



# Analysing Impacts

Nature tourism is growing fast in Hossa



HOSSA NATIONAL PARK

HOSSA REGION

FINLAND

## Measuring sustainability of recreation and tourism

*In order to contribute to sustainable, high-quality outdoor recreation and tourism in Hossa National Park, Metsähallitus Parks & Wildlife Finland (PWF) has developed a set of principles and measures for the evaluation of the sustainability of tourism. The measures are applied through management planning of Hossa National Park and monitoring is carried out by using an ArcGis based software, SASS. The planning framework is based on the concept of Limits of Acceptable Change (LAC).*

PWF bears major responsibility for the development of tourism in Finland's national parks and other state-owned protected and recreational areas. In order to further develop the existing potential for high-quality recreation and nature tourism in these areas, PWF is implementing a set of key measures for the development of sustainable nature tourism. The measures are applied through sustainable nature tourism management strategies and/or management plans. An essential aspect of the drafting process of the strategies and management

plans is the setting of standards, i.e. limits, of acceptable change for selected sustainable recreation and nature tourism criteria by means of participatory planning. As part of the ASCENT project, the development of the method is piloted in Hossa National Park.

LAC development started out with a selected range of applicable criteria, which were connected to the principles of sustainable tourism. On the basis of experience gained from the management planning process in Hossa NP, a targeted evaluation

and selection process, the number of criteria was narrowed down to a set of 24 key indicators. This has been found to be a manageable and effective number once the most essential variables had been selected and their measurement standardised.

For information management, PWF uses database applications for the demand and supply data as well as data of species and biotopes, which are used to produce reports on current figures and trends.

LAC indicators are connected to six Principles of Sustainable Tourism:

<https://julkaisut.metsa.fi/assets/pdf/lp/Esitteet/principles-of-sustainable-tourism.pdf>

1. Supporting the preservation of the values of sites and promoting their protection
2. Minimising the impact on environment
3. Strengthening locality
4. Promoting the use of sites to increase health and well-being
5. Promoting growth and job creation in the local economy
6. Communicating values and services of the site

# Outcome

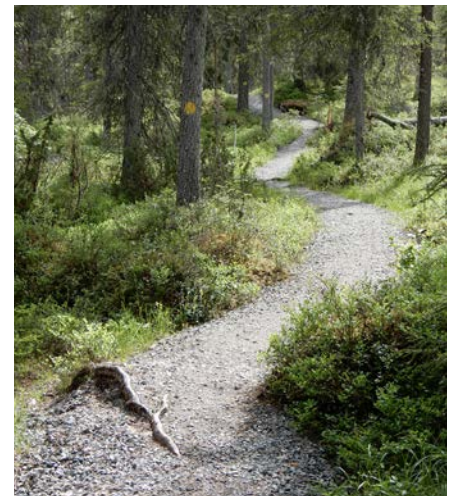
ASCENT project started the process in Hossa National Park with finding the practical criteria for selecting the best indicators. The following criteria for good indicators were used:

- Indicators must be specific to the measurement target, i.e. environmental impacts of outdoor recreation and nature tourism (minimal variation due to other factors)
- Indicators must be objective and their variables clearly measurable.
- Indicators must be reliable and their measurement repeatable to the extent required.
- Indicators must be sensitive and reactive to sustainability related changes.
- Measurements must be reasonably easy to implement (minimal additional work).
- Measurements must be cost-effective, making use of existing information whenever possible.

The following indicators, among others, were found to be suitable to measure sustainability of recreation and tourism in Hossa National Park:

1. 14 indicators directly from visitor survey of Hossa National Park. For example visitor satisfaction index, health index and perceived level of erosion of trails
2. Number of visitations
3. Impact to local economy in terms of euros and person-years (connected to visitor spending)
4. Condition of a key biotope (springs) and species (nesting of large predatory birds)
5. Use of fire wood in the park
6. Condition and safety of infrastructure
7. Satisfaction level of entrepreneurs towards park management
8. Condition of cultural heritage sites nearby recreational services

ASCENT project made an analysis of sustainability using these selected indicators. The status of most of the indicators was either fully sustainable or mostly sustainable. Only one indicator status was partially sustainable that being the satisfaction level of entrepreneurs towards parks management.



## Key Findings & Learning Points

Visitor surveys are important sources of data, feeding information to a number of LAC indicators. As visitor surveys are done approximately only every five years, monitoring may be lacking behind in parts and data in different indicators may date from different years. Thus, more sensitive feedback systems may need to be developed in years to come.

Piloting the LAC method has raised questions connected with its technical implementation. Monitoring is incorporated in an existing software. The more a system expands, the more complicated it gets. Experience gained from the pilot will come very useful in further development of the LAC ICT tool. As such, the connection between management planning and monitoring is tight and incorporating the two of them in a single system is well justifiable.

**Monitoring sustainability is included in management planning**