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Geotourism Support Potential in the Joachim Barrande Geopark

The paper is focused on supporting the potential geotourism development in the buffer zone of the Joachim Barrande Geopark candidate site – e.g. selected municipalities that are a part of the Berrandien geological area. These municipalities have never been investigated from the point of view of geotourism potential. The selected municipalities are being investigated for the existence of geosites as well as the existence of facilities for sustainable tourism. During the observation, it became evident that the geopark buffer zone area has plenty to offer in the way of interesting geosites, so it is, therefore, possible to attract more visitors in the geopark buffer zone as well for local inhabitants to benefit from geotourism.

Keywords: Geotourism, Joachim Barrande Geopark, geosite, infrastructure for sustainable tourism, sustainable tourism

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Introduction

The theory and practice of the development of tourism are becoming increasingly devoted to issues of sustainable tourism and its subtypes such as religious tourism and pilgrimages, or geotourism (UNWTO, 2014; in CR Zelenka 2013; Pásková, 2014; etc.). Geotourism is generally defined as *a form of sustainable tourism based on an active recognition of the evolution of the planet through exploring interesting elements of the natural and cultural landscape with its important geological, mineralogical, and geomorphological heritage.* (Burkoň, 2012)

In 2000, the concept of the geopark spread throughout the world due to the adoption of a declaration and the international interest in inanimate nature under the auspices of UNESCO. The term "geopark" refers to a territory that provides a picture of the geological evolution of the Earth and shows the influence of local natural resources on the economic and cultural development of society. A geopark may be formed in a region whose geological structure allows for an interesting interpretation of geological processes and is thus interpreted by the public, and where a functional infrastructure of local groups is created which supports traditional and new geotourism activities (Czech Geological Survey, 2014). In the recent past, the first geoparks were announced in the Czech Republic, followed by the establishment of a network of national geoparks within the Czech Republic and the necessary methodology (e.g. Zelenka, 2014; Pásková, 2011). One of the members of this network is the Joachim Barrande Geopark candidate site, which is the focus of this article.

The proposed Joachim Barrande Geopark candidate site is located in an area from the southwest edge of Prague past Beroun to Zdice. The protected landscape area of Bohemian Karst and several nature parks are already located here. There are a variety of globally important geological sites to be found here, about 70 of which have international significance. The work of Joachim Barrande led to their discovery and opening up, and other points of interest and new findings throughout the entire area are still being discovered today,

collectively named "Barrandien" after their discoverer. The benefit of the geopark should be, in particular, the promotion of geotourism, support for the creation of employment and business opportunities for newly provided services to the area's visitors, and an increase in the international prestige and popularity of the region as well as its geotourism programs (barrandien.cz, 2013).

The objective of the work was therefore to analyze the possibility of developing geotourism in the area of interest on the western periphery of the Joachim Barrande Geopark candidate site. Geologically, this is a part of the NW arm of the limestone Barrandien massif within the Bohemian Massif, where in an elongated formation geologically interesting formations extend which consist mainly of Silurian and Devonian strata. The studied area is quite affected by disjunctive tectonic disturbances, especially by faults, and paleovolcanites of a basic character penetrate into the sediments in places (Czech Geological Survey, 2014). In terms of karstification of material on the surface, this is a very old karst area with long discontinued development, while most of the caves, karst formations, and phenomena are limited, grounded, or buried under dirt (hidden) or were covered by silt, including river sand, from the original Berounka River during the Tertiary.

Due to its proximity to Prague from the entire territory of the Joachim Barrande Geopark candidate site, there has long existed a high potential for the development of geotourism in the surveyed area (origins reach back to the 19th and early 20th century under the influence of the Charles University Faculty of Science, as evidenced for example by Ložek, 2007). With the proper and adequate promotion of the geopark candidate site, and especially with the gradual formation of a sufficiently attractive offer of tourist destinations (both natural and artificial) in the area, a larger number of people may be expected to be drawn into the peripheral areas, i.e. areas further from Prague and less equipped, areas still located outside the main Barrandien visitor interest area.

Selected municipalities in the geopark area were monitored in terms of their potential for geotourism in peripheral areas of existing territory of the Joachim Barrande Geopark candidate site, i.e. in the territory, by which the geopark could be extended. Part of the study was devoted to the presence of geological sites in selected peripheral towns that are not primarily incorporated into the Geopark, or only partly so, and whose accessibility is lower (more in Pondělíček et al., 2002). The tourist accessibility of selected municipalities and geological sites was also determined, as was their general accessibility. The last studied phenomena for each town was the presence of at least some kind of tourist infrastructure within its area. For each individual town, a SWOT analysis was carried out which focused on the potential for geotourism, followed by a summary SWOT analysis for the potential area of the Joachim Barrande geopark candidate site.

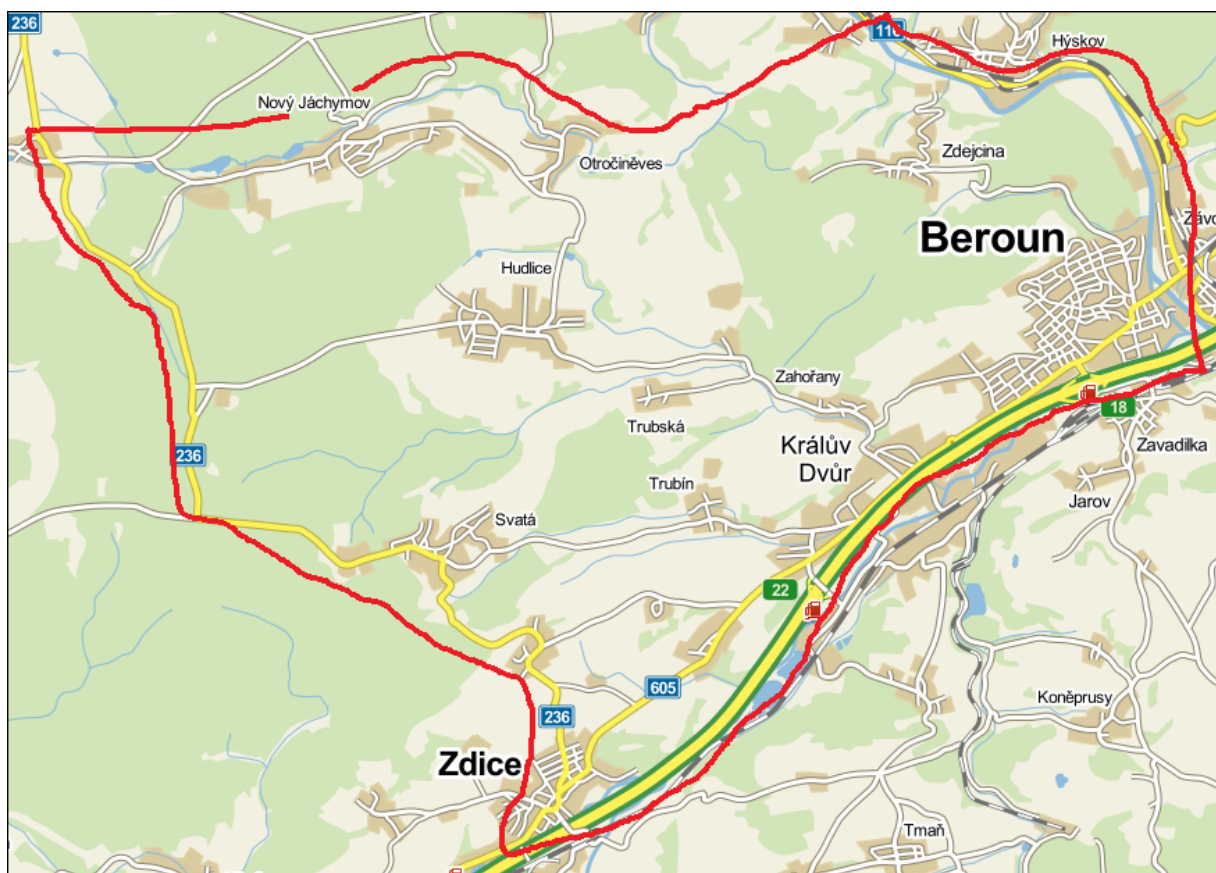
Analysis of the western part of the peripheral area of the Joachim Barrande Geopark candidate site

For the needs of this study, the focus area of the western part of the periphery has been divided into two sub-areas, the northwest (NW) and southwest (SW) areas.

The northwest area is defined by the following towns: Nový Jáchymov, Otročiněves, Hudlice, Svatá, Trubín, Trubská, Stradonice, Zahořany, Zdejcina, Černín, Levín, and Zdice. In general, it can be said that the contiguous area of municipalities is boundaried to the north by the creek of Habr (Habrový potok), to the south by the D5 highway, to the west by roadway II/236, and to the east by the Berounka River (see Fig. 1). This is the area considered for the expansion of the Joachim Barrande Geopark area but which so far has made up its actual peripheral areas. The peripheral character of the area, in terms of tourist accessibility and offers, are evident in the more difficult public transport accessibility (by bus only through Beroun), the neglected tourist infrastructure in terms of geological sites (a minimum of educational paths, etc.), and in terms of the support of the development of support for tourism as such (markings of paths, trails, attractions, etc.). The area is far from

Prague and from the administrative centers of both Protected Landscape Areas, i.e. Křivoklátsko and the Bohemian Karst. The opinion of the authors is that the main point for visiting this area is that it is still undiscovered by tourists and that there are still new and interesting elements of the landscape and geologic past to be found here. Most of the area (except the towns of Trubín, Zahořany and Zdice) is also located within the Křivoklátsko PLA.

Fig.1 Northwestern part of the analyzed area



Source: author's illustration into mapy.cz

The survey included a detailed analysis of all the listed towns. Given the scope of this article, an analysis of the "model" town of Nový Jáchymov is presented here for illustrative purposes.

Nový Jáchymov

Nový Jáchymov is a larger town (ca. 650 inhabitants). The edge of the town is boundaried by the creek of Habr, upon which a cascade of fishponds was formed (especially for sport fishing). The entire town is located within the Křivoklátsko PLA – a UNESCO biosphere reserve, but it is on the edge and, therefore, lies outside the main area of interest. During the 1960's and 70's, there were more than 280 recreational cottages built in the vicinity, and the town became a recreational destination for many citizens of Beroun, Kladno, and particularly Prague. In terms of geological activity, this was a modest center of mining iron ore for the Kladno steel mill production, and the town was likely founded by Germans (given the name), who laid the beginnings for mining in this area, as in others.

The quality of the geological and geological-historical sites

The town area is mostly formed by rocky to aluminum-rocky sediment and mixed quaternary sediment of the Czech Massif system – superficial deposits and post-variscan magmatites. Near the town, there is a mine field of the former iron ore mine. A private narrow-gauge train track passes through the town.

Fig. 2: Nový Jáchymov – former entrance to a mineshaft



Source: author's photo

Tourist (hiking) access

As for hiking trails, the town contains a green trail (direction Nižbor), a blue trail (direction Žloutkovice) and a red trail. The red trail is maintained and leads to an entrance of a former mine under the Ore Mountain (Krušná hora – ca 0.5 km). Cycling path No. 0053 leads to the (section Otročiněves-Kolna).

Transportation access

A class III roadway leads to the town. In the town, there are three bus stops with regular connections to Beroun (BUS 210022, 210027). There are also bus connections on weekends. There are no railway tracks or stations in the town.

Facilities for tourism

Food:

- Hotel Diana, a modern restaurant (for foresters) with a standard offer
- Restaurant "Pod Kaštanem"
- Wine bar and restaurant "**U Cechu**" (constructed from the entrance to the former iron ore mineshaft, with examples of previous use)
- fast food (pizza, etc.).

Accommodations: Hotel Diana, reconstructed building, 52 accommodation places in 2–3 bed rooms with a toilet and a room with wheelchair access, accommodation for groups possible. Additional facilities include a tennis court, playground, parking.

Other: sports ground with facilities

SWOT analysis of the town

S – existing tourism infrastructure (hotels, restaurants), cycling and hiking trails

W – poor quality of the roads leading to the town

O – proximity to the Ore (Krušné) Mountains, mining fields

T – xx

Summarized analysis of the northwestern area of the Joachim Barrande Geopark

The area is attractive enough (geological sites, the natural environment), but with insufficient tourist infrastructure focused on the geology and on access to "geosites" that are not interconnected, labeled, or otherwise utilized within the mosaic of the area. It would be appropriate to create, for example, educational trails and other hiking trails linking the geologically interesting sites. It would also be useful to improve the parking situation, for example by building parking lots (also for cyclists) and by ensuring adequate connections to public transport. The use of P+R (Park and Ride) systems would be appropriate as a proven method of combined transport. Another suggestion for improving the tourist quality of the region is particularly its unified promotion as a tourist destination, which currently does not even exist within the Joachim Barrande Geopark (e.g. via the Hudlicko Association of Towns).

Tourism in the area has also been partially revived by the long-planned construction of the observation tower on Ore Mountain (Krušná hora), the lookout "Máminka", as well as the tower's link via hiking trail (or bike trail) with Hudlická skála (rock formation), which forms another interesting landmark of the area. The area would, however, need to be adapted to the needs of visiting tourists, such as by the construction of the appropriate facilities and infrastructure (paths, parking lots, information boards, refreshments, integrated promotion).

Previously (until 1967), iron ore was actively mined in the area. In addition to geotourism associated with interesting geological sites, there is also room for geotourism focused on the history of the mining industry in the area (educational trail, mining houses, entrances to former mineshafts, etc.).

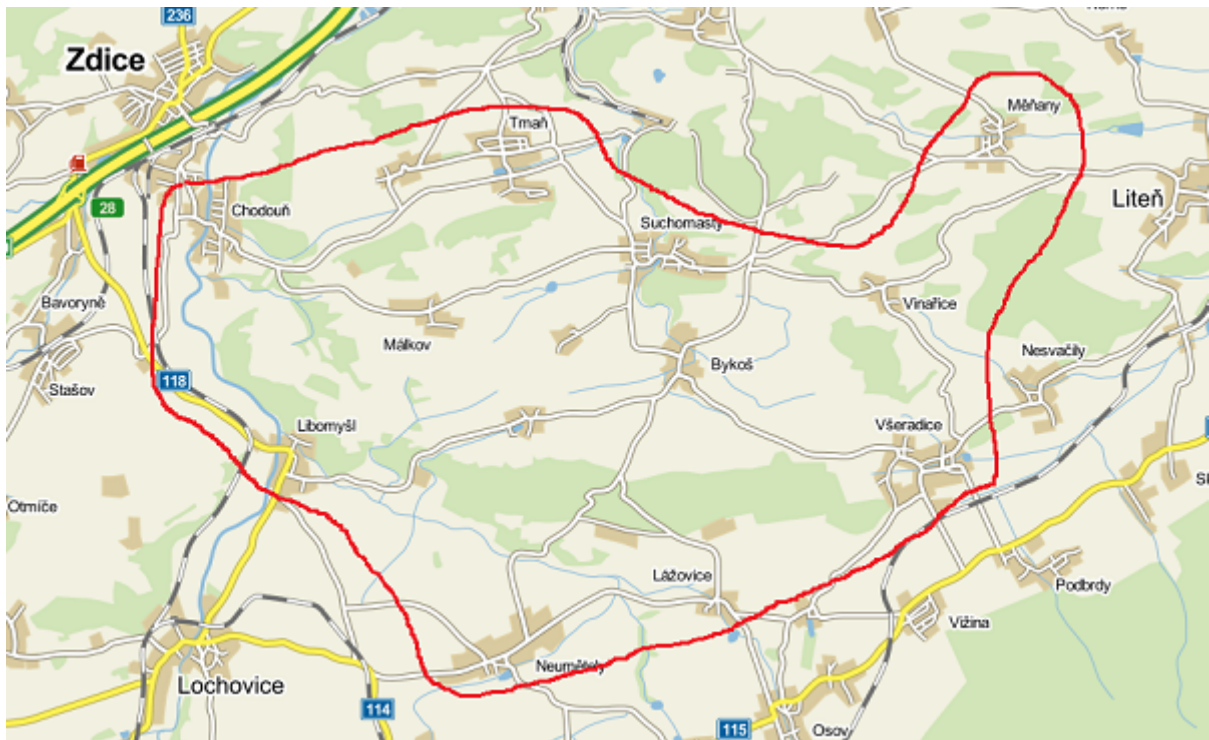
Currently, there are no sufficient and appropriate interconnections between the geologically attractive tourist sites (geosites) or for their promotion, which is the greatest deficiency of the area. There is no awareness of these sites even among the local population. For a person traveling on his own (public transport, cycling, walking), there are only a few

places that offer acceptable food (suitable for biking and hiking), and even fewer places where it is possible to stay at least one night. It is not necessary, of course, that each town should operate a restaurant or accommodation facility, but these objectives should be referred to throughout the entire peripheral region. This is not the case, just like there is no affordable accommodation facility with bicycle storage.

The area of the southwest periphery of the Joachim Barrande Geopark

The second area of interest is located south of the town of Beroun. The area is bounded by the following towns: Málkov, Tmaň/Lounín, Suchomasty, Želkovice, Bykoš, Lážovice, Neumětely, Libomyšl, Chodouň, Vinařice, Všeradice, and Měňany, and it is currently the southern periphery of the Joachim Barrande Geopark candidate site; it is also a unique peripheral area of the Bohemian Karst which is extensively developed and less supported (tourist-oriented businesses here are mostly unsuccessful, as are development projects, with the exception of the individual activities of the area's mayors, most of which are disconnected despite the existence of micro-regions). The towns are contiguous, and the area is approximately defined by the D5 highway to the north, the II/115 roadway to the south, the roadways II/114 and II/118 to the west, and class III roadways to the east (see Fig. 3). Part of the area is located in the southern periphery of the Bohemian Karst PLA. Specifically, these are the towns of Suchomasty, Bykoš, and Všeradice, which lie on the edge of the Bohemian Karst, and the towns of Vinařice and Měňany, located inside the PLA.

Fig. 3 The southwestern part of the analyzed area



Source: author's illustration onto mapy.cz

A detailed analysis has been carried out of all the above mentioned towns in this area as well.

Summarized analysis of the southwestern area

Part of the area territory lies in the Bohemian Karst Protected Landscape Area and directly on the border there is a geologically very important site called the Koněprusy Caves with the adjacent sites of Devil's stairs (Čertovy schody) and Kotýz, as well as Kobyla. These sites make up the region's largest tourist attraction. For the development of the geology-oriented tourist industry, the opportunity exists of offering already-present tourists new and attractive destinations in the focus area and thus keeping them in the region (e.g. Bacín, Červený lom, Kobyla, Mramor, Telín, Housina).

The surveyed area is attractive enough for geotourism. It contains important geological sites (NNM¹ Kotýz, NNM Klonk, NM² Kobyla) and also holds an interesting natural environment (e.g. Mramor Hill and NM Housina). The area holds a smaller number of

¹ NNM – National Natural Monument = NPP - Národní přírodní památka

² NM – National Monument = PP – Přírodní památka

hiking routes that largely bypass the towns in the area of interest. Links to marked hiking trails and bicycle paths are missing, for example, in the towns of Tmaň, Suchomasty, Bykoš, Chodouň, and Měňany. Geologically interesting sites thus remain without a connection to the hiking trails, such as Lejskov, the archaeological site Na Chlum, Bacín, an outcropping of the Zahořany formation in Lažovice, the remains of the fortress Košík, terrain indications of the fortress Libomyšl, terrain indications of the fortified castle Starý Zámek near Libomyšl, Bacín Hill, and the hilltop of Vysoká Skála. These sites do not need to be directly linked to the marked hiking trails, but it would be enough, for example, to create an educational trail or hiking circuit, or at least provide some markings. Like in the case of Area No. 1, it would be suitable to provide a network of P+R sites and the tourism in the area could be revived by the unified and integrated promotion of the area, for example through the Association of Towns for the purpose of creating visitor facilities.

There are few places that offer food and accommodation options directly in the towns of the surveyed area. Of course, it is not necessary to operate these services in every town, but there should be references to accommodation capacities throughout the region. Other tourist infrastructure exists in some municipalities to a greater extent (Libomyšl, Vinařice) and these municipalities (located in the south of Area 2) also have a direct connection to the rail and bus network with connections to Prague. In addition to the town of Zdice, they could thus serve as the larger centers for the region.

Closing Analysis

Both areas are situated in hilly terrain (the Křivoklátská Highlands and the Bohemian Karst, as well as the Podbrdy Ravine/Podbrdský úval), which is aesthetically very interesting and, therefore, a potential tourist destination. Moreover, there is a larger number of geologically interesting locations, geosites, which represent potential for geotourism and are new, interesting, unusual and unknown to the public. However, they are not easily accessible by public transport and are not adequately evaluated by the associations of towns, where

there prevails the personal tendency to drag tourism into the individual locations of the micro-region, regardless of the interests of the whole.

Division of the municipalities

Not all the municipalities in the surveyed area contain geologically interesting sites, and not all municipalities are suitable for investing efforts into the development of tourism, for the reason that the internal potential of the municipalities is already very limited for some reasons. The municipalities with minimum potential are listed in the following table. The main reason is the small size of these municipalities and the lack of a tourism infrastructure, including hiking (geotourism) targets. Moreover, the municipalities listed in the table mostly lie outside the existing frequented hiking trails.

Table No. 1: *Municipalities with minimal potential for geotourism*

MUNICIPALITY
<i>Trubská</i>
<i>Zdejcina</i>
<i>Černín</i>
<i>Levín</i>
Bykoš
Chodouň

Source: author's derivation from the survey data

Another group consists of the peripheral municipalities of the geopark that already contain geologically interesting sites or sites with the potential to revive local geotourism. These sites can be utilized to increase tourism. The names of the municipalities from this group are listed in the following table along with the important or potential geological site.

The peripheral municipalities of the Joachim Barrande Geopark, which are underlined, do not offer sufficient tourist infrastructure (accommodations, food services, or site hiking markings). Sites indicated with the letter P are only potential. Other municipalities offer the support and tourist facilities as well as geologically significant sites for potential

geotourism and visitor traffic (thus having the greatest potential for geotourism within the Geopark) and are highlighted in the table with a colored background.

Table No. 2: Municipalities with the occurrence of geological sites

MUNICIPALITY	SITE
Nový Jáchymov	P - near the Ore Mountains (Krušné hory), mining fields
Hudlice	Hudlická skála and Stará Ves
Stradonice	Stradonice oppidum
Zahořany	Zahořanský stratotype
Svatá,	Vraní skála (rock formation)
Trubín	Trubínský vrch (hilltop)
Tmaň / Lounín	NNM Kotýz, Koukolova Mountain, Lejškov, Havl. Mill
Suchomasty	NNM Klonk, Lejškov
Želkovice	P - Na Chlumu archeological site
Lázovice	P - an outcropping of the Zahořany formation, brickyard, history
Neumětely	P - remains of the fortress Košík, NM Housina
Libomyšl	P - terrain indications of the fortress Libomyšl, terrain indications of the castle Starý Zámek near Libomyšl
Vinařice	Bacín Hill, Vysoká Skála, Telín Hill
Měňany	Plešivec quarry, Skalice Cabe, P - Měňanská karst spring, NM Kobyla

Source: author's derivation from survey data

The last group consists of those municipalities in which geologically interesting sites are not directly located, but which are close to them, or where there is already another tourist infrastructure useful for the further development of the studied area within the Joachim Barrande Geopark. The names of the municipalities of the last group are listed in the following table.

Table No. 3: Municipalities with a developed tourist infrastructure

MUNICIPALITY
Všeradice (exhibition of stones)
Zdice (structures in the area)
Otročiněves (connections to the surroundings)

Source: author's derivation from the survey data

Tourism and transport access

Transport access to the area by car is relatively good. There is little traffic in the area (except for the class II roadway). The problem is rather the lack of parking spaces at interesting sites or near them, and this is a negative aspect even for cyclists. This problem could be solved by introducing a system of P+R and P+B (with bicycle rental) at important traffic junctions. The catchment section of the D5 in the area has a sufficient number of exits and is easily accessible.

Bus service in the area is sufficient; buses run regularly and even on the weekends in most municipalities. The connections in the NW area are mostly directed to Beroun and to Zdice. Connections in the SW area go most often to Beroun, or to Dobříš and Příbram. Train connections are less common, applicable only to towns in the south and east of the SW area (specifically Všeradice, Neumětely, Libomyšl, and Chodouň). Bus connections to the SW area off-season and outside weekdays are very little, if at all.

Access to most towns in the surveyed area is only by class III roadways, which are mostly of poor quality. The vast majority of the cycle routes in the area of interest lead along these very roads, or worse, along class II roadways. The problem thus lies mainly in the safety and comfort of traveling by bicycle. This aspect applies both to the NW area (where, however, there are several bike trails off the road) and the SW area.

Hiking tour access of the sites is suitably divided according to the surveyed areas. The NW area contains a larger number of marked hiking trails and bike paths. Hiking trails lead either directly to geologically interesting sites (Krušná hora, Hudlická skála, Stradonice oppidum, Vraní skála, Zahořany stratotype) or close to them (Stará Ves). Only the Trubínský vrch site is not accessible along any marked trail. The problem is rather the promotion and organization of paths to these locations. Except for the existence of a few isolated local indicators in the towns (e.g. to Hudlická skála), the geological sites are practically not promoted at all, which is incomprehensible given their significance.

The southwest area holds a smaller number of marked hiking trails, and a bike trail leads only peripherally through the area (on the south and west). Moreover, the trails do not lead directly to the geologically interesting sites (Lejškov, Na Chlum archaeological site, Housina, an outcropping of the Zahořany formation, remains of the fortress Košík, terrain indications of the fortress Libomyšl, terrain indications of the castle Starý Zámek near Libomyšl, Bacín Hill, Vysoká Skála Hill, Telín or Mramor Hill); the exceptions are sites accessible via marked trails (NNM Kotýz, NNM Klonk, the quarry at Plešivec, NM Kobyla, Skalice Cave). Sites without tourist signs are usually accessible along repaired and reinforced routes, some along new virtual geotrails. Like with the case of the NW area, there is a nearly non-existent system of targeted and directed central promotion of the geological sites (except for NNM Kotýz and NNM Klonk) and their significance, with the exception of geological virtual paths, and with the exception of the website Barrandien.cz, which promotes the areas and provides information about visiting the area as part of the Joachim Barrande Geopark.

Tourist infrastructure

The weakest link in the tourist infrastructure is insufficient accommodation available in the surveyed area. In most municipalities there is no possibility for accommodations, and there are practically no references to this service in the area. The situation is better only in the municipalities of Nový Jáchymov, Zdice, and Všeradice, which, in terms of geology, are really at the periphery of interest. On the other hand, the town of Beroun is near the study area, where the accommodation capacity is higher but unfortunately often at unreasonable prices. Moreover, every trip from Beroun begins with a steep uphill climb.

Dining options in the area are also not the best. There is a pub in almost every municipality, but usually without the possibility of meals and if so, the overall quality of the food is very poor. There are a sufficient number of restaurants in the area, but they lack promotion (in the form of indicators, ads, etc.) and do not adapt to the needs of tourists,

meaning a greater selection of local specialties and soft drinks. There are no higher standard restaurants at all, which could be a requirement for Prague tourists, for example. The possibility of food shopping exists only in COOP grocery stores.

There are only a few municipalities (Zdice, Všeradice, Libomyšl) where there also exist complementary tourist infrastructures as museums, sports activities (fitness, quad biking, horseback riding) and similar services where visitors can collect hiking stamps and other attributes for hikers/visitors.

The number of other sections of tourist infrastructure corresponds to the rural character of the area. There are several health centers, post offices, service stations, and gas stations in the area.

Tourist structures are complemented by occasional stands for cyclists, shelters for tourists who get caught in inappropriate places, and the occasional bench in a lookout site; local signs pointing out destinations are not sufficiently developed nor is a system of broader information about the area, including maps.

SWOT analysis of the entire area

Table No. 4: SWOT analysis of the entire area

Strengths	Weaknesses
good connections to the transport network (D5 motorway, Prague-Plzeň route)	the small number of marked hiking and cycling trails in the SW area, supplemented by virtual paths, is not enough
proximity to Prague and access by public transport	unmarked geological sites, inadequate local signage, overall inadequate promotion of geological sites in the area
good bus accessibility to the area	poor quality of class III roadways
aesthetically valuable landscape with interesting geological sites and historical artifacts	the danger of accidents between cyclists and cars, insufficient interconnections of geodestinations along roads and trails
the existence of other tourist destinations (homes of historical personalities, castles, swimming, ranch, archeological sites, protected areas, etc.)	low integration of the area (outside the micro-regions of Hudlicko and Horymír)
a sufficient number of marked hiking and cycling paths in Area 1	
Opportunities	Threats
greater promotion of geological sites of natural beauties	degradation of sites that have no forms of protection and visitor traffic
landscaping geological sites and increasing their accessibility and awareness	worsening of the already poor quality tourist infrastructure (hotels and restaurants)
ensuring marked trails to geological sites and their interconnection	a general reduction in tourism (social trends, economic situation)
interconnecting multiple geological sites into one hiking circuit within the Geopark	lack of funding for local information systems and maps
map of the tourist infrastructure in the area linking to geological and archeological destinations (hotels and restaurants)	underestimating the possibility of geotourism at the Geopark for reviving the peripheral areas
coordinated procedure by towns or agencies in developing tourism, integrated system for the destination, particularly the Geopark peripheral area	lack of coordinated cooperation between towns towards a common goal within the framework of geotourism
newly set RUD policy and more money for smaller towns – space for investment in tourism and the utilization of geotourism	age, electoral, and other restrictions to developing a long-term project for the development of the geopark as a whole

Source: author's derivation from the survey data

Conclusion

As part of the study of the peripheral areas of the Joachim Barrande Geopark candidate site, two areas were examined – the northwest periphery (mostly outside the JBG and Křivoklátsko PLA) and the southwest periphery (partly in the JBG, only partly in the PLA, and on the periphery of the Bohemian Karst). The survey also examined the possibilities of integrating both territories further into the geopark, followed by their potential in applying them within the structures of tourism and especially geotourism, specifically the offer of Geosites and adequate infrastructure. It was noted that both areas are mostly oriented towards the catchment area of Beroun and at the same time are very different. The NW periphery is no longer so strongly under the influence of Prague, so the potential here for utilizing the area and the local sites is slightly larger than the potential in the SW area, where Prague affects the supply of labor and earning activity within the given area, and traces of the original area with the expansion of entrepreneurs of Jewish origin are already largely erased in the municipalities.

A lack of connection to public transportation, uncomfortable services outside the major regional centers, and the lack of services and even terrain systems for marking, recreation, etc., then create the effect that even the low cost of services in the regions will not replace the inadequacy and inaccessibility of geotourism destinations, especially at the local level, and of course in the context of linking the geoattractions among each other. It can be said that virtual hiking trails are available but not used, and the reason for the poor visitor rate to the area is the low level of promotion of local destinations as well as the low level of interconnecting the interests of more municipalities into a comprehensive offer of services and attractions that would attract tourism to both regions, especially to the southwest, which is more attractive in terms of the Barrandien area.

Also notable is the lack of interest in the cultivation of the area around Prague from the perspective of the region, which should be the most interested in the re-utilization of the available tourist destinations outside of Prague. In practice and on the basis of this study, it is evident that even here it is true that peripheral regions within the range of large agglomerations and centers that are heavily exposed are not capable of sufficiently reviving their tourist structures, whereas the actual peripheral regions outside of the center are a source for the integration of municipalities and commensurate development, which is more evident in the micro-region of the municipalities of the NW area.

Regarding the Joachim Barrande Geopark candidate site, it is therefore necessary not only to create sophisticated trails, but to promote geotourism destinations both at the site itself (direction signs, local signage, indicator signs, etc.) as well as generally within the area of Beroun and Prague, so that potential visitors may have the opportunity to receive the information from somewhere. Without joint promotion and markings, the development of geological sites around the municipalities is very limited, as is geotourism itself when it does not reach beyond its boundaries peripheral areas.

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