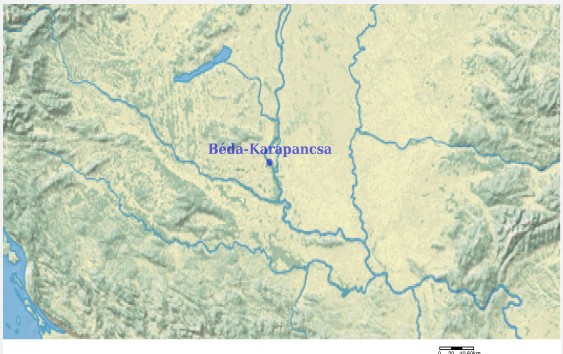
Ramsar Information Sheet

Published on 25 November 2015
Update version, previously published on 1 January 2007

Hungary

Béda-Karapancsa



Designation date	30 April 1997
Site number	901
Coordinates	45°56'43"N 18°46'15"E
Area	8 668,90 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

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.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Ákos Gáborik, conservation officer
Institution/agency	Duna-Dráva Nemzeti Park Directorate
Postal address	H-7625 Pécs, Tettye tér 9. Hungary
E-mail	gaborik@ddnp.kvvm.hu
Phone	+36 72 517 200

2.1.2 - Period of collection of data and information used to compile the RIS

From year	2013
To year	2015

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Béda-Karapancsa

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary	Yes ◉ No ○
(Update) The boundary has been delineated more accurately	☑
(Update) B. Changes to Site area	the area has increased
(Update) The Site area has been calculated more accurately	☑
(Update) The Site has been delineated more accurately	☑

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?	Not evaluated

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image
<1 file(s) uploaded>

Boundaries description (optional)

The previous map did not accurately represent the boundaries of the Ramsar Site. This has been corrected on the new map where the boundary of the Ramsar Site follows the boundary of the Béda-Karapancsa unit of the Duna-Dráva National Park.

2.2.2 - General location

a) In which large administrative region does the site lie?	Barany
b) What is the nearest town or population centre?	The nearest large town is Mohács with approximately 50.000 inhabitants.

2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries?	Yes ◉ No ○
b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?	Yes ◉ No ○

2.2.4 - Area of the Site

Official area, in hectares (ha): 8668.9

Area, in hectares (ha) as calculated from GIS boundaries: 8666.23

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Pannonic

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

☑ Criterion 1: Representative, rare or unique natural or near-natural wetland types

Other ecosystem services provided	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). Please refer to Section 3.4 Ecological communities whose presence relates to the international importance of the Site for habitats of community importance listed for for Béda-Karapancsa Natura 2000 site.

☑ Criterion 2 : Rare species and threatened ecological communities

☑ Criterion 4 : Support during critical life cycle stage or in adverse conditions

3.2 - Plant species whose presence relates to the international importance of the site

important in maintaining the geographic range of a plant species/community + supports endemic species + supports rare/endangered species

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA/ AVES	*Alcedo atthis*	Common Kingfisher	☑	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex I of the EU Birds Directive	Criterion 4: the site supports threatened breeding birds including 10-15 pairs of Alcedo atthis.
CHORDATA/ AVES	*Anas platyrhynchos*	Mallard	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Criterion 4: the site supports threatened breeding birds including 150 pairs of Anas platyrhynchos.
CHORDATA/ AVES	*Anser albifrons*	Greater White-fronted Goose	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex I of the EU Birds Directive	

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA/ AVES	*Anser anser*	Greylag Goose	☐	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐		Criterion 4: the site supports threatened breeding birds including 20 nesting pairs of Anser anser.
CHORDATA/ AVES	*Aythya nyroca*	Ferruginous Duck	☑	☑	☐	☐	☐	☐	☐	☐				NT	☐	☑	Annex I of the EU Birds Directive	Criterion 4: the site supports threatened breeding birds including 8 nesting pairs of Aythya nyroca.
CHORDATA/ MAMMALIA	*Barbastella barbastellus*	western barbastelle;Western Barbastelle	☑	☐	☐	☐	☐	☐	☐	☐				NT	☐	☐	Annex II of the EU Habitats Directive	
CHORDATA/ AMPHIBIA	*Bombina bombina*		☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex II of the EU Habitats Directive	
CHORDATA/ AVES	*Botaurus stellaris*	Eurasian Bittern	☑	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex I of the EU Birds Directive	Criterion 4: the site supports threatened breeding birds including 7 pairs of Botaurus stellaris.
CHORDATA/ AVES	*Ciconia nigra*	Black Stork	☑	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex I of the EU Birds Directive	Criterion 4: the site supports threatened breeding birds including 12 nesting pairs of Ciconia nigra.
CHORDATA/ AVES	*Crex crex*	Corn Crake	☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex I of the EU Birds Directive	
CHORDATA/ AVES	*Egretta garzetta*	Little Egret	☑	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex I of the EU Birds Directive	Criterion 4: the site supports threatened breeding birds including 30 nesting pairs of Egretta garzetta.
CHORDATA/ REPTILIA	*Emys orbicularis*		☑	☐	☐	☐	☐	☐	☐	☐				NT	☐	☐	Annex II of the EU Habitats Directive	
CHORDATA/ AVES	*Falco cherrug*	Saker Falcon	☑	☐	☐	☐	☐	☐	☐	☐				EN	☐	☑	Annex I of the EU Birds Directive	
CHORDATA/ ACTINOPTERYGII	*Gymnocephalus baloni*		☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex II of the EU Habitats Directive	
CHORDATA/ ACTINOPTERYGII	*Gymnocephalus schraetser*		☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex II of the EU Habitats Directive	
CHORDATA/ AVES	*Haliaeetus albicilla*	White-tailed Eagle	☑	☑	☐	☐	☐	☐	☐	☐				LC	☑	☑	Annex I of the EU Birds Directive	Criterion 4: the site supports threatened breeding birds including 5 nesting pairs of Haliaeetus albicilla.
CHORDATA/ ACTINOPTERYGII	*Leuciscus aspius*		☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex II of the EU Habitats Directive	
ARTHROPODA/ INSECTA	*Lucanus cervus*		☑	☐	☐	☐	☐	☐	☐	☐					☐	☐	Annex II of the EU Habitats Directive	
CHORDATA/ MAMMALIA	*Lutra lutra*	European Otter	☑	☐	☐	☐	☐	☐	☐	☐				NT	☑	☐	Annex II of the EU Habitats Directive	
ARTHROPODA/ INSECTA	*Lycaena dispar*		☑	☐	☐	☐	☐	☐	☐	☐				NT	☐	☐	Annex II of the EU Habitats Directive	
CHORDATA/ AVES	*Milvus migrans*	Black Kite	☑	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex I of the EU Birds Directive	Criterion 4: the site supports threatened breeding birds including 15 nesting pairs of Milvus migrans.
CHORDATA/ ACTINOPTERYGII	*Misgurnus fossilis*		☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex II of the EU Habitats Directive	
CHORDATA/ MAMMALIA	*Myotis dasycneme*	Pond Myotis;pond bat	☑	☐	☐	☐	☐	☐	☐	☐				NT	☐	☐	Annex II of the EU Habitats Directive	
CHORDATA/ AVES	*Nycticorax nycticorax*	Black-crowned Night Heron;Black-crowned Night-Heron	☑	☑	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex I of the EU Birds Directive	Criterion 4: the site supports threatened breeding birds including 80 nesting pairs of Nycticorax nycticorax.

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
ARTHROPODA/ INSECTA	*Osmoderma eremita*		☑	☐	☐	☐	☐	☐	☐	☐				NT	☐	☐	Annex II of the EU Habitats Directive	
CHORDATA/ ACTINOPTERYGII	*Pelecus cultratus*		☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex II of the EU Habitats Directive	
CHORDATA/ ACTINOPTERYGII	*Rhodeus amarus*		☑	☐	☐	☐	☐	☐	☐	☐					☐	☐	Annex II of the EU Habitats Directive	
CHORDATA/ ACTINOPTERYGII	*Rutilus rutilus*		☑	☐	☐	☐	☐	☐	☐	☐				LC	☐	☐	Annex II of the EU Habitats Directive	
MOLLUSCA/ GASTROPODA	*Theodoxus transversalis*		☑	☐	☐	☐	☐	☐	☐	☐				EN	☐	☐	Annex II of the EU Habitats Directive	
MOLLUSCA/ BIVALVIA	*Unio crassus*		☑	☐	☐	☐	☐	☐	☐	☐				EN	☐	☐	Annex II of the EU Habitats Directive	

Criterion 2:
- Marsilea quadrifolia: Annex II Habitats Directive (IUCN Red List - LC)

3.4 - Ecological communities whose presence relates to the international importance of the site

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
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	☐	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	☐		

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

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.

The most characteristic vegetation types (associations) are as follows:
Salicetum albae-fragilis
Caricetum elatae
Scirpo-Phragmitetum
Lemno-Utricularietum
Hydrochari-Stratiotetum
Fracino-pannonicae-Ulmetum

4.2 - What wetland type(s) are in the site?

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		1		
Fresh water > Flowing water >> N: Seasonal/ intermittent/ irregular rivers/ streams/ creeks		0		
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		4		
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils		3		Representative
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands				
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		2		Representative

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Carex strigosa		bographically important, potentially endangered
Carpesium abrotanoides		rare, biogeographically important, potentially endangered
Cephalanthera damasonium		
Crataegus nigra		endemic species, known only from the lower floodplains of the Danube
Epipactis helleborine		
Epipactis microphylla		
Iris sibirica		rare, potentially endangered
Leucojum aestivum		potentially endangered
Nymphaea alba		
Nymphoides peltata		rare, potentially endangered
Ophioglossum vulgatum		rare, potentially endangered
Platanthera bifolia		
Salvinia natans		
Scilla vindobonensis		
Vitis vinifera sylvestris		

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	Anas clypeata	Northern Shoveler				
CHORDATA/AVES	Aythya ferina	Common Pochard				
CHORDATA/AVES	Iduna pallida	Eastern Olivaceous Warbler				biogeographically important 1 nesting pair

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude climate with cold winters	Dfa: Humid continental (Humid with severe winter, no dry season, hot summer)

The climate is humid continental.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres): 84

a) Maximum elevation above sea level (in metres): 88

Middle part of river basin ☑

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

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.

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

4.4.3 - Soil

Mineral ☑

Organic ☑

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes ○ No ◉

Please provide further information on the soil (optional)

Characteristic soils are floodplain, meadow and peat-like soils.

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	
Usually seasonal, ephemeral or intermittent water present	

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology:

Water quality is still good enough to maintain the values of the wetland.

4.4.5 - Sediment regime

Sediment regime unknown ☑

Please provide further information on sediment (optional):

Béda-Karapancsa plays an important role in sediment trapping.

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.

4.4.6 - Water pH

Unknown ☑

4.4.7 - Water salinity

Fresh (<0.5 g/l) ☑

4.4.8 - Dissolved or suspended nutrients in water

Unknown ☑

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the site itself: i) broadly similar ○ ii) significantly different ◉

Surrounding area has more intensive agricultural use ☑

Please describe other ways in which the surrounding area is different:

Primarily 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.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Erosion protection	Soil, sediment and nutrient retention	Medium
Hazard reduction	Flood control, flood storage	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Medium

Other ecosystem service(s) not included above:

Fishing, forestry, hunting.

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes ○ No ○ Unknown ◉

4.5.2 - Social and cultural values

<no data available>

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	☑	☑
Local authority, municipality, (sub)district, etc.	☑	☑

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Cooperative/collective (e.g., farmers cooperative)	☑	☑
Other types of private/individual owner(s)	☑	☐

Provide further information on the land tenure / ownership regime (optional):

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.

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site: Duna-Dráva National Park Directorate

Provide the name and title of the person or people with responsibility for the wetland: Ákos Gáborik, zoological officer

Postal address:
H-7625 Pécs, Tettye tér 9.
Hungary
Phone: +36-72-517-200,
Fax: +36-72-517-201,
E-mail: DunaDrava@ddnp.kvvm.hu

E-mail address: gaborik@ddnp.kvvm.hu

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Dams and water management/use	Medium impact		☐	No change	☑	No change

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/ alien species	Medium impact		☑	No change	☐	No change
Problematic native species	Medium impact		☑	No change	☐	No change

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Industrial and military effluents		Medium impact	☐	No change	☑	No change
Agricultural and forestry effluents		Medium impact	☐	No change	☑	No change

Please describe any other threats (optional):

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).

Current recreation and tourism:
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.Due to new fishing exhibition site the thematic tourism is increasing, but it has no disadvantageous effects, because of the low number of visitors and guidance.

b) in the surrounding area:
Primarily 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.

5.2.2 - Legal conservation status

Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	Béda-Karapancsa		whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
landscape protection area			whole
national park	Duna-Dráva National Park.		partly

5.2.3 - IUCN protected areas categories (2008)

II National Park: protected area managed mainly for ecosystem protection and recreation ☑

V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation ☑

5.2.4 - Key conservation measures

Habitat

Measures	Status
Catchment management initiatives/controls	Implemented
Habitat manipulation/enhancement	Proposed
Hydrology management/restoration	Proposed

Species

Measures	Status
Reintroductions	Partially implemented

Human Activities

Measures	Status
Regulation/management of recreational activities	Implemented

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.

Conservation measures proposed but not yet implemented:
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.

5.2.5 - Management planning

Is there a site-specific management plan for the site? In preparation

Has a management effectiveness assessment been undertaken for the site? Yes ○ No ◉

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes ○ No ◉

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

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.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Please select a value

5.2.7 - Monitoring implemented or proposed

Genetic research of the black poplar population along the Danube.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

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

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

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)
<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)
<no file available>

iii. a description of the site in a national or regional wetland inventory
<no file available>

iv. relevant Article 3.2 reports
<no file available>

v. site management plan
<no file available>

vi. other published literature
<no file available>

<no data available>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:

Belső-Béda oxbow (pond 2) in spring (*Ms. Éva Horváth, Duna-Dráva National Park Directorate, 04-04-2014*)

6.1.4 - Designation letter and related data

Designation letter
<no file available>

Date of Designation	1997-04-30