

Causes and Potential Solutions for Conflicts between Protected Area Management and Local People in Germany

Eick von Ruschkowski, Department of Environmental Planning, Leibniz University Hannover, Herrenhäuser Strasse 2, 30419, Hannover, Germany; ruschkowski@umwelt.uni-hannover.de

Introduction

The designation of protected areas (e.g. national parks) often leads to conflicts between local communities and the area's administration. This phenomenon exists worldwide (Pretty and Pimbert 1995) and is probably as old as the national park idea itself. These conflicts often affect both the protected areas and the local communities as strained relations bear the danger of gridlock on park planning, conservation objectives or regional economic development. As national parks and surrounding communities are highly dependent on each other (Jarvis 2000), the task of managing stakeholder interests and potential use conflicts should be of high priority for park managers.

National parks in Germany (as much of Central Europe's protected areas) are often very vulnerable to such conflicts for a number of reasons. Their history is quite recent, with the oldest park having been established less than 40 years ago. On the other hand, the German landscape has been altered throughout many centuries, hence creating cultural landscapes, rather than unimpaired wilderness. Thus, the designation of national parks has caused conflicts in the past, mainly along the lines of the continuation of traditional uses vs. future (non-)development, often additionally fuelled by management issues (local vs. state vs. federal). Additionally, a high population density puts protected areas more likely close to urban areas. Against this background, the management of stakeholder issues in order to increase support among local communities remains one of the most important sociological challenges for German park managers.

This paper presents the results from a field study carried out in the Harz National Park, located in a North German low mountain range. The scope of the study was to identify and analyze existing and potential conflicts between park management and the local population. Based on the results, measures to improve local support for the park were proposed. A specific focus was put on known and hidden communication channels between stakeholders and the park's administration in order to develop a strategy that makes outreach more efficient.

National parks in Germany

National parks in Germany can be established under the Federal Nature Conservation Act, but are designated and managed by the federal states. As of 2009, 14 national parks existed in Germany, protecting a total area of approximately 9,621 km² (BfN 2009, cp. Figure 1). This includes marine areas which account for 80% of it. The terrestrial parks are equivalent to 0.54% of the land mass of Germany. The parks' sizes are typical for Central Europe, but compared to North American or African parks, they are quite small.

The reasons for opposing the designation of protected areas seem deeply rooted in Germany, mainly through emotional and cultural drivers that influence attitude towards nature conservation. Based on extensive research, Stoll-Kleemann (2001) developed a model that cites five causes as barriers to conservation which also strongly influence the attitude towards protected areas: a weak national constituency, conflicts with other government agencies, inadequate management, insecure or insufficient funding and conflicts with local people. Despite the fact that those conflicts as described are common to most German national parks, the parks' research activities still mainly focus on natural resource management. Socio-economic issues often seem to be managed by "gut feeling," although their importance has been on the rise in recent years, even though social scientists among park management staff are rare. Own research via an email survey during the process of preparing the main study revealed that out of the 14 national parks, only three of them had assigned the issue of monitoring the support among local communities a high priority and integrated this into their permanent management tasks (von Ruschkowski 2009).



Figure 1. National parks in Germany. Insert shows Harz National Park and parts of its surrounding communities. Map sources: Bundesamt für Naturschutz (Federal Agency for Conservation) and Harz National Park.

Harz National Park

Harz National Park encompasses about 247 km² of colin (the altitudinal zone between 150 and 300 m in the Central German hills) and montane habitat zones and is located in the German states of Lower Saxony and Saxony-Anhalt. From the North Sea inward, the Harz mountains are the first mountain range beyond the northern German lowlands, rising to 1,142 meters above sea level. The national park only comprises a minor area of the mountain range and features predominantly forests and bogs (peatlands). The forests have mainly been altered by logging and mining for at least the past 1,000 years, thus the vegetation is still far from a natural state in the elevations between 500 and 850 meters above sea level. One of the park's main management objectives is to turn the existing fir monocultured forests into a more natural state (beech-oak communities) over the next 30 years. Currently, barkbeetle infestations from the fir forest pose a potential threat to nearby, mainly privately owned forests outside the park boundaries. One of the park's biggest successes has been the successful reintroduction of the Eurasian lynx which now has become an important figurehead for this park.

Harz National Park was originally founded as two separate parks along the state lines (and the former borderline between East and West Germany) of Saxony-Anhalt (1990) and Lower Saxony (1994). Both parks were merged into the current Harz National Park in 2006,

creating Germany's first (and only) interstate national park. The Harz region has been a strong tourism destination for more than 100 years. The number of visitors is estimated between 10 and 40 million visitors per year (including multiple visits and day visits). Still, the number of overnight stays indicates strong visitor use. For the year 2003, 4.2 million overnight stays were recorded by the local tourism umbrella group "Harzer Verkehrsverband" (von Ruschkowski et al. 2009).

Methodology

To address the research questions, a study design based on a quantitative survey was chosen. The sample size was set to be at least 200 households, a stratified random sample from selected communities in the Harz region that directly lie on or at the park's boundaries. The extensive questionnaire contained 41 questions with a total of 139 items, using a mix of closed and open questions that ranged from nominal to interval scale to allow multivariate analysis in selected cases. The survey was carried out in February and March of 2005. In most cases, the questionnaires were handed over personally to participants, leading to an overall 97.2% response rate. The data was coded and analyzed, using the statistical software package SPSS.

Results

The survey produced mixed results overall which made it difficult to single out specific reasons for a lack of local support for Harz National Park. Select results are presented in this paper. Overall, 40.5% of the sample ($n = 205$) had a positive attitude towards the park at the time of its designation in the 1990s, 27.3% were neutral and 22.0% opposed it, 7.8% of the respondents did not live in the area when the park was founded, 2.4% declined to answer this question. At the time of the survey, 15 (Eastern part) and 11 (Western part) years respectively had passed since the park's designation. Eighty percent responded that their attitude towards the park had not changed since then, while 5.9% indicated it was more positive, and for 7.3% it was more negative now. Therefore, the overall changes were insignificant, but it has to be pointed out that for the vast majority, the initial attitude seemed to persist after more than a decade. When asked about their satisfaction about the initial public involvement when the parks were established, only 17.1% of the respondents ranked the degree of participation at least somewhat or completely satisfactory. The correlation coefficient (Pearson) between satisfaction level and attitude towards the park was highly significant ($r = .582^{**}$).

Personal impacts could be a key driver for the attitude towards the park. Seventy three point six percent of the respondents said they (themselves or members of their families) were not affected by the park. While 11.2% were positively affected (e.g. through the creation jobs), 13.7% stated they were negatively affected. Almost the same results applied when they were asked about the impacts on friends or neighbors. Thus, the overall impacts seem to balance themselves.

Establishing a national park means new rules and regulations for the local communities. As a logging region, the discontinuation of logging within the park's boundaries was probably the most noticeable change in the beginning, although the forests were state-owned and thus economic impacts were low, especially since many foresters were given the opportunity

to transfer to the park administration. Still, many traditional uses exist in the region. While most laws in effect today are widely accepted by the respondents, there was one noticeable exclusion: picking berries and mushrooms was an activity carried out by many locals. Therefore, the ban on this activity was unacceptable for 56.5% of the respondents. This was by far the most unpopular regulation and also caused most comments throughout the survey. Similar results were reported from a study at Eifel National Park in Western Germany (Sieberath 2007).

The access to and the use of media and other information could highly influence people's knowledge about the park. The predominant media were the local newspapers. Two print publications (bi-monthly/quarterly) that include a four-page extra section on Harz National Park reached only 3.9% of the respondents, most of them reading these publications rather irregularly. The park's websites were used by 2.4% of the respondents. Overall, those outreach efforts that are tailored towards national park issues did not even reach five percent of the respondents. Not surprisingly, only 5.4% of the respondents said they felt "very well" informed about the park, 31.7% stated somewhat well, whereas 57.1% opted for less than satisfactory levels. At the same time though, 64.9% of the respondents stated they did not need any additional information about the park, putting the managers in a dilemma as people seem to lack information, but are not necessarily keen to be better informed. One of the important findings of the study was that 51.2% of the respondents knew at least one national park employee personally. This fact could play an important role in future outreach activities, especially since park employees were affiliated with positive impressions.

Discussion

Overall, the study could not determine a single outstanding cause that would explain resistance against Harz National Park among local people. Instead, a number of factors contribute to a positive or negative attitude towards the park. Many of these factors though lead to communication processes in the end. The park will not improve the situation by increasing outreach alone. Especially the fact that only insignificant attitude changes have occurred since the park's establishment despite extensive outreach efforts is a viable hint that quantity alone is not the deciding factor. Overall survey results rather indicate that an integrated approach is required. This would include strengthening communication on a personal level. The fundamentals are already present as park employees play a significant role as communicators and are mostly well-respected in the communities. As most of the surveyed communities are rather small and found in rural settings, a key aspect of this strategy is to address and involve local decision makers. Currently, participation and public involvement relies mostly on the formal requirements as stated in relevant laws and regulations, although the park administration has recently indicated a shift as informal public hearings and presentations were introduced as a new tool. Another worthwhile tool to use would be to involve local people by providing hands-on opportunities for them to learn the basics of park management. Experience from other protected areas show that such events help local people to make a personal connection to the park and understand the complexity of management decisions.

Different stakeholders certainly require different approaches, thus the park management should develop new initiatives tailored towards all stakeholder groups. Stakeholder manage-

ment on a professional level is currently not practiced in any of the German national parks, usually the parks' outreach serves the "usual suspects." A more professional approach in this matter would most likely also lead to more efficient decision making and transparency of these decisions. Especially when small or traditional user groups are affected (as shown in the berry and mushroom picking case), dealing directly with these issues would allow for more simple, case-specific solutions.

References

- BfN [Bundesamt für Naturschutz (Federal Agency for Nature Conservation)]. 2009. National parks in Germany. On-line at www.bfn.de/0308_nlp+M52087573ab0.html.
- Jarvis, T.D. 2000. The responsibility of national parks in rural development. In *National Parks and Rural Development*, ed. G. Machlis and D. Field. Washington, D.C.: Island Press, 219–229.
- Pretty, J., and M. Pimbert. 1995. Beyond conversation ideology and the wilderness myth. *Natural Resources Forum* 19:1, 5–14.
- Sieberath, J. 2007. Die Akzeptanz des Nationalparks Eifel bei der lokalen Bevölkerung. *BfN-Skripten* 206. Bonn, Germany: Bundesamt für Naturschutz (Federal Agency for Nature Conservation).
- Stoll-Kleemann, S. 2001. Barriers to nature conservation in Germany: A model explaining opposition to protected areas. *Journal of Environmental Psychology* 21:4, 369–385.
- von Ruschkowski, E. 2009. Ursachen und Lösungsansätze für Akzeptanzprobleme in Großschutzgebieten. Ph.D. diss., Leibniz University Hannover.
- von Ruschkowski, E., S. Valdeig, R. Jakob, and S. Homann. 2008. Designing a visitor monitoring concept for Harz National Park in Germany. In *Proceedings of the 4th International Conference on Monitoring and Management of Visitor Flows in Recreational and Protected Areas*. Firenze, Italy: National Research Council, 144–147.