# Long term visitor monitoring in protected and recreational areas – results from Finland and Estonia

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#### Introduction

Protected and recreational areas are often significant visitor attractions. Consequently, information on visitors is essential for successful management of these areas to ensure the protection of nature and cultural heritage, quality recreation experiences, sustainable tourism development, as well as the promotion of public health and well-being.

Parks & Wildlife Finland (P&WF) is a unit of Metsähallitus that manages Finland's national parks and other state-owned protected and recreational areas. Estonian State Management Centre (SFMC) is responsible for managing the Estonian state forests and providing opportunities for outdoor recreation in state forests and protected areas. Both agencies have monitored protected and recreational area visitors with similar methodology for more than ten years, P&WF Finland since year 2000 and SFMC since year 2002 (Metsähallitus 2016a, Metsähallitus 2016b, Karoles & Maran 2014). When visitor information is gathered with uniform and systematic visitor monitoring methods across areas and time, it provides invaluable possibilities for comparisons (Hornback & Eagles 1999, Kajala et al. 2007). This paper examines international visitor information, comparing national level visitor monitoring statistics from Estonia and Finland.

## Material and methods

Visitor monitoring activities include visitor counting and visitor surveys. For visitor counting, both P&WF and SFMC use electronic counters. In Finland, the counters are mostly located at main entry points, and in Estonia they are located in main destinations inside each area. The point specific visitation counts obtained by electronic counters are extrapolated into area level visitation numbers by area coverage percentage (Finland) or with calculations that combine visitor counts and visitor survey information (Estonia) (Kajala et al. 2007).

Visitor surveys are implemented by both agencies as standardized on-site guided surveys (Kajala et al. 2007). The sampling aims to be as close to a random sample as possible, taking into account the limitations brought by resources and field circumstances. The questionnaire is four A4 pages (a folded A3) and visitors are asked to fill it towards the end of their visit, ideally when they are exiting the site. The interviewer is available for questions, but typically respondents fill out questionnaire independently. In Finland, each protected area with significant recreational use is sampled on average every five years, which means annually close to ten surveys to be administered. In Estonia, all areas are sampled at one year, generally with an interval of four to five years. For data entry, storage, management and reporting, both agencies use nowadays a similar visitor information database system. The system – ASTA visitor information database system – was originally developed year 2006 for P&WF and taken into use by SFMC year 2009. The Estonian version of ASTA is called KÜSI and it is a translated and customized version of ASTA.

#### Results

In Estonia there are currently altogether 27 areas in visitor monitoring system and in Finland 59 areas. The results here focus on the two main categories of areas for both countries, i.e. national parks and recreational areas (SFMC) or national hiking areas (Finland). In Estonia there are five national parks and 13 recreational areas, while in Finland the situation is reversed; there are many more national parks (39), and only six national hiking areas (figure). Visitation numbers partly reflect these differences.

The average length of stay is fairly similar in Estonian area types, while visits to Finnish national park are shortest and visits to national hiking areas last longest, on average two days. Percentage of foreign visitors is remarkably high in Estonian national parks compared to their Finnish counterparts. The average age of visitors is higher in Finland than in Estonia; also at population level Finland's average age is higher than that of Estonia.

	Year 2015									
	Number of areas	Number of visits	Average number of visits / area	Length of stay, 24 hour visitor days	Average length of stay, 24 hour visitor days	Percentage of foreign visitors	Percentage of men	Average age, years	Perceived health and well-being benefits (1	Number of survey respondents
Estonia										
National parks	5	353,900	70,780	505,034	1.43	31.0	46	41.5	4.35	1,387
Recreation areas	13	1,413,700	108,746	1,717,939	1.22	7.9	44	38.9	4.43	3,986
Finland										
National parks	39	2,634,600	67,554	2,984,973	1.13	8.1	48	45.7	4.34 (2	17,117
National hiking areas	6	275,400	45,900	550,033	2.00	4.2	50	49.2	*.	1,593
*- Information not available										
<sup>1)</sup> Perceived physical, social and psychological benefits of the visit on a scale from 1 = totally disagree,, 5 = totally agree										
<sup>(2</sup> n = 2 340 because the question has been in use only since year 2013										

Figure 1. National visitor monitoring statistics for Finnish and Estonian protected and recreational areas, year 2015.

## Discussion

The visitor monitoring data of both P&WF and SFMC contain many more variables and allow for much more detailed comparisons. But even these few variables indicate interesting similarities and differences between Estonian and Finnish protected and recreational area visitors.

Establishing and maintaining a comprehensive visitor monitoring and information system requires significant investment in time and resources. Nevertheless, P&WF's and SFMC's experience is that this investment pays back many-fold. Standardized visitor monitoring methodology and a common database application ensures reliable and easily available visitor information which is a necessity at local, regional and national levels for effective management, planning, reporting and policy purposes. This study shows one additional way of using visitor information, i.e. for international comparisons. Comprehensive national or even international visitor monitoring systems also include some challenges. Firstly, a prerequisite of this study is a long-term cooperation and coordination with which the agencies ensure comparability of the data. Secondly, monitoring inevitably means inflexibility because it requires commitment to certain fixed methodology and technical solutions. Consequently, we should bear in mind that in addition to visitor monitoring, also other, more spontaneous ways of gathering visitor data are needed.

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- Hornback, KE & Eagles, PFJ 1999, *Guidelines for Public Use Measurement and Reporting at Parks and Protected Areas*, IUCN, Parks Canada, Cooperative Research Center for Sustainable Tourism for Australia and World Commission on Protected Areas. Cambridge, UK and Gland, Switzerland.
- Kajala, L, Almik, A, Dahl, R, Dikšaitė, L, Erkkonen, J, Fredman, P, Jensen, F, Søndergaard, Karoles, K, Sievänen, T, Skov-Petersen, H, Vistad, OI, & Wallsten, P 2007, Visitor monitoring in nature areas a manual based on experiences from the Nordic and Baltic countries. TemaNord 2007:534. 156 p. + appendices.
- Karoles, K & Maran, K. 2014, More than ten years of visitor monitoring in Estonian state forests. In: Reimann, M, Sepp, K, Pärna, E & Tuula, R, Proceedings of the 7<sup>th</sup> International Conference on Monitoring Visitors in Recreational and Protected Areas (MMV). August 20-23, 2014, Tallinn, Estonia.
- Metsähallitus 2016a, http://www.metsa.fi/web/en/visitationnumbers, accessed April 2nd, 2016
- Metsähallitus 2016b, http://www.metsa.fi/web/en/economicbenefitsofnationalparks, accessed April 2<sup>nd</sup>, 2016