# Information Sheet on Ramsar Wetlands (RIS) – 2006-2008 version

Available for download from 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 and guidelines 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:



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**2.** Date this sheet was completed/updated: June 15, 2006

#### 3. Country: Slovak Republic

# 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.

Latorica (in Slovak: Latorica)

#### 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  $\Box$ ; 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:

or

## If the site boundary has changed:

i) the boundary has been delineated more accurately ; or ii) the boundary has been extended ; or

iii) the boundary has been restricted\*\*  $\Box$ 

and/or

### If the site area has changed:

i) the area has been measured more accurately vor ii) the area has been extended ; or

iii) the area has been reduced\*\*  $\Box$ 

\*\* **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:

There are no major changes to the ecological character of the Ramsar site.

#### 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):  $\checkmark$ ;

ii) an electronic format (e.g. a JPEG or ArcView image) ✓;

iii) a GIS file providing geo-referenced site boundary vectors and attribute tables  $\checkmark$ .

#### 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.

Ramsar site is a part of Latorica Protected Landscape Area and it overlaps with the proposed Special Protection Area SKCHVU 015 Medzibodrožie (100 %) and the proposed Site of Community Importance SKUEV 0006 River Latorica (90 %).

**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. 48° 26′ 47′′ - 48° 30′ 57′′ N

21° 53′ 37′′ - 22° 08′ 39′′ E Central coordinate: 48° 28′ 56′′ N 22° 04′ 01′′ E

#### 9. General location:

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

The site is located in the East Slovakian Lowland, 4 km S of the town of Veľké Kapušany (9500 inhabitants) and 7 km N of the town of Kráľovský Chlmec (8029 inhabitants). Region: Košice Districts: Trebišov and Michalovce

Cadasters of villages: Bačka, Beša, Bol', Boťany, Čičarovce, Čierna, Kapoňa, Kapušianske Kľačany, Leles, Oborín, Poľany, Ptrukša, Soľnička, Veľké Kapušany, Veľké Slemence, Zatín.

**10. Elevation:** (in metres: average and/or maximum & minimum) min. 99 m, max. 103 m, average 100 m a.s.l.

11. Area: (in hectares) 4 404,7 ha

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

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

The site includes a part of the floodplain area of the Latorica River defined by levees, from the Ukrainian borders to the confluence with the Laborec River in the Latorica Protected Landscape Area, in S part of the East Slovakian Lowland. It is characterized by a well-developed system of branches, seasonally inundated habitats with adjacent floodplain forests and grasslands. Threatened and rare aquatic and swamp biocoenoses of lowland, flooded habitats are represented. Several nature reserves are included in the site.

#### 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.

#### 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 - a system of river branches, oxbow lakes and various rare wetland habitats on the Slovak - Ukraine - Hungarian frontier, it is a representative example of the natural and near-natural types of wetlands in the Pannonian region.

Survey of wetlands in Latorica River Ramsar site (according to: Wetland for life, foundation Daphne, 1996):

### Palustrine system:

- wood formation willow-poplar wood, oak-elm-ash wood, fen alder wood;
- <u>shrub formation willow shrub;</u>
- grass-herb formation: tall sedge, wet meadow and pasture; tall-herb floodplain, reed swamp; aquatic vegetation;
- <u>ephemeral formation bare bottom growth</u>

#### **Riverine system:**

- tree formation with willows and poplars;
- <u>shrub formation with willows;</u>
- grass-herb formation: with grasses and herbs;

**2** - Latorica site is inhabited by 17 internationally threatened fauna species (6 Vulnerable, 7 Lower Risk & 4 Data deficient species).

The full list of threatened animal and plant species see in Annex 1.

3 – Latorica site supports populations of the following species important for maintaining the biological diversity of the Pannonian and Carpathian regions: Armoracia macrocarpa, Leucojum vernum subsp. carpaticum, Oenanthe silaifolia subsp. hungarica etc.

4 - Latorica is a biological corridor of international importance for migration of significant numbers of rare, vulnerable and/or endangered animal species. The full list of migratory birds or birds which occur in this Ramsar site at critical stage in their life cycle see in Annex 1.

7 – the site supports a significant proportion of indigenous fish species and their life-history stages that are representative of the wetland values (*Rhodeus amarus, Pelecus cultratus, Misgurnus fossilis, Umbra kramery, Gobio albipinnatus, Gymnocephalus baloni, G. schraetser*) and benefits (*Esox lucius, Cyprinus carpio, Silurus glanis, Stizostedion lucioperca*).

8 – Latorica river is important spawning ground and nursery for indigenous freshwater fish species: Acipenser ruthenus, Aspius aspius, Gymnocephalus schraetzer, Pelecus cultratus, Zingel zingel, Z. streber, Umbra krameri etc.

**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: Region of pannonian vegetation (*Pannonicum*)

 b) biogeographic regionalisation scheme (include reference citation):

 (according to Futák 1972 in Bertová 1984): Region of pannonian vegetation (*Pannonicum*) Division of eupannonian vegetation (*Eupannonicum*) District of Východoslovenská nížina lowland (East-Slovakian Lowland)
 EU Habitats Directive 92/43/CEE – Panonian Region

#### 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. <u>Origin:</u> natural, partly artificial. <u>Geological features:</u> Site has been created on gravel-sandy layers, those were clogged by marl, mica and sandy-clay deposits in the upper Miocene and Pliocene. Prevailing sediments are the remnants of old overgrown oxbow lakes and old meandering river beds. <u>Geomorphological features:</u> Site has a typical character of an alluvial plain with a minimal down slope, with a system of natural, alluvial habitats (functional river branches and oxbow lakes, depressions, swamps etc.) as well as artificial channels. <u>Soils:</u> Predominating heavy and extremely heavy soils with low granularity, slightly acidic with very high or high absorption capacity and high humus content. Soils on sandy dunes and deposits differ significantly from the previously mentioned. They are characterised by high granularity, low absorption capacity, neutral soil reaction and substantially lower humus content. Their extent is rather small. Predominant soil types, according to FAO classification (1970, ex Hraško et al. 1991), are euthric fluvisols, euthric glevsols and fluvieuthric gleysols. Hydrological features: Latorica is a transboundary river that originates in the Eastern Carpathians in the Ukraine. Hydrological regime of the site is determined by a predominating flysch substrate and feathery-shaped catchment of the Latorica and Laborec Rivers. Due to the low permeability of the East-Carpathian flysch, and the shallow circulation of groundwater, precipitation results in an accelerated outflow. Mean annual outflow of rainfall from this area is about 50 %, but could increase to 80 % during extreme flows. High flows occur mainly during spring snowmelt, and also after rich short-term rains. Mean annual discharge of the Latorica river is 33,7 m<sup>3</sup>.s<sup>-1</sup>. During floods this can be increased up to 23-times. Latorica has a character of a typical lowland river that has created a network of meanders and oxbow lakes. Water quality: Main stream of the Latorica River throughout the Ramsar site has been assessed as highly polluted for many years, with a high concentration of insoluble substances, nitrites, phenols and coliform bacteria. In the surface water there are also concentrations of heavy metals- mainly Cd, Hg and Zn have been recorded. The river is endangered and irregularly stressed by petrol disasters in the Ukraine. Climate: The area has subcontinental climate (hot summer and cold winter) with average annual temperature 9,3 °C. Average air temperature in January varies between -3 and -5 °C, in July between 19,5 and 20,5 °C. Annual rainfall is 550 mm.

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

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type). <u>Geology:</u> The geological substrate is formed by rocks of the Upper Miocene up to Pliocene, and is represented by gray and varied clays, silts, sands, gravels, lignite, freshwater limestones and tuffite horizons, varied kaolinite clays, sands, gravels, rare lignite seams.

<u>Geomorfological features:</u> The catchment area belongs to lowlands. Type of relief is plain, floodplain and undulated plains with vertical difference lesser than 30 m. The selected relief forms are swamp foothill and inter-rampart depression, loess tables, fossil and recent aggradation ramparts and their axes and nappe outliers.

<u>Soil types:</u> The soil types are fluvisols; gleyic entrice fluvisols and vertic fluvisols, stagni-haplic luvisols, eutric to district planosols, stagni-albic luvisols to stagnic glossisols, luvi-haplic chernozems. Soil texture is clayey, clayey-loamy, loamy, sandy-loamy and clay.

<u>Land use:</u> agriculture (culture crop plants, meadows mowing, stock raising); sports fishing; forestry <u>Climate:</u> The catchment area belongs to warm region, to sub regions: warm, dry with cool winter; warm, moderately dry, with cool winter; warm moderately humid, with cool winter.

#### 18. Hydrological values:

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

Hydrological importance of the site is determined by the Latorica River and its discharges. Its system of branches and oxbow lakes is important for flood control and natural water quality improvement.

#### 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/co	asta	l: A	•	B	•	С	•	D	•	Ε	•	F	•	G	•	Η	•	Ι	•	J	•	K	•	Zł	x(a)
Inland:	L Vt	•	<u>M</u> <u>W</u>	•	N <u>Xí</u>	• <u>f</u> •	<u>O</u> Xj	• p •	P Y	•	Q Zg	• 9•	R Zł	• x(b)	Sp	•	Ss	•	<u>Tp</u>		<u>Ts</u>	•	U	•	Va•
Human-m	ade:	1	•	2	•	3	•	<u>4</u>	•	5	•	6	•	7	•	8	•	<u>9</u>	•	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.

P, Tp, M, Xf, O, 4, Ts, W, 9, 7

#### 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.

Most of the best preserved swamp and water communities are located along the Latorica River within the area bordered by levees. In the southern part, there are very valuable wet meadow communities with extensive swamp depressions inhabited by specific flora and fauna. The occurrence of all wetland habitats depends on periodical floods before and during the vegetation season. Most important and valuable climax communities are soft and hardwood floodplain forests. In the direct vicinity of the river and its branches are distributed willow-poplar floodplain forests (Salicion albae, S. triandrae). Fragments of ash-elm-oak floodplain forests (Ulmenion minoris) with the richest species composition, and oak-hornbeam forests with pannonian oak (Carpinion betuli) are preserved. Poplar plantations and Robinia pseudoacacia woods are sparsely distributed. Non-forest habitats are represented by reed and tall-sedge communities (Phragmiti-Magnocaricetea) and associations Schoenoplectum lacustris, Typhetum angustifoliae, Sparganietum erecti, Glycerietum maximae, Eleocharitetum palustris, Caricetum distichae, Caricetum gracilis, Caricetum vulpinae, Phalaridetum arundinacea, Caricetum ripario-acutiformis, Scirpetum sylvatici-Agrostietum stoloniferae etc. Part of the site is made up of artificial wetlands (gravel and soil pits). The river was regulated in 1954-1965. From the group of water and swamp plant communities there are presented associations *Trapetum* natantis, Nupharo lutei-Nymphaeetum albae, Ceratophylletum demersi (union Nymphaeion albae). One of the most important, characteristic and valuable communities is the association Hydrocharito-Stratiotetum. Others include unions Lemnion minoris, Utricularion vulgaris, Magnopotamion, Parvopotamion, Batrachion aquatilis, Oenanthion aquaticae, Sparganio-glycerion fluitans, Magnocaricion elatae etc.

#### 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.* 

The following plant communities occurring in the site are considered rare or endangered in Slovakia, mainly due to euthrophication, river adaptations, habitat degradation or are occupying artificial habitats while loosing the natural ones: *Trapetum natantis, Nymphaeetum albo-luteae nymphaeetosum, Nymphaeetum albo-luteae nupharetosum, Hydrochari-Stratiotetum, Lemno-Utricularietum vulgaris, Salvinio-Spirodeletum polyrrhizae, Riccietum fluitantis, Polygonetum amphibii, Potametum lutencis, Najadetum marinae, Najadetum marinae najadetosum minoris, Eleocharito acicularis-Marsileetum quadrifoliae, Leersietum oryzoidis, Hottonietum palustris, Cyperetum micheliani, Caricetum elatae, Cypero fusci-Juncetum bufonii, Potametum crispi, Caricetum ripariae etc.* 

Some invasive plant species have been recorded, such as *Stenactis annua*, *Solidago gigantea*, *Asclepias syriaca*, *Helianthus tuberosus*, *Heracleum mantegazzianum*.

#### 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 site belongs to the northern margin of the Pannonian steppe region, East-Slovakian territory and the Tisa River Lowland district. Due to the geographical location of the site within the Pannonian lowland, but with relatively close contact with Carpathians, Mediterranean and boreomontane elements occur

there.

Several important water invertebrates (*Evertebrata*) e.g. planktons have been recorded: more than 60 species of *Rotatoria*, 20 species of *Copepoda* and 40 species of *Cladocera*. Rare *Crustacea* include endemic species *Proasellus pribenicensis, Hemidiaptomus hungaricus, Triops cancriformis, Lepidurus apus* etc. Inventory of several groups of insects (*Insecta*) and molluscs (*Mollusca*) was also completed: *Ephemeroptera* (for example *Baetis fuscatus, Caenis horaria, C. macrura, C. robusta, Palingenia fuliginosa, Potamanthus luteus*), *Odonata, Diptera, Mollusca* (for example *Unio crassus* (LR:nt)).

Vertebrata which occur in the Ramsar site see in Annex 1.

Some non-native species of fish were introduced into the Latorica watershed (*Lepomis gibbosus*, *Ictalurus nebulosus*).

#### 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:

The site is used for angling, forestry, livestock pasture, occasional weekend hiking (trips) of local people.

**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?

If Yes, tick the box **D** 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:

Water bodies are in state ownership - Bodrog and Hornád Rivers Catchment Administration, Košice, forests are managed mainly by owner associations - Lesy Jasov s. r. o., Leles; Lesy Slovenskej republiky(The Forest of the Slovak republic), B.Bystrica, ownership of pasture land and meadows is not clarified, and these are managed by non-state organisations (agricultural cooperatives) eg. Ing. Jozef Halász Kráľovský Chlmec; Ing. Priam Jozef, Kráľovský Chlmec; Les. hosp. kol. Veľké Kapušany and state organisation Slovak Land Fond Bratislava.

b) in the surrounding area:

20 % in state ownership, 80 % in private ownership.

# 25. Current land (including water) use:

a) within the Ramsar site:

Forestry – forested land represents 32.8 % of the total area, prevailing types are economic forests with restricted management within the protected sites; fishing, hunting; hay-making and cattle pasturing – grasslands cover 36,4 % of the area. Forests belong to forest management unit Sobrance and forest management plan is valid until 2009.

b) in the surroundings/catchment:

the land is used for agricultural purposes in the eastern part of the site. The predominant management consists of hay-making, pasturing and forestry in the northern part. There are some settlements in the surroundings of the site with number of inhabitants not exceeding 1000 people.

# 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: In the 19<sup>th</sup> century extensive deforestation for the extension of pastureland for cattle and railway construction in the vicinity of the Ramsar site took place. Forest degradation continued in the 20<sup>th</sup> century and up till now the economic interest is the leading factor for the forestry in the area. Mainly in the second half of the 20<sup>th</sup> century the planting of non-native cultivars of poplars was popular. Oaks, ashes, maples etc were planted in limited amounts. In the 50's and early 60's of the  $20^{th}$  century, regulative measures on the river were implemented. Result of these activities was an artificial more or less straight riverbed surrounded by a number of disconnected branches. Most of these branches are disconnected from the main channel in the upper reaches, but in the lower reaches the connection is still working. As a result of the continuous erosion caused by the main river channel, in many of the branches, the water level, during most days of the year is higher than in the main channel. Equalization of the water levels is impeded by deposits of mud and vegetation, which have been created in the mouths of the branches. The site is bisected by a frequented road, polluting the site obstructing the migration of animals. Transportation routes and settlements are the source areas of non-native and invasive species, endangering the diversity of native communities. A risk factor is the unlimited pasturing of cattle causing the devastation of bank-side vegetation at watering places, and also water eutrophication. Negative factor is also unregulated local fishstock poaching and hunting.

b) in the surrounding area:

Heat-power plant, Vojany, located N of the site causes air pollution and thermic pollution of the rivers. Latorica is already polluted in the Ukraine. The major part of the Latorica watershed is situated within the territory of Ukraine (2900 km<sup>2</sup> from the 3140 km<sup>2</sup> - total area of the catchment). Industry, agriculture and settlements are causing river pollution by heavy metals, phenols, organic substances and nutrients. A real risk of petrol pollution exists, as the river and its major tributaries in the Ukraine are crossed several times by petrol pipelines (repeated accidents in 1992-1995).

#### 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 Ramsar site is a part of the Latorica Protected Landscape Area (23 198,46 ha), designated in 1990. Further protected sites are Nature Reserve (NR) Zatínsky luh (66.06 ha, protected since 1930),

National Nature Reserve (NNR) Botiansky luh (40.6 ha), NNR Latorický luh (15.1 ha), which have been protected since 1967. The site is managed by the Administration of Latorica PLA situated in the town of Trebišov. The site has been included in the Regional Territorial System of Ecological Stability of Trebišov district (R-TSES) as a biological corridor of supra-regional importance. A network of biocentres has also been set up within the territory of the Ramsar site.

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

Ia  $\checkmark$ ; Ib  $\Box$ ; II  $\Box$ ; III  $\Box$ ; IV  $\Box$ ; V  $\checkmark$ ; VI  $\Box$ 

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

The management plan of the Ramsar site is under preparation.

d) Describe any other current management practices:

Common farming practises such as meadow cutting and hay making ate typical for the site. State Nature Conservancy of the Slovak republic in close cooperation with private owner of land (farmer) started some work on keeping water in the site, open the old oxbow.

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

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

In the Regional Territorial System of Ecological Stability of the Trebišov district, the protection of other sites has been proposed for their values and function of biodiversity maintenance (Dravý klin, a site in the cadaster of the village of Boťany, Mokraď, a site in the cadaster of the village of Ptrukša – a complex of floodplain forests and a network of old river meanders from the original river bed. In 1995 the draft Management Plan of the Ramsar site was compiled, which currently needs to be re-evaluated. The Administration of the Latorica PLA has developed and is pushing forward the approval of the proposal for the designation of the forests within the Ramsar site to the category of 'forests of special function' (forests which are important for the maintenance of their non-productive functions, no economic function). The site has been included into the project of Wetlands International "Transboundary cooperation in the Upper Tisa region".

29. Current scientific research and facilities:

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

Long-term research of the site is being implemented by the Zoological Institute of the Slovak Academy of Science in cooperation with the Faculty of Natural Sciences of University in Košice and Parasitological Institute of the Slovak Academy of Science in Košice, as well as by the Administration of the Latorica PLA and smaller research groups and individual researchers. It is research and monitoring of small ground-dwelling mammals, birds, reptiles, amphibians, fish, plankton and crustaceans. A detailed floristic inventory and inventory of plant communities was done in 1998. Hydrological monitoring is provided by Slovak Hydro-meteorological Institute Bratislava, branch in Košice. Monitoring of surface water quality is provided by the Administration of Bodrog and Hornád Catchment based in Košice. A relatively dense network of bore-holes is used for qroundwater monitoring. Extensive hydrological monitoring and assessment of Latorica watershed has been funded by EU sources.

# 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.

Occasional excursions of school children and students guided by employees of the Administration of the Latorica PLA are provided. The brochure for visitors on Latorica PLA was issued in 1993. Another one

is being prepared by NGO SOSNA from Košice. In 1995 a Nature Protection Camp took place here, focused on research and education. Systematical education is limited by lack of nature conservancy staff.. Prospectus about the site was issued in 2003.

#### 31. Current recreation and tourism:

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

Site is not systematically used and/or equipped for recreation and tourism. The development of tourism is not expected. Site is used mainly for seasonal and weekend tourism, combined with fishing less with hunting.

#### 32. Jurisdiction:

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

- a) Ministry of the Environment of the Slovak Republic, Department of Nature and Landscape Protection
- b) Regional Office of the Environment in Košice District Office of the Environment in Michalovce District Office of the Environment in Trebišov

#### 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.

Nature conservation:

State Nature Conservancy of the Slovak Republic, Lazovná 10, SK – 974 01 Banská Bystrica, Tel. +421-48-415 50 27, fax: +421-48-415 38 66, e-mail: <u>koubek@sopsr.sk</u>

State Nature Conservancy of the Slovak Republic, Administration of Protected Landscape Area Latorica, M. R. Štefánika 206, SK - 075 01 Trebišov, Tel./Fax: (+421-56) 668 30 00, 668 30 01

#### Water management:

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

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