

## Ramsar Information Sheet

Published on 10 March 2017 Update version, previously published on : 1 January 2006

# Hungary

## Velence and Dinnyés Nature Conservation Area



Designation date 11 April 1979

Site number 183

Coordinates 47°11'07"N 18°33'13"E

Area 1 354,50 ha

https://rsis.ramsar.org/ris/183 Created by RSIS V.1.6 on - 8 May 2020

## 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

Velence Lake is the second biggest lake in the country (26 km2). The average depth of water is 1.5 meters, at the deepest point it reaches the depth of 3 meters. At the beginning of last century the whole lake was a very important nesting and migration area for waterfowl, but it soon lost its significance as it started to become a holiday resort. In order to save the ecological values of the area two reserves were created in the western and the southwestern side of the lake. The two areas are mainly marshes with open water surfaces, which are rich in submerging water plants. Velence and Dinnyés are divided by road 70 and a railway, but they are connected with Kajtor tunnel, therefore create an entire ecological unit.

## 2 - Data & location

## 2.1 - Formal data

2.1	1.1	-	Name	and	ado	Iress	of	the	com	piler	of	this	RIS
-----	-----	---	------	-----	-----	-------	----	-----	-----	-------	----	------	-----

Compiler 1

Name	Balázs Tóth Ph.D. (hydroecological supervisor); Csihar László (area manager)
Institution/agangy	Duna-lpoly National Park Directorate
il istitution/agency	Dura-poly National Fark Directorate
Poetal address	H-2509 Esztergom, Strázsa-hegy, Hungary
Fostal address	Post Address: 1525 Budapest, Pf.: 86.
E-mail	DINPI@DINPI.HU
Phone	+36 13 914 610
Fax	+36 12 001 168

#### 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)

Velence and Dinnyés Nature Conservation Area

#### 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   No   O
(Update) The boundary has been delineated more accurately ✓
(Update) The boundary has been extended □
(Update) The boundary has been restricted □
(Update) B. Changes to Site area the area has increased
<sup>(Update)</sup> The Site area has been calculated more accurately <b>☑</b>
(Update) The Site has been delineated more accurately ✓
(Update) The Site area has increased because of a boundary extension
(Update) The Site area has decreased because of a boundary restriction

#### 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?

## 2.2 - Site location

#### 2.2.1 - Defining the Site boundaries

## b) Digital map/image

<1 file(s) uploaded>

Former maps 0

#### 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 there are two separate areas.

- 1. Follows the border of Velence-lake bird reserve
- 2. Follows the border of Dinnyési-fertő nature reserve

The Site boundary follows the Natura 2000 site, leaving a buffer zone outside of the Ramsar Site but inside the Natura 2000 Site.

#### 2.2.2 - General location

a) In which large administrative region does the site lie?

b) What is the nearest town or population centre? 6-8 km West of Székesfehérvár

## 2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries? Yes O No  $\odot$ 

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes O No  $\odot$ 

## 2.2.4 - Area of the Site

Official area, in hectares (ha): 1354.5

Area, in hectares (ha) as calculated from 1354.71 GIS boundaries

## 2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Pannonnic

## 3 - Why is the Site important?

## 3.1 - Ramsar Criteria and their justification

<n	0	a	0	21	$\circ$	e>

- ☑ Criterion 2 : Rare species and threatened ecological communities
- ☑ Criterion 3 : Biological diversity

The wetland contains rare and unique natural wetland types important for maintaining biological diversity within the Panonic biogeographic region: permanent saline marsh and permanent fershwater marsh.

Justification

Few hundred years ago these marshes were much larger than nowadays. Floating marshes are one of the most important habitats in Lake Velencei. This habitat provides good conditions for Liparis loeselii, Sphagnum sps. Misgurnus fosilis have stable population in the area.

☑ Criterion 5:>20,000 waterbirds

Overall waterbird numbers	25000-30000
Start year	2010
Source of data:	Duna-lpoly National Park Directorate database

☑ Criterion 6 : >1% waterbird population

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
Liparis Ioeselii		✓					Annex II of the EU Habitats Directive	5000-1000 specimens

Criterion 2: This wetland gives complex support to the survival of endangered and vulnerable animal and a critically endangered orchid species.

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

Phylum	Scientific name		Species qualifies under criterion 2   4   6   9	criterion	Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red / List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Birds												
/ AVES	meranopogon	Moustached Warbler						LC Sign			Annex I of the EU Birds Directive	5-7 pairs
CHORDATA / AVES		Common Kingfisher	0000					LC Sign			Annex I of the EU Birds Directive	4-5 pairs

Phylum	Scientific name	Common name	Species qualifies under criterio 2 4 6	s d	unc	butes der rion	Pop. Size	Period of pop. E	% occurrence		CITES Appendix A	CMS ppendix I	Other Status	Justification
AVES	<b>ET</b> 🔊	Northern Pintail	000		<b>V</b>		80			LC Sign			Annex II/A of the EU Birds Directive	
AVLO	ar 🔊	Northern Shoveler			V		350			LC Si: OTH			Annex II/A of the EU Birds Directive	
CHORDATA / / AVES	Anas crecca	Eurasian Teal; Green-winged Teal			V		2000			LC © SS © ESS			Annex II/A of the EU Birds Directive	
AVES	olatyrhynchos	Mallard			<b>V</b>		9200			LC Sign			Annex II/A of the EU Birds Directive	30-40 pairs
AVES	Anas querquedula	Garganey			<b>V</b>		290			LC			Annex II/A of the EU Birds Directive	
AVES	ar 🔊	Gadwall	000		<b>V</b>		44			LC ©			Annex II/A of the EU Birds Directive	
AVES	Anser albifrons	Greater White- fronted Goose			<b>V</b>		18000	2009-2013	16	LC Sisse			Annex II/B of the EU Birds Directive	Bigoegraphic population: Central Europe
AVLO	🚰 ECL 🤌	Greylag Goose			<b>V</b>		4500	2009-2013	8	LC Sign			Annex II/A of the EU Birds Directive	Bigoegraphic population: Central Europe 20-40 pairs
AVES	Anser erythropus	Lesser White- fronted Goose			•		3			VU Si: SISF		<b>V</b>	Annex I of the EU Birds Directive	Mgrating.
AVES	al 🔊				V		2000			LC Si: OTH			Annex II/A of the EU Birds Directive	
AVES	60L	Asian Imperial Eagle; Eastern Imperial Eagle			<b>V</b>		1			LC © iii © ISH	<b>✓</b>	<b></b> ✓	Annex I of the EU Birds Directive	
AVES	60L	Great Egret			<b>V</b>		320			LC •:			Annex I of the EU Birds Directive	50-75 pairs
AVES	Ardea purpurea	Purple Heron			<b>V</b>					LC Sit other			Annex I of the EU Birds Directive	5-25 pairs
AVES	Ardeola ralloides	Squacco Heron			<b>V</b>					LC © iii © iiii			Annex I of the EU Birds Directive	3-10 specimens
AVES	a. 🥱	Common Pochard			V		1200			LC •:			Annex II/A of the EU Birds Directive	8-10 pairs
AVES	🚮 ett. 🤌	Tufted Duck	000		V		1500			LC •:			Annex II/A of the EU Birds Directive	0-2 pairs
AVES	al 🔊	Ferruginous Duck			V		150			NT ●\$* ●®#		✓	Annex I of the EU Birds Directive	15-20 pairs
AVES	Botaurus stellaris	Eurasian Bittern			V					LC •:			Annex I of the EU Birds Directive	10-12 pairs
CHORDATA / / AVES	Branta ruficollis	Red-breasted Goose			V		25			EN Sign		<b>√</b>	Annex I of the EU Birds Directive	Mgrating.

Phylum	Scientific name	Common name	Species qualifies under criterion	Specontri uno crite	butes der erion	Pop. Size Period of pop. Est	% occurrence 1)		CITES Appendix	CMS Appendix I	Other Status	Justification
AVES	hybrida Mulicipation in the state of the	Whiskered Tern	0000			45		LC •\$			Annex I of the EU Birds Directive	
CHORDATA / AVES	Chlidonias niger	Black Tem				500		LC •#			Annex I of the EU Birds Directive	
/ AVES	ECL.	Black-headed Gull	0000			2000		LC OTSF			Annex II/B of the EU Birds Directive	150-200 pairs
CHORDATA / AVES	Circaetus gallicus	Short-toed Snake Eagle	0000			2		LC OTSF			Annex I of the EU Birds Directive	
AVES	aeruginosus	Western Marsh Harrier	0000					LC OTSF			Annex I of the EU Birds Directive	10-15 pairs
AVLO	<b>E</b> 91.	Mute Swan	0000			200		LC OTSF			Annex II/B of the EU Birds Directive	7-12 pairs
AVES	Egretta garzetta	Little Egret	0000					LC •#			Annex I of the EU Birds Directive	20-50 specimens
AVLS	<b>EL 🤣</b>	Eurasian Coot				2600		LC •#			Annex II/A of the EU Birds Directive	35-40 pairs
CHORDATA / AVES	Gallinula chloropus	Common Moorhen	0000					LC OTSF			Annex II/B of the EU Birds Directive	8-12 pairs
	Haliaeetus albicilla	White-tailed Eagle	,0000			3		LC ©	<b></b>	<b></b> ✓	Annex I of the EU Birds Directive	
	Himantopus himantopus	Black-winged Stilt	0000			74		LC ©#			Annex I of the EU Birds Directive	0-10 pairs
	Ixobrychus minutus	Little Bittern	0000					LC ©			Annex I of the EU Birds Directive	15-20 pairs
CHORDATA / AVES	Larus cachinnans	Caspian Gull; Yellow-legged Gull	0000			180		LC Sign			Annex II/B of the EU Birds Directive	
AVLO	<b>E</b> C. (5)	Mew Gull	0000			100		LC •Si •Si			Annex II/B of the EU Birds Directive	
AVES	Limosa limosa	Black-tailed Godwit	0000			20		NT			Annex II/B of the EU Birds Directive	
AVES	Luscinia svecica	Bluethroat	0000					LC Single			Annex I of the EU Birds Directive	10-12 pairs
	pygrieus	Pygmy Cormorant				50		LC other			Annex I of the EU Birds Directive	0-7 pairs
AVES	<b>E</b> 61.	Red-crested Pochard	0000			42		LC Single			Annex II/B of the EU Birds Directive	2-7 pairs
CHORDATA / AVES	Numenius arquata	Eurasian Curlew	0000			45		NT			Annex II/B of the EU Birds Directive	

Phylum	Scientific name	Common name	Specie qualifie under criterio 2 4 6	es c on	Species contributes under criterion 5 7 8	Pop. Size Period of pop. Est.			CMS Appendix I	Other Status	Justification
CHORDATA / AVES	Pandion haliaetus	Osprey; Western Osprey					LC ●酸			Annex I of the EU Birds Directive	1-3 specimen. Mgrating.
/	Philomachus pugnax	Ruff				1000	LC			Annex I of the EU Birds Directive	
AVES	leucorodia	Eurasian Spoonbill				85	LC • \$: • \$:			Annex I of the EU Birds Directive	50-75 pairs
AVES	Porzana parva	Little Crake					LC			Annex I of the EU Birds Directive	5-10 pairs
AVES	Porzana porzana	Spotted Crake					LC			Annex I of the EU Birds Directive	10-15 pairs
AVES	Rallus aquaticus	Water Rail					LC			Annex II/B of the EU Birds Directive	8-12 pairs
/	Recurvirostra avosetta	Pied Avocet				55	LC ●部 ●陽			Annex I of the EU Birds Directive	0-7 pairs
AVES	Sterna hirundo	Common Tern					LC ●記 ●陽			Annex I of the EU Birds Directive	0-20 pairs
AVES	Sturnus vulgaris	Common Starling; European Starling				8000	LC			Annex II/B of the EU Birds Directive	
AVES	Tringa erythropus	Spotted Redshank				370	LC • à: • or			Annex II/B of the EU Birds Directive	
AVES	Tringa glareola	Wood Sandpiper				700	LC			Annex I of the EU Birds Directive	
AVES	Tringa nebularia	Common Greenshank				55	LC • à: • or			Annex II/B of the EU Birds Directive	
AVES	Tringa totanus	Common Redshank				70	LC • à: • or			Annex II/B of the EU Birds Directive	
CHORDATA / AVES	Vanellus vanellus	Northern Lapwing				250	LC ● \$ ● SW			Annex II/B of the EU Birds Directive	
Others											
REPTILIA	Emys orbicularis	European pond turtle					NT ● st ● 簡			Annex II of the EU Habitats Directive	
CHORDATA / MAMMALIA	Lutra lutra	European Otter					NT ● AP ● SSF	V		Annex II of the EU Habitats Directive	7-10 pairs

<sup>1)</sup> Percentage of the total biogeographic population at the site

Criterion 2: This wetland gives complex support to the survival of endangered and vulnerable animal and a critically endangered orchid species.
Noteworthy fauna: The fauna of the area is mainly similar to the fauna of the wider surrounding, the Mezőföld. In the meantime during the researches there were lee Age relict invertebrates found in the area of Lake Velence. The most outstanding ecological values are found among bird species, which is not surprising according to the character of the habitats.
Noteworthy fauna which have not been assessed for the IUCN Red List and are not in the Catalogue of Life: - Podalirius podalirius - Chrysoptera c-aureum

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
Bolboschoenetum maritimi			
Artemisio-Festucetum pseudovinae			
Artemisio-Festucetum pseudovinae puccinelliosum			
Agropyro-Festucetum rupicolae			
Puccinellietum limosae			
Juncetum gerardii			
Agrostio-Caricetum distantis			
Caricetum elatae			

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

## 4.1 - Ecological character

The ecological characters of the two territories are quite different. The territory of Lake Velence means mainly water surfaces, the shores are less significant from a conservation aspect. Its common plant societies are the reeds (Phragmitton australis), and the floating bogs which are of outstanding ecological value. On the area of 100-120 hectares there are more types of floating bogs.

At Dinnyési-Fertő the terrestrial associations play a more important role in the ecosystem. The most common communities are the following:

- Artemisio-Festucetum pseudovinae
- Artemisio-Festucetum pseudovinae puccinelliosum
- Agropyro-Festucetum rupicolae
- Puccinellietum limosae
- Juncetum gerardii
- Agrostio-Caricetum distantis
- Caricetum elatae
- Bolboschoenetum maritimi

The most valuable ones are the saline communities. The salines of Dinnyés are the nicest examples of this type of natural areas found in Transdanubia, and they have remained in good condition. Among the water plant societies the Lemno-Utricularietum communities are found in larger areas than the reeds.

Natural forests are not found in the area.

## 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	or wettand type	
Fresh water > Lakes and pools  >> O: Permanent freshwater lakes		1		
Saline, brackish or alkaline water > Marshes & pools >> Sp: Permanent saline/ brackish/ alkaline marshes/ pools		3		
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		1		
Fresh water > Marshes on inorganic soils >> Ts: Seasonal/ intermittent freshwater marshes/ pools on inorganic soils				

#### Human-made wetlands

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
2: Ponds		0		
4: Seasonally flooded agricultural land				
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
Anacamptis coriophora		
Anacamptis laxiflora		
Anacamptis morio		
Carex elata		
Carex pseudocyperus		
Dactylorhiza incarnata		
Thalictrum lucidum		
Thelypteris palustris		
Utricularia vulgaris		

#### 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
	Acrocephalus arundinaceus	Great Reed Warbler				

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	Acrocephalus schoenobaenus	Sedge Warbler				
CHORDATA/AVES	Acrocephalus scirpaceus	Eurasian Reed Warbler				
CHORDATA/AVES	Ardea cinerea	Gray Heron; Grey Heron				
CHORDATA/AVES	Athene noctua	Little Owl				
CHORDATA/AVES	Chlidonias leucopterus	White-winged Tern				
CHORDATA/AVES	Ciconia ciconia	White Stork				
CHORDATA/AVES	Ciconia nigra	Black Stork				
CHORDATA/AVES	Circus pygargus	Montagu's Harrier				
CHORDATA/AVES	Falco cherrug	Saker Falcon				
CHORDATA/AVES	Falco peregrinus	Peregrine Falcon				
CHORDATA/AVES	Falco vespertinus	Red-footed Falcon				
CHORDATA/AVES	Hirundo rustica	Barn Swallow				
CHORDATA/AVES	Luscinia luscinia	Thrush Nightingale				
CHORDATA/AVES	Mergellus albellus	Smew				
CHORDATA/AVES	Merops apiaster	European Bee-eater				
CHORDATA/AVES	MIvus milvus	Red Kite				
CHORDATA/AVES	Nycticorax nycticorax	Black-crowned Night Heron;Black-crowned Night-Heron				
CHORDATA/AVES	Plegadis falcinellus	Glossylbis				
CHORDATA/AVES	Tringa stagnatilis	Marsh Sandpiper				
CHORDATA/ACTINOPTERYGII	Msgumus fossilis					
CHORDATAACTINOPTERYGII	Tinca tinca					
ARTHROPODA/INSECTA	Acherontia atropos					
ARTHROPODA/INSECTA	Acrida ungarica					
ARTHROPODA/INSECTA	Aglais urticae	Inachis io				
CHORDATA/AMPHIBIA	Bombina bombina	Fire-bellied Toad				
CHORDATA/AMPHIBIA	Bufo bufo	European Toad				
ARTHROPODA/INSECTA	Calosoma sycophanta					
ARTHROPODAINSECTA	Carabus cancellatus					
ARTHROPODAINSECTA	Carabus coriaceus					
ARTHROPODA/INSECTA	Carabus hortensis					
ARTHROPODA/INSECTA	Carabus ulrichii					
ARTHROPODA/INSECTA	Coleophora hungariae					
CHORDATA/MAMMALIA	Eptesicus serotinus	serotine;Common Serotine				
CHORDATA/AMPHIBIA	Hyla arborea					
CHORDATA/REPTILIA	Lacerta agilis					
CHORDATA/REPTILIA	Lacerta viridis					
CHORDATA/AMPHIBIA	Lissotriton vulgaris					
ARTHROPODAINSECTA	Mantis religiosa					
CHORDATA/MAMMALIA	Mustela erminea	Ermine				
CHORDATA/MAMMALIA	Mustela eversmanii					
CHORDATA/MAMMALIA	Mustela nivalis	Least Weasel				
CHORDATA/MAMMALIA	Myotis daubentonii					

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/MAMMALIA	Myotis myotis	Mouse-eared Myotis;mouse-eared bat				
CHORDATA/REPTILIA	Natrix natrix					
CHORDATA/REPTILIA	Natrix tessellata					
CHORDATA/MAMMALIA	Nyctalus noctula	noctule;Noctule				
ARTHROPODAINSECTA	Panchrysia deaurata					
ARTHROPODA/INSECTA	Papilio machaon	Common Yellow Swallowtail;Swallowtail;Old World Swallowtail;Artemisia Swallowtail				
CHORDATA/AMPHIBIA	Pelobates fuscus					
CHORDATA/AMPHIBIA	Pelophylaxlessonae					
CHORDATA/AMPHIBIA	Pelophylax ridibundus					
ARTHROPODA/INSECTA	Phalera bucephaloides					
CHORDATA/MAMMALIA	Pipistrellus pipistrellus	Common Pipistrelle;common pipistrelle				
CHORDATA/MAMMALIA	Plecotus auritus	brown big-eared bat;Brown Long-eared Bat				
ARTHROPODAINSECTA	Proserpinus proserpina					
CHORDATA/AMPHIBIA	Pseudepidalea viridis					
CHORDATA/AMPHIBIA	Rana arvalis					
CHORDATAMAMMALIA	Rhinolophus hipposideros	Lesser Horseshoe Bat;lesser horseshoe bat				
CHORDATA/MAMMALIA	Spermophilus citellus citellus					
CHORDATA/AVPHIBIA	Triturus cristatus					

## 4.4 - Physical components

#### 4.4.1 - Climate

The Ramsar site belongs to the moderately warm and dry climate area. For more information on the climate, please refer to Section 6.1.2 Additional material> vi. other published literature.

## 4.4.2 - Geomorphic setting

2 - Geomorphic setting
a) Mnimum 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 C

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.

Lake Velencei and Dinnyés are located in the Császár-stream, and the Kajtor-channel drainage area. Császár-stream comes from the Vértes hills (Csákvár) and flows into the Lake-Velencei at Dinnyés.

The catchment area is 236 km2. Its drainage is the Dinnyés-Kajtor channel (25.5 km long), with 928 km2 catchment area. The area is dry, with water-deficient area. Floods are usual in spring and water levels are low in autumn.

For more information on the geology and geomorphology of the Site please refer to Section 6.1.2. Additional material > vi. other published literature.

## 4.4.3 - Soil

Mneral 🗹

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

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)?

Please provide further information on the soil (optional)

The soils are formed on the pebble-alluvial hills of the Császár-víz. These are mainly bog, marsh and meadow soils.

#### 4.4.4 - Water regime

#### Water permanence

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

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

The hydrological situation of the Bird Reserve can be examined together with the Lake Velence as a whole. From the total surface of 22,5 sqkms the Ramsar site is 4,2 sqkms. The water of Császár-víz reaches the lake here, and the only outflow of the water is also found here, which is the Dinnyés-Kajtor tunnel. In order to control the balance of the lake's water, which has outstanding tourism role, two artificial storage lakes were built along the Császár-víz. During the operation of two decades the two ponds assured the proper level of water, but the dry years caused serious problems. Through additional financial investment and strict water economy the water has stood back to the optimal level.

For more information on the history of the water of Dinnyés-Fertő and geology, please refer to Section 6.1.2 Additional material > vi. other published literature.

The water quality is good (Astacus astacus occures in the stream).

Λ.	15	- 500	dima	nt rea	ima

Sediment regime unknown	]
-------------------------	---

<no data available>

#### 4.4.6 - Water pH

#### Alkaline (pH>7.4)

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

#### 4.4.7 - Water salinity

#### Fresh (<0.5 g/l)

<sup>(Update)</sup> Changes at RIS update No change  Increase  ODecrease  OUnknown O	
Euhaline/Eusaline (30-40 g/l) ☑	
•	
<sup>(Update)</sup> Changes at RIS update No change	
Linknown [	

## 4.4.8 - Dissolved or suspended nutrients in water

Eutrophic 🗹

 $^{ ext{(Update)}}$  Changes at RIS update No change oldot Increase O Decrease O Unknown O

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 i) broadly similar O ii) significantly different  $\odot$  site itself:

Surrounding area has greater urbanisation or development  $\Box$ 

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types  $\hfill\Box$ 

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

The surrounding area is one of the best agricultural areas of the country in its quality, where first of all cereals are produced. North of the area in the valley there are further extensive fishpond systems. The nearest industrial centre is located in Székesfehérvár north of the area 5 km from the site.

## 4.5 - Ecosystem services

#### 4.5.1 - Ecosystem services/benefits

## Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Wetland non-food products	Reeds and fibre	High

#### Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Pollution control and detoxification	Water purification/waste treatment or dilution	Medium
Climate regulation	Local climate regulation/buffering of change	Medium
Hazard reduction	Flood control, flood storage	High

#### Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	Medium
Recreation and tourism	Nature observation and nature-based tourism	Medium
Scientific and educational	Educational activities and opportunities	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium
Scientific and educational	Major scientific study site	Medium

#### Other ecosystem service(s) not included above:

The main purpose on the two territories is to save the natural values. On the area of Lake Velence the only land use is the handling of the reeds, which is required both from agricultural and nature conservational point of view. On the territory of Dinnyés the grazing and mowing of the meadows is also significant besides the handling of reeds. As the territories are the properties of Nature Conservation, any activity is supervised by our guards in order to assure the interests of the ecosystems. Hunting is also supervised by the Nature Coservation Authority. Hunting of waterfowl is not allowed on the areas. Angling and fishing is also prohibited.

#### Hydrological values:

Close to the inflow floating bogs are typical habitats in the Lake-Velencei. Drainage of the lake is Kajtor -channel flowing through Dinnyési Fertő, which is also part of the Ramsar site. Large reedbeds of Lake Velencei, and Dinnyés have a role in water purification.

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

#### 4.5.2 - Social and cultural values

tes a model of wetland wise use, demonstrating the tional knowledge and methods of management and that maintain the ecological character of the wetland	,
as exceptional cultural traditions or records of former $\hfill\Box$ we influenced the ecological character of the wetland	ii) the s civilizations th
Il character of the wetland depends on its interaction with local communities or indigenous peoples	iii) the eco
aterial values such as sacred sites are present and trongly 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

ı ub	lic owners	u III

Category	Within the Ramsar Site	In the surrounding area
National/Federal	<b></b>	<b></b>
government	662	6823

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Cooperative/collective (e.g., farmers cooperative)		<b>&gt;</b>
Other types of private/individual owner(s)	<b>/</b>	<b>2</b>

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

a) within the Ramsar site: state property: 841.1378 ha private property: 108.6050 ha

b) in the surrounding area:

co-operative, state and private property

## 5.1.2 - Management authority

agency or organization responsible for managing the site:

Please list the local office / offices of any Duna-lpoly National Park Directorate

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

Balázs Tóth PhD. (+36306634658)

Postal address:

H-2509 Esztergom Strázsa-hegy Hungary Post address: 1525 Budapest, Pf. 86. Phone: (36-1) 200-4033, 200-4066, 200-4101

Fax: (36-1) 200-1168

E-mail address: DINPI@DINPI.HU

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

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

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		<b>₽</b>	No change	<b>&gt;</b>	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		<b>2</b>	No change	<b>&gt;</b>	No change

Natural system modifications

Hadda o yolom 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

#### Pollution

1 0	Olidion						
	Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
F	Agricultural and forestry effluents					✓	

Please describe any other threats (optional):

## a) Within the Ramsar site:

The most important task is the proper management of the large reeds. The management is organised by the Nature Conservation Authority, therefore it is in harmony with nature conservation interests. The illegal fishing means slight disturbance, these cases are prosecuted on law. The keeping up of grazing is also important from nature conservation point of view. That is how the botanical and zoological values can be saved on special habitats.

On the waters of the territories there is no significant effect of pollution. Animal farms were eliminated in the early 1900s. Industrial facilities are not found on the site.

## b) In the surrounding area:

The illegal fishing means stronger disturbance than on the protected areas. The main problem is the intensity of the tourism and the recreation. Method of water management of Lake Velence often serves recreational purposes.

## 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	Velencei-tó és Dinnyési- Ferto (SPA- covers the whole Ramsar Site) and Velencei-tó (SCI - covers part of the Ramsar Site)		partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Bird Reserve	Lake Velence Bird Reserve		whole
nature conservation area			whole

### 5.2.3 - IUCN protected areas categories (2008)

la Strict Nature Reserve L
Ib Wilderness Area: protected area managed mainly for wilderness protection
Il National Park: protected area managed mainly for ecosystem protection and recreation
Il Natural Monument: protected area managed mainly for conservation of specific natural features
V 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
M Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

## 5.2.4 - Key conservation measures

#### Habitat

Tablat		
Measures	Status	
Habitat manipulation/enhancement	Implemented	
Hydrology management/restoration	Implemented	

#### **Human Activities**

Measures	Status
Regulation/management of recreational activities	Implemented

Other:

The two areas are strictly protected. They are under protection since the middle of the last century. This explains why they became the paradises of ornithologists. Both areas are surrounded with signboards signing their status of protection. The two territories are supervised by rangers. One of them lives just in the neighbourhood of the area. The meadows of the areas are mowed by ancient type of racka sheep. Using chemicals on the area is prohibited. Hunting is only allowed for the interests of the natural values (reducing of invasive and overpopulated species). The waters of the two marshes are balanced by sluices of the Kajtor tunnel.

Liparis loeseli habitat management

Conservation measures proposed but not yet implemented:

The complex management, development aims and sustaining of the Lake Velence Bird Reserve, and Dinnyési Fertő is being prepared and bringing up to date currently.

#### 5.2.5 - Management planning

Is there a site-specific management plan for the site? No

Has a management effectiveness assessment been undertaken for the site?

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

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

The aim of the past was to save the areas from the expanding tourism. Today it remained partly so, but we look towards opportunities in tourism. This means that the main purpose is to create a well operating sustainable tourism. It would mean opportunities for demonstrating nature and natural education. In the meantime this could give financial support for the keeping up of the areas. Those who arrive to spend their holiday at the Lake Velence, would not only have sunbath and swim, but also know about the natural values of the region.

The infrastructure of ecotourism is well prepared, but further facilities could be established in order to support sustainable tourism with wide range. At the present time there is a birdwatching 14 meters high tower in good situation (almost all the reedbed can be watched), and a research house. There is an ornithological house at Agárd near the reedbeds of Lake Velence Bird Reserve.

There is a study trail created in Dinnyési-fertő in 2011.

#### 5.2.6 - Planning for restoration

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

#### 5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented

Bird fauna monitoring by DINPD and Birdlife Hungary

University of West Hungary has been operating waterfowl monitoring here for two decades.

## 6 - Additional material

## 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Dudich, E., Loksa, I., 1975: Állatrendszertan, Tankönyvkiadó Publishing Company

Faragó, S., 1995: Geese in Hungary 1986-1991 Numbers, Migration and Hunting Bags IWRB Publication 36

Haraszthy, L., et al., 1998: Magyarország madárvendégei Natura Publishing Company

Magyarország kistájainak katasztere I., 1990.: MTA Földrajztudományi Kutató Intézet Budapest,

Nagy Sz., 1998: Fontos madárélőhelyek Magyarországon Magyar Madártani és Természetvédelmi Egyesület

Rakonczay, Z., Kaszab, Z., et al., 1989: Vörös Könyv A Magyarországon kipusztult és veszélyeztetett Növény- és Állatfajok. Akadémia Publishing Company

Stefanovits, P., 1992: Talajtan Mezőgazda Publishing Company

Tardy, J. (2007): A magyarországi vadvizek világa - hazánk Ramsari területei Alexandra kiadó

#### 6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

flo ovpiloble>

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

<2 file(s) uploaded>

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

Please provide at least one photograph of the site:



View of the Dinnyési-Fertő from the drinking site ( Mr. Tarrás Fenyvesi ; Duna-Ipoly National Park Directorate, 10-09-2006 )

#### 6.1.4 - Designation letter and related data

Designation letter

<no file available>

Date of Designation 1979-04-11