

# Information Sheet on Ramsar Wetlands (RIS) – 2006 version

Available for download from [http://www.ramsar.org/ris/key\\_ris\\_index.htm](http://www.ramsar.org/ris/key_ris_index.htm).

*Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8<sup>th</sup> Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX.22 of the 9<sup>th</sup> Conference of the Contracting Parties (2005).*

## Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2<sup>nd</sup> edition, as amended by COP9 Resolution IX.1 Annex B). A 3<sup>rd</sup> edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

---

### 1. Name and address of the compiler of this form:

Zoltán Hegyi Ph.D. (zoological supervisor)  
László Csihar (area manager)  
Duna-Ipoly National Park Directorate  
H-1021 Budapest, Hűvösvölgyi út 52., Hungary  
Post address: 1525 Budapest, Pf.: 86.  
Phone: (36-1) 200-4033, 200-4066  
Fax: (36-1) 200-1168  
Email: DINPI@DINPI.HU

FOR OFFICE USE ONLY.

DD MM YY

--	--	--

Designation date

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

Site Reference Number

---

### 2. Date this sheet was completed/updated:

8 June 2006

---

### 3. Country:

Hungary

---

### 4. Name of the Ramsar site:

The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.  
Velence and Dinnyés Nature Conservation Area

---

### 5. Designation of new Ramsar site or update of existing site:

This RIS is for (tick one box only):

- a) Designation of a new Ramsar site ; or  
b) Updated information on an existing Ramsar site

---

### 6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area

The Ramsar site boundary and site area are unchanged:  X

or

**If the site boundary has changed:**

- i) the boundary has been delineated more accurately ; or
- i) the boundary has been extended ; or
- iii) the boundary has been restricted\*\*

and/or

**If the site area has changed:**

- i) the area has been measured more accurately ; or
- ii) the area has been extended ; or
- iii) the area has been reduced\*\*

\*\* Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

**b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:**

Thanks to more favourable water management and some wet years, Dinnyési Fertő marsh has had much better water conditions in recent years.

---

**7. Map of site:**

Refer to Annex III of the *Explanatory Note and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

**a) A map of the site, with clearly delineated boundaries, is included as:**

- i) a hard copy (required for inclusion of site in the Ramsar List): X;
- ii) an electronic format (e.g. a JPEG or ArcView image) X;
- iii) a GIS file providing geo-referenced site boundary vectors and attribute tables .

**b) Describe briefly the type of boundary delineation applied:**

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

Follows the boundaries of the Velence Bird Reserve Nature Conservation Area and the Dinnyés Fertő (Marsh) Nature Conservation Area. Only a small part of Lake Velence is still valuable for ecological reasons (and was so at the time of designation), holding large numbers of waterfowl, while the rest of the lake is a popular resort.

---

**8. Geographical coordinates** (latitude/longitude, in degrees and minutes):

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

N border: 47° 07' S border: 47° 13'

E border 18° 32' W border 18° 35'

Center of the wetland: 47° 41'N 18° 33'E

---

**9. General location:** West Hungary, Fejér county, 6-8 km West of Székesfehérvár

---

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

---

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

92.0-97.0 above sea level

**11. Area:** (in hectares) 965 ha (more precise figure from the latest official announcement of Ramsar sites in Hungary in 2003 – no site extension since designation)

---

**12. General overview of the site:**

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland. Lake Velence is the second biggest lake in the country (26 km<sup>2</sup>). The average depth of water is 1.5 meters, at the deepest point it reaches the depth of 3 meters. In 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 target of recreation. 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. The Dinnyés Fertő is a marsh with large reed- and bulrush beds. Its conditions are strongly influenced by precipitation. Hydrologically it is connected with Lake Velence. It is surrounded with alkaline meadows and reedbeds.

---

**13. Ramsar Criteria:**

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked.

1 •  2 •  3 •  4 •  5 •  6 •  7 •  8 •  9

---

**14. Justification for the application of each Criterion listed in 13 above:**

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

1.: Within the biographic region, this wetland contains rare and unique natural wetland types: permanent saline marsh and permanent freshwater marsh. A few hundred years ago these marshes were much larger than nowadays. Several types of floating bogs (*Thelypteridi-Typhetum angustifoliae* and *Cladietum marisci*) occur in Lake Velencei, which are of outstanding ecological value. Sphagnum willow bogs (*Salici cinerea-Sphagnetum recurvi*) are also important, although its spreading may not be favourable for other types of bogs.

Habitat types listed in Annex I of the EU Habitats Directive:

3150 Natural eutrophic lakes with Magnopotamion or Hydrocharition type vegetation

7140 Transition mires and quaking bogs

7210 Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae*

2.: This wetland supports a critically endangered orchid species. This is the *Liparis loeselii*, which is listed in Annex II of the EU Habitats Directive

Other internationally protected species:

Orchids in the site under international protection :

*Dacylorhiza incarnata* EU – CITES B II

*Liparis loeselii* EU – CITES A; Bern Convention Appendix I; Habitats Directive Annexes II and IV

*Orchis coriophora* EU – CITES B II

*Orchis morio* EU – CITES B II

*Anacamptis pyramidalis* EU – CITES B II

Invertebrates:

*Proserpinus proserpina* (Bern Convention Appendix II, Habitats Directive Annex IV)

Fish species:

*Misgurnus fossilis* (LR/nt IUCN Red list + Habitats Directive Annex II) and the following animal species:

Amphibians:

*Bufo bufo* Appendix III Bern Convention

*Bufo viridis* Appendix II Bern Convention

*Rana esculenta* Appendix III Bern Convention

*Rana lessonae* Appendix III Bern Convention

*Rana arvalis* Appendix II Bern Convention

*Rana ridibunda* Appendix III Bern Convention

*Hyla arborea* Appendix II Bern Convention

*Pelobates fuscus* Appendix II Bern Convention + Annex IV Habitats Directive

*Bombina bombina* LC IUCN Red list + Habitats Directive Annex II

*Triturus cristatus cristatus* or *dobrogicus* (subspecific status unknown) NT IUCN Red list + Habitats Directive Annex II

*Triturus vulgaris* Appendix III Bern Convention

Reptiles:

*Lacerta agilis* Appendix II Bern Convention

*Lacerta viridis* Appendix II Bern Convention

*Emys orbicularis* LR/nt IUCN Red list + Habitats Directive Annex II

*Natrix natrix* (Bern Convention App. III)

*Natrix tessellata* Appendix II Bern Convention

The bird species listed under justification for Criterion 4 are all listed on Annex I of the Birds Directive, except for *Chlidonias leucopterus*, the Podicipediformes and the Anseriformes (apart from *Aythya nyroca* and *Mergus albellus*, which are on Annex I).

Mammals:

*Rhinolophus hipposideros* (Bern Convention App. II, Bonn Convention App. II, Habitats Directive Annexes II and IV)

*Myotis myotis* (Bern Convention App. II, Bonn Convention App. II, Habitats Directive Annexes II and IV)

*Eptesicus serotinus* (Bern Convention App. II, Bonn Convention App. II, Habitats Directive Annex IV)

*Pipistrellus pipistrellus* (Bern Convention App. III, Bonn Convention App. II, Habitats Directive Annex IV)

*Myotis daubentoni* (Bern Convention App. II, Bonn Convention App. II, Habitats Directive Annex IV)

*Nyctalus noctula* (Bern Convention App. II, Bonn Convention App. II, Habitats Directive Annex IV)

*Plecotus auritus* (Bern Convention App. II, Bonn Convention App. II, Habitats Directive Annex IV)

*Mustela eversmanni* Appendix II Bern Convention + Annex II and IV Habitats Directive

*Mustela erminea* Appendix III Bern Convention

*Lutra lutra* NT IUCN Red list + Habitats Directive Annex II

3.: This wetland has an important role for maintaining the biological diversity of the biogeographic region. The floating bog vegetation of this magnitude (6-8 sq km) and such diversity is unique in Hungary. It holds such biogeographically important species as *Cladium mariscus*, *Liparis loeselii*, *Carex pseudocyperus* and *Thelypteris palustris*. *Sphagnum girgensohnii* has relatively recently been discovered in the floating bogs: it is a species of taiga forests and has no other lowland occurrence in Central Europe (only in high mountains). The fungus flora has been explored since 1979. Several species new to Hungary have been found here, the most important being *Mycaena belliae*, which was also new to Central Europe, and was at that time the third known occurrence in the world (since then, it has been found in other

floating bog communities in Hungary). Sphagnum species of the bogs: *Sphagnum teres*, *Sph. squarrosum*, *Sph. recurvum*, *Sph. recurvum* var. *amblyphyllum* és f. *parviflorum*.

Strongly alkaline habitats (*Salicornietum prostratae*, *Lepidio-Campborosmetum annuae*, *Artemisio-Festucetum pseudovinae*, *Puccinellietum limosae*, *Juncetum gerardii*, *Agrostio-Caricetum distantis*) are rare in Transdanubia, and the Dinnyési Fertő is a very good example for these habitats. The flora also has affinities to halophytic vegetation of the seacoasts, and holds the third known Hungarian occurrence of the coastal *Schoenoplectus litoralis*.

Most recently, a spider species new to science has been found in the reedbeds of Lake Velencei, next to the Bird Observatory. This spider has its nearest relative in North America!

4: On the wet areas and meadows 110 (95 protected) species have their nesting places. Number of migrant species is 200. The strictly protected and especially rare species are the following:

Podicipediformes: *Tachybaptus ruficollis* (breeding), *Podiceps nigricollis* (breeding), *Podiceps cristatus* (breeding), *Podiceps grisegena* (breeding since 2004)

Phalacrocoraciformes: *Phalacrocorax pygmeus* (first breeding in 2005)

Ciconiiformes: *Egretta alba* (100 pairs), *Egretta garzetta* (1-5 pairs), *Ciconia nigra* (migrant, 1-5 ind.), *Ciconia ciconia* (feeding, breeds in villages), *Platalea leucorodia* (120 pairs), *Plegadis falcinellus* (rare migrant, one breeding attempt), *Ixobrychus minutus* (11-50 pairs), *Ardeola ralloides* (1-5 pairs), *Ardea purpurea* (11-50 pairs)

Anseriformes: *Anser anser* (breeding, 4-600 on migration peaks), *Anser fabalis* (migrant, 1000-5500 on migration peaks), *Anser albifrons* (migrant, 5 000 – 12 000 on migration peaks), *Anas crecca* (migrant, 200), *Anas platyrhynchos* (breeding, 2 000 on migration), *Anas querquedula* (a few pairs breeding, 40 on migration), *Anas clypeata* (few pairs breeding, 200 on migration), *Aythya ferina* (breeding), *Aythya nyroca* (11-50 pairs, slowly increasing), *Mergus albellus* (migrant, 10-50 on migration), *Netta rufina* (10 pairs, increasing)

Falconiformes: *Haliaeetus albicilla* (visitor, 1-2 ind.), *Circus gallicus* (rare visitor), *Circus aeruginosus* (11-20 pairs), *Circus pygargus* (migrant), *Circus cyaneus* (11-50 ind., wintering), *Aquila heliaca* (rare visitor), *Pandion haliaetus* (migrant, 1-2 ind.), *Falco vespertinus* (rare visitor), *Falco cherrug* (rare visitor), *Falco peregrinus* (migrant, 1-2 ind.)

Rallidae: *Porzana porzana*, *Porzana parva*, *Porzana pusilla* (all breeding)

Charadriiformes: *Himantopus himantopus* (5-10 pairs), *Recurvirostra avosetta* (1-5 pairs), *Numenius arquata* (1-5 pairs, mostly migrant), *Tringa glareola* (migrant, 200 ind.), *Sterna hirundo* (5-10 pairs), *Chlidonias hybridus* (50-60 pairs), *Chlidonias niger* (migrant), *Chlidonias leucopterus* (migrant), *Philomachus pugnax* (migrant, 1000-5 000 ind.),

Passeriformes: *Luscinia svecica* (20-50 pairs), *Acrocephalus melanopogon* (10-50 pairs), *Lanius minor* (1-2 pairs)

6.: *Anser anser* 400-600 (threshold for Central European population: 250)

*Anser albifrons* 5000-12 000 (threshold for “Pannonic” population: 250)

**15. Biogeography** (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

**a) biogeographic region:** Pannonic

**b) biogeographic regionalisation scheme** (include reference citation): European Commission DG

Environment webpage

Bern Convention/ EU Habitats Directive

**16. Physical features of the site:**

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Geology and Geomorphology:

The formation of the territory is closely connected to the formation of its surrounding area the Mezőföld. The pannon desk found here raised out from its surroundings in the Pleistocene. During this progress, the desk broke into several pieces. The Lake Velence did not exist that time. The formation of the pool of the lake went through in the beginning of the Holocene. Then along two land cracks perpendicular to each other, the area sanked down. The lake pool became the base of the erosion of the Császár-víz, and started to gain the water of the surroundig areas. The largest expansion of the lake was approximately twice large as now, as it involved the Nádas Lake of Dinnyés between Kisfalud and Seregélyes. Having reached its present form, the water started to flow towards southeast, according to the direction of the crack system. In the new Holocene the level of the water decreased, and eutrophication started in the Nádas Lake, which is still in progress.

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 sq km the Ramsar site is 4.2 sq km. 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 sever water economy the water is stood back to the optimal level.

Soil type:

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

Climate:

The Ramsar site belongs to the moderately warm and dry climate area.

---

**17. Physical features of the catchment area:**

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

Geology and Geomorphology:

See 14. point.

Hydrology:

The catchment area is 236 km<sup>2</sup>. Its drainage is the Dinnyés-Kajtor channel (25.5 km long), with 928 km<sup>2</sup> catchment area. The area is dry, with water-deficient area. Floods are usual in spring and low water levels in autumn.

Climate:

The catchment area is characterized by 2000 sunny hours. The annual mean temperature is 9.8-9.9 CO. The annual precipitation is 580-600 mm (330-340 mm within the vegetation period). In the winter term, the number of days of snow cover is 30-32, with a maximum of 20 cm deep snow cover. The prevailing wind direction is northwestern. The average wind speed is 2.5-3.0 m/s. The extensive reed-cover prevents the development of strong waving, even during storms.

---

**18. Hydrological values:**

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

In order to introduce the history of the water of Dinnyés-Fertő we have to look back on the history of its geology. The water coming down from the surrounding upper laying territories, flew through the territory of Velence and Dinnyés, which form together an entire unit. Thanks to the flat conditions of the area the alluvial of the Császár-víz was set down here. Therefore the water of Dinnyés eutrophicated and held down the water of Velence. Because of the constant floods of Lake Velence, there were ideas of total draining of the lake in the end of the 18th century. The first significant intervention was realised with the building of the Dinnyés-Kajtori tunnel. This tunnel solved the problem of water surplus of Lake Velence, but did nothing about the opportunity of outflow at Dinnyés. The situation of today formed with the digging of a ditch system in the territory of Dinnyés between 1927 and 1930.

## 19. Wetland Types

### a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the *Explanatory Notes & Guidelines*.

**Marine/coastal:** A • B • C • D • E • F • G • H • I • J • K • Zk(a)

**Inland:** L • M • N • O • P • Q • R • Sp • Ss • Tp Ts • U • Va •  
Vt • W • Xf • Xp • Y • Zg • Zk(b)

**Human-made:** 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c)

### b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

Tp, O, Ts, 1; 4; 9; M, Sp.

## 20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

The ecological characters of the two territories are quite different. The territory of Lake Velence means mainly water surfaces, it involves shores in irrelevant parts. Its common plant societies are the reeds (*Phragmites australis*), and the floating bogs which are of outstanding ecological value. On the area of 100-120 hectares there are several types of floating bogs.

At Dinnyési-Fertő the terrestrial communities play 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 area 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. The introduced Robinia pseudo-acacia woods are in bad condition.

---

## 21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Endangered, biogeographically important or rare species are the following ones:

### **Thelypteridaceae**

Thelypteris palustris

### Ranunculaceae

Thalictrum lucidum

### Lentibulariaceae

Utricularia vulgaris

### Orchidaceae

Dacylorhiza incarnata EU – CITES B II

Liparis loeselii EU – CITES A; Bern Convention Appendix I; Habitats Directive Annexes II and IV

Orchis coriophora EU – CITES B II

Orchis morio EU – CITES B II

Orchis laxiflora ssp. palustris

Anacamptis pyramidalis EU – CITES B II

### Cyperaceae

Carex elata

Carex pseudocyperus

---

## 22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

The fauna of the area is mainly similar to the fauna of the wider surrounding, the Mezőföld. In the meantime during the researches there were Ice 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.

*Endangered invertebrates* are the following:

### Odonata - Zygoptera:

Mantidea

Mantis religiosa

Caelifera

Acrida hungarica

### Coleoptera:

Calosoma sycophanta, Carabus coriaceus, Carabus cancellatus, Carabus hortensis, Carabus ullrichi,

### Lepidoptera:

Coleophora hungariae, Inachis io, Iphiclides podalirius, Papilio machaon, Phalera bucephaloides, Chrysoptera c-aureum, Panchrysia deaurata, Acherontia atropos, Proserpinus proserpina (Bern Convention Appendix II, Habitats Directive Annex IV)

### Endangered vertebrates:

### **Pisces :**

Cypriniformes :

Misgurnus fossilis, Tinca tinca

**Amphibia :**

Anura:

Bufo bufo, Bufo viridis, Bombina bombina, Rana esculenta, Rana lessonae, Rana arvalis, Rana ridibunda, Pelobates fuscus, Hyla arborea

Caudata

Triturus vulgaris, Triturus cristatus

**Reptilia :**

Saura:

Lacerta agilis, Lacerta viridis,

Serpentes:

Natrix natrix natrix, Natrix tessellata,

Testudines -:

Emys orbicularis

**Aves :**

On the wet areas and meadows 110 (95 protected) species breed. For the list of strictly protected and especially rare species, see justification for Criterion 4 under point 14.

**Mammalia:**

Chiroptera:

Rhinolophus hipposideros, Myotis myotis, Eptesicus serotinus, Pipistrellus pipistrellus, Myotis daubentoni, Nyctalus noctula, Pelecotus auritus

Rodentia:Citellus citellus

Carnivora:

Mustella eversmannii, Mustela erminea, Mustela nivalis, Lutra lutra

---

**23. Social and cultural values:**

**a)** Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

**b)** Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? No. Fish production is semi-intensive. The 1848 Pákozd battle monument is visible from the site, but lies outside (several kilometers away from the boundary).

If Yes, tick the box  and describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:

- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

---

**24. Land tenure/ownership:**

(a) within the Ramsar site:

state property:	841.1378 ha
private property:	108.6050 ha

(b) in the surrounding area:

co-operative, state and private property

---

**25. Current land (including water) use:**

The main purpose on the two territories is to save the natural values. On the area of Lake Velence the only land use is reed management, 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 reed management. As the territories are the properties of state nature conservation, any activity is supervised by rangers in order to assure the interests of the ecosystems. Hunting is also supervised by the Nature Conservation Authority. Hunting of waterfowl is not allowed. Angling and fishing is also prohibited. Wild boars are hunted as the oversize population poses a threat to ground-nesting birds and sensitive habitats. The meadows by the Dinnyés Fertő are grazed by sheep, and since 2004, also by Hungarian Grey cattle, which is better for maintaining marshy vegetation.

(b) in the surroundings/catchment:: 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 far from the site.

---

**26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:**

(a) within the Ramsar site:

The most important task is the proper reed management. It is organised by the National Park Directorate, therefore, it is professionally correct. The illegal fishing means slight disturbance, these cases are prosecuted on law.

The keeping up of grazing is also important from nature conservational point of view. That is how those botanical and zoological values can be saved on special habitats.

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

Water level has stabilised in recent years, thanks to efforts to control water levels (sluices of the Kajtori canal) and especially some outstandingly wet years (1999, 2000, 2006).

(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 the interests of recreation.

---

**27. Conservation measures taken:**

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

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

The two areas are strictly protected. They are under protection since 1966.

---

**b)** If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ; Ib ; II ; III ; IV ; V ; VI

**c)** Does an officially approved management plan exist; and is it being implemented?:

No officially approved management plan exists as yet.

**d)** Describe any other current management practices: The meadows of the areas are mowed by ancient type of racka sheep, and since 2004, also by Hungarian Grey cattle, which is better for maintaining marshy vegetation. Using chemicals on the area is prohibited. Hunting is only allowed for the interests of the natural values (reducing of invaders and overpopulated species). The waters of the two marshes are balanced by sluices of the Kajtor canal (sluice built in 1974).

---

**28. Conservation measures proposed but not yet implemented:**

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

The complex management, development aims and sustenance of the Lake Velence Bird Reserve, and Dinnyési Fertő are being prepared and brought up to date currently.

---

**29. Current scientific research and facilities:**

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

Botany: the National Biodiversity Monitoring System involves the total research of the area of Velence.

Zoology: Department of Zoology of the Museum for Natural Sciences takes measures of breeding birds of reeds.

Waterfowl migration research for almost two decades.

---

**30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:**

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

Several school groups visit the area annually. The background of high level education has to be created.

---

**31. Current recreation and tourism:**

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

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 stood up in order to enable the formation of a 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.

---

**32. Jurisdiction:**

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

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

---

**33. Management authority:**

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Duna-Ipoly National Park Directorate  
H-1021 Budapest, Hűvösvölgyi u. 52., Hungary  
Post address: 1525 Budapest, Pf. 86.  
Phone: (36-1) 200-4033, 200-4066, 200-4101  
Fax: (36-1) 200-1168  
Email: DINPI@DINPI.HU  
gaborik@ddnp.kvvm.hu

---

### 34. Bibliographical references:

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

- 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
  - Rakoncay, 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
- 

Please return to: **Ramsar Convention Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**  
Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • e-mail: [ramsar@ramsar.org](mailto:ramsar@ramsar.org)