

# Methodological challenges in nature-based tourism surveys – the use of self-registration cards in Swedish mountain areas

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## *Introduction*

Common difficulties with nature-based tourism surveys include challenges in locating visitors' post-experience, as well as challenges in administering reliable surveys post-visit. In this study, self-registration cards are used to address these difficulties in a case study of Södra Jämtlandsfjällen (the southern Jämtland mountain area, Sweden). Visitors are asked to fill out a card with their contact information and thus agree to be contacted by email to participate in a web-based questionnaire. The utility of the self-registration card approach, as well as the method of web-based questionnaires, is analysed and discussed in this study.

## *Soundscapes*

To experience peace and quiet is increasingly difficult in today's society. Not surprisingly, studies in the field of outdoor recreation reflect this trend. For example, in North American national parks and wilderness areas noise is becoming an increasing problem, according to both research and management (Mace et al., 2004) where the *soundscape* (consisting of natural and non-natural sounds) is a resource to be protected (Rossman, 2004). To experience natural sounds is obviously a valuable product in tourism, but is also important in outdoor recreation. Noise thereby illustrates one example of a conflict if motorized recreation activities are allowed in areas where natural sounds are sought by other recreational groups. Moreover, it is found that in order to understand and to handle conflicts of noise and natural quiet, it is important with information of the visitors' attitudes (see e.g. Pilcher et al., 2009).

## *Motorized Activities and Visitors' Attitudes in a Swedish Context*

Issues of reducing noise pollution and protecting natural soundscapes has been discussed in Sweden since the 1980's. The Swedish National Board of Housing, Building and Planning (2003) claims that the level of unwanted sounds is increasing in Sweden while areas with natural sounds of quality are diminishing. The possibility to experience natural sounds and reduce noise varies in protected areas and e.g. in different parts of the Swedish mountains. In the national environmental goal *A Magnificent Mountain Landscape* (16 environmental quality objectives describe the state of the Swedish environment which environmental action is to result in; these are to be met within one generation, i.e. by 2020), noise is defined as a management issue. This concerns several stakeholders, where the values for outdoor recreation are to be defended and maintained, and the influence of noise is minimized.

One defined source of noise (as well as smell and pollution) is the snowmobiles. In the past 25 years, the usage of snowmobiles in the Swedish mountains has increased. Snowmobiles are used when transporting goods and supplies to peripheral areas of the mountains, as well as a mean by the Sami. Snowmobiles have also become part of the tourism development in these areas. There are several opportunities to rent a snowmobile or to participate in safaris. The motorized activities are thereby in different contexts; work and fun. In order to understand who the primary stakeholders are and if there are any conflicts of noise connected to motorized activities, as well as what management strategies would be the most effective for managing soundscapes, it is relevant to get information directly from the users of the area.

### *The Study*

This study is part of a project in the research programme *A magnificent mountain landscape for future generations*. It is a research initiative by the Swedish EPA in order to encourage a holistic view of the mountain landscape based on close collaboration between relevant stakeholders. The aim is to create a deeper understanding of the mountain world conflicts and opportunities with respect of different perspectives to promote sustainable development. Thereby, the conflict of noise in the mountain region of Jämtland-Härjedalen, Sweden is investigated. In-depth qualitative interviews with visitors, second home owners and authorities in the counties Härjedalen and Jämtland will be carried out during fall 2014 and spring 2015. Also, field observations will be conducted to document and analyse norms, values, and interpretation as well as communication patterns of stakeholders i.e. an attempt to see the reality from the stakeholders' perspective. The above-described qualitative methods are preceded by a web-based questionnaire directed to visitors in spring 2014. Thereby, two stakeholder groups have been identified – skiers and snowmobilers – to be included in the survey.

However, this raises the question how the skiers and snowmobilers will be contacted and reached (Kajala et al., 2007). In Sweden, self-registration cards are one of the few ways to obtain addresses of future respondents of a questionnaire survey. In this study, self-registration cards are one method used for an initial visitor monitoring in the mountain area of Jämtland-Härjedalen. The cards themselves are a method for collecting visitor data concerning name, e-mail addresses, age and sex, and information of the number of days visiting the area. Additionally, there are two questions regarding the experience of noise and the attitudes to regulations of snow-mobiles in the Swedish mountains to achieve natural quiet. Five STF (*Svenska Turistföreningen*) mountain stations were selected for the distribution of self-registration cards in March-April 2014. In addition, cards were handed out at certain gate-ways in the area by field workers. Finally, different local associations for snowmobiles were contacted.

What are the advantages and disadvantages with the data collection procedure and the gathered data? How can the procedure with self-registration cards be further developed? Different problems and biases are identified and discussed in this study with comparisons to earlier studies and methodological discussions (see Ankre & Wall Reinius, 2010). There are several aspects to consider such as finances, other organizations and their interest to participate, geographic distance, number of visitors in the research area etc. Moreover, questionnaires are an appropriate sampling strategy since it captures many stakeholders' opinions and attitudes where the results may be compared to earlier studies. However, what are the future challenges with web-based questionnaires

within visitor monitoring? For example, it can be difficult to stand out in a flow of various web-based questionnaires from different sources.

### *References*

Ankre, R. & Wall Reinius, S. (2010). Methodological Perspectives: The Application of Self-Registration Cards in the Swedish Coasts and Mountains in *Scandinavian Journal of Hospitality and Tourism*. Vol. 10, No. 1. pp. 74-80.

Kajala, L., Almik, A., Dahl, R., Diksaite, L., Erkkonen, J., Fredman, P., Jensen, F., Karoles, K., Sievänen, T., Skov-Petersen, F., Vistad, O. & Wallsten, P. (2007). *Visitor monitoring in nature areas. A manual based on experiences from the Nordic and Baltic countries*. Stockholm: The Swedish EPA.

Mace, B., Bell, P. & Loomis, R. (2004). Visibility and natural quiet in national parks and wilderness areas. *Psychological considerations in Environment and Behavior*. Vol. 36, No. 1. pp. 5-31.

Pilcher, E., Newman, P. & Manning, R. (2009). Understanding and Managing Experiential Aspects of Soundscapes at Muir Woods National Monument in *Environmental Management*. Vol. 43. pp. 425-435.

Rossmann, B. (2004). Impairment of Park Soundscapes in *The George Wright FORUM*. Vol. 21, No. 1. pp. 18-21.

Swedish National Board of Housing, Building and Planning. [Boverket] (2003). *Buller delmål 3 – underlagsrapport till fördjupad utvärdering av miljömålsarbetet. Rapport God bebyggd miljö april 2003*. Karlskrona: Swedish National Board of Housing, Building and Planning.