Information Sheet on Ramsar Wetlands

Categories Approved by Recommendation 4.7 of the Conference of the Contracting Parties.

NOTE: It is important that you read the accompanying Explanatory Note and Guidelines document before completing this form.

1. Date this sheet was completed : September, 1998.	For office use only. DD MM YY		
2. Country : Hungary	Designation date	Site Reference Number	
3. Name of wetland: Ipoly Valley			
 Geographical coordinates: N border: 48 E border 19° Approximate Center of the wetland (at Ip 	3° 04' 42 ¹ ⁄ ₂ S border 15' 30 ¹ ⁄ ₂ W border olyvece) : 48° 03' 5 19° 07' 22 ¹ ⁄ ₂	: 48° 02' 49½ 18° 58' 20½ 5½	
5. Altitude: (avarage and/or max. & min.): 125,7-145,0) m above sea level	6. Area: (in hectares) 2227,6 ha	

7. Overview: (general summery, in two or three sentences, of the wetland's principal characteristics) This section of the Ipoly valley possesses remarkable values of a slightly modified wetland, which is connected to a partly regulated small river. This region is significant from hydrological, geomorphological, botanical, zoological and cultural point of view. The variety of wetland habitats situated here maintains reach and diversified flora and fauna.

8. Wetland Type (please circle the applicable codes for wetland types as listed in Annex I of the Explanatory Note and Guidelines document.)

marine-coastal: $A \cdot B \cdot C \cdot D \cdot E \cdot F \cdot G \cdot H \cdot I \cdot J \cdot K$ inland: $L \cdot M \cdot N \cdot O \cdot P \cdot Q \cdot R \cdot Sp \cdot Ss \cdot Tp \cdot Ts$ $\cdot U \cdot Va \cdot Vt \cdot W \cdot Xf \cdot Xp \cdot Y \cdot Zg \cdot Zk$ man-made: $1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8 \cdot 9$

Please now rank these wetland types by listing them from the most to the least dominant: Ts, Tp, M, Xp, Xf

9. Ramsar Criteria: (please circle the applicable criteria; see point 12, next page.)

1a • 1b •
$$(1c) \cdot (1d) | (2a) \cdot (2b) \cdot (2c) \cdot 2d | (3a) \cdot 3b \cdot 3c | (4a) \cdot 4b$$

Please specify the most significant criterion applicable to the site:

(Please refer to the Explanatory Note and Guidelines document for information regarding desirable map traits).

11. Name and address of the compiler of this form:

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12. Justification of the criteria selected under point 9, on previous page.

- 1c: Valley of Ipoly is linked up with Poiplie Ramsar Site in the Slovak Republic. This complex plays substantial hydrological, biological and ecological role in the agency of Ipoly river catchment. Ipoly is a border river between Slovak Republic and Hungary.
- 1d: This area is exceptionally good example for preserved wetland habitats in the valley of Ipoly river and in the Carpathian basin. This wetland is important for its quality in preserving high diversity of plant and animal communities in the biogeographical region.
- 2a: This wetland complex supports the survival of endangered and vulnerable animal and plant species.
- 2b: Valley of Ipoly has a special value in maintaining ecological diversity of this region as similar habitats are critically damaged by human influence in the Carpathian basin.
- 2c, 3a: Floodplain of the river Ipoly is a valuable habitat for the migratory birds, especially for

waterfowl during spring time. Several times more than 30 000 waterfowls were in the area in early spring. These migratory birds take their rest here and feed in marshes and wet meadows.

4a. High proportion of endangered fish species can be found in this wetland. In the past this area was an important spawning ground for lot of species but unfortunately it has changed for today. The river supplies the local inhabitants and livestock as well with potable water.

13. General location:

Northern Hungary, Nógrád county, 12-22 km West of Balassagyarmat

14. Physical features:

Geology:

The valley of Ipoly is an alluvial plain. Its formation had started in Pleistocene and gained its present-day form during Holocene. The uppermost layers of this alluvial plain consist of clay, silt and fine or large sand. The bed of this plain is formed from various tertiary sediments (e.g. volcanic ash, limestone and gravel which are sediments of tertiary seas, etc.). <u>Geomorphology:</u>

The Ipoly floodplain is a long, flat and not so wide valley with few depressions. In these depressions there are oxbow lakes as well as shrub and alder bogs. There are small sand hills

shaped by erosion and deflation in the eastern part of the proposed site. Slope inclination is rather small in the valley. In early spring there are typical long-lasting floods that are the main source of water, especially for depressions.

Origins:

Natural and artificial effects together are responsible for the present day form of the landscape. Regulation of the river (since 1975) has caused most of the damage in the wetland habitats. The regulation works has stopped by now in both countries. <u>Hydrology:</u>

The whole catchment area of the Ipoly river covers 5108 km² out of which 1424 km² lays in Hungary. During the last centuries water balance was optimal for the bogs, marshes and wet meadows at both side of the river. After the regulation of Ipoly and its branches the depth of the riverbed and the speed of the water had increased. During the low discharges between July and October the water absorbency power is so high that it effects areas which are some kilometers far from the river. The groundwater level and the quantity of floods has decreased after regulation works done. Floods are during February and March every year as well as sometimes in early fall.

Water quality:

The water is very polluted in terms of microbiology and sand grains but clear in terms of chemicals.

	at Hont	at Ipolyvece	Drégelypalánk- Zaba	Kifli lake	Ipolyszög alderbog
PH	8,8	7,9	7,8	8,1	7,2
solved oxygen (mg/dm3)	8,8	8	6,9	8,8	2
Conductivity (µS/cm)	601	652	445	681	544
hardness (mmol/dm3)	-	5,4	3	5,4	2,2

Soil type:

The common types are alluvial soils, sandy soils with low humic part, multilevel sandy soils along with brown forest soils and loam soils.

Climate:

The Valley of Ipoly belongs to the moderately warm and dry climate area. The annual solar radiation is 104-106 Kcal/cm². Average air temperature is 9,0-9,5 °C. Annual rainfall varies between 550-600 mm. Number of frosty days: 100-110. Number of heat days: 10-15.

15. Hydrological values:

The floodplain of Ipoly and the river itself have significant role in balancing groundwater level of this region. Many meanders and annual floods of the river, its tributary creeks as well as sediment layers of its alluvial plain besides yearly precipitation play main role in the recharge of groundwater. Discharge of groundwater in the region besides natural ways is mainly by the use of drinking water management (catchment). This hydrological system (mainly by chain of floodplains along the river) can minimize the risk of flash floods and reduce flood damage as well in lower sections of Ipoly. (There are few manmade embankments for this reason, too.)

Wetland vegetation living on the floodplain binds large amount of sediments (mainly silts) during floods slowing its downstream movement. In spite of the regulation of Ipoly, riverbank

erosion is still at work in reshaping the landscape. This wetland acts as natural water purifiers enhancing the quality of groundwater supplies, too.

16. Ecological values:

M

Ipoly river is the basis of the proposed Ramsar site because of its role of sustaining this wetland habitat. This part of Ipoly is a small, slightly regulated river section, which still posses the quality of a freely meandering river. Here the regular floodplain process is still at work. On the riverbank the dominant plant communities are willow gallery *forest (Salicetum albae-fragilis)* riparian bush willows (*Salicetum purureae*) and pioneer sandbank communities. Characteristic species: *Salix alba, Salix purpurea, Salix fragilis, Rorippa amphibia*.

<u>Tp</u>

There are six main marsh areas (namely: Honti marsh, part of Alsó-rét, Zabai-rét, Papárkidûlõ, Nagy-tó and Vörös-haraszt) that are water-logged most of the growing season. There are six oxbow lakes in the region more or less with permanent water. Dominant plant communities here are reedbed communities (e.g. *Scirpo-Phragmitetum, Glycerietum maximae*, etc.) and floating or submerged reed-grass communities (e.g. *Lemnetum minoris, etc.*) Characteristic species: *Typha latifolia, Phragmites communis, Gliceria maxima, Lemna minor, Lemna triscula*

<u>Ts</u>

Chain of seasonally flooded meadows alongside Ipoly is a basic element in forming this wetland (the larger ones are Alsó-rét, Ortásrét and Pakoca.). They are partly grazed and partly mowed. Sedge marshes occur at the outskirts of marsh areas. They are partly grazed. Dominant plant communities here are wet alluvial meadow (*Alupecuretum pratensis*) and tall-sedge communities (e.g. *Caricetum acutiformis-ripariae, Caricetum gracilis*, etc.) Characteristic species: *Alopecurus pratensis*, *Carex gracilis, Carex acutiformis, Poa pratensis*.

<u>Xf</u>

There are scattered, smaller patches of seasonally flooded forests throughout the area. This type of vegetation was more widely spread in the past and the remands of them are now lone willow trees on wet meadows. Dominant plant community here is willow gallery forest (*Salicetum albae-fragilis*). Characteric species: *Salix alba, Salix fragilis*.

<u>Xp</u>

Alder and willow bogs occur in permanently water-logged depressions. The largest forested bog is placed near the little settlement of Ipolyszög at the eastern border of the proposed site. Endangered and protected species are most abundant in this type of wetland here. So far these area (there are four of them) are not used heavily for commercial purpose. Dominant plant communities are alder bog (*Dryopteridi-Alnetum*) and willow bog (*Calamagrostio-Salicetum cinereae*). Characteristic species: *Alnus glutinosa, Salix cinerea, Carex elata*. Two mountains (Börzsöny and Cserhát) lay with still existing native vegetation at the south border of the proposed site. Native plant communities here are English-Turkey oak forest (*Quercetum petreaea-cerris*), Hornbeam-oak forest (*Querco petreaea – Carpinetum*), and different types of beech forest (*Melitti – Fagetum, Aconito – Fagetum*). Other parts of the adjacent area are under heavy human influences (e.g. development areas, agricultural fields, settlements, etc.) besides the Slovak Ramsar Site of Poiplie. Non-native vegetation forms

present in the area are plantations (Poplar, Robinia), corn and wheat fields, weed communities (alongside roads, in dried out marsh areas, at illegal sand pits and abandoned gravel pits, on parts of over grazed meadows) and semi-natural vegetation degraded by invasive plant species (native and not native alike). Introduced species are *Acer negundo* (i), *Aster spp.* (i), *Solidago spp.*(i), *Ailanthus altissima* (i) *Robinia pseudo-acacia* (i), *Asclepias syriaca* (i), *Echinocystis lobatus* (i), *Reynoutria japonica* (i), *Helianthus spp.* varieties of *Populus sp.*, and *Ambrosia elatior* (i) ("i" means invasive).

17. Noteworthy flora:

Biogeographically important communities are alder bog (Dryopteridi- Alnetum), willow bog (Calamagrostio - Salicetum cinereae), sedge fen (Caricetum elatae) and floating waterlily community (Nymphaeetum albo-lutae). These plant communities are very vulnerable and endangered throughout Hungary. Endangered, biogeografically important or rare species are the following ones: Thelypteridaceae Thelipteris palustris PS - rS Aspidiaceae Dryopteris carthusiana PS - eV Ranunculaceae Clematis integrifolia EV, PS - eV Pulsatilla pratensis ssp. nigricans PS -eV, bS EV, PS - eVV Ranunculus lingua Thalictrum lucidum -rS, bS Nymphaceae Nymphea alba PS - eV, bS Nymphea lutea -rS, bSGrossulariaceae Ribes nigrum EE, PS - eVV, bS Fabaceae (Leguminosae) Lathvrus palustris PS - eV Trifolium fragiferum -rS, bSUmbelliferae -rS, bSEringium planum Rubiaceae Galium boreale -rS, bSGalium rubioides - rS Scrophulariaceae Gratiola officinalis - rS Lentibulariaceae Utricularia vulgaris - rS Campanulaceae Campanula patula - eV, bS - eV, bS Jasione montana Compositae Senecio paludosus PS- eVV Primulaceae Hottonia palustris EV, PS - eE, bS Urticaceae

Urtica kioviensis EVV, PS - eE, bS Liliaceae Allium angulosum - rS Ornithogallum orthophyllum - bS Amarillydaceae Leucojum aestivum EV, PS - eVV Iridaceae Iris variegata PS - rS Orchidaceae Dacylorhiza incarnata EV, PS - eVV Orchis laxiflora ssp. palustris EV, PS - eVV Cyperaceae Carex elata - eV Carex elongata - eVV, bS Carex pseudocyperus - rS Carex vricaria - rS Poaceae Corynephorus canescens - bS Festuca rubra - bS Festuca wagneri EV - bS Koleria javorkae EVV, PS - eVV, bS EVV, PS - EVV Koleria majoriflora Stipa pennata PS - eV

<u>Legend:</u> <u>Status in Hungary</u> EE - critically endangered EVV - very vulnerable EV - vulnerable PS - protected species

Status in the Ipoly region eE - critically endangered eVV - very vulnerable eV - vulnerable rS - rare species bS - biogeographically important species

18. Noteworthy fauna:

The fauna is an interesting composition of Carpathian montane species, Mediterranean species and Pannonian species. There are several endangered animal species which have survived in the region. Zoologists appreciate very well the unique features of the area. *Endangered invertebrates* are the following:

Odonata - Zygoptera:

Lestes virens, Onychogomphus forcipatus, Aeshna mixta, Stylurus flavipes, Coenarigon pulea, *Gomphus flavipes, G. vulgatissimus (rare)*.

Coleoptera:

Mordellochroa milleri, *Dyschirius tristis (only 5 specimen have been noticed in Hungary),* Monanychus punctumalbum, Dytiscus latissimus, Dorcus parellelopipedus, Scarabeus affinis, Carabius coriaceus, Calosoma auropunctatum, *Rhantus consputus, R. latitans (rare)*

Lepidoptera:

Dioszeghyana schmidtii (endemic species), Marmo maura, Arythrura muscullus,

<u>Hymenoptera - Symphyta:</u> *Hedychridium roseum, Priocnamis mimula (endangered species listed in the Red Book of Council of Europe),* Philanthus triangulum

Crustacea:

There are 20 Cladocera and 13 Copepoda species in the site. <u>Crustacea -, Copepoda:</u> <u>Cyclops insignis (this is the second data of presence of this species in Hungary)</u> <u>Crustacea - Cladocera:</u> <u>Ceriodaphnia megops, Simocephalus serrulatus (rare endangered species)</u>

Endangered vertebrates: Cyclostomata:

Eudontomyzon vladykovi

<u>Pisces -, Teleostei -, Clupeiformes:</u> Umbra krameri, Thymallus thymallus <u>Teleostei -,Cypriniformes :</u> Noemacheilus barbatulus, Sabanejewia aurata, Misgurnus fossilis, Cobitis taenia, Cottus gobio, Gobia uranoscopus, G. albipinnatus, G. kessleri <u>Teleostei -, Perciformes:</u> Gymnocephalus baloni, G. schraetzer, Aspro zingel, A. streber, Cottus poecilopus

<u>Amphibia -, Amura:</u> Bufo bufo, Bufo viridis, Bombina bombina, Rana esculenta, R. dalmatica, R.arvalis, Pelobates fuscus, Hyla arborea

<u>Reptilia - Squamata -Lacertilia:</u> Lacerta agilis, Lacerta viridis, Angius fragilis <u>Squamata - Ophidia:</u> Natrix natrix, Coronella autricata, Natrix tesselata, Elaphe longissima <u>Chelonia :</u> Emys orbicularis

Aves:

Number of breeding species are 118. The strictly protected species are the following:

<u>Carinatae -, Ciconiiformes -:</u> Ciconia ciconia <u>Carinatae -, Strigiformes:</u> Tyto alba, Athene noctua, Asio flammeus <u>Carinatae -, Coraciiformes:</u> Merops apiaster

Number of migrating species are 60. The strictly protected endangered species are: Carinatae -, Pelecaniformes: Phalacrocorax pygmaeus Carinatae -, Ciconiiformes: Ardeola ralloides, Egretta alba, Pegadis falcinellus, Ciconia nigra Carinatae -, Anseriformes: Anser erythropus, Aythia niroca Carinatae -, Falconiformes: Milvus milvus, Circaetus gallicus, Aquilla pomarina, Pandion haliaetus, Aquilla heliaca, Falco cherrug, Falco peregrinus Carinatae -, Strigiformes: Bubo bubo Carinatae -, Charadriiformes: Tringa stagnatilis Carinatae -, Passeriformes: Luscinia luscinia

Mammalia -, Placentalia -, Chiroptera :

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

<u>Placentalia -, Carnivora:</u> Martes martes, Felis sylvestris, Mustela erminea, Mustela nivalis, Lutra lutra

19. Social and cultural values:

The Ipoly-region is part of an area of Slovak-Hungarian ethnic border where the two nations have been living together for centuries. Therefore the area has a unique ethnographical and cultural character. A prehistoric settlement, Csadó-tanya from the early historical time of the region was found near Drégelypalánk. Economical basis of the local population was provided by floodplain agriculture and many different ways of traditional fishing in the past. The remnants of that still can be found and may serve as a good possibility or opportunity for extensive, sustainable land use. The wine-producing capacity and traditions of the area is represented by many wine-cellars carved in the neighboring hills alongside the river. Börzsöny mountains laying south from Ipoly-valley are a popular tourist site. Together with the Pilis mountains and the Danube-bend it serves as the main recreational area of the Budapest-region. The Ipoly-valley supplements this function as a potential oeco-tourism area. (This last one is still not well exploited so far.)

20. Land tenure/ownership of: (a) site (b) surrounding area

a) Site :

In April of 1991 the Hungarian Legislation passed an order [28/1991 (IV.30.)] about certain international environmental protection polices concerning the Danube river. This order

contained the idea of the designation of Duna-Ipoly National Park. The NP came into existence in November of 1997. At the end of this very month 95% of the land (of the proposed Ramsar site) already belonged to the NP. Now it is under nature conservation management. The buying up of the remaining meadows are still in progress. b) Surrounding area :

The structure of land tenure in the surrounding area is very diverse including private plaughlands, meadows and pastures. Bordering the indicated territory there are inner-city areas along with outskirts of settlements and private or state forests on the Hungarian side of Ipoly. From the North much of the area is adjacent to the Slovak Ramsar Site, Poiplie.

21. Current land use: (a) site (b) surroundings/catchment

a) Site :

On much of the area there is (or planned to be) extensive cattle-breeding. Some meadows are utilized only by pasturage, others by hay-making or both. There are certain strictly protected territories where the presence of endangered associations do not allow us to make use of the land (as in approx. one tenth of the meadows). In 1998 the hay-making fields have been cultivated by paid mowers or by our staff.

Through the Angler Association the population of the neighboring settlements is allowed to go fishing in Ipoly river and in its backwaters. With a suitable regulation this is not a peril to the wetland habitats. The forestry plans have already adopted nature conservation norms, so new plantations would use only native species. The drinking water supply of many neighboring settlements is provided by wells situated in the area. This fact gives a special emphasis on the protection of this wetland territory. Land use through hunting is fully subordinated to the measurements and needs of nature conservation.

Population of neighboring settlements:

Balassagyarmat (+Ipolyszög)	18072	
Drégelypalánk		1542
Hont	634	
Ipolyvece	858	
Dejtár	1473	
Patak	1016	

b) Surrounding / catchment area :

Most of the surrounding area is agricultural land (plough lands, woods, pasture) and innercity territory. There are a few factors that may endanger the wetlands, like manure or sewage handling.

The degree of drinking water exploitation is not so high as to change the level of the groundwater system dramatically. The quality of the soil of the surrounding area is weak but overdosing with artificial fertilizer is not a potential danger (mainly because of its high expenses).

22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects: (a) at the site (b) around the site The aim of the regulations done in the Ipoly-river region during the last century (cutting off meanders, building dikes etc.) was the following:

- flood prevention of neighboring settlements

- win new agricultural land and free them from floods

- gain constant sprinkling-water for agricultural use

- make the conditions of outflow and the ice drift better

As a result of the regulations the outflow of the river has increased, the level of the ground water lowered and the degree of the floods decreased. These factors changed the water management of the valley. The wells along the bank of the river caused some more decrease in the groundwater level. The degradation of the region might speed up.

Communal sewage pollution might cause problems in the groundwater system, industrial sewage pollution does not occur at the Hungarian side.

At the present time overgrazing causes problems in the condition of pastures. Through nature conservation management hopefully this will change by using more suitable technologies and/or species.

The present economical recession suppressed the usage of artificial fertilizers and other chemicals. Thus the negative effects of these are not burdening the region nowadays. Clearing the fields by fire might cause huge hurts in native vegetation and fauna (now it can be done only with NP permission).

In the vicinity of the settlements some small sandpits cause danger to the area.

In some ways the planned highway (No.2) may negatively effect the area.

Adventive, aggressive weeds that cause danger to the native associations are:

- Ailantus altissima
- Ambrosia elatior
- Asclepias syriaca
- Aster spp.
- Erigeron canadensis
- Robinia pseudo-acacia
- Solidago spp.

23. Conservation measures taken:

The entire proposed area is part of the Duna-Ipoly National Park. The date of the foundation of the Park is 28.11.97. (by an Order of the minister of EPLD). The total territory of the National Park is 600 314,3 ha.

Before the National Park was declared much of the proposed area had been already protected by local orders. Its official management plan has not yet been compiled. The hunting, pasturage, mowing and the development of the forestry management plans in the proposed Ramsar Site is done with nature conservation priority. Cattle breeding means a limited number of employment for local people.

24. Conservation measures proposed but not yet implemented:

Compiling the missing management plans for the whole territory of the National Park. Establishment of a Hungarian-Slovakian bilateral National Park. The joint Ramsar Site project is a first step towards this goal.

25. Current scientific research and facilities:

Botanical: Research Institute of Ecology and Botanical of the Hungarian Academy of Science in 1992-94

Zoology: Department of Zoology of the Museum for Natural Sciences in 1992-94

Management plans for forested areas: University of Forestry, Sopron in 1993 Inserting the area into the Hungarian monitoring system has not yet been completed.

26. Current conservation education:

The frog refugee lakes along highway No.2 at Hont region give place for nature conservation education programs. Local students take part in the rescue of amphibians arranged twice a year.

A sort of ancient Hungarian cattle is planned to be kept in the area that can also serve as educational activity besides the conservation value of the genetic material.

An educational center is planned to be developed at Madách farm bought by Ipoly Unió (nongovernmental organization).

27. Current recreation and tourism:

At the present time the area is not utilized by tourism. We are planning a cycling road through the area (from Hont to Balassagyarmat). The route takes on the dikes sometimes going round the protected spots. With the cycling road and the establishing of bird observation places we are trying to indicate the development of a sustainable ecoturism.

28. Jurisdiction:

State:
Ministry of Interior
Ministry for Environment
Ministry of Agriculture and Rural Development
Ministry of transport, Telecommunication and Water Management
Regional:
Dejtár Water Management Ltd., West Nógrád
2nd Department of the Directorate of Water Management of the Middle Basin of Danube
Local:
Municipal Office at Patak, Dejtár, Ipolyvece, Drégelypalánk and Hont
Town Office at Balassagyarmat

29. Management authority:

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

30. Bibliographical references:

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szitakötő- faunájáról (Insecta: Odonata)

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(Orthoptera),

Szitakötők (Odonata) és Recésszárnyúak (Neuropteroidea)

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Az Ipoly-Vidék Természeti Képe 2.

A Duna-Ipoly Nemzeti Park

-Kiss, T., 1998: Szakdolgozat

A vadgazdálkodás és a természetvédelem kapcsolata az Ipoly-folyó völgyében.

-Kozma, P., 1998: Szakdolgozat

Az Ipolyszögi Égerláp rehabilitációja a Duna-Ipoly Nemzeti Park területén.

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