

## Geoconservation – an opportunity for people living on karst terrains? A case study of the Aggtelek National Park (Hungary)

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**Introduction:** Karst terrains are generally unfavourable for human settlement. However, these natural environments can be relatively well preserved, and given their special geologic and biologic settings, they often became protected areas.

Since the foundation of Yellowstone National Park in 1872, the national park (NP) concept has been transformed several times. Important components of the present NP concept are, for example, protection of ‘pristine’ nature, national identity, tourism, and other elements. The ‘worthless lands’ hypothesis of Runte (In: Frost and Hall 2009) states that ‘before designating public lands as national parks, the US Congress had to be persuaded that those lands were ‘worthless’ for other purposes.’ Our opinion is that karst-lands fit the ‘worthless land’ hypothesis as they provide generally poor conditions for the people living on them. Recently, we investigated human-environment relations in the special context of karst terrains (Telbisz *et al.* 2014, 2015, 2016). The main conclusion of our studies was that these karst-lands (including Aggtelek Karst, Hungary) were poor areas, affected by depopulation in the second half of the 20<sup>th</sup> century. However, their special natural values and attractions (*e.g.* caves and gorges) offer a good potential for tourism.

Another important issue is the relationship of nature protection and regional development. It is increasingly emphasized that nature protection should contribute to regional development (Mose 2007). Thus, one of our main study questions is whether the Aggtelek National Park (ANP) can improve the socio-economic conditions of local people or not. Karst tourism is deeply related to geotourism and thus it may provide an opportunity for a better life for local people. Another

question is the relative importance of geoconservation and geotourism among the several functions of karst NPs.

**Methods:** First, we demonstrate that the ANP as an employer has a significant direct impact on local development. Second, we present how geotourism has changed over the last century in ANP, using visitor numbers of the Baradla Cave. Third, we try to evaluate the relative importance of geoconservation, bioconservation and other NP functions within the ANP. In addition to providing an overview of the official ANP documents, we have used interviews and questionnaires. Semi-structured interviews were created with ANP managers and local stakeholders, as well as questionnaires targeted employees of the ANP, local people and tourists.

The ANP is the largest employer in the micro-region. It has 106 direct employees and 141 people employed in the framework of the ‘public works program in Hungary’. Furthermore, around

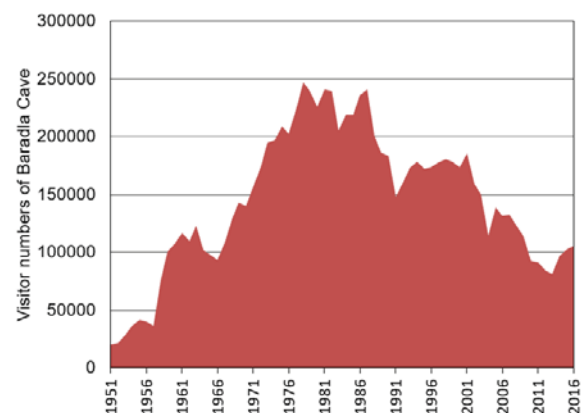


Fig. 1. Visitor numbers at the Baradla Cave between 1951 and 2016.

200 people work at small companies on the basis of contracts with the ANP. Thus, the mere existence of the ANP has a direct impact on the socio-economic conditions of the poor, depopulating micro-region.

**Tourism trends at Aggtelek National Park since its inception:** The ANP was founded in 1985. However, its main attraction, the Baradla Cave (with total length of 25 km including the Domica Cave, Slovakia) has a very long human history, as it was already known and inhabited by prehistoric man. Exploration has been underway since the 18<sup>th</sup> century, and the cave already became a tourist target in the second half of the 19<sup>th</sup> century, when it was the second longest known cave in the world. Thus, in some ways, geotourism was always significant in this area. In the 20<sup>th</sup> century, tourism at Baradla Cave was intensively developed and it became a brand name: ‘The Dripstone Cave’ – is a must see for all Hungarians. Visitor numbers continuously increased until 1978 (Fig. 1), and remained relatively high until 1987 with around 240,000–250,000 visitors per year. However, the political and economical change around 1990 had a serious impact on tourism at Aggtelek and since then there has been an almost continuous decrease in visitors. This downtrend was interrupted for a six-year period after the caves of Aggtelek Karst and Slovak Karst became a UNESCO World Heritage Site in 1995, but the decrease then continued until 2013. Since that time, a slight increase in visitors is observable. The question is, whether this is a result of ongoing investments and mar-

keting, and how tourists numbers can be further increased.

**External determination versus limited optimism:** First, the opinion of ANP experts is that the peripheral location of the ANP at the boundary of Hungary, relatively far from urban centers, largely limits its opportunities. Second, a significant proportion of Hungarian tourists travel to foreign countries, and the ANP is not as appealing as it was before. Third, state funds are sufficient for infrastructure development, but not for everyday operation, and therefore an increase in geotourism would be desirable.

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