Social assessment of national parks through the example of the Aggtelek National Park

MARGIT KŐSZEGI¹, Alena GESSERT², JANETTA NESTOROVÁ-DICKÁ², Péter GRUBER³ and Zsolt BOTTLIK⁴

Abstract

Karst areas, which are less involved in productive activities are often declared protected areas that can have a positive impact on the lives of the local communities. To verify this hypothesis, we examine karst areas, where national parks have been established to preserve mostly geological but also biological values. According to the threefold system of objectives in national parks, not only protection and conservation, but also the presentation of the natural values to the outside world is important. Thus, tourism and related services are essential and often exclusive economic activities in these protected areas. Our questions are how national parks appear in the daily lives of the local communities and how much locals perceive the beneficial effects of national parks. The selected area of our study is the Gömör-Torna / Gemer-Turňa Karst on the Hungarian-Slovak border, where national parks have been established on both side of the border (Aggtelek National Park in Hungary and Slovak Karst National Park in Slovakia) to preserve karst landforms and caves. We conducted structured interviews with leaders of settlements in and around the national park. Interviews reveal the ambivalent system of everyday relationships. Local communities are experiencing multiple conflicts with national parks. The conflicts stem from the contrast that usually occurs within the threefold system of objectives of national parks (the tension between the practice of protection/preservation and presentation). Locals are negatively affected by the presence of national park as an authority, which limits to some extent their economic activities. They perceive national parks as barriers that prevents them from building a more diversified economy, so the existence of the national park is seen by the majority as a disadvantage rather than an advantage. Some people even question the need to protect nature, which can be seen as a legacy of the former socialist regime. Thus, we conclude that there is a need to change the attitudes of local communities more positive towards nature conservation.

Keywords: national park, human environment relationship, preservation protection, presentation

Received February 2022, accepted June 2022.

Introduction

National parks are special areas of modern societies. They are common but very different in the conditions of their creation and operation (HILL, M.A. and PRESS, A.J. 1993; GLENDINNING, M. 2003; WEST, P. *et al.* 2006; FROST, W. and HALL, M. 2009; GISSIBL, B. *et al.* 2012; Kőszegi, M. *et al.* 2019; Böhn, D. 2021).

They were brought to life by a social demand arising from modernity (BEATTY, R.O. 1952; McConnell, G. 1954; Cronon, W. 1995). As an alternative to their way of life, communities away from nature, determined by artificial conditions, want to keep areas where natural situations can still be found (DUNLAP, T.R. 1999; HALL, M.C. and FROST, W. 2009; NASH, R. 2014).

¹ Department of Cultural History, Faculty of Humanities, Institute of Historical Studies, ELTE Eötvös Loránd University, Múzeum krt. 6–8, 1088 Budapest, Hungary. E-mail: koszegi.margit@btk.elte.hu

² Institute of Geography, Faculty of Natural Sciences, P.J. Šafárik University. 041 80 Šrobárova 1014/2, 04001 Košice, Slovakia. E-mails: alena.gessert@upjs.sk, janetta.dicka@upjs.sk

³ Aggtelek National Park Directorate, Tengerszem oldal 1. H-3758 Jósfafő, Hungary. E-mail: info.anp@t-online.hu

⁴ Department of Social and Economic Geography. Faculty of Science, Institute of Geography and Earth Sciences, ELTE Eötvös Loránd University, Pázmány Péter sétány 1/C, 1117 Budapest, Hungary. E-mail: agria@gmx.net

Our research group, which has been studying the relationship between man and the environment for many years, focuses on national parks in karst areas (Kőszegi, M. *et al.* 2019; TELBISZ, T. *et al.* 2020; TELBISZ, T. and MARI, L. 2020). National parks can also be interpreted as symbolic spaces for dissolving the dichotomy between man and nature (Kőszegi, M. *et al.* 2015). As a basic idea of our research, we suggested that *the utilisation of limestone areas* (*that are less involved in productive activities*) for *touristic purposes can have a positive impact on the communities living there.*

One of the sample areas of our investigations is the Gömör-Torna/Gemer-Turňa Karst on the Slovak-Hungarian border. On the Hungarian side, the Aggtelek National Park, on the Slovak side, the Slovak Karst National Park. These are connected protected areas, separated by a border (TELBISZ, T. et al. 2014, 2020). The questions in our research presented here are as follows. How do national parks appear in the daily lives of the communities? What is the assessment of national parks? Do locals perceive the beneficial effects of national parks, which we assume? We sought answers through interviews with local community leaders.

Theoretical background – the national park as a social actor

From the very beginning, the existence of national parks has been determined by a threefold system of objectives (Сомsтоск, T.B. 1874; Waugh, F.A. 1918; Kőszegi, M. et al. 2019). The basic idea of the national park, the need to keep the stunning landscape, was first articulated by CATLIN, G. (1844) in the 19th century. CATLIN says pristine places are treasures of special beauty that must be protected and preserved for future generations and shown to the rest of the world (NASH, R. 2014). Preserve, protect, and present - basic terms for discourses related to national parks. In addition to the preservation of the "wilderness", and in connection with this, the protection of the natural values found in the demarcated area also appears. At the same time, the third pillar is influenced by the intention to make protected nature *accessible and open* to people for their recreational activities (ANFIELD, J. 1993; MAYER, M. 2010; BYSTRÖM, J. and MÜL-LER, D.K. 2014; DOLLMA, M. 2019; BOLLOBANI, E. and URUCI, R. 2019; TELBISZ, T. *et al.* 2020).

The national park is present in our study as a social construction that has an impact on the local communities associated with it (WHATMORE, S. 2006). We looked for the actors of power that play a role in shaping these effects, in creating and operating the frameworks. Regulatory actors appear at different levels, i.e., different scales. The formed hierarchy is shown in *Table 1*.

A special organisation, the IUCN (International Union for Conservation of Nature and Natural Resources), was set up in 1948 to organise nature conservation worldwide. The associated WCPA (World Commission on Protected Areas) has classified protected areas according to management objectives (*Table 2*). The IUCN and WCPA do not provide a binding classification and regulatory system. The guidelines set out in their documents can help individual countries to organise nature conservation (BISHOP, K. *et al.* 2004). They also have an impact on the laws of individual states, which is why we called the role of the IUCN *symbolic* in the first table.

At the *international* level, continental factors also play a role in shaping the rules for national parks. Among them, the European Union's nature conservation directives are the most important in the national parks we have examined (VAN BEECK CALKOEN, S.T.S. *et al.* 2020). The best known is the European ecological network, Natura 2000, whose main goal is to *preserve* and *protect* natural values and biodiversity.

The formal definition of national parks as social actors is primarily a matter of *statelevel* regulation. In Hungary, for example, the protection of nature is regulated by a law enacted in 1996 (Act LIII of 1996 on the Protection of Nature). The introductory text of the law mentions the general objectives in

Scales, levels	Actors	Role in regulation and enforcement	Impact on the lives of local communities
Global Continental	IUCN European Union	symbolic	indirect
National	state		
Regional Local	national park directorate municipalities	practical	direct

Table 1. Actors regulating the operation of national parks

Classification	Name
Ia	Strict Nature Reserve
Ib	Wilderness Area
II	National Park
III	Natural Monument or Feature
IV	Habitat/Species Management Area
V	Protected Landscape/Seascape
VI	Protected area with sustainable use of natural resources

Table 2. The classification of protected areas according to the WCPA

line with international guidelines, including the protection of natural areas and the threefold system of objectives for national parks (these are highlighted in the text):

"Recognising that natural values and natural areas are a special and irreplaceable part of the national wealth, their maintenance, management, improvement of their condition, preservation for present and future generations, ensuring the economical and rational management of natural resources, the protection of natural heritage and biological diversity and the establishment of a harmonious relationship between man and nature, in accordance with our international obligations, as an essential condition for the survival of mankind, requires the establishment of effective protection of nature and therefore constitute the following law:... "

With the increase in the social distance between the *local* community and the actors belonging to the national park, a symbolic interpretation can be observed in public thinking. In the absence of a direct connection, the *state* as an actor becomes an *abstract concept and symbol* for local communities. The same goes for the *national park directorate*. At the same time, *employees of the national park* or *local leaders* (mayors, municipal employees) are more of a *direct experience* for the local population (SELBY, A. *et al.* 2011).

In this paper, we focus on the relationship between national parks and local communities, specifically from the community side. In line with the research questions, we examine how the symbolic role of national parks and the interpretation of their international and national system of objectives occur at the local level. On the other hand, we also explore the image that is formed by gaining direct experience. It also provides information on the specifics of the operation defined by the different actors. The threefold system of objectives in national parks and the local representatives of the current state power must cooperate in everyday life in such a way that they can even balance conflicting interests (Carruthers, J. 1989; Arnberger, A. and Schoissengeier, R. 2012; Yakusheva, N. 2019; Arpin, I. and Cosson, A. 2021; Fienitz, M. et al. 2022).

Based on the literature, we can assume that the *contradiction* between protection/preservation and demonstration works here at the local level as well (FINE, K. 1988; TURNER, R.W. 2000; EAGLES, P.F.J. 2002; DEXLER, Sz. *et al.* 2003; NOLTE, B. 2004; WEST, P. *et al.* 2006; JUUTINEN, A. *et al.* 2011; SABO, H.M. 2012; ZGŁOBICKI, W. and BARAN-ZGŁOBICKA, B. 2013; Bell, J. and Stockdale, A. 2015; GAYNOR, A. 2017; WIDAWSKY, K. and JARY, Z. 2019; ESFANDIAR, K. *et al.* 2021).

The protection of values is opposed by the economic interests associated with services, especially tourism, which can generate conflicts in the lives of communities (ANFIELD, J. 1993; WALLSTEN, P. 2003; SZALAI, K. and SZILÁGYI, Zs. 2007; Puhakka, R. 2008; Arnberger, A. et al. 2018, 2019; Кім, М. and Јакиз, Р.М. 2019; WARCHALSKA-TROLL, A. 2019). At the same time, official activities restricting traditional economic activities in communities are often at the root of conflicts (AAGESEN, D. 2000; Trakolis, D. 2001; Anderson M.K. and Barbour, M.G. 2003; Mukherjee, A. 2009; DAIM, M.S. et al. 2011; HIDLE, K. 2019). Another factor is the contrast between the nihilistic environmental mind set of nature in the former Eastern Bloc and the protection of nature (Сонк, J.P. 1992; Навеск, М. 2004; PETROVA, S. et al. 2009). Distrust of the state and state-owned areas, including national parks, is also a post-socialist feature (Schwartz, K.Z.S. 2006; Niedziakowsi, K. et al. 2014). These factors are also reflected in the attendance at the national park, which we also expected in the interviews (ARNBERGER, A. et al. 2012; PIETRZYK-KASZYŃSKA, A. et al. 2012; MARCEL, G. 2013; GETZNER, M. and Švajda J. 2015; Schamel, J. and Job, H. 2017; Gessert, A. et al. 2018; Stemberk, J. et al. 2018; MATEUSZ, R. 2021).

Study area and research methodology

Our research area is the Aggtelek National Park and the Slovak Karst National Park (*Figure 1*). The protected areas were established in the Aggtelek Karst and the Slovak Karst. Both are part of the Gömör-Torna/Gemer-Turňa Karst. The peculiarity of both national parks is that they were created specifically to protect geological values, i.e. karst forms and caves (VERESS, M. and UNGER, Z. 2015; TELBISZ, T. and MARI, L. 2020). The Aggtelek Karst became a national park in 1985 and the Slovak Karst in 2002 (SZVOBODA, L. 1998). The Aggtelek and the Slovak Karst caves have been a World Heritage Site since 1995. The protected karst areas on the Hungarian-Slovak border are adjacent to each other. Due to their border situation, they are peripheries in both countries (POTTER, R.B. and BEYNON, B. 2000; TELBISZ, T. *et al.* 2014, 2020; GÁLOSI KOVÁCS, B. and HORVÁTH, G. 2018).

The natural endowments of the karst areas posed challenges before modernity, but even after the Industrial Revolution they did not have the economic potential to change the situation of the periphery due to the natural endowments (JAKÁL, J. 1975; TELBISZ, T. et al. 2015, 2016). Mining, which was linked to forced industrialisation during the period of socialism, was loss-making. The mines were closed, leaving only environmental damage and unemployment (GERASZIMOV, I.P. 1978; Нокуа́тн, I. et al. 1979; Соны, J.P. 1992; HABECK, M. 2004). Far from the larger centres (Košice on the Slovak side, Miskolc on the Hungarian side), the villages of the regions with poorer infrastructure, located in the shadow of traffic, are ageing communities, and there are many commuters among their inhabitants. Locally, there are few job opportunities for them, and their livelihood as entrepreneurs and employees is directly or indirectly linked to the tourism of the national park, the municipalities, and the institutions they maintain (such as schools; Tózsa, I. 1996; Telbisz, T. et al. 2014).

In our research, we conducted guided conversations with the leaders of the local governments. We were more successful on the Hungarian side in conducting the interviews. On the Hungarian side, the selected settlements included Aggtelek and Jósvafő within the Aggtelek National Park, as well as villages (Bódvaszilas, Perkupa, Szin, Szögliget, Tornakápolna and Trizs) in the immediate vicinity of the national park. In Slovakia, the mayors of Kecső, located within Slovak Karst National Park, and of Rožňava, the largest settlement closest to the Slovak Karst, could only be interviewed. Interviews were con-



Fig. 1. The area of the selected national parks and the nearby settlements

ducted in 2018 and 2019. There is only one woman among the respondents. According to age, the range of interviewees ranged from 23 to 70 years. The conversations took place along pre-defined questions. Everyone was given the same set of questions (structured interview). Audio recordings and notes were also made of the interviews. The questions were as follows (beyond the basic data):

The social situation of the settlement:

How do you see the situation of the settlement where you live? How has the situation changed in recent decades (if you have lived here for a long time)? Has there been any change since the "abolition" of borders (Schengen, 2007)? What future do you see for the settlement? If you got money for development, what would you spend the most on?

Karst landscape:

What does it mean to live in a "karst region"? What are the values of the landscape? To what extent are traditional forms of farming still present? Is it important to maintain or possibly recreate them? Is it good to live here? Is karst more a blessing or a curse? Do you visit the sights of the national park? With what regularity?

Connection to the national park:

Is it more advantageous or a disadvantage for the people living here? What are the positive benefits of the national park for the locals? What is more of a disadvantage? What are the most common conflicts? What are the relationships with the national park? Of the settlement, approximately how many people work directly at the national park? How many are indirectly affected?

Tourism:

Are the impacts of tourism felt in the settlement? Where do tourists come from? Does the municipality itself strive to develop tourism? Would it be nice if more tourists came to the settlement? Are there any harmful effects of tourism? Which form of tourism should be developed? What is the proportion of holiday homes in the settlement?

Summary, evaluation questions:

Overall, does the national park contribute to the development of the settlement? Is it important to you that "the national park is part of our national heritage, and we can be proud of it"? Which title do you feel more important: part of a national park/world heritage site?

Using the answers to the above questions, we present the assessment of the selected karst national parks based on the opinions of the local community leaders. Respondents are distinguished by codes in the text. As we only had two interviewees from the Slovak side, we do not indicate the country separately in the text to avoid identification.

In the next subsection, we explore the symbolic, value-bound interpretation of the national park as a social actor through conversations. Afterwards, we present the practical side, the everyday experiences, and the challenges of coexistence. Thereafter, we examine the possibility of merging the two, the assessment of tourism (which was also considered useful from an economic point of view). Finally, we devote a separate subchapter to the peculiarities that make people distrustful of the national park as a legacy of the socialist past.

Results

Social perception of the national park as a symbolic actor

Leadership conversations agree that it is a pride for a local person to live in or near a national park. The term "glory" was used in several interviews. The landscape is a value that the state and the world appreciate. It is difficult to separate the love of the birthplace from the values of the national park. "*This is my home; I can't put it into words.*" (I1), "*This place is beautiful; I don't want to live anywhere else.*" (I5). Compared to other landscapes, the emotional attachment also appears: "*Coming home from the Great Plain or the coast, I think: well, that's beautiful.*" (I9).

However, it is difficult to relate to the common value as a local. Locals don't necessarily see what others are willing to travel for (from other parts of the country, from different parts of the world). "It doesn't mean much to those who live here." (I3), "It doesn't even occur to me; I've been living here for over 50 years." (I2), "I was born here, it's natural for me." (I8), "The value of this does not appear to the local population. The thinking of those who live here should be shaped in this. In the forest they see not the beauty but the firewood." (I10). Leaders agree that locals do not visit the national park's main attraction, the caves.

A sign of mistrust is that the existence of the national parks is seen as a construction of power. The operation of national parks is not a local initiative. "Others are pointing out that it's worth something." (I4). One leader traced the reason for this back to decades of partystate dictatorship: "In the period of socialism, man is accustomed to everything belonging to the state, so he does not realise that this is a national value. The cave belongs to the state in the consciousness of the people." (I9). One mayor said of protected birds: "They are like fairy-tale dragons. The national park only guesses them, but no one has seen one yet." (I2).

The locals distance themselves from the caves and barely visit them. Even mayors only go there for representation purposes. They mentioned the caves in the interviews only if the question is specifically about the caves. They do not see them as their own, they are not bound by them, and they see in them the property of the state. "Many of the seniors haven't even been to the cave yet. The former miners don't really appreciate it." (I7), "As a teacher, it was my duty to go to the caves with the kids. As mayor, I don't go with guests. I have no guests who are interested in this. I don't brag about the national park." (I2), "For locals, the national park is the cave." (I8). One of the mayors listed the values of the area at length and then concluded: "the caves may be additional values" (I9), "It is not the cave that is first, but the other values of the national park that can be marvelled at every day." (I4).

The surface landscape is an integral part of life. Locals talk about it as their own. The picturesque backgrounds of the positive home image and the basis of their economic activities. "The limestone, the karst waters, the forest, including old stone roads that connected this region to Košice." (I10). The beauty and treasure of the landscape is the primary source of attachment. "I don't tie the natural environment, the mountains, the waters, the forests, the wildlife to the national park, because I grew up in the woods, I played in the stream." (I5), "Values here are mountains, trees, heights, waters (springs), flora and fauna. One of the most beautiful places in Hungary and in the world (I've been to a couple of places; I've seen a lot). It is also a value from a health point of view (such as karst water)." (I9), "The wilderness is a value. Locals used to live better with nature. It was much better in terms of health. Now our world is shrinking. Today, children are also frightened by the boundless nature. We need good professionals who show nature in an experiential way, for both children and adults." (I1).

Recreational interpretation of the national park is essential in local communities. "Beauty alone is not enough, it could be better utilised, filled with content" (I6), "For a long time, it was all about Aggtelek and Jósvafő, but it's already opening up so that tourists can stay as long as possible." (I8). The importance of tourism is also related to the situation of settlements, which is presented in the next chapter. *Life in the "shadow" of the national park – the social assessment of the situation of the settlements*

The possibility of preserving untouched nature is possible in landscapes that provide less favourable conditions for human activities (Glendinning, M. 2003; West, P. et al. 2006; FROST, W. and HALL, M. 2009; Kőszegi, M. et al. 2019). Thus, only small communities are connected to national parks. Communities that are far from urban centres emerging through modernisation. They do not offer the economic potential to deploy an economic activity that involves significant environmental transformation. Careful transformations, on the other hand, lag people's demands. The world of the city and its level of comfort is becoming more attractive. This is reinforced by the labour requirements of the centres. Local communities are lagging behind the demand levels of the rising generations, and emigration is intensifying.

"The most important issue is population. Only 4–5 children are born each year." (I1), "There are few children, the village is ageing, the elder are already 50 percent." (I3), "Demographic situation is serious." (I4), "Ageing is a big problem, within 10 years, if no miracle happens, three families will live in the village" (I9). There was no town leader who did not mention the problem of population.

The reason for the population decline is seen as a lack of job opportunities. "Jobs are rare locally and nearby." (I3), "Young people do not stay here due to lack of work. They migrate to the surrounding larger cities (mainly Miskolc)." (I8), "There are few job opportunities in the area. In addition, it requires underpaid and unskilled labour." (I1), "1990 was a break. The limestone quarry was closed, where 200 people worked (skilled workers, managers, clerks). Producer cooperatives have been wound up (some 200 people have also been affected)." (I2), "The mine has been operating for a long time, unemployment began a generation later." (I5), "Young migrants don't necessarily go to nearby cities. If so, towards Kazincbarcika and Miskolc." (I7). In Slovakia, Košice and the capital, Bratislava, have absorbed the rising generations. "There is no regular salary, people are migrating from the area to the capital city and even abroad." (I4).

Local infrastructure and related public services are considered satisfactory by local leaders and are not cited as a reason for youth emigration. In addition to the school and the doctor's office, pharmacies and general stores were highlighted. In some settlements, sewerage is waiting for public services. The development of telecommunications infrastructure is considered an important task for the future everywhere (the stagnant internet service in mountainous areas could be eliminated by using more modern technologies, but due to the small population, service providers are not interested in making costly developments).

Traditional farming methods are disappearing. "There are about ten farmers, the others have already given up. But families still keep animals (10–15 families deal with it). They prefer pigs, less poultry, but the former cattle and sheep herds are missing. The national park first drew boundaries, but now it would support animal husbandry, but there is no one to deal with it anymore." (I1), "We are starting to urbanise; animal smells and sounds disturb your neighbours. There is confusion in the heads; they only keep dogs. The dog walk has started, it is the beginning of the end in the village. There are no cattle, there are three or four goats. People mow the grass, but there is nothing to eat it." (I2), "The situation is not lucky from an agricultural point of view, but it is very good wildlife management." (I3), "Animal husbandry is fashionable again. Not in the backyard, but on a large scale. It would be important because it should be an integral part of rural life." (I9), "The plant should not be grown on karst because the soil is not good. Ruminants should be grazed here. You don't have to cut the grass, you have to graze the animals." (I4).

Most of the local workers are public employees who are employed by either the municipality or the national park. "Most people are employees of the municipality and state institutions." (I5), "The main employer is the municipality." (I7). "Many people work at the national park. That's why we're glad the national park is here." (I3), "The national park is also a state-owned company. They have a headcount; they can't employ more people and their budgets are tight." (I8), "There are two restaurants that employ at least 10 people, two shops, a national tobacco shop, a pub, a post office. All because of the national park, which is positive." (I3), "There are entrepreneurs, mainly in services (e.g. shops)." (I10), "There is a lack of a suitably qualified workforce." (I2), "Other job opportunities are public utilities and logging." (I1), "The church is also an employer here locally." (I5).

Those who do not provide a local service work as commuters nationwide. The primary destinations of the commuters are Ózd, Kazincbarcika, Miskolc and Košice. "People also go abroad to work as construction workers." (I2), "There are a lot of commuters: seasonal male workers who work abroad, those who work three shifts in Miskolc, and those who work in smaller businesses in neighbouring settlements. Even agricultural work is typical." (I9), "The entrepreneurs of Košice also come for the workforce." (I5).

There are also newcomers to the settlements (in recent decades) who are primarily attached to the national park. However, among those working in the national park, there are several who have moved out after a few years. Another characteristic is that urban dwellers try to adapt to the rural way of life as a farmer but give up after a few years. Real estate acquisitions are also common, but this does not necessarily mean population growth. "Nonlocals buy local properties as holiday homes." (I2). The slowly depopulating Tornakápolna is in a special situation, where there has been a significant increase in recent years due to the previously low population. Along with the mayor and his family moving to the village, another family arrived and took a job in the national park. They were followed by a few more families. They are private entrepreneurs who have a job in the city but have settled down because of the quiet village and the beauty of the landscape.

Synthesis of the symbolic role and practical aspects: the importance of tourism

Every local leader wants to stop and reverse the decades-long declining trend in population. The solution is seen in tourism. This requires infrastructural developments, the costs of which cannot be extracted by local communities. They are waiting for help from the national park, which represents the state, but are not exactly interested in the investments involved in the environmental transformation. At the same time, increasing the number of visitors is also in the interest of the national park and the local population, but the implementation poses difficult dilemmas for society.

Services would also address job shortages. "The key to the future in the workplace, improving working conditions, developing tourism. The old traditions should be supplemented with something else." (I10), "The number of tourists is increasing. It also helps the locals indirectly: they bring benefits, they provide jobs." (I3), "We hope that people will come here to rest." (I8), "Tourism is the future. It has no tradition, the livelihood was different, and the locals do not perceive the beauty and attractions of the place. This requires a change of attitude, which is only just beginning. Quality tourism needs to be developed, there is much to be done" (I5), There are also sceptical voices: "There is nothing to do. No one in the country has been interested in the countryside for decades, and the change of regime has not helped either." (I2).

Mayors see potential in tourism. "Tourism is developing more and more. The cars fit last year. Parking is already a problem this year." (I3). However, they also express their doubts about this. A more diversified supply of jobs is seen as an ideal state. In addition to organic farming and food processing to meet urban needs, assembly plants would also be set up. These provide a livelihood for the low-skilled workforce. However, this is not compatible with the threefold system of objectives of the national park, so they can only think of the only economic sector that does not harm the symbolic principles and related rules. Local and national (and international) interests can meet in tourism and catering.

In tourism related to the national park, locals see opportunities primarily in accommodation. "It can be felt that accommodation is running out at certain events. There is always movement at the accommodation on the weekends." (I1). Municipalities also see it as a source of revenue. They are trying to use their properties to increase accommodation. The capacity of small settlements is characterised by the following answer: "10–15 families can make a living from it, but there are some families that specialise in providing the widest possible range of tourists." (I8).

However, barriers were indicated in all settlements. "*The national park is best suited for active tourism, but it's declining, people prefer comfort.*" (I5). According to the mayors, the national park is not attractive enough. There are not enough tourists according to the special features of the place. "It would be nice if more people came." (I4). Visitors are only in the caves. There are no attractions that can still be attractive to them. "*Tourists just go to the cave, the rest is negligible.*" (I7), "*Tourism is present, there are a lot of visitors on the weekends, mostly by car, but they only stop for a short time.*" (I10).

According to the mayors, investments would be needed that would encourage visitors to stay and spend more time. "Investments could keep people here for several days." (I8). The different ideas do not necessarily agree with the principles of the national park. "We wanted an adventure park, but the national park didn't allow it because it didn't fit in." (I3), "It should be developed to spend more days here. Not with accommodation, but with a program. For example, you need wellness accommodation because it's an extra service." (I1). The development of the spa and water tourism was mentioned as potential by all mayors. This is where they see the greatest opportunity to attract tourists. The need for cooperation was also expressed. "There aren't many accommodations, but the guest doesn't even stay local. The programs should be given priority, and this would require cooperation, even across the border (Betlér, Košice)." (I10), "There should be more festivals, events, the attraction is still missing; cooperation between villages is needed." (I5).

In addition to larger investments, they would also build on local specificities. "To present local specialities. Garden, backyard, walking in the forest. To build on quiet village life. Local products, interactive country house. Local market and local product. Local gastronomy,

typical dishes. Beekeepers' good quality honey. Preservation of traditions." (I10).

The costs of the plans would be passed on to the state. In return for restricting the lives of locals with a set of rules related to the national park. *"I need government help. Call for a state tender for the development of an amusement park."* (I3), *"There is no room for improvement.* We would try to strive for it, but they say we would rather not submit to the tenders." (I2).

Coexistence with the national park

How does the national park appear in the everyday lives of the locals? Not as their own. Rather as the "other", whose presence must be endured. They must live with it because there is no other choice. The organisation of national parks is separate from the local administration. There is no overlap in budget or staff. The national park directorate, which operates the national park, is present as a foreign body in the lives of the locals.

Leaders say the population disapproves of the practical existence of the national park. "People don't see the benefits of the national park. People who live here experience it more as a negative." (I5), "Those who live here and haven't worked at the national park say it's not good." (I1), "Locals see that national park workers are not using the things at their disposal wisely. For example, workers go to the same place in a separate car." (I3), "National park workers don't necessarily do what they advise people who live here. Their negligence is often observed." (I2). In addition, the workers in the national park often come from elsewhere and are not locals, so they are seen as strangers.

The lack and inadequacy of contacts is mostly revealed by local leaders. "Residents of the settlement have no connection with the national park" (I10), "When the last director was appointed, there was no introduction for local leaders. There is no live connection." (I9), "We live on the edge of the national park (in fact, a piece of it is in the village), but we have no experience with it. It is neutral for us here." (I2), "I need a personal network. As a local mayor, I don't even get to know what programs the national park organises." (I5), "In the first cycles, the leaders of the national park withdrew. That is changing now. They have to adapt to the people who live here. A common goal would be for the countryside to flourish, so the national park should also be helped (as a public institution)." (I3), "At first, they didn't even want to talk to the locals. For example, for the barn I wanted to fix, I got the answer that it wasn't mine, nor the national park workers. Don't worry about it if it collapses." (I1).

As a positive factor in the direct existence of the national park, leaders highlight the job-creating effect. "It would be positive if more people could be employed in the national park, but at normal wages." (I7), "They don't pay anything to the town, but it allows for a visit and gives a lot of people a job." (I1).

The sources of revenue for the national park are often growing to the detriment of local communities. *"Entrepreneurs at the bazaar pay the national park for the right to sell."* (I3). The national park is in contact with non-local entrepreneurs to carry out site-related works.

Acting as an authority is a sensitive issue for the local population. *"The workers of the national park practice punishment by the local inhabitants"* (17), *"They are abusive to farmers. They show that they are the national park workers."* (18), *"There are conflicts with park rangers who want to punish immediately, are unwilling to compromise, to cooperate."* (13), *"Behind the tension between the countryman and the park rangers is the pride of the national park. Everything is seen as a controversy between distracted villagers and educated national park workers."* (11).

The main source of conflict with the national park is the strict regulation of farming. "Locals can't get dry wood out of the woods to ignite it. Bugs are more likely to eat." (I7), "The pines in the office yard had to be cut down because of the wires. As they were cut down, the guardian of the national park appeared, and reported the new mayor for the felling." (I1), "The farming was regulated, but at first they took official action, only later did they come to explain the rules to the people living here, to understand how to cooperate with them." (I2), "Locals had previously laid a stone wall on the side of the creek to protect against flooding. But this is not allowed now. There is nothing to do with the stream, the properties of the people living here are endangered by the flood." (I3).

The rules often seem ill-considered in the eyes of the locals. "The locals feel the rules for mowing are unnecessary because they give mowing dates randomly, not on a regular basis." (I8), "Protecting the birds would be more effective without the rules. If farmers mowed in May, the bird would not go to the meadow to brood. It is nesting in pristine grass right now. A week later we already have a permit to mow in the nesting area." (I9).

At the same time, it has been expressed as a general trend that attitudes on the part of the national park are changing. They are less reluctant that local leaders are very happy about. "It's a good thing they've let go off the austerity, now it's better to live together." (I5)

Only two cases were positive about cohabitation. "The national park is an advantage, there are professionals out there who protect the world. They have a say in everyday life, but it is important that there are places like this. At least in these places, the values to be protected remain." (I6), "It preserves the natural values in our environment. Opportunity for municipalities to get involved in tourism. The landscape is one, like the endowments, it ensures the survival of the small village as well." (I4).

Discussion and conclusions

How do national parks appear in the daily lives of the communities? What is the assessment of national parks? Do locals perceive the beneficial effects of national parks, which we assume? In our research, we sought answers to these questions in connection with the Aggtelek National Park and the Slovak Karst National Park. We chose a karst landscape that is divided into two countries, but in both countries, a national park has been established in its territory. The responses got during the structured interviews with the leaders of the local settlements confirmed the preliminary assumptions we made based on the literature.

The interviews revealed an ambivalent network of contacts (ANFIELD, J. 1993; WALLSTEN, P. 2003; SZALAI, K. and SZILÁGYI, Zs. 2007; Puhakka, R. 2008; Arnberger, A. et al. 2018, 2019; Кім, М. and Јакиз, Р.М. 2019; Warchalska-Troll, A. 2019). The symbolic significance of the national park and the coexistence in everyday life are separated. In practical experience, the focus is on the strict set of rules that provide a framework for the activities of those who live here. In addition to the difficult coexistence with the rules, there is also a lack of trust in the state (Schwartz, K.Z.S. 2006; Niedziakowsi, K. et al. 2014). The state is represented locally by the national park in the eyes of those who live here. Locals perceive the presence of the national park and the activities of those who work there as foreign bodies. Mayors lack closer cooperation. Everyday problems obscure the threefold system of objectives of the national parks.

From a practical point of view, the recreational interpretation is the most important for the locals because it can give them a livelihood by receiving guests coming to the national park (Мауек, М. 2010; Вузтком, J. and Müller, D.K. 2014; Bollobani, E. and Uruçi, R. 2019; DOLLMA, M. 2019; TELBISZ, T. et al. 2020). Due to the regulations, this is almost the only job opportunity, in other economic sectors, they cannot think about the threefold goal system of the national parks. In the 21st century, due to limited opportunities, the biggest problem for settlements is emigration. According to local leaders, the process cannot be stopped due to the national park. The presence of national parks strengthens emigration, the process of depopulation of rural areas. It can be interpreted as a postsocialist peculiarity that the entrepreneurial attitude and the opportunities inherent in services and tourism are not perceived by the communities or they cannot live with them (Schwartz, K.Z.S. 2006; Niedziakowsi, K. et al. 2014).

At the same time, every local leader states that with a change of attitude, this process can be reversed (REPKA, P. and Švecová, M. 2012). People need to be made aware of the value that is present in the national park's triple target system. For this, however, it is essential that the national park approaches the locals: there should be an overlap in both local and national park regulations, as well as in staffing (CARRUTHERS, J. 1989; ARNBERGER, A. and SCHOISSENGEIER, R. 2012; YAKUSHEVA, N. 2019; ARPIN, I. and COSSON, A. 2021; FIENITZ, M. *et al.* 2022). It would therefore be important for locals to feel the symbolic significance of the national park and to do so in their daily lives.

The results of our present work reveal how the target system of national parks can get into the crossfire of different social interests and how the protection of values can be relativised in everyday life. The practical implementation of the social/national interest may involve conflicts. All actors involved have an essential role to play in resolving this.

Acknowledgement: The article was produced as part of the project K-124497 with the support of the National Research, Development, and Innovation Office (NKFIH).

REFERENCES

- AAGESEN, D. 2000. Rights to land and resources in Argentina's Alerces National Park. Bulletin of Latin American Research 19. (4): 547–569.
- ANDERSON, M.K. and BARBOUR, M.G. 2003. Simulated indigenous management: A new model for ecological restoration in national parks. *Ecological Restoration* 21. (4): 269–277.
- ANFIELD, J. 1993. Sustainable tourism in the nature and national parks of Europe. *The George Wright Forum* 10. (4): 87–94.
- ARNBERGER, A., EDER, R., ALLEX, B., STERL, P. and BURNS, R.C. 2012. Relationship between national-park affinity and attitudes towards protected area management of visitors to the Gesaeuse National Park, Austria. *Forest Policy and Economics* 19. 48–55.
- ARNBERGER, A., EDER, R., ALLEX, B., PREISEL, H., EDENBERGER, M. and HUSSLEIN, M. 2018. Trade-offs between wind energy, recreational, and bark-beetle impacts on visual preferences of national park visitors. *Land Use Policy* 76. 166–177.
- ARNBERGER, A., EDER, R., ALLEX, B., PREISEL, H. and HUSSLEIN, M. 2019. National park affinity segments of overnight tourists differ in satisfaction with, attitudes

towards, and specialisation in, national parks: Results from the Bavarian Forest National Park. *Journal for Nature Conservation* 47. 93–102.

- ARNBERGER, A. and SCHOISSENGEIER, R. 2012. The other side of the border: Austrian local residents' attitudes towards the neighbouring Czech Šumava National Park. Journal of Nature Conservation 20. 135–143.
- ARPIN, I. and Cosson, A. 2021. Seeking legitimacy in European biodiversity conservation policies: The case of French national parks. *Environmental Science and Policy* 116. 181–187.
- BEATTY, R.O. 1952. The conservation movement. The Annals of the American Academy of Political and Social Science 281. 10–19.
- BELL, J. and STOCKDALE, A. 2015. Evolving national park models: The emergence of an economic imperative and its effect on the contested nature of the 'national' park concept in Northern Ireland. *Land Use Policy* 49. 213–226.
- BISHOP, K., DUDLEY, N., PHILLIPS, A. and STOLTON, S. 2004. Speaking a Common Language. The uses and performance of the IUCN System of Management Categories for Protected Areas. Cardiff, Cardiff University, IUCN – The World Conservation Union and UNEP – World Conservation Monitoring Centre.
- BOLLOBANI, E. and URUÇI, R. 2019. Geotourism potentials of the National Park "Mali i Tomorrit". International Journal of Geoheritage and Parks 1. 15–23.
- BÖHN, D. 2021. National park in Germany: Let nature be nature – But which nature? International Journal of Geoheritage and Parks 9. 30–35.
- BYSTRÖM, J. and MÜLLER, D.K. 2014. Tourism labor market impacts of national parks. The case of Swedish Lapland. Zeitschrift für Wirtschaftsgeographie 58. (2–3): 115–126.
- CATLIN, G. 1844. Letters and Notes on the Manners, Customs, and Condition of the North American Indians. New York, Wiley and Putnam.
- CARRUTHERS, J. 1989. Creating a national park, 1910 to 1926. Journal of Southern African Studies 15. (2): 188–216.
- COHN, J.P. 1992. Central and Eastern Europe aim to protect their ecological backbone. *BioScience* 42. (11): 810–814.
- COMSTOCK, T.B. 1874. The Yellowstone National Park. *The American Naturalist* 8. (2): 65–79.
- CRONON, W. 1995. The trouble with wilderness; or getting back to the wrong nature. In *Uncommon Ground: Rethinking the Human Place in Nature*. Ed.: CRONON, W., New York, W.W. Norton & Co., 69–90.
- DAIM, M.S., BAKRI, A.F., KAMARUDIN, H. and ZAKARIA, S.A. 2011. Being neighbour to a national park: Are we ready for community participation? *Procedia – Social* and Behavioral Sciences 36. 211–220.
- DEXLER, Sz., HORVÁTH, G. and KARANCSI, Z. 2003. Turizmus, természetvédelem és tájhasznosítás kapcsolata egy nógrádi kistájrészlet példáján (The connection between tourism, nature conservation and landscape utilisation demonstrated on the example

of a small landscape unit of Nógrád county). Földrajzi Közlemények 127. (1–4): 45–62.

- DOLLMA, M. 2019. Geotourism of Thethi National Park. International Journal of Geoheritage and Parks 7. 85–90.
- DUNLAP, T.R. 1999. Nature and the English Diaspora: Environment and History in the United States, Canada, Australia, and New Zealand. Cambridge, Cambridge University Press.
- EAGLES, P.F.J. 2002. Trends in park tourism: Economics, finance and management. *Journal of Sustainable Tourism* 10. (2): 132–153.
- ESFANDIAR, K., DOWLING, R., PEARCE, J. and GOH, E. 2021. What a load of rubbish! The efficiency of theory of planned behaviour and norm activation model in predicting visitors' binning behaviour in national parks. *Journal of Hospitality and Tourism Management* 46. 304–315.
- FIENITZ, M., BUSSE, M., FIENITZ, M. and HEILAND, S. 2022. Analysing the impact of communication and public participation on the acceptability of Germany's Black Forest National Park. *Journal for Nature Conservation* 67. 1–15.
- FINE, K. 1988. The politics of "interpretation" at Mesa Verde National Park. Anthropological Quarterly 61. (4): 177–186.
- FROST, W. and HALL, M. 2009. Reinterpreting the creation myth: Yellowstone National Park. In *Tourism and National Parks*. Eds.: FROST, W. and HALL, M., London– New York, Routledge, 16–29.
- GÁLOSI KOVÁCS, B. and HORVÁTH, G. 2018. Határokon átnyúló természetvédelmi területek lehetőségei és problémái (Perspectives and problems of transboundary protected areas). Földrajzi Közlemények 142. (4): 309–327.
- GAYNOR, A. 2017. Entangled nature: The Stirling Range National Park. *RCC Perspectives* 2. 81–88.
- GERASZIMOV, I.P. 1978. Ökológiai válságok a természet és az emberiség történetében (Ecological crises in the history of the nature and mankind). Földrajzi Közlemények 102. (1): 29–39.
- GESSERT, A., NESTOROVÁ-DICKÁ, J. and SNINČÁK, I. 2018. The dynamics of tourist excursion ratios in Slovakia show caves from 2000 to 2014. *Geografisk Tidsskrift / Danish Journal of Geography* 118. 173–183.
- GETZNER, M. and ŠVAJDA J. 2015. Preferences of tourists with regard to changes of the landscape of the Tatra National Park in Slovakia. *Land Use Policy* 48. 107–119.
- GISSIBL, B., HÖHLER, S. and KUPPER, B. (eds.) 2012. Civilizing Nature: National Parks in Global Historical Perspective. New York, Berghahn.
- GLENDINNING, M. 2003. The conservation movement. A cult of the modern age. *Transactions of the Royal Historical Society* 13. 359–376.
- HABECK, M. 2004. Eastern Europe's environmental challenge. Frontiers in Ecology and Environment 2. 4. 172.
- HALL, M.C. and FROST, W. 2009. Introduction. The making of the national parks concept. In *Tourism and National Parks*. Eds.: FROST, W. and HALL, M., London–New York, Routledge, 3–15.

- HIDLE, K. 2019. How national parks change a rural municipality's development strategies – The Skjåk case, Norway. *Journal of Rural Studies* 72. 174–185.
- HILL, M.A. and PRESS, A.J. 1993. Kakadu National Park: An experiment in partnership. *The Australian Quarterly* 65. (4): 23–33.
- HORVÁTH, I., MAHUNKA, S., SIMON, T. and SZUJKÓNÉ LACZA, J. 1979. Nemzeti parkok kutatása – természetvédelem – tájrekonstrukció (Research of national parks – nature conservation – landscape reconstruction). MTA Biológiai Osztály Közleményei 22. 337–350.
- JAKÁL, J. 1975. Az emberi tevékenység negatív hatásai és annak megjelenésformái a karsztvidéken (Negative effects of human activity and its various forms on karst region). Földrajzi Közlemények 99. (1). 19–24.
- JUUTINEN, A., MITANI, Y., MÄNTIMAA, E., SHOJI, Y., SIIKAMÄKI, P. and SVENTO, R. 2011. Combining ecological and recreational aspects in national park management: A choice experiment application. *Ecological Economics* 70. (6): 1231–1239.
- KIM, M. and JAKUS, P.M. 2019. Wildfire, national park visitation, and changes in regional economic activity. *Journal of Outdoor Recreation and Tourism* 26. 34–42.
- Kőszegi, M., Bottlik, Zs., Telbisz, T. and MARI, L. 2015. Human-environment relationships in modern and postmodern geography. *Hungarian Geographical Bulletin* 64. (2): 87–99.
- Kőszegi, M., BOTTLIK, Zs., TELBISZ, T. and MARI, L. 2019. A "nemzeti park" koncepció tér és időbeli változásai (Spatial and temporal changes in the concept of "national park"). Földrajzi Közlemények. 143. (4): 308–323.
- MARCEL, G. 2013. National parks in Europe. Studia Universitatis "Vasile Goldiş", Seria Ştiinţele Vieţii. 23. (1): 91–94.
- MATEUSZ, R. 2021. A method to analyse variability and seasonality the visitors in mountain national park in period 2017–2020 (Stołowe Mountains National Park, Poland). *Journal of Outdoor Recreation and Tourism* 35. 100407.
- MAYER, M., MÜLLER, M., WOLTERING, M., ARNEGGER, J. and JOB, H. 2010. The economic impact of tourism in six German national park. *Landscape and Urban Planning* 97. 73–82.
- McCONNELL, G. 1954. The conservation movement. Past and present. *The Western Political Quarterly* 7. (3): 463–478.
- MUKHERJEE, A. 2009. Conflict and coexistence in a national park. *Economic and Political Weekly* 44. (23): 52–59.
- NASH, R. 2014. Wilderness and the American Mind. 5th Edition. New Haven–London, Yale University Press.
- NIEDZIAŁKOWSKI, K., BLICHARSKA, M., MIKUSINSKI, G. and JEDRZEJEWSKA, B. 2014. Why is it difficult to enlarge a protected area? Ecosystem services perspective on the conflict around the extension of the Białowieza National Park in Poland. Land Use Policy 38. 314–329.
- NOLTE, B. 2004. Sustainable tourism in biosphere reserves of east central European countries – Case studies from Slovakia, Hungary and the Czech Republic. Policies,

Methods and Tools for Visitor Management MMV2. 349–356.

- PETROVA, S., BOUZAROVSKI, S. and MARTIN, C. 2009. Conservationist or fashionista?: Urban dwellers' expectations from national parks in the Republic of Macedonia. Urbani Izziv 20. (2): 128–135.
- PIETRZYK-KASZYŃSKA, A., CENT, J., GRODZIŃSKA-JURCZAK, M. and SZYMAŃSKA, M. 2012. Factors influencing perception of protected areas – The case of Natura 2000 in polish Carpathian communities. *Journal of Nature Conservation* 20. 284–292.
- POTTER, R.B. and BEYNON, B. 2000. National parks in Hungary: Developments post 1990. *Geography* 85. (3): 274–279.
- PUHAKKA, R. 2008. Increasing role of tourism in Finnish national parks. *Fennia* 186. (1): 47–58.
- REPKA, P. and Švecová, M. 2012. Environmental education in conditions of National Parks of Slovak Republic. *Procedia – Social and Behavioral Sciences* 55. 628–634.
- SABO, H.M. 2012. Ecotourism in Rodna Mountains National Park. Research Journal of Agricultural Science 44. (2): 226–232.
- SCHAMEL, J. and JOB, H. 2017. National parks and demographic change – Modelling the effects of ageing hikers on mountain landscape intra-area accessibility. *Landscape and Urban Planning* 163. 32–43.
- SCHWARTZ, K.Z.S. 2006. "Masters in our native place": The politics of Latvian national parks on the road from communism to "Europe". Political Geography 25. 42–71.
- SELBY, A., PETÄJISTÖ, L. and HUHTALA, M. 2011. The realisation of tourism business opportunities adjacent to three national parks in southern Finland: entrepreneurs and local decision-makers matter. *Forest Policy* and Economics 13. 446–455.
- STEMBERK, J., DOLEJS, J., MARESOVA, P. and KUCA, K. 2018. Factors affecting the number of visitors in national parks in the Czech Republic, Germany and Austria. *ISPRS International Journal of Geo-Information* 7. 124–133.
- SZALAI, K. and SZILÁGYI, Zs. 2007. A táj a turizmus fókuszában (Landscape with focus on tourism). Földrajzi Közlemények 131. (3): 147–156.
- SZVOBODA, L. 1998. A természetvédelem múltja, az Aggteleki Nemzeti Park jelene és jövője (The past of the nature conversation, present and future of the Aggtelek National Park). In Az Aggteleki Nemzeti Park. Ed.: BAROSS, G., Budapest, Mezőgazda Kiadó, 12–17.
- TELBISZ, T., BOTTLIK, ZS., MARI, L., PETRVALSKÁ, A., KŐSZEGI, M. and SZALKAI, G. 2014. Természeti tényezők hatása a népesség területi eloszlására a Gömör-Tornaikarszt és környezet példáján (The impact of physical environment on the spatial distribution of population – a case study of Gömör – Torna Karst and its surroundings). Földrajzi Közlemények 138. (4): 277–292.
- TELBISZ, T., BOTTLIK, ZS., MARI, L. and PETRVALSKÁ, A. 2015. Exploring relationships between karst terrains and social features by the example of Gömör-Torna Karst (Hungary-Slovakia). Acta Carsologica 44. 121–137.

- TELBISZ, T., IMECS, Z., MARI, L. and BOTTLIK, ZS. 2016. Changing human-environment interactions in medium mountains: the Apuseni Mts (Romania) as a case study. *Journal of Mountain Science* 13. 1675–1687.
- TELBISZ, T., GRUBER, P., MARI, L., KÓSZEGI, M., BOTTLIK, ZS. and STANDOVÁR, T. 2020. Geological heritage, geotourism and local development in Aggtelek National Park (NE Hungary). Geoheritage 12. 5.
- TELBISZ, T. and MARI, L. 2020. The significance of karst areas in European national parks and geoparks. Open Geoscience 12. 117–132.
- TRAKOLIS, D. 2001. Perceptions, preferences, and reactions of local inhabitants in Vikos-Aoos National Park, Greece. Environmental Management 28, 665–676.
- Tózsa, I. 1996. Az Aggteleki-karszt idegenforgalmi potenciálja (Touristic potential of the Aggtelek karst region). *Földrajzi Értesitő / Hungarian Geographical Bulletin* 45. (3–4.): 299–312.
- TURNER, R.W. 2000. Managing multiple activities in a national park. Land Economics 76. (3): 474–485.
- VAN BEECK CALKOEN, S.T.S., MÜHLBAUER, L., ANDRÉN, H., APOLLONIO, M., BALČIAUSKAS, L. et al. 2020. Ungulate management in European national parks: Why more integrated European policy is needed. Journal of Environmental Management 260. 1–11.
- VERESS, M. and UNGER, Z. 2015. Baradla-Domica: large cave system on the Hungarian-Slovak border. In *Landscapes and Landforms of Hungary*. Ed.: Lóczy, D., World Geomorphological Landscapes, Springer International Publishing, 167–175.
- WALLSTEN, P. 2003. The "inside-out" process: A key approach for establishing Fulufjället National Park in Sweden. *Mountain Research and Development* 23. (3): 227–229.
- WARCHALSKA-TROLL, A. 2019. Do economic opportunities offered by national parks affect social perceptions of parks? A study from the Polish Carpathians. *Mountain Research and Development* 39. 1. R37-R46.
- WAUGH, F.A. 1918. A national park policy. The Scientific Monthly 6. (4): 305–318.
- WEST, P., IGOE, J. and BROCKINGTON, D. 2006. Parks and peoples: The social impact of protected areas. *Annual Review of Anthropology* 35. 251–277.
- WHATMORE, S. 2006. Materialist returns: practising cultural geography in and for a more-than-human world. *Cultural Geographies* 13. (4): 600–609.
- WIDAWSKY, K. and JARY, Z. 2019. Mass tourism in protected areas – underestimated threat? Polish National Parks case study. Open Geoscience 11. 1046–1060.
- YAKUSHEVA, N. 2019. Managing protected areas in Central Eastern Europe: Between path dependence and Europeanisation. *Land Use Policy* 87. 104036.
- ZGŁOBICKI, W. and BARAN-ZGŁOBICKA, B. 2013. Geomorphological heritage as a tourist attraction. A case study in Lubelskie Province, SE Poland. *Geoheritage* 5. 137–149.