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Editorial

According to the Cambridge dictionary, an editorial is "an article in a newspaper that expresses the editor's [= the person in charge of the newspaper] opinion on a subject of particular interest at the present time". In order to capture the topics of particular interest to our editors and editorial team members in mountain protected areas (PAs) in 2023, I asked them to answer four questions about their work. The answers were as varied as the mountain areas themselves, and at the same time the problems on the ground are sometimes very similar.

• What challenges did you face in your work for mountain PAs in 2023?

In 2023, securing finances in the midst of high inflation posed a problem to the management of at least one PA, reflecting the difficulties that businesses in general are facing globally. In addition, PA managers are facing a steady increase in the number of people visiting mountain areas, which brought its own challenges, such as overcrowding. One solution was offered by the Triglav National Park (Slovenia), who introduced a reservation system for canyoning in Koritnica Valley to limit the number of daily visitors. Importantly, this measure helps to preserve nature while at the same time allowing visitors an adequate experience of nature. In France, diversification in recreational practices raised new questions, including how to manage trampled sensitive areas, and understanding the potential impact of activities such as swimming on high-altitude lakes. In Italy, France and Slovenia, the coexistence of wild animals and livestock grazing in the parks poses a further challenge. Livestock farmers have had to adjust their practices in a relatively short space of time, for example by introducing herding and guarding dogs in response to the presence of wolves, highlighting the need for proactive conflict resolution. Incidents such as an encounter with a female bear in Trentino, Italy, which proved fatal, underscore the complexities of managing human—wildlife interactions. In this case, the challenges extended beyond the immediate incident, with public trust in park authorities becoming a focal point of discussion.

From a scientific point of view, waning interest by locals and visitors alike in participating in scientific surveys in PAs poses a threat to data quality, comparability and reliability.

• What new issues emerged in 2023?

Collaboration between the Gesäuse National Park and the University of Graz led to the creation of the eLTER site Gesäuse-Johnsbach Valley as part of the Austrian Society for Long-Term Ecological Research (LTER-Austria). During ongoing measurements, a 4°C increase in water temperature in the Johnsbach in 2022 and 2023 was observed. In addition, the broader discussion about NetZero and the impacts of carbon emissions on mountain landscapes became an integral part of the scientific discourse. The co-existence of wolves, mountain sports enthusiasts, hikers and environmentalists emerged as a new challenge. The opening of the hunting season in Italy, for example, saw an increase in the number of bears killed, some of which were proven to have been poisoned, raising further questions about man-made threats to wildlife.

What work-related success stories in 2023 can you tell us about?

In Austria, the Gesäuse National Park successfully enlarged its area by 113 hectares after years of negotiations with the Austrian Rail Way. In Slovenia, the Triglav National Park is preserving the traditional cultural landscape in the outer zone of the park, thanks to the good relations that the park authorities maintain with local residents. Another success story, in Koritnica and the Trenta Valley, is the introduction of on-demand public transport, by electric vehicles, for both locals and tourists, an initiative co-financed by the Park. In addition, the small primary school in Soča, within the Park's boundaries, was kept open, despite the very low number of pupils (around 10). On the scientific level, tracing the impacts of Biosphere Reserve management on tourism shed light on the type of tourists attracted by the PA. In France, the conclusion of the Birdski project in 2023 marked a milestone, with the production of a technical handbook ("Avifauna et domaines skiables, partager l'espace" Birdlife and ski areas, sharing the space). The aim of the project is to facilitate the creation of co-constructed quiet zones in ski areas, preventing birds from colliding with power lines by providing them with warning beacons, and thus helping to preserve avifauna.

• What are the strengths of mountain PAs?

Mountain PAs such as the Gesäuse National Park boast varied habitats and microclimates, offering ecological niches crucial for biodiversity, especially in the face of increasing natural dynamics. They retain a robust image of pristine nature, serving as a powerful lever for communicating new challenges to civil society and for attracting scientists. The existence of PAs limits environmental damage, underlining their essential role in preserving natural environments from over-exploitation, such as the development of new ski slopes and downhill trails. Various challenges are common to diverse mountain PAs, thus fostering the motivation to address problems collectively, and making learning from each other's experiences a particular strength.

The challenges of 2023 underscore the need for resilience, collaboration and innovative solutions, while the success stories remind us of the positive impact that dedicated efforts can have on preserving invaluable ecosystems for future generations.