clay. The water bodies mostly surrounded by forest (hardwood and softwood gallery forest and tree plantations. Some water are bordered by reedbeds. The climate is continental.

18. Hydrological values:

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

Béda-Karapancsa has a flat topography, there are only a few metres elevation difference within the site. On the surface sediment mainly consists of riverine alluvial sediments, consisting of Quaternary gravel, sand and clay deposits. Characteristic soils are floodplain, meadow and peat-like soils. On the riversides of the Danube, sandbanks arise continuously. They wander with the floods, as a consequence of watercourse regulation that has been carried out. Water quality is still good enough to maintain the values of the wetland. Béda-Karapancsa plays an important role in sediment trapping.

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)

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.

M, Xf, Ts, O. Negligible amount of N and W.

Béda-Karapancsa hosts a large variety of floodplain habitats along the River Danube. There are rivers, oxbow lakes and ponds in the floodplain. Besides the open water areas, there are marshlands, reedbeds, meadows, willow bushes and gallery forests with ash, elm, alder and oak trees.

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.

Habitats: - rivers, oxbow lakes, ponds in the floodplain

-marshland, meadows, reedbeds, gallery forests both hardwood and softwood (ash, elm, alder and oak), willow bushes

The most characteristic vegetation types (associations) are as follows:

Salicetum albae-fragilis

Caricetum elatae

Scirpo-Phragmitetum

Lemno-Utricularietum

Hydrochari-Strationetum

Fracino-pannonicae-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.

Carpesium abrotanoides: rare, biogeographically important, potentially endangered

Crataegus nigra: endemic species, known only from the lower floodplains of the Danube

Carex strigosa: bographically important, potentially endangered

Leucojum aestevum: potentially endangered Iris sibirica: rare, potentially endangered

Nymphoides peltata: rare, potentially endangered Ophioglossum vulgatum: rare, potentially endangered

Epipactis helleborine, E. microphylla, Scilla vindobonensis, Nymphea alba, Vitis sylvestris, Platanthera

bifolia, Cephalathera damasonium, Salvinia natans

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 most important bird species

Egretta garzetta

Nycticorax nycticorax

Ciconia nigra

Haliaeetus albicilla

Milvus migrans

Falco cherrug

Anser anser

5-6 nesting pairs

200 nesting pairs

12 nesting pairs

6 nesting pairs

11 nesting pairs

70 nesting pairs

Anser albifrons

Anas platyrhynchos 100 nesting pairs Aythya nyroca 22 nesting pairs

Aythya ferina

Anas querquedula 4 nesting pairs

Anas clypeata

Hippolais pallida - biogeographically important 1 nesting pair

Important mammalian species:

Lutra lutra - strictly protected species

Barbastella barbastellus Annex II Habitats Directive

Important beetle species:

Osmoderma eremita Annex II Habitats Directive priority species

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 value

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. Main activities at the site are forestry, hunting and fishing.

- b) If Yes, tick the box \square 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:
- 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:

The territory of Béda-Karapancsa is mainly state owned, but private, cooperative and local municipality ownership can also be found.

(b) in the surrounding area:

The surrounding area is owned by cooperatives, local municipalities and state companies.

25. Current land (including water) use:

(a) within the Ramsar site:

Fishing, forestry, hunting

(b) in the surroundings/catchment:

Agricultural activity (grazing, farming, etc) forestry and hunting.

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:

Invasive tree species (Acer negundo) expand on some parts of the nature reserve. Populus hybridus and Juglans nigra have been artificially planted in monocultures in several places, replacing native gallery woodlands. Populations of wild boar and red deer are much higher than natural, affecting natural regrowth of forest and sometimes even successful breeding of birds. The high number of wild grazers are also a potential threat for the site (red deer, wild boar).

(b) in the surrounding area:

Primary the water quality could be the determining factor for the ecosystem therefore it should be kept at a high standard. Industrial pollution coming from upstream (nuclear power station at Paks, e.g.) as well as agricultural chemical runoff may deteriorate water quality. Deepening of the riverbed due to former river regulation (cutting through bends) causes decline in water levels.

27. Conservation measures taken:

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

A Landscape Protection Area was established in the Béda-Karapancsa region before 1996. In 1996, Béda-Karapancsa protected areas were declared parts of the Duna-Dráva National Park. Some parts of it became strictly protected.

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	
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- **c)** Does an officially approved management plan exist; and is it being implemented?: No officially approved management plan exists. A detailed management plan is being developed.
- d) Describe any other current management practices:

Water level regulation is taken in order to retain flood waters, thereby helping fish spawning in flooded plains, and releasing water back when fish fry have developed. A sluice system has been built at Nagyrét (near Kölked village) and on the strictly protected Szúnyog Island. The canal network in the area (Boki-Duna) helps to maintain water levels of oxbows and larger lakes in accordance with the demands of breeding waterbird species. Motorboat riding, fishing and hunting are regulated (for example extra restrictions for hunting in the breeding season around nesting sites of strictly protected species).

The National Park Directorate has started a re-stocking scheme for declining fish species, such as Tinca tinca, Carassius carassius and wild Cyprinus carpio in ponds and oxbows owned by the state and managed by the directorate. Artificial nests are also erected for Black Storks and raptors.

28. Conservation measures proposed but not yet implemented:

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

The water supply of areas dried out by agricultural "amelioration" can be solved by careful planning and substantial financing. The restoration of flood plain forests is also very important. Presently, 80 % of the flood plain forests is managed for forestry, and the proportion of non-native tree species (Hybrid poplars, black walnut and American ash) is nearly 40 %. These will have to be replaced with native species while near-natural forest stands must be preserved. The replacement of hybrid poplars for native softwood forests can bring relatively quick results, as softwood species grow into trees within 10-20 years.

The presently oversize game population has to be reduced.

29. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc. There is no research project.

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.

A Children's Nature Education Centre is operated in the area. Rangers of the national park provide guided tours, and facilitate the summer practice of students.

31. Current recreation and tourism:

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

Mass tourism is increasing, its harmful aspect being tent camping without permission or even notification of the national park.

Professional and thematic tourism is guided, thus it has no disadvantageous effects.

Water tourism is not prominent, since canoe groups usually only travel through this section of the Danube.

Angling is characteristic, but it is well regulated and controlled, therefore its negative impact is decreasing.

32. Jurisdiction:

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

The Dél-Dunántúli 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.

Duna-Dráva Nemzeti Park Directorate

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34. Bibliographical references:

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

J. Majer (1990): Zoological survey of Béda-Karapancsa Landscape Protection Area - in Hungarian, Janus Pannonius University, Pécs

Á, Uherkovich (eds., 1992): Wildlife of the Béda-Karapancsa Landscape Protection Area - in Hungarian, Baranya Megyei Múzeumok Igazgatósága, Pécs

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