

## Editorial by Valerie Braun



The second issue of *eco.mont* in 2017 puts the emphasis on protected areas (PAs) in the Alps, and just one article covers the Carpathians. Geographically the articles take us from Lombardy in Italy, south of the Alps, to Austria and Germany, and finally further north to the Polish part of the Carpathians. The interesting topics range as widely as the distance between the PAs.

PAs are places with elements of special environmental interests. The promotion of these natural elements to the public is essential to raise attention on environmental issues and nature conservation. Mt Cavallo, in the Orobie Bergamasche Regional Park in Northern Italy, is an important plant area of Italy. *Luca Giupponi* and *Annamaria Giorgi* introduce the readers to the floristic features of Mt Cavallo and propose the establishment of a botanical path. They also discuss the threats this could pose for the natural

heritage and make suggestions for managing sustainable nature tourism in PAs.

Not only do PAs possess natural elements of special interest, they also serve as refuges for threatened species. *Marco Bonelli*, *Raoul Manenti* and *Davide Scaccini* introduce us to the white-clawed crayfish, listed as endangered on the Red Data List. As a result of human introduction of the spiny-cheek crayfish, the white-clawed crayfish has become extinct. The paper closes by underlining the need for careful management of freshwater habitats in mountain PAs.

*Ewa Poż* introduces us to two species of special botanical value in Poland, *Euphrasia picta* and *E. minima*. Both species are typical highland species and appear only within a small distribution range. For the protection of the species, the author proposes management measures such as monitoring their numbers as well as protection through the Living Gene Bank, a project co-financed by the EU.

Since PAs are a tourist attraction, tourist management is one essential part of PA management. Author *Sabine Henning* introduces us to OpenStreetMap (OSM) and its usefulness for PA management. Infrastructure elements for recreation are essential in PAs and the availability of spatial data can help in decision-making by providing an accurate picture of these elements. She discusses the pros and cons of OSM data: While most infrastructure types are described within OSM some important ones are not.

Geocaching is a very popular leisure activity. Since the geocaches are often hidden off-trail in natural surroundings, the authors *Claudia Hödl* and *Ulrike Pröbstl-Haider* examined if and how national parks in Austria are affected. The results show that geocaching is present in all six Austrian national parks, in some of them with a quite likely environmental impact, suggesting the need for relevant management strategies.

The study presented by the authors *Silvia Kainzinger*, *Arne Arnberger* and *Robert C. Bruns* explores white-water recreationists' crowding perceptions and preferences for river trip scenarios on the Salza River in the Alpine Nature and Geopark Styrian Eisenwurzen in Austria. The authors suggest regulating group sizes, since the number of people on the river play a significant role in white-water recreation and because high levels of use may pose a threat for the ecosystem of the river.

In this issue's case in point, *Ian Soane* and *Kate Foster* explore individual roles and the social identity of participants involved in the management of protected areas with a series of 12 cartoon frames. The cartoon is based on one author's experience in offering conservation advice and seeking appropriate management agreements. The authors invite the readers to share this case study in a local context with real stakeholders to gain mutual understanding.

*Dominik Cremer-Schulte*, *Maik Rebnus*, *Antoine Duparc*, *Clémence Perrin-Malterre* and *Letizia Arneodo* summarize the workshop on *Wildlife and Winter Sport Activities*, coordinated by ALPARC in 2016. It provides an overview of management approaches to diminish wildlife disturbance from recreational winter activities in the Alps.

*Günter Köck*, *Marja Spiereburg*, *Petr Čupa*, *Raphael Mathevet* and *Vanja Debevec* report on the 2017 EuroMAB Conference in France, which had the motto *Building a Sustainable Future Together*. Participants discussed how biosphere reserves could contribute to the *Sustainable Development Goals*, to multilateral environmental agreements and to the 2015 Paris Agreement on Climate Change. Biosphere reserves are model regions for sustainable development and thrive on the cooperation with scientific and educational institutions. *Heike Egner*, *Julia Falkner*, *Michael Jungmeier* and *Daniel Zollner* document their five-year experience of such a cooperation between the Carinthian part of Salzburger Lungau & Kärntner Nockberge Biosphere Reserve, and Alpen-Adria-Universität Klagenfurt.

Two book reviews complete this issue, which once again points to the strong link of science and management. Enjoy your read!

*V. Braun*

## 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://4dweb.proclim.ch/4dcgi/ProtAreas/en/BuildSearch\\_ProtArea](http://4dweb.proclim.ch/4dcgi/ProtAreas/en/BuildSearch_ProtArea)

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*Mount Cavallo Botanical Path: a proposal for the valorization of an area of the Orobie Bergamasche Regional Park (Southern Alps)* by Luca Giupponi & Annamaria Giorgi

*Whitewater recreationists' preferences for social, resource and managerial attributes in the Alpine Nature and Geopark Styrian Eisenwurzen* by Silvia Kainzinger, Arne Arnberger & Robert C. Burns

*Wildlife disturbance and winter recreational activities in Alpine protected areas: recommendations for successful management* by Dominik Cremer-Schulte, Maik Rehnus, Antoine Duparc, Clémence Perrin-Malterre & Letizia Arneodo

## Related projects in the **European Mountain Pool** and **eco.mont**

**Ivan Nikitin:** Assessing the ecological impacts of nature based tourism in the Swiss National Park. CH-5685

**Carsten Dormann:** Optimierung von Naturschutzleistungen und der Erholungsnutzung in Großschutzgebieten zur Entscheidungsunterstützung für das Schutzgebietsmanagement. CH-6008

**Eva Streberova:** Standards of quality for outdoor recreation. CH-5377

**Arnold Walter:** Einfluss von Wintersportlern auf die Nutzung der Wintereinstände von Rothirschen *Cervus elaphus* und Gämsen *Rupicapra rupicapra* in der Val S-charl Einfluss von Wintersportlern auf die Nutzung der Wintereinstände von Rothirschen *Cervus elaphus* und Gämsen *Rupicapra rupicapra* in der Val S-charl. CH-6041

**Stefan Briendl:** Fahrtenkartierung von Wildtieren im Nationalpark Kalkalpen. CH-2027

**Stefan Briendl:** Wildtierbeobachtung-Kartierung der Fauna im Nationalpark Kalkalpen. CH-2028

**Martina Bächtiger:** Habitatparameter für Wildtieranalysen im Sihlwald und Umgebung. CH-5255

**Immoos, U. & M. Hunzinker 2015.** The effects of communicative and on-site measures on the behaviour of winter sports participants within protected mountain areas – results of a field experiment. *eco.mont* 7: 18–25.

**Sterl, P., R. Eder & A. Arnberger 2010.** Exploring factors influencing the attitude of ski tourers towards the ski touring management measures of the Gesäuse National Park. *eco.mont* 2(1): 31–38.

**Weber, S. & F. Knaus 2017.** Using drones as a monitoring tool to detect evidence of winter sports activities in a protected mountain area. *eco.mont* 9(1): 30–34.