

More than ten years of visitor monitoring in Estonian state forests

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Introduction

Almost a half (2.2 million hectares) of Estonian land is covered with forest. The State Forest Management Centre (SFMC) is the agency responsible for the management of about a half of the total forested area in Estonia. In addition to forest regeneration, silvicultural activities and timber production, SFMC has also been responsible for the systematic development of diverse opportunities for outdoor activities in recreational areas in state forests since 1997. SFMC has chosen, developed and designed 13 recreation areas across the country. As of February 2009 SFMC is also dealing with visitor management in 5 national parks and 40 other protected areas. In addition to creating and planning recreation opportunities in SFMC's recreation areas and protected areas, SFMC is providing information about those opportunities and is organizing environmental education activity in SFMC's nature centres and nature houses.

The goal of the SFMC's Nature Management operation area is to contribute with its activities to growing awareness and sustaining of nature among and by the population, and thereby reduce the impacts involved in the use of nature on the ecosystem, improving people's health and providing satisfaction through the possibility of nature recreation based on everyman's right in recreation areas and protected areas.

Visitor management

According to SFMC visitor monitoring data, participation in outdoor recreation activities has increased in the last decade, it is important that visitor management is dealt with in a complex way. There are three important components of visitor management in SFMC:

PLACE – planning, establishing and managing recreational landscapes (monitoring of social and ecological aspects, surveys, management plans, general plans and designs, building the infrastructure, maintaining the infrastructure, landscape protection activities)

INFORMATION – informing the general public of recreation opportunities (directing information in the landscape, information desks, home page, publications, events, campaigns in the media)

ATTITUDE – shaping sustainable attitudes to land use (nature study programs, permanent exhibitions, competitions)

To improve the visitor management and measure the successfulness of the visitor management activities there are indicators and annual target values set in SFMC development plan. In the SFMC development plan 2010-2014 (State..., 2010) the indicators related to outdoor recreation are:

- number of graduates of SFMC's nature education programs
- number of different nature education programs
- number of forest visits in SFMC recreational and protected areas
- number of people receiving information from SFMC on gathering areas for berries and - mushrooms
- customer satisfaction
- carrying capacity of ecosystems

Visitor monitoring

Cooperation has been an important part in the development of the visitor management and monitoring system in Estonia. As a Nordic-Baltic cooperation in 2007 the manual "Visitor monitoring in nature areas" (Kajala *et al.* 2007) was released. In 2008 SFMC published the manual in Estonian. SFMC has been using an on-site guided visitor survey method and automatic visitor counting methods described in the manual since 2002.

In April 2009 SFMC took into use the application KÜSI for entering and processing visitor information. The application, which was specially developed for Metsähallitus from Finland the user interface was translated to Estonian and a few customisations were made to the application to meet the needs of SFMC.

To ensure the achievement of the goals, make future management and funding decisions several visitor monitoring methods are applied:

- Visitor surveys

The visitor survey has been carried out on all recreational areas of SFMC to establish the motivation, preferences and needs of visitors in recreational areas and to determine whether the developed facilities meet the expectations of the users. There have been visitor surveys in 2002, 2003, 2006 and 2010. Visitor surveys have been carried out in the same year and they are carried out on the same basis.

The 2002, 2003 and 2006 visitor surveys were carried out on all recreation areas. The 2010 visitor survey was carried out simultaneously on 13 recreation area, five national parks and 7 other recreation areas with significant infrastructure. In total 6893 filled survey questionnaires were obtained.

Since the 2003 and 2006 visitor surveys showed that people are not aware of the opportunities provided by SFMC, several actions have been taken since to increase the awareness. Information desks around Estonia were opened, the recreation objects got style changes to look more uniform so the visitors would be more aware that they are visiting SFMC recreation objects, events were organized. In 2012 a more user friendly website was launched and since 2013 it is available in Estonian, Russian and English. Also there is a mobile application for finding outdoor recreation possibilities.

- Visitor counting

Visitor counting is continuously conducted in all SFMC recreational areas since 2002. In 2009 SFMC installed first counters also on protected areas. In 2013 there were a hundred and twenty electronic counters installed in SFMC recreational areas and protected areas. The installation of counters, taking counter readings, the maintenance, calibration of counters and extrapolating the point counting results is done as described in the manual "Visitor monitoring in nature areas" (Kajala *et al.* 2007).

- Nationwide recreation studies

The primary objective of the nationwide recreation studies is to find out the level of awareness of Estonian residents concerning the opportunities developed by SFMC for the outdoor recreation activities and the level of the demand for and use of offered opportunities. Since the nationwide studies involve also the non-visitors of the SFMC recreation sites they are an important addition to the on-site visitor surveys. The study has been conducted by the Survey Research Centre Faktum in 2003, 2006 and 2009. The 2012 study was carried out by Turu-uuringute AS.

In 2006 SFMC ordered from the Survey Research Centre Turu-uuringute AS a survey to find out the attitude of people living close to 5 most problematic recreation areas towards recreation opportunities provided by SFMC.

References

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