

## Editorial by Christoph Stadel



This issue of *eco.mont* truly reflects the fact that protected areas are an important topic of international concern, are researched by scholars of different academic disciplines, and are also of great interest for many practitioners. While protected areas have been established in different terrestrial and maritime zones, they are particularly important in mountain regions, given their ecological and anthropogenic variety and their susceptibility to fragility and vulnerability. Different types of protected areas in mountains can be distinguished, ranging from small pockets of protected ecological niches to provincial and national parks, biosphere reserves, buffer zones, and even transnational protection corridors.

Given the mandate of *eco.mont*, the papers in this issue reflect the transdisciplinary and international scope of this journal. They address various issues of biosphere reserves, national parks and protected areas in general in Austria, Switzerland, Greece, Colombia and the United States, and have been written by academics from different disciplines and other professionals in distinguished positions. This genuinely reflects the multi-faceted nature of protected mountain areas and the vast scope of research interests and management concerns.

At the centre of this issue of *eco.mont* are four research articles. Carla Marchant and Axel Borsdorf examine the Colombian biosphere reserves, national parks and privately owned protected areas, based on specific case studies in the Sierra Nevada de Santa Marta. Using the concepts and strategies of the livelihood approach, they evaluate the options of the protected areas for securing a sustainable development for local people – in the opinion of this author, an indispensable prerequisite for an acceptance of protected areas by local inhabitants and their long-term success.

Reporting on the research project *Biosphere Reserve Integrated Monitoring Scheme*, carried out in the Carinthian Nockberge of the Austrian Alps, Michael Jungmeier, Tobias Köstl, Sigrun Lange and Markus Bliem, in close cooperation and communication with local stakeholders, have developed an innovative framework of twelve indicators to monitor the ecological, social and economic development of the region, as well as the management performance.

The importance of the input of local stakeholders is further highlighted in the paper by Veronika Andrea, Stilianos Tampakis, Geogios Tsantopoulos and Garyfallos Arabatzis. Their empirical studies were carried out in Dadia National Park in the eastern Rhodopes Mountains of Greece. Based on the assumption that the effectiveness of protected areas is linked to the environmental policies and type and performance of administrative structures, they asked park management, regional authorities, as well as local people and visitors, to assess the effectiveness of administration and management of the park. These interviews revealed rather critical perspectives on park management, mutual cooperation and communication, and on the benefits and transparency of park policies and strategies.

The final research paper deals with a very different, albeit equally significant, aspect of protected areas, that of landscape preference and perceptions. This contribution by Franziska Rom, Arne Arnberger and Robert C. Burns is particularly interesting, as it makes a comparison of visitor perceptions between Gesäuse National Park in Austria and Hell's Canyon National Recreation Area in Oregon, U.S.A. Interviewees were presented with sets of images depicting mountain landscapes with varying degrees of human impact. The results show a higher overall acceptance of more intensively used landscapes in the American sample compared to the Austrian one, but landscape preferences were not homogeneous among the Austrian and Oregon interviewees.

The following section deals with management and policy issues. Once again, this part offers a wide regional and topical spectrum. Samuel J. Biondo describes the concept of combining the biomonitoring of plants with their capacity to block the transfer of pollutants before they can contribute to habitat degradation. The paper proposes a *multi-zone biomonitoring buffer concept* aimed at creating an effective biological system of detecting, monitoring, and limiting the transport of pollutants from anthropogenic sources to conserve biological diversity and to prevent adverse effects.

A short note in this issue of *eco.mont* gives an account of the 2013 *European Rural Futures* (EURUFU) Summer School in Lungau Biosphere Reserve. 37 students from various academic disciplines and different universities spent three weeks to attend lectures and to work in small groups on pre-set projects. The concepts and results of the sustainable development projects were then presented to the local public, stakeholders and decision makers in a final session.

A very different topic is addressed by the next paper. Thomas Scheurer examines the dynamic residual flow regimes of the river Spöl in the Swiss National Park. As this artificial annual flooding proved to be beneficial to the ecological conditions, it has become a permanent feature since 2011: *“In this way, artificial floods could be legally integrated in the energy generation permit without the need to amend the permit itself”*

Günter Köck, Marta Umhack and Christian Diry relate to the Austrian biosphere reserves as a *Connoisseur's world beyond the cookery book*, stating that, compared to parks and heritage sites, they are relatively little known in the wider population. In order to enhance the popularity of the biosphere reserves, the Austrian MAB National Committee launched a programme under the slogan *Vielfalt Genießen* (Enjoying diversity). A schools competition was started, followed by the publication of an award-winning cookery book. An additional component of the programme was the training of students in a biosphere reserve under the auspices of the Vocational College of Waldegg. This was complemented with a number of biosphere-related activities in restaurants in Wienerwald Biosphere Reserve.



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The author of this Editorial is Emeritus Professor at the University of Salzburg, Austria and Adjunct Professor of the Institute of Natural Resources of the University of Manitoba, Canada. He is a member of the World Commission on Protected Areas of the International Union for Conservation of Nature (IUCN). His research on protected areas has taken him to the tropical Andes (foremost in Ecuador and Peru), the national parks in Canada (especially Riding Mountain National Park), in Kenya (Kakamega Forest), and Austria (Hohe Tauern National Park). His research focuses on the complex interrelationships between protected areas and the adjacent rural areas.

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## Related projects according to the **European Mountain Pool**

At the editorial office of eco.mont, we maintain the **European Mountain Pool** on research in European protected mountain areas.

<http://www.alparc.org/our-actions/research-platform/european-mountain-pool>

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The art of omission: BRIM<sup>Nockberge</sup> – design of a Biosphere Reserve Integrated Monitoring for the Carinthian part of the Biosphere Reserve Salzburger Lungau & Kärntner Nockberge by Michael Jungmeier, Tobias Köstl, Sigrun Lange & Markus Bliem

Related projects in the **European Mountain Pool**:

**Kienast Felix:** Landschaftsmonitoring in der UNESCO Biosphäre Entlebuch – Partizipative Entwicklung von Monitoringindikatoren im Bereich Landschaft. CH-4275