

Reviving of natural networks in Hungary

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Introduction

In the lecture we explore the habitat restoration works in Hungary in general and we are focusing on the area of Hanság where the latest rehabilitation works enhanced the ecologic value of the area reviving the former richness of marshlands. With the reviving of the former landscape values we are making recommendations for the elaboration of Greenway *Natural Jewels* of Hanság.

Reviving natural habitats

There are two major groups of habitat rehabilitation programs in Hungary: for wetlands and for grasslands. The projects have two major financial background: the LIFE and LIFE+ programs of the European Union and the Regional Operative Programs of the National Development Plan (Regulation (EC) No 1655/2000).

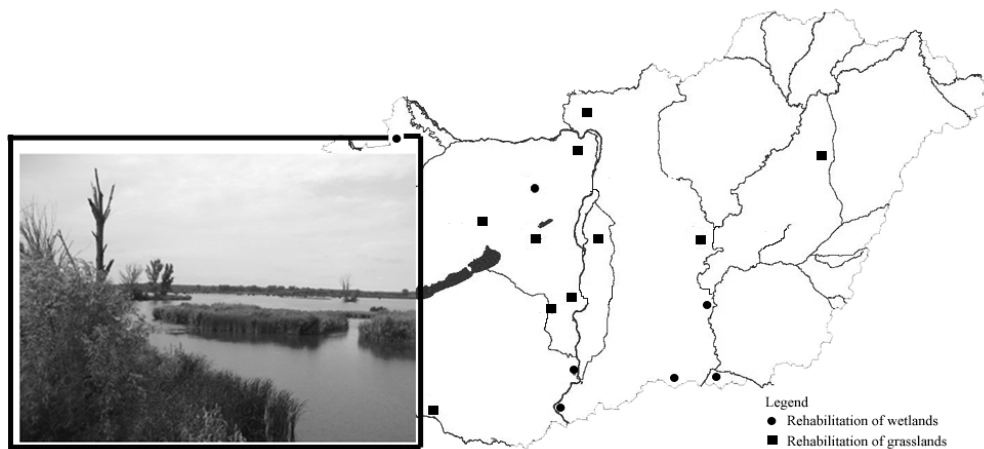


Figure 1. The location of habitat rehabilitation programs in Hungary with the example of Hanság

All rehabilitation projects were elaborated in the frames and management of national parks. Just one of them is situated in a functioning greenway in Hungary in Börzsöny. Greenways offer possibilities for enhancing life quality, tourism for local people and visitors as well, expand the facilities for recreation and provide access to nearby nature meanwhile ensures the protection of natural and cultural values (Csemez 2000 and Shafer, Lee, Turner, 2000). In Hungary in the region of Budapest agglomeration we can find functioning greenways: *Örökségeink Útján Zöldút*/On the Road of our Heritage connecting to the *Duna-Ipoly Zöldút*/ Duna-Ipoly Greenway

and there are other planned greenways as Greenway of Pilis, BudaSide Greenway. These greenways serve the recreation of the people living in the agglomeration and mostly in the capitol and the development of the villages of the areas rich in natural values (Bárcziné Kapovits, Csemez, Sallay, 2009). In spite of these we would like to give suggestions for the elaboration of greenway in a region lagging behind where the existing natural and cultural values and the planned habitat rehabilitations and cultural development projects give the frames for the future realization of the greenway or as the development council of the micro-region of Csorna is planning a thematic road of Hanság. Essential elements are of our planning project the rehabilitation projects of National Park Fertő-Hanság.

Characteristics of Hanság

The region of Hanság is characterized mostly by rural areas encompassing micro-villages. The Hanság is situated in the Small-Plain in Western-Hungary, between the great urban centers of County Győr-Moson-Sopron. This situation, the lack of a real centre determines the position of the region. In spite of the area is situated in the most developed region of the country, close to the Austrian border it was always considered as a periphery (Rechnitzer, 1989 and KSH 2007). Due to the increasing regulation works the marshlands were drained, almost completely disappeared the former wetlands, the enchanting aquatic world.



Figure 2. Footprints of landscape history (remnants of river-regulation and medieval canal system)

The remained awash meadows, wetlands, forests of Hanság, are protected as part of the Fertő-Hanság National Park as the strictly protected areas of Southern-Hanság, and Tóköz (Lake Barbacs and environment of Fehértó). Due to the latest habitat rehabilitation programs in the Hanság nowadays we can find again open water

surfaces, for this is a wonderful example the Nyirkai-Hany. About 400 ha area of Nyirkai Hany–Keleti Mór grasslands were flooded in 2001.

Goals and objectives

The stakeholders of Hanság still have not recognized the potentials of landscape resources which were also hindered by the nowadays changing closed attitude of the National Park Fertő-Hanság. On the other hand still just some stakeholders have realized the potentials of local landscape values in the development of tourism. On the basis of the explored potentials and weaknesses we decided to design greenways connecting the natural and cultural values.

In the frames of the planning project our goals are:

- Reviving the landscape identity of the region
- Enhancing life quality by opening new recreational opportunities for local people and tourists
- Enhancing tourism

Methods

We have carried out a social survey in the micro-region, which discovered that it is important to use the means of landscape architecture as well for broadening the possibilities of recreation and raise attention of local people on the landscape values. The survey revealed that the majority of local people have not realized the landscape values of the region. In the future the stakeholders of the region should raise attention on the natural and cultural values of the area and for the national Park Directorate to have a more open attitude in the direction of local population and tourists: educational programs, study trails, information. Great deficiency is the lack of landscape identity, so it is important to enhance the traditional characteristic elements of the landscape, as forest belts, woods and characteristic vegetation along the water-courses, meadows, rehabilitation of mine-lakes etc.

We examined the landscape history, the changing land use system and the existing landscape values of the area. In the course of our research work we explored the further rehabilitation plans of the National Park and development concepts of the settlements. On the basis of the analysis of existing low traffic road system which are most suitable for cycling and the landscape conditions and values we elaborated a greenway system in the area while using the means of landscape planning to enhance the traditional characteristic landscape elements as forest belts, woods and characteristic vegetation along the water-courses, meadows.

In the last years there is a greater attention and interest from the side of the inhabitants in the direction of natural resources, protected areas. In the case of Hanság the Directorate of National Park Fertő-Hanság has an outstanding role. For a long time nature protection in Hungary had a closed attitude which hindered the

development of the related communities. Nowadays the Directorate has a more open social role.

In the frames of the planning project we elaborated routes leading on cycling roads and low traffic roads exploring the natural and cultural values. Additionally we made recommendations for resolving the existing land use conflicts and satisfying the social needs for recreation.

Results

As a basis of our work we elaborated a landscape value cadastre including all the natural and cultural values of the settlements of the region. We elaborated a plan of suggested greenway which connects the most important values of the region giving opportunities for shorter or longer trips.

Additionally in several areas we have given recommendations for the improvement of environmental quality using the means of landscape planning and rural development. In the frames of this study we just highlight the most important aspects.

Due to the geological conditions in the past and still there was intensive gravel mining in the region which resulted several abandoned lakes. The complex rehabilitation of these lakes is recommended according to coordinated actions in the micro-region. Several lakes function as fish ponds, the development of these lakes (plantings, elaboration of gang-boards, bathing platforms in special cases, walking paths etc.) is necessary.

In spite of the rich natural values there is just one study trail in the region. In order to enhance regional identity and tourism it would be essential to elaborate other study trails in the area as the planned *Kócsag/Egret* study trail in Györsövényház.

It would be important to explore and present the landscape history of Hanság as it would be interesting not just for tourists but it would enhance the identity of the local people. The most suitable place would be for a landscape history exhibition in Györsövényház at the remnants of the medieval canal system in the area of the national park (Figure 2).

Reviving and exploring the former wetlands. In 2001 a notable wetland restoration project took place in Nyirkai-Hany in the neighborhood of Bősárkány. About 400 ha formerly grassland area was flooded. The area was chosen because it was drained relatively late and was cultivated extensively, and there was no valuable habitat to be found here. Anyway because of its deep lying situation it was flooded often during the year. After the flooding countless bird species have returned to the area. Due to the good experiences the National Park Directorate elaborated a new rehabilitation program of a greater scale to flood 1322 ha in Oslí-Hany (www.ferto-hansag.hu). The habitat restoration was realized by the financial support of the Dutch

Ministry of Agriculture, the restoration works of Oslí-Hány will be co-financed by the European Union. The flooded area is open for the public but just visitable in limited number. We consider it very important to open these areas or parts of it for the public elaborating here study trails or information points.

The area of Hanság and Rábaköz is rich in living folk arts (woodcarvers, potters, plaiters, lace makers, dyer in blue). Preservation and exhibition of these traditions would be important from the point of view of enhancing rural tourism.

According to our social survey the need for places of recreation is relatively great from the side of local people so it is important to realize the planned projects such as the development sport center in Kóny, recreation park in Csorna which up till now for lack of financial resources were not realized.

By new plantings along cart-roads and canals we would like to revive the traditional mosaic-like landscape character: plough lands, grass-fields divided by forest belts and alleys.

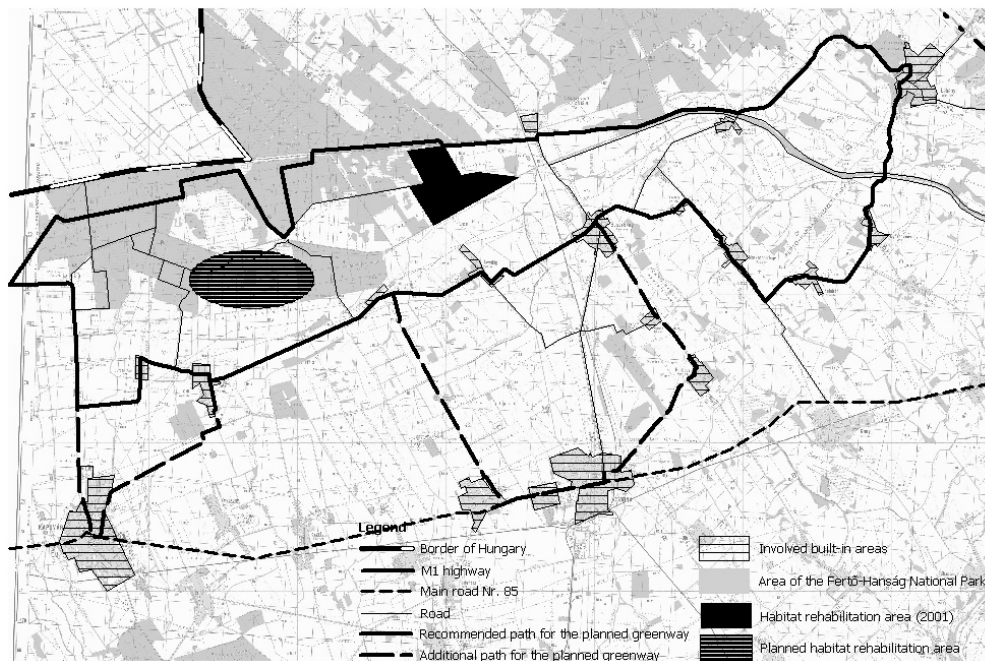


Figure 3. A possible layout of the planned greenway

Conclusion

The growing dynamics of co-operation among settlements and the National Park and other stakeholders of the region can result in enhancement of life quality. During our research work we explored the need of enhancement the traditional characteristic elements of the landscape. In the frame of the planned greenway we gave suggestions for reviving of the traditional landscape character. The revival of the former habitats and exhibitions of landscape history and the promotion of landscape values through their connection in the frame of greenways leading through characteristic landscape elements will contribute the development of tourism (mostly ecotourism) potential of the region and promote local identity. Hopefully the settlements of the region or the council of the micro-region will find financial resources for the realization of these plans.

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