

Foresight Outdoor Recreation – A discussion based on monitoring experiences in the Nordic context

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Foresight outdoor recreation in the future is inherently important to inform policy makers and make the appropriate management decisions. It is also an essential tool to cope with changes. Participation in outdoor recreation in the Nordic countries has a long tradition and has been closely related to wellbeing, social welfare and cultural values. More recently, however, social, economic and environmental changes challenge the traditional view on outdoor recreation. This includes, for example, urbanization, increased mobility, improved economy, cultural diversity, aging populations, new technology, climate change, competing leisure activities and time constraints.

Most measures of outdoor recreation participation are cross-sectional studies at one point in time, but more recently there are an increasing number of longitudinal measures (e.g. replications of earlier studies) reported in the Nordic region. Such historical trend data can be extrapolated and is one obvious way of forecasting the future, but there are many limitations. New approaches needed should be forward-looking rather than backward-based, to deal with increased complexity and change. Hence, the aim of this paper is to discuss approaches to foresight outdoor recreation based on experiences from outdoor recreation monitoring in the Nordic context with two purposes: (i) to provide an overview of different monitoring approaches used and (ii) to propose alternative approaches to foresight outdoor recreation given contemporary changes in society.

Trend analyses based on monitoring

Monitoring outdoor recreation is typically done either on-site covering a specific area or off-site targeting the population in e.g. a municipality, region or country. Most longitudinal data have used national survey data (mail, phone or web-questionnaires), focusing on trends in activity participation, frequency, etc. A wide range of methods and techniques exists for on-site visitor monitoring. Basic on-site survey approaches include i) automatic counting stations, ii) on-site questionnaires (in different variations), and iii) self-registration. With the increase in smartphones and Internet coverage, data collection based on QR codes or web links direct to the visi-

tor are expected to increase in the future. The Nordic countries have a long term and broad experience of outdoor recreation monitoring.

Denmark

In Denmark, three national population surveys (in 1976/77, 1993/94 and 2007/2008) have been conducted, using the same methodology. Comparable information collected was e.g. number of forest visits, duration of visits, activities and transportation. The intensity of the recreational use of specific forests has also been monitored in 1976/77 and 1996/1997. The yearly number of visitor hours and visits was estimated, and questionnaires used to measure e.g. length of stay, group size and activities of the car borne visitation. Four permanent car-counting stations have been in use since 1976 which are able to describe the time-dependent variation and the trends in the extent of the recreational use. Finally, the Danish National Forest Inventory includes indicators like trails, hunting facilities and litter since 2006.

Finland

National Outdoor Recreation Inventory (LVVI) -study is a population wide survey to produce basic information of outdoor recreation behavior and recreational use of natural resources, it is conducted in 2000 and 2010. The principal outcome is Outdoor Recreation Statistics. The comparable information cover participation in 86 outdoor activities, information of the last visit to nature, of the last nature trip (nature tourism), and a large set of background information including access to recreational home, possession of equipment, number of holidays etc. Visitation in national parks and state owned hiking areas managed by Natural Heritage Service (Metsähallitus) has been monitored since 2000.

Sweden

Statistics on outdoor recreation participation is collected by Statistics Sweden as part of the national census and surveys have been conducted approximately every five years since 1976 using both personal and telephone interviews. In 2007, the interdisciplinary national research program "Outdoor Recreation in Change" conducted a nation-wide postal survey to provide information on participation in more than 40 outdoor recreational activities as well as associated motivations, constraints, economic and social factors. Some of these topics were followed up in another national survey in 2014 as the national outdoor recreation objectives were evaluated. In 2009 the Swedish Environmental Protection Agency proposed a special program for monitoring outdoor recreation at the national and local levels. While the program was never implemented as suggested, on-site surveys of visitors to all 29 Swedish National Parks were done for the first time in the summer of 2014.

Approaches to foresight outdoor recreation

Foresight information aims to help to see the future beyond the immediate years to come and different methods provide information for different needs and time perspectives. Policy and planning often have long term perspectives while management decisions are short termed. We argue that continuous monitoring is a funda-

mental basis for all foresight, but validity and reliability can be improved through mixed method approaches. In additions to trend data, different approaches to foresight outdoor recreation discussed here include:

- Scenarios and future tables
- STEEP, PEST, EPISTEL-M (see e.g.: <http://pestleanalysis.com/>)
- Cohort studies
- Intentions by the public
- Predictions by experts
- Back-casting
- Ethnographic online approaches