

Slovak Karst Biosphere Reserve

Slovak Republic

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Key Messages/Lessons learnt

- Restoration of degraded habitats and maintenance and improvement of the favorable status of non- forest protected habitats
- Conservation of endangered and occurring animal and plant species
- Establishment of cooperation with local farmers, owners and land users to protect habitats and species

Biosphere Reserve description

The Slovak Karst is the largest karst area of the plateau type in Central Europe located in the south-eastern part of Slovakia, at the border with Hungary. It is a significant territory in terms of the occurrence of geological, geomorphological phenomena and groundwater resources in terms of the occurrence of unique species of fauna and flora. This territory (landscape) was declared as a protected landscape area in 1973 and since 2002 the category of protected area changed to national park. In 1977 the Slovak Karst was registered in the World Network of Biosphere reserves under UNESCO's Man and Biosphere Programme. The total area of the Slovak Karst Biosphere Reserve is 74,500 ha. Its borders have been marked concurrently with the boundaries of the protection landscape area and its protection zone. In the process of territory zonation in 1988, the geomorphological character of the Slovak Karst played an important role. The area of the core area is 8 857 ha, the buffer zone is 23 395 ha and transition zone is 42 248 ha. There are 1300 caves known in the Slovak Karst, which since 1995, together with the caves of the adjacent Aggtelek Karst in Hungary, have been included in the UNESCO World Cultural and Natural Heritage List.

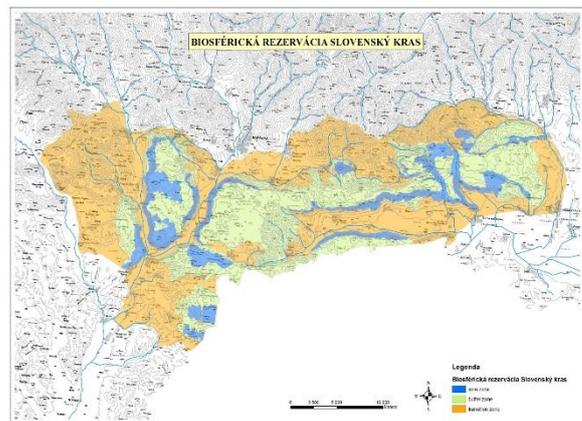


Figure 1: Map of the Biosphere Reserve Slovak Karst

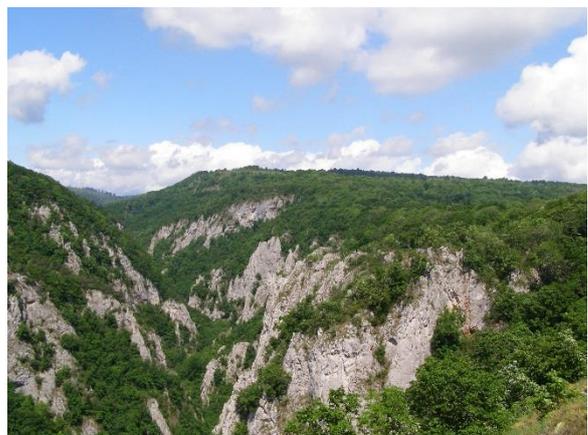


Photo 2: Zadielska tiesnava Gorge

BR challenges

Since the end of the 1980s, agriculture has been undergoing constant qualitative changes. This is negatively reflected in the appropriate way of using the land, especially its remote and the less accessible permanent grasslands, which are left unused and subject to the succession of the slaughter process.

In the past, using of landscape was much more intense than it is today. It was also due to the considerably higher state of livestock (cattle, goats and sheep). As a result of the absence of this traditional method of land use, grassland degradation occurs in many places and their overall size is reduced. The largest area in terms of agricultural land occupies permanent grasslands in the core zone (7%) and in the buffer zone (15%). There is predominantly arable land in the transition zone. The structure is represented by permanent grasslands of xerophilic to mesophilous nature, which are mostly used as pastures, less than meadows and part is currently not used. Compact grasslands are found mainly on The Silická, Plešivská and Zádielská Plateau. The change of social relations after 1989 resulted in the disappearance and division of large farms. The land is managed by various agricultural organizations, churches, forest landowners association, municipalities, and small private owners. A complex owner's structure in many localities complicates the use of farmland, and for this reason, the area of grasslands is dwindling and measures need to be taken to revitalize them.

Initiatives/Actions on SDG

15. The Biosphere Reserve thus contributes to the goals of SDG 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

15.A Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems



Photo 3: Degraded grassland habitat by the succession overgrowing of the trees

Practical Outcomes/Achievements

Despite of the subsidy schemes from the European Union funds and the various agri-environmental projects, the condition is still not satisfying. The aim is to maintain and improve the beneficial status of non-forest protected habitats and species occurring. The international Life project "Restoration of habitats and species of subpanonic grasslands" was elaborated with the participation of BR Slovak Karst. This project started in 2018 and runs until 2024. The aim is to restore these rarely degraded habitats at Silická, Plešivská, Zádielská Plateau and at the same time to save the endemic species *Onosma tornensis* on the slopes of Turnian Castle Hill. The activities are targeted to areas that are also registered under NATURA 2000 - SACs Horný Hill, the Plešivec Plateau, the Plešivec slope, the Fabiánka, the Kečovo and the Domica scars with the area of about 200 ha. Project activities are carried out by cooperation with

local farmers, owners and land users. After removing the ravages, they will provide permanent care of the restored sites by implementing an extensive pasture and sprouts removing. This work is already being carried out by the agricultural cooperative of Silica Plateau and Forest landowners association - Dvorníky.

At the same time local populations and stakeholders awareness about in the importance of target species and habitats, the NATURA 2000 network and the need for the management of valuable habitats is increasing. The Biosphere Reserve also works closely with other farmers. Cooperation agreements are concluded with land owners to ensure care of protected plant habitats and animal species in the area to simplify conditions of management for those users in places where more stringent restrictions are applied.



Photo 4: Sheep grazing on the Silická planina Plateau



Photo 5: The semi-dry grassland after restoration

References

1. Rozložník, M., Karasová, E.: PLA – BR Slovak Karst, 1991
2. Action plan BR Slovak Karst
3. Projekt Life „Restoration of habitats and species of subpanonic grasslands“

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