

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/updated:

December, 1997

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Designation date

Site Reference Number

2. Country: Slovak Republic

3. Name of wetland: Poiplic

4. Geographical coordinates: N border 48° 4' 50", S border 48° 3' 45"

E border 19° 4' 34", W border 18° 58' 24"

5. Altitude: (average and/or max. & min.) 124 - 132 m a. s. l.

6. Area: (in hectares) 410.8658

7. Overview: (general summary, in two or three sentences, of the wetland's principal characteristics)

The territory comprises the last large wetland ecosystem in the Ipeľ river basin. A remarkable natural values and phenomena significant from hydrological, geomorphological, botanical and zoological point of view are concentrated there. Ipeľ River is an important left-side tributary of Danube River and drains the southern and southwestern part of central Slovakia.

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

marine-coastal: A . B . C . D . E . F . G . H . I . J . K

inland: L . (M) . N . O . P . Q . R . Sp . Ss . (Tp) . (Ts)
U . Va . Vt . W . (Xf) . Xp . Y . Zg . Zk

man-made: 1 . 2 . (3) (4) . 5 . 6 . (7) . 8 . (9)

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

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

1a . 1b . (1c) . (1d) | 2a . (2b) . (2c) . 2d | 3a . 3b . 3c | 4a . 4b

Please specify the most significant criterion applicable to the site: _____

10. Map of site included ? Please tick *yes* -or- *no*

(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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Please provide additional information on each of the following categories by attaching extra pages (please limit extra pages to no more than 10):

12. Justification of the criteria selected under point 9, on previous page (please refer to Annex II in the Explanatory Note and Guidelines document)

- 1(c): the wetland is linked with the extensive wetland ecosystems in Hungary. The whole complex plays an important hydrological, biological and ecological role in the natural functioning of the Ipeľ river catchment.
- 1(d): it is an unique complex of well-preserved wetland habitats along the middle and lower part of the river floodplain within the Pannonian biogeographical region. Its uniqueness rests in appreciably good status and high diversity of plant and animal communities of the biogeographical region considered.
- 2(b): high ecological diversity and naturalness of the wetland is the vital factor ensuring the survival of a number of plants and animals of wetland habitats, many of them being threatened and/or rare.
- 2(c): the wetland is an important habitat for migratory birds, mainly during their spring migrations. The last remnants of floodplain forest provide breeding sites for rare bird species. Suitable habitats for complete life cycles of plant species also occur within the site.
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13. General location: (include the nearest large town and its administrative region)

central Slovakia, Banská Bystrica region, Veľký Krtíš and Levice districts, 0.8 - 8.5 km east of town Šahy

14. Physical features: (e. g. geology, geomorphology, origins - natural or artificial; hydrology; soil type; water quality; water depth; water permanence; fluctuations in water level; tidal variations; catchment area; downstream area; climate)

Geology: The geological structure of the territory is simple. Ipeľ River flows in its clayey Holocene sediments with few Pleistocene terraces remained. The Quaternary strata are chiefly thin and consist of sandy gravels and clays. Locally there are small deposits of colic sand and loess. The bedrock belongs to the lithological unit called "Modrý Kameň strata".

Geomorphology: A typical flat relief of alluvial floodplain with scattered depressions and aggraded river channel that allows periodical long-lasting floods. Slope inclinations within the area are moderate to small.

Hydrology: The appropriate part of the Ipeľ river basin has an area of 3649 km². Mean annual discharge of Ipeľ River near Krupinica is 13.01 m³.s⁻¹. Peak spring discharges cause overbank flow stages mostly during February - March. Low discharges occur between July and October with minima during September.

Water quality: The water quality indices showed the lowest quality of the river water (i. e., very polluted) in terms of biology (microbiology) and the highest quality (i. e., almost unpolluted) in terms of chemical composition (measured in the river profile near Slovenské Džarmoty).

Soil types: The most common types are clayey alluvial soils (fluvisols) and gleysols on carbonate-free and locally waterlogged sediments.

Climate: The site belongs to the warm climatic area, warm and dry subarea and warm and dry district with moderate winters. Average air temperature is between -2 and -4 °C in January and 18.5 to 20 °C in July. Annual rainfall varies between 600 and 700 mm.

15. Hydrological values: (groundwater recharge, flood control, sediment trapping, shoreline stabilisation, etc.)

Ipeľ River and its alluvial floodplain are important for groundwater accumulation and for maintaining a suitable hydric regime of the area. Owing chiefly to meanders and the floodplain width, water retention capacity is high enough to minimize the risk of flooding of the downstream area. The alluvial floodplain is a place where great amounts of silts are deposited. Its biotic function is thus significant as to sediment trapping, biomass production and support of food webs. It is the last large remnant of near-natural wetland ecosystems that ensure the survival of many native species of plants and wildlife depending on wetland habitats.

16. Ecological features: (main habitats and vegetation types)

M - Ipeľ River, which is the core area of the Ramsar site, represents a residual fragment of meandering unregulated river with its floodplain where floodplain processes are still active. It is important for hydrology and ecology of this landscape and for several adjacent wetlands.

Tp - the proposed Nature Reserve Ipeľské Hony is the largest as to extent and the richest as to biodiversity. Further smaller but valuable wetlands along Ipeľ River are Súdenica, Ryžoviská and several other patches near Tešmak.

Ts - among the seasonally flooded and mowed grasslands along the river, Surdocké Lúky Meadows, Jasenec and Súdenica provide the most valuable examples. Their considerable plant species diversity contrasts with improved meadows that are widespread in the floodplain. Populations of some rare and vulnerable plant

species of Slovakia, e. g. *Carex melanostachya*, *Clematis integrifolia*, *Gratiola officinalis*, *Thalictrum lucidum* and *Veronica scutellata* grow there.

- Xf - two fragments of floodplain forest of association *Salicion albae* have remained there in proposed Nature Reserve Ipeľské Hony and Ryžoviská, besides scattered patches of willow shrub.
- 3 - there are no artificially irrigated agricultural land tracts now, but few irrigating channels remain that were built in 1950s for experimental paddy-fields. Channels are now partly silted and are inhabited by marsh tall-grass and tall-herb stands (class *Phragmiti-Magnocaricetea*) and macrophyte stands of the class *Potametea* (in stagnant water).
- 4 - alluvial meadows are seasonally flooded and mowed to produce hay and then grazed by cattle.
- 7 - near the SW margin of Tešmak village there are few sand pits filled by groundwater and inhabited by several rare plant communities and endangered species.
- 9 - drainage channels built in the past are out-of-function now, but they became habitats for marsh and aquatic plants (e. g. the channel along the road near Ipeľské Predmostie village).

The native vegetation dominates in the area with moderate negative human influences. Plant communities belong to the classes as follows (according to Zürich-Montpellier classification): *Alnetea glutinosae*, *Bidentetea tripartiti*, *Lemnetea*, *Potametea*, *Isoëto-Nanofuncetea*, *Molinio-Arrhenatheretea*, *Phragmiti-Magnocaricetea*, *Salicetea purpureae* and synanthropic *Chenopodietea* and *Plantaginetea majoris*. The adjacent area is influenced heavily by intensive agriculture, forest exploitation, growing settlements and development of their infrastructure. These factors induce changes in native vegetation, which is replaced by plantations and invasive alien plant species such as *Negundo aceroides*, *Reynoutria japonica*, *Echinocystis lobatus* and *Bidens frondosa*.

17. Noteworthy flora: (indicating, e. g., which species/communities are unique, rare, endangered or biogeographically important, etc.)

In the Ipeľ river basin there have been found 43 species of vascular plants regarded as endangered in Slovakia. Two of them are endangered critically (E, R), 10 are very vulnerable (V_m), 21 are vulnerable (V) and 10 are rare and/or indeterminate (I).

E, R: *Achillea crithmifolia*, *Orchis palustris* s. l., *Orchis laxiflora* subsp. *elegans*

V_m: *Carex buekii*, *Carex hordeistichos*, *Carex paniculata* (?), *Dianthus collinus* subsp. *collinus*, *Gratiola officinalis*, *Juncus gerardii* subsp. *gerardii*, *Thalictrum lucidum*, *Oenanthe silaifolia*, *Utricularia australis*, *Veronica anagalloides*

V: *Allium angulosum*, *Batrachium aquatile*, *Butomus umbellatus*, *Carex distans*, *Carex hostiana*, *Carex melanostachya*, *Centaureum pulchellum*, *Clematis integrifolia*, *Eryngium planum*, § *Lathyrus hirsutus*, *Leucopodium aestivum*, *Myosurus minimus*, *Myriophyllum verticillatum*, *Potamogeton trichoides* (?), *Ranunculus lingua*, *Rumex stenophyllus*, *Schoenoplectus tabernaemontani*, *Thalictrum flavum*, *Utricularia vulgaris*, *Veronica scutellata*

I: *Carex disticha*, *Galium elongatum*, *Lycopus exaltatus*, *Lythrum hyssopifolia*, *Pseudohysimachion longifolium*, *Ranunculus auricomus* agg., *Sagittaria sagittifolia*, *Stellaria palustris*, *Taraxacum* sect. *Palustris*, *Teucrium scordium*.

Species important regionally that occur along the river are *Batrachium circinatum*, *Batrachium trichophyllum*, *Spirodela polyrrhiza*, *Hydrocharis morsus-ranae* and *Ceratophyllum demersum*.

Most of these species suffer from insufficient protection. Therefore it is necessary to establish the Protected Landscape Area Poiplie as a whole and several strict nature reserves, particularly Ipeľské Hony, Súdenice, Ryžoviská, Veľké and Malé Jazierko near Tešmak and Veľká Piesková Duna.

18. Noteworthy fauna: (indicating, e. g., which species are unique, rare, endangered, abundant or biogeographically important, include count data, etc.)

Fauna is typical for alluvial floodplain and hills in a zoogeographical zone where thermophilous Pannonian and Mediterranean species meet with Carpathian montane forest species. A wide scale of habitats support a variety of animals species. Several endangered species of invertebrates survive in the area:

- dragonflies (*Odonata*): *Aeschna affinis*, *A. mixta*, *Lestes virens*, *Onychogomphus forcipatus*, *Crocothemis erythraea*
- beetles (*Coleoptera*): *Colobaea bifasciella*, *Pherbellia majuscula*
- spiders (*Araneae*): *Gibbaranea ulrichii*, *Euphrys obsoleta*.

Endangered vertebrates:

- fishes (*Osteichthyes*): *Abramis sapa*
- amphibians (*Amphibia*): *Hyla arborea*, *Pelobates fuscus*, *Rana dalmatina*, *R. kl. esculenta*
- reptiles (*Reptilia*): *Natrix natrix*, *N. tessellata*
- birds (*Aves*): *Ciconia nigra* (1 breeding pair), *Nycticorax nycticorax*, *Ardeola ralloides*, *Anas querquedula* (2), *Tringa totanus* (2), *Upupa epops* (1), *Motacilla flava* (3), *Acrocephalus arundinaceus*

(4), *Miliaria calandra* (5). Further important species are *Ardea cinerea*, *Alcedo atthis*, *Saxicola rubetra*, *Locustella luscinioides*, *Acrocephalus scirpaceus*, *Corvus corax*, *Ciconia ciconia*, *Egretta alba*, *Ardea purpurea*
- mammals (*Mammalia*) with the rarest species comprising otter *Lutra lutra*, *Micromys minutus*, *Neomys anomalus*, *Plecotus austriacus*

19. Social and cultural values: (e. g. fisheries production, forestry, religious importance, archaeological site, etc.)

The area is important as to biomass production for wild and domestic animals, cattle and poultry in particular. Fishing and hunting are practised locally. In the vicinity, some cultural monuments and archaeological sites are preserved where remnants of either Palaeolithic or medieval (9th - 10th century) age were discovered.

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

(a) site

Till 1997, there is 383.7002 ha of land of unknown owners within the territory of the Ramsar site. Private land tracts of the total area of 14.4002 ha are registered under the labels "cultivated" and "other". Grasslands, urban areas and other categories totalling 3.7654 ha in the Veľký Krtíš district are in municipal ownership of Ipeľské Predmostie village. The major part of cultivated land is managed by the co-operative farms "Hont" at Šahy and "Ipeľ" at Balog Nad Ipľom. Ipeľ River itself is administered by Hron River Catchment Administration at Banská Bystrica. The only alluvial woodland Ryžoviská is managed by Western Slovakia Forests forestry enterprise.

(b) surrounding area

There is private ownership of arable land, meadows, pastures and forests; state ownership of watercourses, some forest tracts; municipality ownership of smaller arable land tracts, meadows and pastures. Large part of the area along Ipeľ River on the left (Hungarian) side of the river was bought from private owners and now belongs to the state. This area is managed by Nature Conservancy under the label "Ipeľ - Danube National Park".

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

(a) site

The area is used extensively for agriculture including cattle grazing and poultry breeding. Alluvial meadows are mowed once or twice a season and then grazed in autumn. Current use of the meadows is appropriate for conservation of grassland communities with their diversity of non-woody plant species. Permanently waterlogged damp places are not exploited. Consequently, this may lead to the decrease in plant diversity as succession progresses, therefore an active management measures are required.

Ipeľ River and stagnant water habitats, e. g. Ipeľské Hony, are used for fishing mainly. Fragments of floodplain forests fall within the category of commercial forests, but now they are not exploited. Their management regulatives will be revised at the beginning of the next 10-year forestry planning cycle.

Two villages, Ipeľské Predmostie (695 inhabitants) and Tešmak (604 inhabitants) lie in the vicinity.

(b) surroundings/catchment

The surroundings are characterized by intensive agriculture (grain and other crops, vineyards) and settlements with small local enterprises and services. Some activities might take an effect of water pollution source, e. g. sewage, manure or harmful chemicals. Upper parts of hills are forested, forests being commercially managed. The area is used also for hunting, watercourses and reservoirs for fishing and recreation.

An exploitation of forests by clear-cutting in the past influenced the hydrology of the river and the surrounding area. Extreme fluctuations in water regime, particularly in annual discharges (i. e., floods) occur.

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

(a) at the site:

A part of the area was used experimentally (30 - 40 years ago) as paddy-fields with a network of artificial irrigation channels. As this attempt was not productive as to rice grain crop, the exploitation pattern changed towards the production of hay and grazing cattle. These practices combined with use of fertilizers result in changes and impoverishment of plant species diversity in the floodplain meadows. Now is the site influenced moderately along its borders in the vicinity of villages. Due to the lack of water purification plants near settlements, Ipeľ River is polluted particularly in terms of chemical and biological composition. In the vicinity of villages, several scattered small illegal landfills and dumps occur, the sanation of which is in the progress. The landscape management plan for districts Veľký Krtíš and Levice proposes:

- partial regulation of the Ipeľ river meanders near the eastern border of the site

- derivation of alluvial water to prevent villages near eastern and western border of the site from floods
- a corridor for planned highway and railway near the northern border of the site.

(b) around the site:

The nature and landscape along Ipeľ River was adversely affected by large-scale clear-cutting in the middle and upper part of the catchment in the past. The reforestation in the upper part of the river basin progressed quickly to prevent extreme fluctuations in water discharge and to increase the retention capacity. During the second half of this century there were large-scale reclamations throughout the Ipeľ river basin, e. g. regulation of the river channel, construction of dikes and drainage of the floodplain followed by its transformation into intensive agricultural land. The prevention of floods was also an important aim. Further negative impacts are pollution of watercourses, application of agricultural fertilizers and pesticides and expected growth of settlements with their infrastructure.

23. Conservation measures taken: (national category and legal status of protected areas - including any boundary changes which have been made; management practices; whether an officially approved management plan exists and whether it has been implemented)
No protected site has been established within the Ramsar site and no particular management plan has been proposed. Among the measures required but still not adopted is the sanitation of local landfills in a close vicinity of valuable proposed Nature Reserve Ipeľské Hony. The reason why is a lack of financial support as well as lack of awareness in local population.

24. Conservation measures proposed but not yet implemented: (e. g. management plan in preparation; officially proposed as a protected area, etc.)

The Ipeľ river basin is proposed as Protected Landscape Area Poiplie, a relevant project being elaborated in 1993. This area is in immediate transboundary neighbourhood with National Park Danube - Ipeľ on the Hungarian side of the river. Some strict nature reserves are proposed in the area, such as Ipeľské Hony, Surdocké Lúky Meadows, Ryžovisko, Malé and Veľké Jazierko, Mokrad' near Tešmak, Súdenica Marsh and Veľká Piesková Duna, that are rich in biodiversity. If the proposals will be accepted, the PLA will belong to the second while nature reserves to the fifth level of protection. The projects and the PLA relevant documents are consistent with the landscape and water management plans for the region, e. g. with "Regional Terrestrial System of Ecological Stability" for districts Veľký Krtíš and Levice, spatial plan for the Ipeľ river basin and districts Veľký Krtíš and Levice and "Ecological case study of Ipeľ River". They share the priority to preserve natural values of this landscape.

25. Current scientific research and facilities: (e. g. details of current projects; existence of field station, etc.)

In the course of 1997, floristical and phytosociological research of wetland vegetation of classes *Phragmiti-Magnocaricetea*, *Isoëto-Nanojuncetea* and *Littorelletea* was conducted. Faunistical research was aimed at birds, small mammals and the otter. As to invertebrates, an attention was paid to *Coleoptera*, *Orthoptera*, *Phalangida* and some mites.

Several permanent plots for monitoring of fauna and flora are planned in the Ramsar site according to partial monitoring system "Biota" within the scope of the Complex Monitoring System of the Slovak Republic. Hydrological research has also begun to investigate the influence of local landfill on the underground water quality near the proposed Nature Reserve Ipeľské Hony.

26. Current conservation education: (e. g. visitors centre, hides, information booklet, facilities for school visits, etc.)

As the area provides one of the few examples of wetland ecosystems, it is suitable for environmental education of the public and pupils/students in particular. Education is managed by The Environmental Centre of The Ipeľ Union NGO at Šahy. The Union organizes also The Ipeľ Academy that attempts to facilitate discussion on current problems, perspectives, river utilization and relationships between man and nature in the surroundings of the river.

27. Current recreation and tourism: (state if wetland is used for recreation/tourism; indicate type and frequency/intensity)

The site and surrounding area is exploited for tourism and recreation in moderate intensity. Visitors (mostly on passage) spend a day or two (e. g., a weekend) here dealing with hobby fishing. A bike trail was proposed to be built in the near future to encourage bicycle tourism along Ipeľ River from Chľaba up to Lučenec.

28. Jurisdiction: (territorial, e. g. state/region and functional, e. g. Dept. of Agriculture/Dept. of Environment, etc.)

State: Ministry of Environment, Ministry of Agriculture, Forestry and Water Management, Ministry of Interior

Regional: Regional Office at Banská Bystrica, District Office at Veľký Krtíš and Levice

Local: Town Office at Šahy, Municipal Office at Ipeľské Predmostie

29. Management authority: (name and address of local body directly responsible for managing the wetland)

Slovak Environment Agency, Centre for Nature and Landscape Conservation, Lazovná 10, SK - 974 01 Banská Bystrica, Slovakia, phone (+421 88) 754269, 754289, 753866, fax (+421 88) 753866

30. Bibliographical references: (scientific/technical only)

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