

## Forest visitors' opinion of recreational facilities and trails in forests in the Blaník Protected Landscape Area – a case study

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**ABSTRACT:** Currently, recreation is the most common use of protected areas and there are scarce data on the users and their opinion. The research was focused on visitors to the Blaník Protected Landscape Area (hereafter referred to as PLA), a well-known recreational area where data on visitors, important for PLA management, are missing. Therefore, the aim of the paper is find out: what kind of visitors comes to the study area; the type of forest trails and tourist facilities the visitors prefer. A questionnaire survey of forest visitors was used. Results show that the visitors mostly prefer maintained trails. According to forest visitors' opinion, the most convenient facility to place near the forest tourist trail is the nature trail panels. Furthermore, based on the acquired data, it was possible to create a visitor's profile which is important for respective research and other case studies in similar areas, and for managers of protected landscape areas to comply with both the visitors' needs and the needs of the protected area.

**Keywords:** opinion of recreational facilities; forest trails; visitors' profile; visitors' preferences; questionnaire survey; Czech Republic

One of the most favourite ways to spend a leisure time is to go outdoors. Nowadays, the popularity of nature-based tourism and recreation is increasing worldwide, particularly protected areas are major tourist targets (PICKERING, HILL 2007; NYAUPANE, POUDEL 2011). Recreation is the most common use of protected areas. The demand for natural areas has increased dramatically in recent years and the pressures on land use are becoming more obvious, both in developed and developing countries (FONT, TRIBE 2000; KEARSLEY 2000). The Czech Republic is not an exception; the number of tourists in protected areas has increased. VAN DER ZEE (1990) argues that people travel from their home base because they want a type of recreation that cannot be provided there. PETROSILLO et al. (2007) calls for more research as it is crucial to seek a better understanding of forming perceptions about environmental quality.

There are many studies investigating the public opinion of nature; nevertheless, tourists in pro-

tected areas as a target group of research are not very common yet. Therefore, we decided to identify the social composition of forest visitors as a target group as well as their needs and expectations in the Czech well-known natural and recreational area, Blaník Protected Landscape Area (PLA). The aim of the study was to find out the type of forest trails and tourist facilities the visitors prefer.

According to SAYAN and KARAGÜZEL (2010), the importance of getting to know a typical visitor's profile is confirmed, among others, by visitor demographics and perceptions while their relationships are investigated to determine the problems and issues for outdoor recreation. Similarly ŠIŠÁK (2011) argued that an objective survey of what forest visitors know about the issues in question is a very important informative source for forest policy and forestry public relations plans and activities.

Thanks to these data, resulting from our study, the managers of the PLA will be able to improve the

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evaluation of the current state of recreation facilities as well as find a way to adjust the forest environment in accordance with visitors' demands and expectations. It is important to balance demands on recreation while maintaining the objectives of nature conservation.

## MATERIAL AND METHODS

As no available materials exist, it was necessary to carry out a new research to acquire data for statistical evaluation. On-site questionnaire was chosen as the best survey method.

The first objective was to identify the most attractive places and the visitation rate in the study area. The best was to walk along the most frequented tourist trails and simultaneously make photographic documentation. A sociological survey followed. The top of Velký Blaník Mt, the centre of PLA, was chosen as the best place for data collection. Near the view tower, approximately halfway up the trail, there was a good strategic point for asking people as many of them take a break before going up to the view tower. There are several tables and benches, and respondents could sit down comfortably while completing questionnaires. Data collection was under way over one year; data were collected during five days on both weekends and weekdays.

During the survey 267 tourists were asked to fill in the questionnaire. 242 of them agreed to participate in the study and completed the questionnaire. It means the response rate was more than 90%. That is a rather high number; other studies using direct on-site questioning of tourists report lower response rates, e.g. MERCADO and LASSOIE (2002) nearly 85% or HEER et al. (2003) around 75%. Almost all tourists came on foot; only 6 respondents (from all inquiry days in total) rode bikes.

### Study area

As it is already apparent from the title of the paper, the on-site questionnaire survey took place in Blaník PLA. Currently, in the Czech Republic there are 25 PLAs with the total area of 1,086.700 ha ([www.eagri.cz](http://www.eagri.cz)); all PLAs together represent 13.78% of the total area of the Czech Republic (MACHAR et al. 2012).

Blaník PLA with the area of 41 km<sup>2</sup> was established by Decree No. 17 332/1981 of the Ministry of Culture of the Czechoslovak Socialist Republic, coming into effect on January 1, 1982. The purpose of this PLA was the protection of the harmonious,

balanced landscape of central Bohemia and its pivotal landmark, the memorable and mythical mountain Velký Blaník (HANEL, KLAUDYS 2011).

The whole area is called Podblanicko – after Velký Blaník Mt. (638 m a.s.l.). Geographically, Podblanicko was defined on the basis of several criteria. Its location is important from the aspect of visitation rate – it is easily accessible by car and public transport from the capital of Prague, and also by train from the nearby town of Vlašim (Hanel, personal communication). Despite quite a short distance from Prague and regardless of the charming landscape, this area is not yet fully explored by tourists. The only exceptions are visits to the legendary top of the Velký Blaník nature reservation (RUBÍN 2003). Almost every tourist, who comes to Blaník PLA, goes to the top of Velký Blaník. The tourist interest in Blaník rapidly rose in 1895 when a wooden view tower was constructed on its top (MAUR 2006). But not everybody who reaches the top continues to the view tower. The turnout increases at certain times of the year when e.g. news about the wealth of mushrooms spreads (Hanel, personal communication).

### Questionnaire

The questions covered overall preference judgments as well as more cognitive ratings. Respondents were asked twelve closed-ended questions and two open-ended questions. Inspired by SAYAN and KARAGÜZEL (2010), the final open-ended question was asked in order to elicit any suggestion respondents might have. Finally, five questions were added to determine the socio-demographic characteristics of respondents. It took approximately 7 min to fill in the questionnaire.

## RESULTS

### Characterization of the most common visitor

The data evaluation shows that the most typical visitor in the Blaník PLA is a female (58.3%), between 35 and 44 years of age (20.3%), a secondary school graduate (36.5%), with a job of technical specialization (27.2%). She lives in a city with 1 million inhabitants and more (26.1%). Although it was not the goal of the research and the questionnaire did not ask about the exact place where the respondent lives, in this case it is evident – in the Czech Republic there is only one city with more than 1 million inhabitants: the capital of Prague.

For the visitor's profile in detail see Table 1.

### Comparison of respondents with the overall population in the Czech Republic

The acquired data were compared with available official data from the Czech Statistical Office (CZSO) (CZSO 2012). Talking about the total sample, 58.3% of women and 41.7% of men participated in the survey. It is a somewhat larger percentage of women than in the overall population in the Czech Republic (males 49.1%, females 50.9%) (Table 1). As for the age, there was a high diversity among particular age groups over 15. The survey was focused on respondents older than 15 years. By the level of education, during the survey there was nobody without primary education completed. We do not know if there was anybody uneducated in the study area – maybe such a person would refuse to participate in the survey because they would not be able to read the text properly. In the Czech Republic there are ca 12,500 persons without primary education completed, which means almost 0.1% of the overall population (CZSO 2012). From Table 1, perceptible differences among the other levels of education can be seen.

A comparison of respondents' professions with the overall population in the Czech Republic was quite difficult, because the categories were very dissimilar. For an easier comparison, various categories covered by the CZSO (CZSO 2012) were sorted such as classification in the questionnaire. After that it is evident that the majority of respondents (27.2%) as well as the majority of the overall population in the Czech Republic (57.4%) have a profession belonging to technical specialization. The full breakdown of the outcome is in Table 1.

The last variable for the comparison is the number of inhabitants in municipalities where the respondents live. The majority of respondents come from a city with 1 million inhabitants and more (26.1%) and from towns with 5,000–19,999 inhabitants (21.2%). Only 26 respondents were from towns with 500–1,999 inhabitants (which includes also the nearest municipality – Louňovice pod Blaníkem), which is less than 10.8%. In the overall population in the Czech Republic, most people live in cities with 20,000–99,999 inhabitants (21.7%). For more information see Table 1.

### Preferences of forest trails

The following question was what forest trail the tourists prefer (they were allowed to choose max. 2 answers). Results showed that the most preferred was a maintained trail (e.g. with bridges) without any further equipment for visitors – more than 1/3 of respondents marked this answer. Also a maintained trail with basic equipment (benches) and a wild unkempt trail with minimum equipment seemed to be interesting for visitors. For more information see Fig. 1.

### Preferences of facilities for visitors

The next question was: Which of the following types of facilities for visitors do you find appropriate to place near the forest tourist route? (You can choose more than one). The most appropriate facility showed to be nature trail panels and a place with a table for having a rest (and eating a snack). On the other hand, in the respondents' opinion the

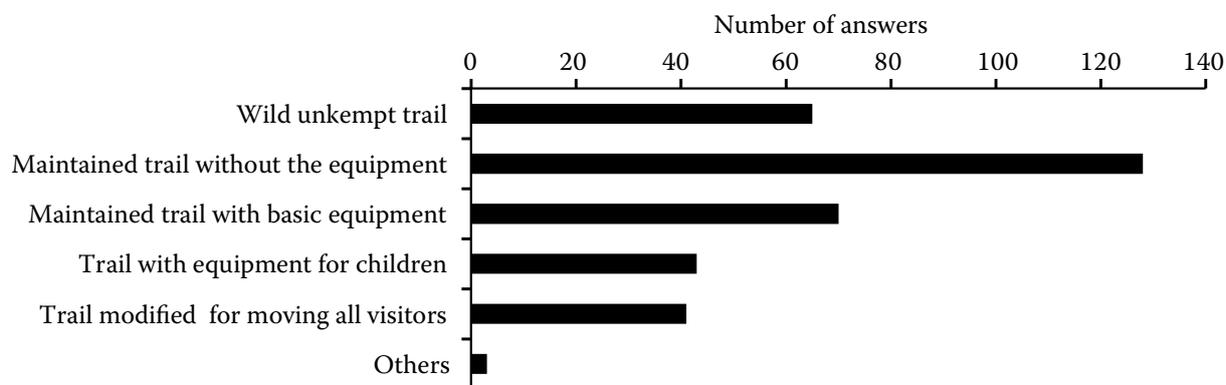


Fig. 1. Preferences of forest trails

as "others", the respondents wrote: a cultural landmark in the target destination (castle ruins, church etc.) and a restaurant (snack bar); well-marked, passable and safe trails for children; a tourist landmark at the end of the trail (a view-tower, viewpoint etc.); solitude

Table 1. Basic demographic features compared with the overall population in the Czech Republic by the Czech Statistical Office (in percentages)

Variables defining the sociological characteristics of visitors	Visitors	Population in the Czech Republic
<b>Gender</b> (Czech Statistical Office 2010b)		
Male	41.7	49.1
Female	58.3	50.9
<b>Age</b> (Czech Statistical Office 2010a)		
under 15 years	–	14.3
15 to 24 years	16.2	12.3
25 to 34 years	17.4	15.8
35 to 44 years	20.3	14.9
45 to 54 years	17.4	13.1
55 to 64 years	17	14.2
65 years and more	11.6	15.4
<b>Level of education</b> (Czech Statistical Office 2010a)		
Without education	0	0.1
Basic	7.1	14.1
Secondary school without exam	19.1	30.3
Secondary school with exam	36.5	29.3
College	5.4	
University		11.8
bachelor studies		
magister studies	31.9	
post-graduate		
<b>Study or professional focus</b> (Czech Statistical Office 2009)		
Technical specialization	27.2	57.4
Scientific or medical specialization	11.9	17.6
Agriculture and food industry	8.5	2.9
Forestry	1.3	
Economics and finance specialization	19.1	13.1
Humanities and law specialization	14	6.6
Others	17.9	2.4
<b>Number of inhabitants in municipalities where respondents live</b> (Czech Statistical Office 2011)		
≤ 500	8.3	7.9
500–1,999	10.8	18.6
2,000–4,999	14.1	11.6
5,000–19,999	21.2	18.3
20,000–99,999	14.1	21.7
100,000–999,999	5.4	9.9
1 mil. ≥	26.1	11.9

place with barbecue equipment is not necessary or appropriate. The numbers of visitors who wish to place particular types of facilities near the forest tourist trail could be seen in Fig. 2.

## DISCUSSION AND CONCLUSIONS

Our research helped, among other outcomes, to create the typical visitor's profile. The acquired data

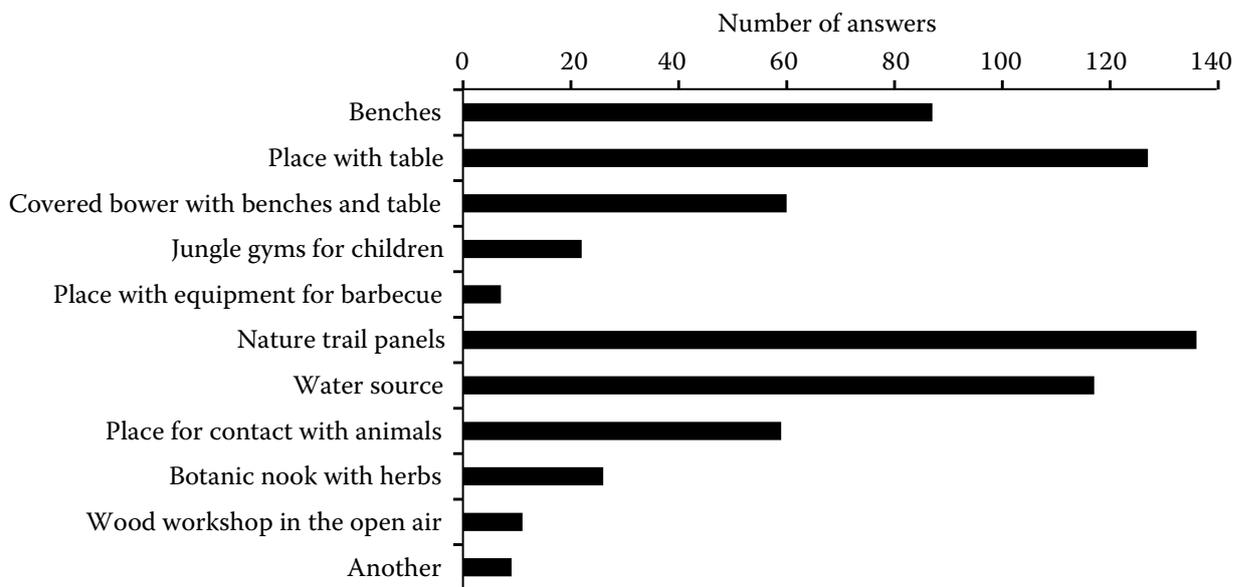


Fig. 2. Preferences of facilities for visitor

as “another” type of facility suitable to place near the forest tourist route the respondents mentioned these: I prefer nature without any human influence; rubbish bins; I do not need any facilities, stumps are enough to sit and have a snack on; stones and stumps are enough + another sufficient place to sit

show who the people coming to the study area are, as well as in what respect they differ from the overall population in the Czech Republic – in comparison with data from the Czech Statistical Office.

Another intriguing finding of the study clarified the tourists’ preferences of forest trails and facilities for visitors. The most preferred was a maintained trail without the equipment for visitors, the most appropriate facility showed to be nature trail panels. In Blaník PLA there is already a good system of tourist marks and tourist trails. LOŽEK et al. (2005) wrote: There is a marked nature trail that leads along the tourist trail in the nature reserve. Data on tourists in a certain area is very important information, particularly for managers of the area. TORBIDONI (2011) stated that the planning and management of recreational activities in protected areas involves the understanding of many complex factors. Knowing what kind of visitors comes to the study area, and the type of forest trails and tourist facilities the visitors prefer is of paramount importance for adjusting forest management techniques. HEARNE and SALINAS (2002) argued that protected area managers must be able to develop infrastructure, access, and to use restrictions which facilitate the dual goals of conservation and tourism development. All recommendations to forest managers should concern not only how to enhance the recreational potential for specific areas but also they should help them to find the right balance between the level of recreational use and nature conserva-

tion. But, as confirmed also by TORBIDONI (2011), achieving and maintaining an appropriate balance between the conservation and use of these areas for recreation, sport, and tourism is not an easy task. The solution seems to lie in a better understanding of visitors’ profile, as it could help to know expectations and interests of participants. Managers of the area should find a way how to improve foreknowledge about levels of nature protection, e.g. through the education. The communication with visitors could be easier if it is focused on a particular group of visitors. More research is needed in this field. This study should be followed up in the future and repeated in other areas.

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