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Sustainability of boreal and subarctic environment to nature-based tourism

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The right of public access has largely shaped the development of recreation and nature-based tourism throughout Fennoscandia. Known popularly as 'everyman's rights', this allows for free access to and use of both public and private land, provided no harm is caused to people, animals or vegetation. In order to maintain future tourism activities at sustainable level, effective methods and indicators based on scientific results are needed. These indicators help to measure and predict the effects of nature-based tourism on the environment, and to plan and control the use of natural habitats for tourism.

In this paper we summarize results on ecological and social impacts of recreation in Northern Finland, based on case studies of our research group since the 1990's. An important aim of our studies has been to determine whether tourism is ecologically sustainable in the study areas and what should be done to minimize the negative effects of tourism on environment.

Ecological changes are inevitable even where natural habitats are only affected by limited numbers of visitors. Different habitat types and local microhabitats vary in their ability to resist trampling. Compared with hiking, the direct influence of crosscountry skiing is smaller, but the impact spreads over a wider area due to the management of ski trails. A significant threat caused by tourism is the introduction of alien species at national parks, a situation which may lead to yet unexpected problems. In the long run, the wear and tear on the environment reduces its value for recreation. Especially in areas of summer tourism, attempts have been made to protect the environment from further wear. In national parks zoning is used to limit access to the most sensitive sites within protected areas. Perhaps the most neglected areas today are those that concentrate solely on winter recreation, especially downhill skiing, since the wear of the environment is not seen by visitors due to the snow cover in winter.

To investigate attitudes of people towards nature conservation and recreation we conducted a survey among local residents in Kuusamo and Iso-Syöte region at Pudasjärvi. Local residents showed a positive attitude towards nature conservation in general, as long as their own opportunities to continue using natural resources were not restricted. Still, the majority of respondents regarded that there are too many conservation areas in their own municipality. Most respondents were willing to accept an increase in the number of tourists both in their immediate area, and in their municipality in general, even though the negative effects of tourism on the environment were perceived. The survey emphasises the importance of management planning and the participation of stakeholders in rural areas, where nature protection directly affects traditional local livelihoods.

We claim that the starting point for sustainable nature-based tourism development is ecological sustainability, since both the host community and the visitors are highly dependent on the quality of the environment.