

## Monitoring and management of visitor flows in recreational and protected areas: an introduction

Marcel Hunziker<sup>1</sup>, Christophe Clivaz<sup>2</sup>, Dominik Siegrist<sup>3</sup>

<sup>1</sup> WSL Swiss Federal Institute for Forest, Snow and Landscape Research, Zürcherstrasse 111, CH-8903 Birmensdorf, Switzerland. marcel.hunziker@wsl.ch

<sup>2</sup> University of Applied Sciences Western Switzerland – Valais, TechnoArk 3, CH-3960 Sierre, Switzerland. christophe.clivaz@hevs.ch.

<sup>3</sup> HSR University of Applied Sciences Rapperswil, CH-8640 Rapperswil, Switzerland. dsiegris@hsr.ch

This special issue of “Forest Snow and Landscape Research” covers results from research on monitoring and management of visitor flows in recreational and protected areas. The papers represent a selection from scientific papers that were presented at the International Conference on Monitoring and Management of Visitor Flows (MMV 3) that took place in Rapperswil, Switzerland from 13–17<sup>th</sup> September 2006. They were invited for inclusion on the basis of the peer-review process that was undertaken for abstracts submitted to the conference. After submission to Forest Snow and Landscape Research they have again been thoroughly peer reviewed. Another, more practise-oriented, selection of papers from those presented at the conference was invited to be submitted to the Series of the Institute for Landscape and Open Space, University of Applied Sciences Rapperswil (SIEGRIST *et al.* in print). This volume will appear in the end of 2007. All of the contributions to the MMV-3 conference have already been published by the proceedings of the conference as extended abstracts (SIEGRIST *et al.* 2006).

The table of contents demonstrates a rather wide interpretation of the research topic mentioned in the conference’s and the special issue’s title. There is more than just the analysis, monitoring and management of visitor behaviour. This special issue starts, therefore, with society’s perspectives on outdoor recreation areas such as the nearby environment of daily living space or the rather remote Alpine area. These perspectives vary and depend on differing cultural values. Nevertheless, GIS models allow implementing the knowledge of people’s views into planning and design. This is facilitated, as the authors of one contribution recommend, if the symbolic meanings of the environment are taken into account.

The second part of this volume deals with a main issue of research in the field of monitoring and management of visitor flows: with crowding. Two articles focus on methodical aspects, such as visualisation and question order, when investigating crowding perception. Two other papers deal with the analysis of the crowding perception in particular areas. They conclude that perceived crowding can, but does not always, negatively affect visitor satisfaction.

There are not only the problems of crowding. One contribution also discusses the existence of recreation conflicts caused by different uses with different interests and behaviour, and two articles reveal the impact of visitor frequency on nature, in particular by trampling. Such social and ecological conflicts lead us to the question of management: how can visitor behaviour be influenced in a way that social and ecological conflicts are avoided or, at least, reduced? Two articles report on experimental studies that try to provide answers to this question while another stresses the advantage of combining different models to analyse recreation behaviour in general – an important basis for the development and evaluation of intervention measures.

Finally, visitor-flow analysis and management can be embedded into the sustainability framework – not only in an ecological, but also in an economical and societal sense. One contribution discusses the importance of park tourism for the regional economy and another reports on the investigation of a participatory development of a tourism destination – a promising way of implementing the society’s perspective into sustainable regional development.

We hope that this special issue will be a helpful basis for further research in the broad and open field of monitoring and management of visitor flows in recreational and protected areas. The broadness and openness of the research field is also represented in this special issue. Thus, we are convinced that it will support connections between this research and other research fields, which, in our view, would be a worthwhile future development of the research monitoring and management of visitor flows in recreational and protected areas.

### **References**

- SIEGRIST, D.; CLIVAZ, C.; HUNZIKER, M.; ITEN, S. (eds.) 2006: Exploring the Nature of Management. Proceedings of the third international conference on monitoring and management of visitor flows in recreational and protected areas (MMV-3), 13<sup>th</sup>–17<sup>th</sup> September, Rapperswil, Switzerland. 511p.
- SIEGRIST, D.; CLIVAZ, C.; HUNZIKER, M.; ITEN, S. (eds.) in print: Exploring the Nature of Management. Series of the Institute for Landscape and Open Space, University of Applied Sciences Rapperswil.