



# Ramsar Information Sheet

Published on 1 January 2007

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## Hungary Mártély



Designation date	11 April 1979
Site number	186
Coordinates	46°26'10"N 20°12'37"E
Area	2 324,00 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

The Mártély Landscape Protection Area Ramsar Site covers a section of the River Tisza floodplain, characteristic for the floodplain wetlands of southern Hungary. It features freshwater oxbow lakes, flood meadows, marshes, arable land, woodland, and many smaller and larger branches of the river. The site consists of permanently and occasionally flooded areas. The site hosts a relatively large population of otter *Lutra lutra*, and it is important reproduction place for many fish species. It hosts one endemic plant species, *Leucanthemum serotinum*. Mártély is a breeding site for various waterbirds, and raptors, e.g. including several species of Ardeidae species, Black Stork, White-tailed Eagle.

## 2 - Data & location

### 2.1 - Formal data

#### 2.1.1 - Name and address of the compiler of this RIS

##### Compiler 1

Name	Zoltan Vajda
Institution/agency	Kiskunsági Nemzeti Park Directorate
Postal address	H-6000 Kecskemét, Liszt F. u.19.
E-mail	vajdaz@knp.hu
Phone	+36-76-482-611
Fax	+36-76-481-074

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

From year	2006
To year	2014

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Mártély
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#### 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 <input type="radio"/> No <input checked="" type="radio"/>
(Update) B. Changes to Site area	the area has increased
(Update) The Site area has been calculated more accurately	<input checked="" type="checkbox"/>
(Update) The Site has been delineated more accurately	<input type="checkbox"/>
(Update) The Site area has increased because of a boundary extension	<input type="checkbox"/>
(Update) The Site area has decreased because of a boundary restriction	<input type="checkbox"/>

#### 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?	No
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## 2.2 - Site location

### 2.2.1 - Defining the Site boundaries

#### b) Digital map/image

<1 file(s) uploaded>

Former maps	0
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#### Boundaries description (optional)

The site boundary follows the boundary of the Mártély Landscape Protection Area.
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### 2.2.2 - General location

a) In which large administrative region does the site lie?	Csongrád county
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b) What is the nearest town or population centre?	Hódmezővásárhely
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### 2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries?	Yes <input type="radio"/> No <input checked="" type="radio"/>
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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):

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

#### 2.2.5 - Biogeography

##### Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Pannonic

##### Other biogeographic regionalisation scheme

European Commission DG Environment webpage  
[http://ec.europa.eu/environment/nature/natura2000/sites\\_hab/biogeog\\_regions/index\\_en.htm](http://ec.europa.eu/environment/nature/natura2000/sites_hab/biogeog_regions/index_en.htm)

### 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 reasons

The site contains a representative and unique example of permanent river, freshwater oxbow lakes, and tree dominated flooding types of wetlands within the Pannonic biogeographic region.

Habitat types listed on Annex I of the Habitats Directive:

3150 Natural eutrophic lake with magnopotamion or Hydrocharition vegetation type.  
 3270 Rivers with muddy banks with *Chenopodium rubri* p.p. and *Bidention* p.p.  
 6440 Alluvial meadows of river valleys of the *Cnidion dubii*  
 91 E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-adion*, *Alnion incanae*, *Salicion albae*)

- Criterion 2 : Rare species and threatened ecological communities


- Criterion 3 : Biological diversity

Justification





It supports populations of plant and animal species important for maintaining the biological diversity of Pannonic biogeographic region, such as: *Leucanthemum serotinum* - Pannonic endemic, biogeographically important, *Tisza* mayfly *Palingenia longicauda* is endemic to the Carpathian Basin tributaries of the river Danube.




































- 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

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<i>Leucanthemella serotina</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		Criterion 3: The site supports this species species important for maintaining the biological diversity of Pannonic biogeographic region.

#### 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 <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7								
Birds																	
CHORDATA/AVES	<i>Alcedo atthis</i> 	Common Kingfisher	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	<i>Ardea alba</i> 	Great Egret	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.

Phylum	Scientific name	Common name	Species qualifies under criterion			Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	GITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7								
CHORDATA/AVES	 <i>Ardea purpurea</i>	Purple Heron	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Ardeola ralloides</i>	Squacco Heron	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Aythya nyroca</i>	Ferruginous Duck	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input type="checkbox"/>	<input checked="" type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Botaurus stellaris</i>	Eurasian Bittern	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Chlidonias hybrida</i>	Eurasian Whiskered Tern	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Chlidonias niger</i>	Black Tern	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Ciconia ciconia</i>	White Stork	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Ciconia nigra</i>	Black Stork	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Circus aeruginosus</i>	Western Marsh Harrier	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Circus cyaneus</i>	Northern Harrier	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Crex crex</i>	Corn Crake	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Dendrocopos syriacus</i>	Syrian Woodpecker	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Dryocopus martius</i>	Black Woodpecker	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Egretta garzetta</i>	Little Egret	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Grus grus</i>	Common Crane	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Haliaeetus albicilla</i>	White-tailed Eagle	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Microcarbo pygmeus</i>	Pygmy Cormorant	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.
CHORDATA/AVES	 <i>Milvus migrans</i>	Black Kite	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.

Phylum	Scientific name	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	GITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7	8								
CHORDATA/ AVES	<i>Nycticorax nycticorax</i> 	Black-crowned Night Heron; Black-crowned Night-Heron	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.	
CHORDATA/ AVES	<i>Pernis apivorus</i> 	European Honey Buzzard	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.	
CHORDATA/ AVES	<i>Platalea leucorodia</i> 	Eurasian Spoonbill	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.	
CHORDATA/ AVES	<i>Porzana parva</i> 	Little Crake	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.	
CHORDATA/ AVES	<i>Porzana porzana</i> 	Spotted Crake	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			LC 	<input type="checkbox"/>	<input type="checkbox"/>	79/409/EGK Annex I	Criterion 4: The site is a breeding and wintering area for migrating and resident birds such as this species.	
<b>Fish, Mollusc and Crustacea</b>																		
CHORDATA/ ACTINOPTERYGII	<i>Acipenser nudiiventris</i> 	Ship	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			CR 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II Bern Convention, IUCN Red list: Considered as EN, Annex V Habitats Directive + Annex II Bonn Convention	Criterion 2: The site supports this vulnerable, endangered species.	
CHORDATA/ ACTINOPTERYGII	<i>Gymnocephalus schraetser</i> 		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			LC 	<input type="checkbox"/>	<input type="checkbox"/>	IUCN Red list: Considered as VU & 92/43/EGK directive Annex II	Criterion 2: The site supports this vulnerable, endangered species.	
CHORDATA/ ACTINOPTERYGII	<i>Zingel zingel</i> 		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			LC 	<input type="checkbox"/>	<input type="checkbox"/>	IUCN Red list: Considered as VU & 92/43/EGK directive Annex II	Criterion 2: The site supports this vulnerable, endangered species.	
<b>Others</b>																		
CHORDATA/ MAMMALIA	<i>Myotis dasycneme</i> 	pond bat; Pond Myotis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			NT 	<input type="checkbox"/>	<input type="checkbox"/>	IUCN Red list: Considered as VU & 92/43/EGK directive Annex II	Criterion 2: The site supports this vulnerable, endangered species.	
ARTHROPODA/ INSECTA	<i>Palingenia longicauda</i> 	Tisza mayfly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>		Criterion 3: This bio-geographically important species is endemic to the Carpathian Basin tributaries of the river Danube.	

1) Percentage of the total biogeographic population at the site

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

<no data available>

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

### 4.1 - Ecological character

See additional material for information on ecological character

### 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		2		Unique
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		4		Representative
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools				
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils				
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		1		Unique

#### Human-made wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
4: Seasonally flooded agricultural land		3		
7: Excavations				
9: Canals and drainage channels or ditches				

### 4.3 - Biological components

#### 4.3.1 - Plant species

##### Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Astragalus contortuplicatus</i>		
<i>Jacobaea paludosa</i>	Fen ragwort	
<i>Leucjum aestivum</i>	Summer Snowflake	
<i>Peucedanum officinale</i>		
<i>Trapa natans</i>	Water Chestnut	
<i>Vicia biennis</i>		

#### 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
ARTHROPODA/INSECTA	Aegosoma scabricorne					This species is protected under national law as their populations have declined and require special habitat types.
ARTHROPODA/INSECTA	Aromia moschata					This species is protected under national law as their populations have declined and require special habitat types.
ARTHROPODA/INSECTA	Chamaesphacia palustris					This species is protected under national law as their populations have declined and require special habitat types.
ARTHROPODA/INSECTA	Lucanus cervus					This species is protected under national law as their populations have declined and require special habitat types.
CHORDATA/MAMMALIA	Myotis daubentonii					This species is protected under national law as their populations have declined and require special habitat types.
ARTHROPODA/INSECTA	Oberea euphorbiae					This species is protected under national law as their populations have declined and require special habitat types.
ARTHROPODA/INSECTA	Obrium cantharinum					This species is protected under national law as their populations have declined and require special habitat types.
CHORDATA/MAMMALIA	Pipistrellus pipistrellus pipistrellus					This species is protected under national law as their populations have declined and require special habitat types.
ARTHROPODA/INSECTA	Saperda perforata					This species is protected under national law as their populations have declined and require special habitat types.

#### 4.4 - Physical components

##### 4.4.1 - Climate

Climatic region	Subregion
C: Moist Mid-Latitude climate with mild winters	Cfb: Marine west coast (Mild with no dry season, warm summer)

The climate variations are limited in the region of the Carpathian Basin. The macroclimate can be considered a homogenous basic feature in terms of surface and fauna evolution, as well. The region has a temperate continental climate. Its unique features are limited cloudiness, a relatively high number of sunshine hours, high daily and annual temperature variation, relative dryness and very low humidity values.

See additional material for further information on climate.

##### 4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

- Entire river basin
- Upper part of river basin
- Middle part of river basin
- Lower part of river basin
- More than one river basin
- Not in river basin
- Coastal

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 Mártély Landscape Protection Area Ramsar Site covers a section of the River Tisza floodplain, characteristic for the floodplain wetlands of southern Hungary.

The site belongs to River Tisza catchment area. The living Tisza-valley has a huge catchment area (157.000 km<sup>2</sup>) which also comprises Carpathian mountain region and the major part of Great Hungarian Plain. The whole site is inside the main embankment.

4.4.3 - Soil

No available information

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

4.4.4 - Water regime

Water permanence

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

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from surface water	<input type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
To downstream catchment	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels fluctuating (including tidal)	No change

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

We may declare that the balance of precipitation and evaporation is negative in the region.

River control and surface drainage from the middle of the nineteenth century radically changed the water conditions of the region. The comprehensive control of the River Tisza began in 1846 and started at the reach of Csongrád in 1856. The biggest bends were cut through and the river was forced between embankments. As a result two oxbow lakes were created, such as Mártély and Körtvélyes freshwater lakes.

See additional material for further information on water regime.

4.4.5 - Sediment regime

Sediment regime unknown

4.4.6 - Water pH

Unknown

4.4.7 - Water salinity

Fresh (<0.5 g/l)

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

Unknown

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

Unknown

Please provide further information on dissolved or suspended nutrients (optional):

Natural eutrophic lake with magnopotamion or Hydrocharition vegetation type.

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 greater urbanisation or development

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types

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
Wetland non-food products	Timber	Medium
Wetland non-food products	Livestock fodder	Medium

Regulating Services

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

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Water sports and activities	High
Recreation and tourism	Recreational hunting and fishing	High
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Scientific and educational	Long-term monitoring site	Medium

Other ecosystem service(s) not included above:

The site has an important role in flood control, sediment and nutrient retention.

The most important land uses are forestry, extensive grassland and agricultural management.

Traditional fisheries production can be found around the floodplain of River Tisza. No religious importance, ancient burial-ground or archaeological sites inside the Ramsar-site.

National Biodiversity Monitoring System is running on the site for habitats and birds.

Water recreation tourism (swimming, boating, fishing) is important on Mártély oxbow lake with a small holiday resort settlement on the site.

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

- i) the site provides 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) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland
- iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples
- iv) 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

<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	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Local authority, municipality, (sub)district, etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Cooperative/collective (e.g., farmers cooperative)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

**within the Ramsar site:**  
35 % of the site is state owned by the state and managed by the Kiskunság National Park Directorate, most of other lands are also in state owned and managed by other state companies e.g. water regulation company, and forest company.

**in the surrounding area:**  
Mostly privately owned.

#### 5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

Kiskunság National Park Directorate

Provide the name and title of the person or people with responsibility for the wetland:

Zoltan VAJDA

Postal address:

H-6000 Kecskemét, Liszt F. u.19.

E-mail address:

vajdaz@knp.hu

### 5.2 - Ecological character threats and responses (Management)

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

Water regulation

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Water abstraction	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Marine and freshwater aquaculture			<input checked="" type="checkbox"/>		<input type="checkbox"/>	

Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Fishing and harvesting aquatic resources	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change
Logging and wood harvesting	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

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	High impact	High impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	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	High impact	High impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Unspecified	Medium impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change
Agricultural and forestry effluents	High impact	High impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Droughts	High impact	High impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Please describe any other threats (optional):

a) within the Ramsar site:

Some allochthonous and invasive plant species can take advantage of these unnatural conditions and supplant certain species in forest communities: they are, for example, *Amorpha fruticosa*, *Echinocystis lobata*, *Acer negundo*, *Vitis riparia*, *Fraxinus pennsylvanica*. The most important spreading factor of the seed of the alien species is the floods.

Artificial hybrid poplar races made serious genetic pollution - by pollination - in the natural *Populus nigra* populations, so genetically unpolluted *Populus nigra* populations are close to extinction.

b) in the surrounding area: groundwater decreasing, water and river regulation, intensive agricultural pollution and disturbing factors, artificial forest planting, drying out, eutrophication, low or high grazing pressure, invasion by alien species (e.g. *Fraxinus pennsylvanica*, *Amorpha fruticosa*), spontaneous forestation, waterfowl hunting.

One of the main problems is the decreasing groundwater in the region due to water and river regulation and droughts.

Intensive agricultural pollution can occur on cultivated lands just as high grazing pressure is possible in grasslands which damages natural flora, pollutes groundwater etc. There is an opposite problem with low grazing pressure when spontaneous forestation will begin much easier where it is undesired. Artificial forest plantations are managed by forestry but should be replaced by native tree species considering that artificial hybrid poplar races made serious genetic pollution furthermore large clear-cuttings in these forests providing in this way good opportunity for adventives invasive plants to spread intensively. Surrounding areas are affected by human activities so disturbing factors cause invasive plant species spreading. Waterfowl hunting is permitted taking attention of the nature conservation.

It should be paid particular attention to developing campsites, growing tourism, holiday resorts and if necessary it can be controlled. Waste management is solved on campsites but anglers usually leave their rubbish nearby the banks.

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	Mártély		whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Site of Community Importance (SCI)	Mártély		whole
landscape protection area	Mártély		whole

5.2.3 - IUCN protected areas categories (2008)

- Ia Strict Nature Reserve
- Ib Wilderness Area: protected area managed mainly for wilderness protection
- II National Park: protected area managed mainly for ecosystem protection and recreation
- III Natural Monument: protected area managed mainly for conservation of specific natural features
- IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
- V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation

VI Managed Resource Protected Area: protected area managed mainly  for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Habitat

Measures	Status
Habitat manipulation/enhancement	Implemented

Species

Measures	Status
Control of invasive alien plants	Implemented

Other:

The technical management plan is in place and is implemented, although legally it has not been approved according to most recent legislation. Natura 2000 management plan will be available in the near future for the Natura 2000 part of the site.

A habitat restoration project launched in 2009 to restore wet meadows and eliminate not native invasive species stands (*Fraxinus pennsylvanica*, *Amorpha fruticosa*, *Acer negundo*) on 60 ha.

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:

Information tables, booklets, summer environmental educational camp for local schools are available on the site. Riparian forest nature trail. 2000 copies of brochure titled "Pusztaszer and Mártély) published in 2005.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Yes, there is a plan

Further information

There are further habitat restoration programmes planned.

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Plant community	Implemented
Birds	Implemented

National Biodiversity Monitoring System is running on the site for habitats and birds

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Bankovics A.: Data on the comparative ecology of the scrub Warbler *Hippolais pallida elaeica* (LINDL. ) and its spreading along the Tisza is the Tears 1973 to 1974. Tiscia, 1974. 10. köt. 81-83. p.  
Bankovics A.: Spreading and habits of *Hippolais pallida elaeica* (LINDL.) along the Tisza. Tiscia, 1974. 9. köt. 105-113. p.  
Gallé, S. & Körmöczi, L (eds.). 2000. Ecology of River Valleys. Published by Department of Ecology, University of Szeged, Tiscia monograph series 2000.  
Sterbetz, I. 1981. Protected wetlands of international importance in Hungary. IWRB XVII. International Conference in Debrecen 1981.

#### 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

<1 file(s) uploaded>

#### 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



An oxbow lake of the river  
Tisza at Mártély ( *István  
Somodi* , 18-04-2009 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1979-04-11