

POSSIBILITIES AND ADVANTAGES OF INDIVIDUAL RECREATION IN THE TOPOĽČANY DISTRICT

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<https://doi.org/10.11118/978-80-7509-904-4-0193>

Abstract

The individual form of recreation and spending free time individually came to the fore during the COVID-19 pandemic. In the area – the Topoľčany district, there are several alternatives for individual recreation, which are provided by natural ecosystems, cultural-historical, sacral and architectural monuments. In research connection with the aesthetics of the landscape, they provide several opportunities for recreational activities: hiking and cycling, camping, fishing, swimming, observing plants and animals, the ever-expanding use of agrotourism in a rural environment. Locations with such a focus are part of the Regional Territorial System of Ecological Stability – 21 biocenters, 27 biocorridors and 41 ecostabilization elements with total area 18,271.25 ha. In recent years, in connection with recreation, the concept of "ecotourism" has come to the fore as a sustainable form of recreation based on natural wealth, primarily focused on experiences and the study of nature. It is associated with minimal waste production and almost no consumption, protects the landscape, the environment and biodiversity, improves the prosperity of local people and should be economically viable, ecologically sensitive, and culturally appropriate. The main aim of the contribution is to point out the possibilities of individual recreation for residents in the Topoľčany district with the criterion of ecotourism.

Key words: Ecotourism Individual free time Landscape protection Recreational activities

Introduction

We got used to an individual form of recreation during the COVID-19 pandemic, which was also associated with strict blocking measures and restrictions on the movement of people tied to the place of permanent residence. Staying in nature is associated with relaxation, regeneration of forces and experiential activities.

The natural environment becomes the focus of nature tourism, which is especially suitable for protected areas and is a form of sustainable tourism. It supports the harmony between natural, socioeconomic, and cultural conditions. In Anglo-Saxon literature, nature tourism or wildlife tourism is used for nature tourism. A common feature is getting to know nature and gaining new experiences and knowledge about living and non-living nature. It is also usually referred to by the term „green tourism“ (Kurek et al. 2007). It is defined as a summary of tourist routes with the primary goal of visiting and learning about naturally valuable areas through activities that do not (or only minimally) disturb its integrity and character (Matlovičová et al. 2015). Terminologically, ecotourism is considered synonymous with nature tourism, while in this approach it loses an important cultural aspect. In 1996, the International Union for Conservation of Nature adopted the broader meaning of ecotourism as: ecologically responsible travel to areas that have not been transformed by humans with the aim of learning about nature and all the accompanying elements of culture (past and present), routes promoting nature conservation with minimal negative impact and helping development of the local community in socioeconomics (Ceballos-Lescuráin 1996). Ecotourism has many forms, there is an intersection of traditional tourism and ecological alternatives (Zaręba 2010), basically it is one of the forms of nature tourism. Nature tourism has a great potential in areas without the influence of mass tourism, as well as in less developed regions. It naturally creates conditions for the development of local communities and the preservation of their traditions and culture. It is based on a vision of long-term sustainability, the development of the territory is based on the principle of actively contributing to the preservation of natural and cultural heritage, with the involvement of local communities in planning the development of the given territory and interpreting the natural and cultural heritage for visitors (Koščová, Koščová 2013).

The main aim of the contribution is to point out the possibilities of individual recreation for residents in the Topoľčany district with the criterion of ecotourism.

Materials and methods

The research area is the Topoľčany district in the western part of Slovakia, administratively included in the Nitra self-governing region. In this district there are 53 municipalities and 1 with the status of town: Topoľčany (also a district town), as of 1 January 2022 total 24 804 inhabitants. The Topoľčany district has an area of 59 763.37 ha and as of 1 January 2022 it has 70 877 inhabitants with an average population density of 117.04 inhabitants per km² (<http://datacube.statistics.sk/>).

Within each the municipalities we focused on areas with the potential recreational use for residents. We used the processed documents within the Regional Territorial System of Ecological Stability (RTSES) of the Topoľčany district (Kočícký et al. 2019). According to the RTSES creation methodology, recreational elements in the structure have the character of biocentres (supraregional and regional), biocorridors (supraregional and regional) and other ecostabilization elements (gene pool localities and ecologically important landscape segments). These elements were supplemented by small protected areas III. – V. degree of protection (zone A, B, C), Protected Landscape Area Ponitrie, NATURA 2000 sites and protected trees (circular sites with a radius of 10 m and an area of 314 m²). In the environment of geographic information systems (GIS) in the QGIS 10.1 program, a polygon layer was processed with the occurrence of RTSES elements – their location within municipalities, calculated their area and share in the structure of the research area.

Results

The elements belonging to the RTSES of Topoľčany district (Kočícký et al., 2019) with the potential recreational use include (Pic. 1) **2 supra-regional biocentres** Hrdovická (2380.33 ha) and Havran (1111.83 ha), **19 regional biocentres** in 35 municipalities of district mainly representing forest communities, which contribute to increasing ecological stability in a heavily urbanized and intensively agricultural landscape. The largest biocenters by area are Hontová (682.85 ha), Hraškovce lúky meadows – Drža (614.94 ha) and Bear Hill (567.36 ha), the smallest biocenter is Oxbow of Nitra River (23.2 ha). Recreation options and the network of protected areas are complemented by **27 biocorridors** – 2 supra-regional (Nitra and Horňany rivers) and 25 regional (16 hydric and 11 terrestrial) as a part of the 40 municipalities. The longest biocorridor is the Nitra River (23.44 km) and Chotina stream (19.95 km). Territorial smaller are ecostabilization elements – gene pool localities – GL (6 in total) representing smaller territories with the occurrence of rare and protected species of flora and fauna, or rare plant communities, and ecologically significant landscape segments – ESLS (37 in total), which include rare natural habitats close to nature from the point of view of the protection of the gene pool and the territory with a balancing function (they dampen the negative consequences of human activity), by protecting important components of the country and the landscape system against negative degradation and destabilization processes (Ružička, Ružičková 1973).

Both GL and ESLS are mostly part of protected areas. In total, there are 6 nature reserves and 1 national nature reserve (4th and 5th level of protection), 4 protected areas (3rd level of protection) and 3 natural monuments (4th level of protection) in the district. ESLS mainly consists of preserved forest complexes, forest stands of soft alluvial forest, accompanying tree and shrub vegetation along water courses and areas, parks and historical parks, areas with a wetland character with admixture of woody soft alluvial forest, remnants of oxbow of the Nitra River, herbaceous and scrubland, water reservoirs and, in the city of Topoľčany, also areas of urban public green.

The Topoľčany district is locally connected with traditional forms of land use with a historical aspect. In addition to fields, the structure of the territory includes hop farms (34 ha), vineyards (248 ha), gardens (1462 ha), orchards (330 ha).

Residents of the district can use for individual recreation (sports tourism or cycling) mainly forest stands, for walks and cycling accompanying linear vegetation along the Nitra (including dead branches) and Bebrava rivers, water bodies – water reservoirs (6 in total) with a multi-purpose system uses – also recreational (swimming, fishing, hiking, and cycling). The most famous is Duchonka on the middle course of the Železnica stream with an area of approx. 60 ha (in the municipality of Prašice) with cottage settlements (49.1 ha). Individual recreation is complemented by recreational and sports facilities, gardening, and cottage settlements. Every village has football or multifunctional fields, gardening settlements are mainly located in the town of Topoľčany (8.5 ha) and the neighboring village of Tovarníky (5.6 ha).

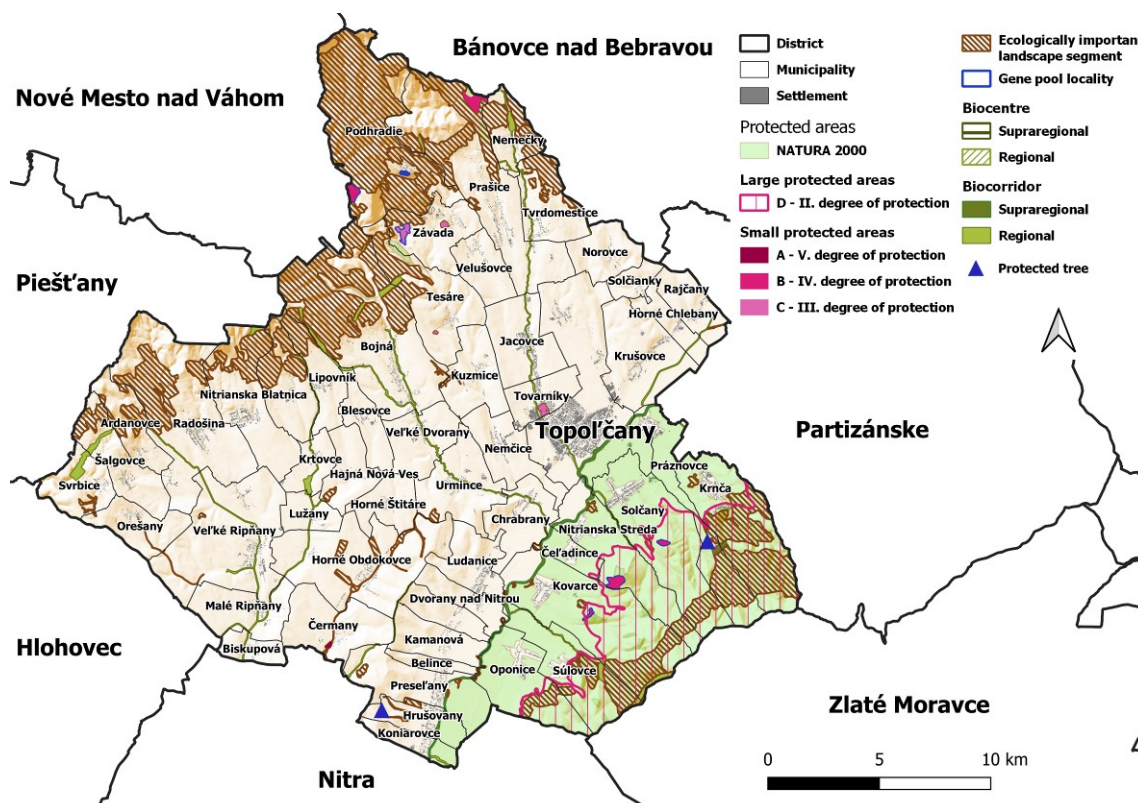


Fig. 1: Occurrence of elements with potential recreational usage in Nitra District (Grežo, 2021)

Cultural-historical, archaeological and sacred objects also have recreational potential, e.g. castles and castle ruins (6 in total) – the most famous in the villages of Podhradie (Topoľčiansky Castle) and Oponice, the Bojná castle with the archaeological site of Valy and an archery range, castles and mansions (17 in total, of which 7 are national cultural monuments) – the most famous is the mansion in Oponice, churches and religious monuments (a total of 11, of which 10 are national cultural monuments), a ranch in Bojná village and a network of existing cycle paths – a total of 34 marked cycle paths with a length of 294 km (<https://okres-topolcany.oma.sk/cykloatlas>). There are also lookouts in two villages of the district – on Marhát in the village of Nitrianska Blatnica and on Panská Javorina in the village of Podhradie.

All types of protected areas have a total area of 18,271.25 ha (30.82%) in the Topoľčany district. There was no protected area in only two municipalities of the district (Velušovce, Nemčice), in 9 municipalities there is 1 type of protected area. The greatest diversity of protected areas is in the municipalities of Kovarce – 10, Nitrianska Streda – 9, Solčany – 9 and Podhradie – 7. The municipalities in which the share of protected areas from their total area is greater than 50% include: Podhradie (94.55%), Krnča (70.95%), Ardanovce (62.67%), Nemečky (62.27%), Bojná (58.98%), Súľovce (58.15%), Nitrianska Streda (57.86%), Solčany (56.47%), Práznovce (56.17%), Kovarce (55.81%). On the contrary, the smallest share of protected areas from the area of the municipality has: Belince (0.87%), Orešany (0.55%), Ludanice (0.46%), Horné Štitáre (0.07%). Municipalities with the smallest areas (up to 100 ha) and 1 type of protected area are Biskupová (10.28 ha), Blesovce (7.13 ha), Horné Štitáre (0.38 ha), Krtovce (30.18 ha), Kuzmice (13.85 ha), Lužany (12.85 ha), Solčianky (10.12 ha) and Veľké Dvory (15.2 ha). As a regional or supra-regional biocorridor and parts of accompanying vegetation along waterways or oxbows are used for recreation in the municipalities Oponice (31.02 ha), Nitrianska Streda (66.35 ha), Hrušovany (13.97 ha), Koniarovce (11.64 ha) and Topoľčany (63.52 ha).

Discussion and conclusion

For the regeneration of physical and mental strength during the week (year), the environment tied to permanent residence or border of the district is mainly used, as well as for active leisure time in the natural environment. For this are used well-known localities of a natural character, but also new ones, or lesser-known localities. Continuous forest stands, smaller woods, dams of the Nitra, Chotina, Hlavinka waterways or the banks of water bodies can be used for hiking or cycling. The dominant

geomorphological unit in the territory of the Topoľčany district is the Danube Upland bordered by a pair of mountains – Považský Inovec in the west and Tribeč in the east.

All types of protected areas occupy 30.82% of the Topoľčany district. Except for 2 municipalities, there was at least 1 type of protected area in the other municipalities of the district. Potentially can be at risk from the point of view of visitors' sites that are part of the PLA Ponitrie (15 sites) and their protection zones (the 4th level of protection – 8 sites, the 3rd level – 1 site), NATURA 2000 sites (total of 9).

In case of increased concentration of people, conflicts may occur between different types of recreational visitors (e.g., hikers, mountain bikers and equestrians), between motorized and non-motorized users, and between visitors with different social norms and arrangements (e.g., group size and commercially run groups) and ethics (e.g., noise levels and waste disposal). High levels of traffic may reduce the quality of the visitor experience for those seeking solitude or whose use of the natural area conflicts with others (Shin et al. 2010).

The concept of "sustainability" has been resonating in the international environment for several decades, but in Slovakia it has so far only received marginal or theoretical attention in the development of tourism. The spectrum of activities carried out in nature tourism is wide, its development is less investment-intensive, less developed areas have the potential to appeal to visitors, in this case rural municipalities with potential for the development of nature tourism. Nature tourism means much more than just spending time in nature. Its key difference and feature is that it must also directly contribute to the improvement of nature protection, biodiversity, and the landscape in two ways – by developing programs and products supporting and increasing environmental awareness and by directly using the generated part of tourism income to care for this natural and cultural heritage (<https://rabbsk.dobrykraj.sk/>).

From the processed documents for the RTSES of the Topoľčany district results that there is at least one protected area and locality with potential recreational use in 52 municipalities. In total, the residents of the district (a total of 70,877 inhabitants) have 18,271.25 ha of protected areas at their disposal. That is 0.2578 ha (2578 m²) per inhabitant. Therefore, it would be interesting to determine the carrying capacity of protected areas for tourists according to the selected methodology. Determining the recreational carrying capacity is one of the management tools of recreational areas, which is based on knowing the preferences of the recreational user and providing quality experiences in nature while protecting the natural environment (Sayan, Atik 2011). Outdoor public infrastructure, including parks, hiking, and biking trails, is one of the few low-risk spaces that individuals have easy access to outside their homes (Doubleday et al. 2021). However, many of them belong to the system of protected areas with different degrees of protection, which should be preserved.

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Acknowledgement

This article was supported by project KEGA No 043UKF-4/2022 The impact of tourism on land use changes in selected localities in Slovakia.

Souhrn

Cílem příspěvku je poukázat na možnosti individuální rekreace obyvatel okresu Topoľčany, která splňuje podmínky přírodního cestovního ruchu. V obcích byly vytipovány plochy s potenciálním rekreačním využitím s využitím zpracovaných podkladů v rámci Regionálního územního systému ekologické stability (RÚSES) okresu Topoľčany (Kočícký a kol. 2019). Prvky náležející do RÚSES s potenciálním rekreačním využitím zahrnují biocentra - 2 nadregionálního a 19 regionálního významu v 35 obcích okresu, 27 biokoridorů - 2 nadregionální a 25 regionálních (16 hydrických a 11 terestrických), které jsou součástí k.ú. Topoľčany. 40 obcí. Rozlohou menší jsou tzv. ekostabilizační prvky - genofondové lokality - GL (celkem 6) a ekologicky významné segmenty krajiny - EVKS (celkem 37). Obyvatelé okresu mají možnost využívat především lesní plochy k individuální rekreaci (sportovní turistika nebo cykloturistika), doprovodnou liniovou zeleň podél vodních toků Nitra (včetně mrtvých ramen) a Bebrava, vodní plochy - vodní nádrže (celkem 6) s víceúčelovým systémem využití - i rekreačním (koupání, rybaření, pěší turistika a cykloturistika) k vycházkám a cykloturistice. Individuální rekreaci doplňují rekreační a sportovní areály (fotbalové či multifunkční hřiště), zahrádkářské a chatové osady (zejména ve městě Topoľčany a sousední obci Tovarníky). Rekreační potenciál mají i kulturně-historické, archeologické a sakrální objekty, např. hrady a zříceniny hradů (celkem 6) - nejznámější v obcích Podhradie (hrad Topoľčany) a Oponice, hrad Bojná s archeologickým nalezištěm Valy a areálem lukostřelby, hrady a zámky (celkem 17), hrad Bojná s archeologickým nalezištěm Valy a areálem lukostřelby, z toho 7 národních kulturních památek) - nejznámější je zámek v Oponicích, kostely a sakrální památky (celkem 11, z toho 10 národních kulturních památek), ranč v Bojně a síť stávajících cyklotras (34 značených v délce 294 km. Ve dvou obcích okresu jsou také rozhledny - na Marhaté v obci Nitrianska Blatnica a na Panské Javorině v obci Podhradie. Z rozlohy okresu Topoľčany připadá na všechny typy chráněných území celkem 18 271,25 ha (30,82 %), tj. 0,2578 ha (2578 m²) na jednoho obyvatele. Řada z nich však patří do soustavy chráněných území s různým stupněm ochrany, která by měla být zachována.

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