## 2. Inventory of tourism and recreational use

## **Theoretical background**

Studies show that estimations on visitor use of protected and recreational areas often rely on "best guesses" of managers (Watson et al. 2000). Reasons, why recreational use, especially wilderness use is often not assessed in a proper manner are listed by Watson et al. (2000: 2) as follows:

- Difficulty in quantifying and measuring wilderness use.
- Littler or no coordination across wilderness areas.
- Lack of quantitative and practical skills.
- Lack of decision-making and judgement skills.

But, "in order to make effective management decisions, the manager must have reliable information about the visitor use of wilderness" (Watson et al. 2000: 1). Visitor monitoring is "providing fundamental visitor and conservation management data" (Cessford and Muhar 2003).

Visitor use characteristics can be divided into four main attributes: visit counts, which are count data of visitors passing by a specific site over a defined period of time; visit attributes describing data of the visit, like the length of a stay or number of people of a group; visitor attributes, which describe the visitors in detail, e.g. their demographics and experiences; and summary use statistics providing aggregated data like visitors or visitor-days (Watson et al. 2000).

## Checklist

- Have you identified all management questions to be answered by this visitor survey?
- Have you identified all relevant recreational and tourism uses?
- Have you identified all species and habitats likely to be deteriorated or disturbed by recreational and tourism use?
- Have you decided which kind of data you want to collect?
- Have you chosen adequate methods for the visitor survey?
- Are there any cost- effective alternatives?
- Is secondary data available (e.g. permits, entrance tickets)?
- Are there any existing data on visitor use and visitor impacts of this area?
- Did you talk to local tourism experts?
- Have you identified the necessary resources (e.g. staff, financial resources) for your visitor survey?
- Have you identified all important points of interest (e.g. sights, huts, viewpoints...) in the investigation area?
- Have you identified the tourism infrastructure in the investigation area that is important for your visitor monitoring (e.g. hiking trails for monitoring hikers or fixed rope routes for monitoring climbers)?
- If you do visitor counts did you distribute the counting stations so that the whole investigation area is covered?
- If you use questionnaires are the questions plain and clearly expressed (especially important if the visitors have to fill out the questionnaires by their own without help from personnel)?
- Did you make a field inspection in the investigation area to check the conditions there?
- Have identified management measures that have already been implemented in the investigation area that maybe have an influence at the intensity of tourism use?
- Do you have enough staff to collect data?
- Do you have the necessary resources for you selected methods (own equipment or finances to lease equipment (e.g. GPS-devices, airplane for recording of aerial photos)?
- Do you have the resources (equipment and the knowledge) to analyse the collected data?
- Did you brief the staff properly?
- Did you consider the weather conditions in the investigation area and make sure that the equipment is protected against weather and vandalism?
- Did you consider that summer in mountain areas is often very short and that the counting dates have to be chosen carefully?

- Did you consider that due to the weather the implementation of some monitoring methods may be not possible at a certain date (e.g. recording of aerial photos in mountainous areas) and that you have to may fix enough alternative dates?
- Do you consider that you maybe need spare parts or additional batteries for technical counting devices?
- Is the modelling of data necessary, and if yes, have you chosen the adequate model and is he data collection adjusted to the modelling?

## Literature

CESSFORD, G., MUHAR, A. (2003): Monitoring Options for Visitor Numbers in National Parks and Natural Areas. Journal for Nature Conservation, 11: 240-250.

WATSON, A.E., COLE, D.N., TURNER, D.L., REYNOLDS, P.S. (2000): Wilderness Recreation Use Estimation: A Handbook of Methods and Systems. United States Department of Agriculture. General Technical Report RMRS-GTR-56.