Information Sheet on Ramsar Wetlands (RIS) – 2006 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 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9th 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, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd 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.



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.

Rába valley (Rába-völgy)

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 \boxtimes ; 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 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** \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:

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): 🗵;

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

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.

Most of the boundary follows the borders of the Örség National Park, Natura 2000 sites or protected areas to be designated in the future. Where the boundary is not the same as these areas, it follows the borders of natural grasslands or floodplain forests along the river Rába.

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.

46°55'N, 16° 11'E (westernmost location) 47°18' N, 16°58' E (northernmost location) 47°16' N, 17°00' E (easternmost location) Central co-ordinates: 47°01' 45,6" N, 16°39' 56,9" 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 South-Western Hungary in the floodplain along the river Rába from the Hungarian - Austrian border downstream to the city of Sárvár in Vas County. The largest town close to the site is Szombathely, other important towns are Szentgotthárd, Körmend, Vasvár and Sárvár.

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

The average is 190.6 m above Baltic Sea (240.1 m at Hegyhátszentmárton, 149.2 m at Sárvár)

11. Area: (in hectares): 10 961 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 Rába River is the most important river of Western Hungary; the Rába Valley is the largest valley of Western Transdanubia. The area includes the Rába River's section from Alsószölnök to the border of Győr-Moson-Sopron County. The Csörnöc-Herpenyő Brook collecting the waters of the Hegyhát also belongs to it. The Rába meanders freely, unregulated in its own valley and forms oxbows at several locations. The section below Sárvár is regulated and flows between dykes. The Rába Valley is flanked on the right side by a prominent hill range while the left side is predominantly plain. The main soil type of the valley is raw alluvial soil, in some places diversified by fen soils. The alluvium's physical soil types are clay, sand and gravel. The latter two are quarried in industrial quantities. In the place of the abandoned quarries, several large ponds have formed. Apart from the woodlands and oxbows flanking the river, only a few grasslands remain in natural conditions, because most of them have been ploughed up or some of them have been partly colonized by forests.

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).

- Criterion 1: Rába is a representative example of a natural or near-natural middle-reach river type found within the biogeographic region. This part of Rába is the only unregulated, meandering river in Hungary.
- Criterion 2: Rába supports vulnerable, endangered and critically endangered species and threatened ecological communities, for example the *Scirpus radicans*, the *Carex repens* and the *Eudontomyzon mariae*. For lists of species under international protection, see 21 and 22.
- Criterion 3: Rába supports populations of plant and animal species important for maintaining the biological diversity of the biogeographic region. Rába holds a rich fish and insect fauna. The populations of *Zingel zingel, Zingel streber*, and *Gymnocephalus schraetzer* are

important. High banks are formed by the process of natural processes and are used by *Merops apiaster*, *Alcedo atthis* and *Riparia riparia* for nesting. *Charadrius dubius* and *Actitis hypoleucos* live on gravel reefs, forming the stronghold of the Hungarian population.

- Criterion 4: Rába supports plant and animal species at a critical stage in their life cycles and provides refuge during adverse conditions. The meandering parts of Rába, the oxbows, navvy pits and the abandoned gravel pits play an important role in the reproduction of fish species and aquatic insects. These are also essential habitats for them in order to survive summer droughts.
- Criterion 7: Rába supports a significant proportion of indigenous fish subspecies, species and populations that are representative of wetland benefits and thereby contributes to global biological diversity. It is estimated that the greatest Hungarian population of *Eudontomyzon mariae* lives in Rába and its water system.
- Criterion 8: Rába is an important source of food and spawning ground for fishes, of which *Zingel zingel, Zingel streber* and *Gymnocephalus schraetzer* are to be noted in particular, as they have their Hungarian strongholds here. For other important fish species, see 22.
- Criterion 9: Rába supports a high percentage of the Hungarian populations of the following fish species:

Scientific name	Percentage of the Hungarian
	population*
Eudontomyzon mariae	39 %
Aspius aspius	2 %
Cobitis taenia	2 %
Gobio albipinnatus	17 %
Gobio kessleri	17 %
Gymnocephalus baloni	1 %
Gymnocephalus schraetzer	14 %
Rhodeus sericeus amarus	4 %
Cobitis aurata	13 %
Zingel zingel	48 %
Zingel streber	31 %

Expert estimate (Mr. Zoltán Sallai) based on surveys and literature data from the last 25 years

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

The soil types in the floodplain of Rába are raw alluvial soil, sometimes mixed with marsh soil. The river deposits consist of silt, sand and gravel. Several springs spout forth from the steep hills. Of course, the main watercourse is Rába river, which is here totally unregulated, less rapid than upper-reach river type, so its building-destroying role is not so dynamic. The biggest tributary on the left riverside is Pinka, which joins here into Rába. Rába meanders among a series of naturally formed oxbows.

Soil types

The most dispersed soil types in the floodplain of Rába are meadow soils, marsh soils, forest soils connected to moorland and floodplain, and row swamp soils. The sole soils have the aspects of clay and loam, because leading part of the river deposits are from acid Holocene bedrocks (gravel, sand), and the chemical characteristic of sole soils are also acidic. It is typical to sole soils to be wet through periodically (water-logged), where loose water can be found the formation of peat and "kotu" soil formation is remarkable. On the steep hills, where leaching and acidification are intensified, usually brown forest soils (clay, pseudoglej, podzol) are current. In cultivated lowlands different sub-types of brown forest soils can be found.

Climate

The climate in the West-Hungarian floodplain of Rába is caused by Atlantic (Alpine), Mediterranean (southern) and Continental (eastern) effects. On the western part of Rába (Szentgotthárd region), the climate is moderately warm and wet with mild winters. In the middle parts it is transitional, and the north-eastern part connected to Kislaföld (Small Plain) is moderately warm and dry with mild winters. The wind usually blows from the north. There are significant differences regarding annual cloud cover, hours of sunlight, temperature, and rainfall. The average number of hours of sunlight is 1850-1900 hours/year, which is less than the national average. Overcasting is also remarkable, on the western parts it can reach 65%. The summer is cooler (19-19,5 °C), the winter is colder (Jan. -2 °C) in the western region than in the eastern region. The average yearly rainfall is about 800mm near the western border (in Körmend above 1000mm has also been measured), but on the south-western part of the floodplain it is about 600-750mm.

Three types of floods are typical: the first occurs mainly in March-April, following the snow melt. Heavy floods may occur in June-July caused by intensive precipitation. As an effect of the Mediterranean, a second peak comes in September-October (for example in 1998), which is caused by the rains in Graz-basin.

Hydrogeology

The Rába springs in the Fischbach-Alps, at 1200m above the sea level. The real floodplain of Rába in Hungary can be found in Vas County, between Alsószölnök and Nick settlements, with the length of 120km. After that the Rába becomes a lowland river (Rábaköz) and flows into Mosoni-Duna at Győr. The catchment area of Rába is disproportionate. All of the watercourses are collected from the left side: Lapincs, Pinka, Sorok, Gyöngyös. Several streams can be found on the right side, but their discharge is low: Szölnöki-patak, Szakonyfavi-patak, Huszászi-patak, Lugos-patak. A significant part of the right riverside water supply of Rába is collected by Csörnöc-Herpenyő (which springs near Halogy settlement), from the streams Himfai-, Nádasdi-, Hegyaljai-, Szarvaskendi-, Bogrács-, Ordó-, Mókus-, Szentkúti-, Szentegyházi-, Koponyás- és Egervölgyi patak. Csörnöc-Herpenyő flows more or less parallel with Rába. Its floodplain and moorland areas belong to the floodplain of Rába.

^{17.} Physical features of the catchment area:

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

The catchment area is fairly varied: from mountains to hilly areas. General land uses include forestry, gravel mining and to a lower extent agriculture. Soil types of the flood plain and climate are described under 16.

18. Hydrological values:

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

During the yearly floods the Rába inundates the low grounds near Körmend totally. So the water of Pinka and Csörnöc-Herpenyő streams unite with the flooded Rába. Behind the floods the oxbows and navy pits are filled with water, which determines the yearly dynamics of vegetation. The riverbed shifting and oxbow development are important and significant between Szentgotthárd and Rum: they assure the maintenance of interesting riverside vegetation. At some places the floodplain can be divided into high and low floodplain zones.

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: ABCDEFGHIJKZk(a)Inland:L $\underline{M} \cdot N \cdot O \cdot P \cdot Q \cdot R \cdot Sp \cdot Ss \cdot \underline{Tp}$ $\underline{Ts} \cdot U \cdot Va \cdot Vt \cdot W \cdot Xf \cdot Xp \cdot Y \cdot Zg \cdot Zk(b)$ Human-made:123456789Zk(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.

Roughly M is around 40%, Ts is around 40% and Tp is around 20%.

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.

Types of habitats and vegetation are closely related to the typical riparian ecosystems. Because of the regulation of the river, the size and distribution of these habitats has decreased significantly during the last hundred years. However, in the present situation the remaining fragments of these habitats are able to hold their basic features. These are as follows:

- Floodplain meadow (Succiso-Molinietum, Festucetum pratensis, Agrostis albae): Rich biodiversity of lowland meadows can be found along the river. These are one of the most endangered habitats of Rába, because their extension seems to be reduced by agricultural activities.
- Softwood riparian forest (*Salicetum albae-fragilis*): consists of the species *Salix alba, Salix fragilis, Populus alba,* and *P. nigra.* Willow woods can be found in a very narrow line along the river, but some area of floodplain are covered by extended willow woods. Sorry to say that significant amount of allian plants are current in the area.
- Willow bushes (*Salicetum triandre*): consists of *Salix triandra, S. purpurea, S. fragilis, S. viminalis.* Willow bush association appears on scattered reefs. Their existence indicates that the river runs in a natural bed still formed, built and destroyed by natural forces, which is very rare in Europe.

- Hardwood riverside forests (*Querco-Ulmetum*): consist of *Fraxinus excelsior, Quercus robur, Carpinus betulus, Ulmus laevis.* These seem to appear on high floodplains, and are rarely flooded. The soil is of good quality, that is why most of them were destroyed and hardly any contiguous patches remain. Their spring aspect is of very rich biodiversity.

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.*

Most valuable plant communities in the area:

Cicuto-Caricetum pseudocyperi Trapetum natantis Succiso-Molinietum Salicion triandrae Salicion albae-fragilis Querceto Fraxineto-Ulmetum

Protected plant species in the area:

Salix elaeagnos
Carex repens
Hottonia palustris
Acorus calamus
Trapa natans Bern Convention Appendix I
Fritillaria meleagris
Iris sibirica
Gentiana pneumonanthe
Elatine triandra
Lindernia procumbens Bern Convention Appendix I, Habitats Directive IV
Leucojum vernum
Scilla bifolia agg.
Equisetum hyemale
Ludwigia palustris
Cicuta virosa
Petasites albus

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*.

<u>Fish</u>

Eudontomyzon mariae endemic to the Carpathian Basin, Bern Convention Appendix III, Habitats Directive Annex II Alburnoides bipunctatus Bern Convention Appendix III Gobio kessleri Bern Convention Appendix III Gobio albipinnatus Bern Convention Appendix III, Habitats Directive Annex II Leucaspius delineatus Bern Convention Appendix III

Sabanajewia aurata Bern Convention Appendix III, Habitats Directive Annex II Misgurnus fossilis Bern Convention Appendix III, Habitats Directive Annex II Gymnocephalus schraetzer Bern Convention Appendix III, Habitats Directive Annexes II and V Zingel zingel Bern Convention Appendix III, Habitats Directive Annexes II and V Zingel streber Bern Convention Appendix III, Habitats Directive Annex II

Amphibians

Rana dalmatina Bern Convention Appendix II, Habitats Directive Annex IV Bufo viridis Bern Convention Appendix II, Habitats Directive Annex IV Bufo bufo Bern Convention Appendix III Bombina bombina Bern Convention Appendix II, Habitats Directive Annexes II and IV

Reptiles

Emys orbicularis Bern Convention Appendix II, Habitats Directive Annexes II and IV Natrix natrix Bern Convention Appendix III

<u>Birds</u> (the most important qualifying species). Numbers refer to the size of breeding population. Crex crex, 5-10 pairs in the grassland habitats Global IUCN: NT, Birds Directive: Annex I Aythya nyroca: 1-3 pairs European IUCN: Vulnerable, Global IUCN: Near Threatened, Birds Directive Annex I Milvus migrans: 1 pair European IUCN: Vulnerable, Birds Directive Annex I Ardea cinerea: 15-20 pairs Nycticorax nycticorax, 5-10 pairs Alcedo atthis, 50-80 pairs Birds Directive: Annex I Riparia riparia: 500-600 pairs Haliaëtus albicilla: 1 pair Global IUCN: NT, Birds Directive: Annex I Charadrius dubius: 20-30 pairs Actitis hypoleucos: 30-40 pairs

Mammals

Lutra lutra CITES: A (I), Bern Convention Appendix II, Habitats Directive Annexes II and IV Castor fiber Bern Convention Appendix III, Habitats Directive Annexes II and IV

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 fish fauna is rich, providing opportunity for traditional fishery. Because of the natural conditions, the area provides a unique opportunity to study both the structure and function of a riverside ecosystem and the ecological and behavior characteristics of both the populations and the community of animal and plant species in an undisturbed condition.

The area has great importance for environmental education. Because of the large and diverse habitats, there are many options for hands-on presentation of the structure and function of the ecosystems both to the students and others, without causing significant damage, by utilizing proper methodology.

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:

State owned – roughly 60% Local government –5% Private – 35%

b) in the surrounding area:

mainly private

25. Current land (including water) use:

a) within the Ramsar site:

- Forestry, unfortunately with extended plantation of hybrid poplar;
- Inappropriate grazing and harvesting of hay;
- Tourism, canoeing along the river, beaches and related business, development of guest-house areas;
- Hunting, mainly for wild boar, pheasant, waterfowl;
- Fishing.

b) in the surroundings/catchment:

- Plans for large-scale developments (industry, traffic, etc.).

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:

- intensive and unfortunately uncontrolled canoe tourism during the summer period;

- intensity of forestry has increased since 1970. As a result, the fragmentation of the riverside forest habitats is getting close to the dangerous level for the species living in that habitat.
- constant volume of treated sewage water and the nutrients it carries poses a potential risk for the river and its streams and oxbows.
- uncontrolled fishing activities in the oxbows, introduction of non-native fish species, overloading, littering and disturbance by anglers.

⁻ Intensive forestry;

- growing and uncontrolled tourism along the river and on the beaches produce significant littering and disturbance.
- b) in the surrounding area:
- intensive forestry along the river
- runoff of chemicals due to intensive agriculture
- untreated waste water from neighboring settlements, including waste water from leather manufacturers in Austria

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.

Rába comes from Austria to Hungary at the settlement of Alsószölnök. Since 2002, the whole reach of the river belongs to Őrség National Park between Alsószölnök and Körmend. From Körmend to Kám Rába is connected to the Csörnöc Landscape Park, which has not been proclaimed yet.

The whole Hungarian reach of the Ramsar site and its surroundings are either Special Protection Area (SPA) or proposed Sites of Community Importance (pSCI).

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate): Rába valley has no IUCN category

Ia \Box ; Ib \Box ; II \Box ; III \Box ; IV \Box ; V X \Box ; VI \Box

The part of the site that belongs to the Őrség NP is classified into category V. c) Does an officially approved management plan exist; and is it being implemented?:

In 2004, a restoration plan was prepared by Directory of Órség National Park and West-Transdanubian Water Management Authority between Rábagyarmat and Csörötnek. This reach of the river is rich in abandoned gravel pits and oxbows. The plan is about the water supply of the oxbows, increasing the possibilities of fish spawning and development of bird habitats in the region. The realization depends on finances (applications for grants will be submitted).

d) Describe any other current management practices:

28. Conservation measures proposed but not yet implemented:

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

The "Rába Water Management Plan" is the first complex river basin management plan in Hungary, which was prepared in cooperation with the organizations and bodies based in the river basin. It contains the sustainable development of Rába river in the future, conciliating the protection and development of habitats with the social demands of the region. The plan was prepared by the bodies of water management and nature conservation. The realization would happen with the help of European Union project financing.

29. Current scientific research and facilities:

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

For several years, macro-invertebrate and fish monitoring work has been carried out in the frame of the National Biodiversity Monitoring System. The Water Framework Directive (60/2000/EC)

monitoring also started in 2005. Survey of alien plants was prepared on the whole marked reach. Other studies include surveys and research on birds conducted by NGOs and Directory of Őrség National Park. A habitat map plan was prepared about the reach belonging to the Őrség National Park.

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.

Vas County holds a leading role in nature protection education in Hungary. However, in this part of the county there are no significant activities on environmental education. Őrség National Park has an education center in Őriszentpéter.

31. Current recreation and tourism:

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

The volume of tourism related to water and rural areas is increasing and may have a potential for threatening the riverside ecosystem.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc. Nyugat-dunántúli Environmental, Nature Conservation and Water Management Authority

Szombathely

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.

West-Transdanubian Water Management Authority,

Szombathely, Vörösmarty u. 2. 9700

Directorate of Örség National Park

H - 9941 Őriszentpéter, Siskaszer. 26/A Phone: 36/ 94-548-034 Fax: 36/ 94-428-791 E-mail: gruber@onp.kvvm.hu

34. Bibliographical references:

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

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