# Recreational use and visitor motivations at Torfhaus visitor area in Harz National Park, Germany

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## Background

Profound knowledge about visitor numbers to a protected area, combined with those visitors' demographics and their recreational preferences, can be considered the most important baseline data in order to enable protected area administrations to manage visitor impacts and the quality of the recreational experience (Kajala et al. 2007; Eagles et al. 2002). In spite of this knowledge, visitor monitoring can be considered the stepchild of protected area management in Germany as the majority of its 14 national parks (and the other protected areas as well) lack sophisticated efforts to establish visitor management systems based on valid visitor numbers (see Burns et al. 2010).

Harz National Park in the Northern part of Germany is one of the country's most frequently visited parks and serves as a valid case for lacking visitor data. The Harz region has provided recreation opportunities for visitors since the advent of tourism. With the designation of a national park in 1991, about 10% (246 km<sup>2</sup>) of this forested low mountain range are now under strict protection. Due to a lack of accurate visitor counting procedures and due the geographical dispersion of ingress and egress points, the exact number of visitors to the park remains unclear, although the park estimates it to be between three and five million visitors per year.

In order to perpetuate visitor monitoring methods in the park, the Torfhaus visitor area was chosen for a case study. It is one of the park's tourism hot spots and is visited by an estimated 500,000+ visitors annually. Since 2009, a new visitor center has been serving about 160,000 visitors each year, creating an opportunity to inform visitors about the park's purpose and objectives. A target group analysis had not been carried out prior to the relocation of this visitor center.

#### Objectives and research questions

Based on these considerations and to reflect management needs, a set or research questions was defined. These research questions address the visitor motivations to come to the area, the park's importance when making the decision to travel to the region, the overall number of visitors to the Torfhaus area, including the percentage of actual visitors to the park's interpretive infrastructure, and many more. The objective of the study was to evaluate the park's current onsite outreach strategy and to develop recommendations for improvement if necessary. This paper focuses on three of these important research questions:

- What are the main visitor motivations to visit the Torfhaus area in Harz NP?
- What role does the existence of Harz NP play in the visitors' decision to travel to the region?

• What are the primary recreational uses and visitor activities in the Torfhaus area?

The study's objective was to develop recommendations to the park's managers based on the findings on each of the research questions.

### Methods

As the set of research questions focuses on a variety of management issues associated with the Torfhaus visitor area, several different quantitative methods were selected depending on the specific research question. The methods include a manual vehicle count (number of cars, number of passengers, license plate for origin determination), three different quantitative survey instruments (one on general visitation and two on pre- and post-visitor experience), a visitor count in the visitor center and hidden observation in the exhibit to identify the time spent at each exhibit). The surveys were carried out on several sampling periods between July 2011 and February 2012, with the next sampling periods being planned in July and October 2012 in order to support continuous data collection.

#### Results

The results presented here focus specifically on the research questions presented and on the quantitative general visitor survey. Within the first sampling period, a total of 774 visitors were interviewed at the Torfhaus parking lot, of which 338 were summer and 436 winter visitors. The overall visitation of the area does not really fluctuate over the year (except for the month of November, when visitation is at the lowest); it is rather dependent on current weather conditions in the region as the park's catchment area includes the Hamburg, Bremen and Hannover metropolitan areas within daytrip distance. The percentage of day visitors was 58.3% in the summer season compared to 71.6% during the winter. The average length of stay for overnight visitors was considerably longer during the summer (6.8 days) than during the snow season (3.8 days), while the average group size remained about the same (4.6 vs. 4.9 people per group). Foreign visitors made up for 10.7% of the overall visitors in the summer versus only 2.3% in the winter time.

96.8% of the visitors were aware that they were in a national park. For 12.4% and 34.9%, the park's existence played a very important or an important role, respectively, when making the decision to come to the region. Nevertheless, 94.8% of all visitors would still have come if the park did not exist. The results of these questions were combined in a cross table, identifying the total number of visitors to whom the parks existence was (very) important and who would not have come without the park existing. A total of

27 visitors or 3.5% of the sample were identified, who can be considered "core" or "true" national park visitors.

The visitors' main activities and motivations showed an expected seasonal variability. During the summer (n = 335), stopping for the scenery (23.6%) was the most important reason for stopping at Torfhaus, followed by hiking (21.2%), dining (15.5%) and to make a rest stop (14.3%). 2.7% came for other outdoor activities than hiking. 2.4% stated they came specifically for the visitor center, another .9% specifically because of the national park.

During the winter season, 38.9% came for snow-related activities. Enjoying the scenery, to which the snow probably also contributed, was the main activity for 18.0% of the sample, followed again by dining (15.7%), hiking (6.9%) and again, using the location for a rest top (4.8%). 1.8% came for the visitor center, none specifically for the national park.

#### Discussion

The Harz National Park's visitors to the Torfhaus area show a high seasonal variability in regards to the main motives for their visit and their preferred activities. If snow is present in the wintertime, almost 40% of the visitors come for this special experience. In general, the presence of the national park only plays a minor role for the visit, also indicated by the low number of "true" national park visitors at this specific site. As the current exhibit in the visitor center is directed towards people with a rather keen interest in the national park, the park's administration should reconsider whether the misalignment between the intended target group and the actual visitor needs to be addressed. The data strongly suggests that a more target-oriented approach could help to build a greater awareness about the national parks and its objectives.

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