

Allegra!

It is a privilege to write this editorial as a new member of the eco.mont editorial team. Dedicated to research and management in alpine protected areas, the journal serves as an important platform to promote interdisciplinary and transdisciplinary research and to foster dialogue between scientists, practitioners, managers and policy makers.

Building on the strong foundation laid by my predecessors, whose efforts have been instrumental in shaping the identity of the journal, I hope to contribute to the development of eco.mont. My background as a mathematician and as a climate and permafrost scientist has reinforced my belief that today's pressing challenges cannot be addressed within disciplinary silos. They require ongoing, in-depth collaboration between the natural and social sciences, coupled with active and meaningful engagement with practitioners and policy makers to ensure that different perspectives are integrated into the search for sustainable solutions. eco.mont bridges an important gap between scientific research and practical implementation in mountain protected areas, addressing real-world challenges at the science–policy interface.

In my current role as head of the Research Commission of the Swiss National Park in collaboration with the UNESCO Biosphere Reserve Engiadina Val Müstair and the Regional Nature Park Val Müstair, I am involved in projects that highlight the importance of interdisciplinary approaches to the challenges facing mountain ecosystems. These efforts address issues such as climate change impacts, balancing ecosystem use and protection, understanding trophic cascades, or understanding and managing aquatic systems, among many others. By facilitating collaboration between researchers, practitioners and policy-makers, the Research Commission ensures that scientific knowledge is effectively integrated into management strategies and policy frameworks in these three parks in a mountainous region of south-eastern Switzerland.

Climate change poses major challenges for mountain regions. These include the increasing frequency of natural hazards, the impact of droughts on agriculture and forestry, reduced snowfall affecting winter tourism, and even the increased activity of forest decomposers. Addressing these challenges requires interdisciplinary cooperation, bringing together different sectors and stakeholders to identify needs and potential adaptation strategies. It is crucial to recognize that climate change is not only an environmental issue, but also one that directly affects livelihoods and communities. As such, protected areas can play a fundamental role in fostering communication and outreach between science and local communities. By facilitating this dialogue, protected areas act as repositories of long-term local knowledge, help build greater understanding, trust and cooperation, and local communities become empowered to take an active role in addressing the impacts of climate change while ensuring the resilience of their environment.

The growing demand for renewable energy, such as hydropower, solar and wind, highlights the tension between environmental protection and societal needs. In the Alps, these pressures often target pristine mountain areas, requiring careful consideration of sustainability issues, local acceptance and potential long-term ecological impacts. Ensuring that different stakeholders such as local communities are involved in the decision-making process and that their concerns are addressed is essential to the success of renewable energy projects in these regions, which need to take into account environmental sustainability, cultural heritage and social equity to create solutions that are not only technically feasible but also socially inclusive and ecologically responsible. Here, too, protected area researchers and managers can make a difference through dialogue and communication. The return of large carnivores to mountain regions, for example, while beneficial for regulating deer populations and protecting forests, has sparked social and political debates that reflect urban–rural divides and highlight the need for inclusive conservation strategies.

Protected areas such as biosphere reserves, national parks or regional parks are particularly well placed to take a leading role in addressing the complex challenges facing mountain ecosystems. These areas can act as platforms for dialogue, bringing together stakeholders from different sectors to exchange knowledge and ideas. They may also serve as pilot regions, providing a space to test new approaches to conservation and sustainable development in a real-world setting. Protected areas can, furthermore, act as role models, demonstrating how environmental protection can be reconciled with the needs of local communities. And last but not least, they can play essential roles in education by bringing school children closer to nature, fostering environmental awareness, promoting sustainable practices, and inspiring the next generation to take an active role in protecting the planet. By suc-



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cessfully addressing local challenges, they provide valuable examples that can be scaled up and adapted to other regions facing similar pressures. Through these efforts, protected areas play a critical role not only in the conservation of biodiversity, but also in the development of sustainable livelihoods.

This is where eco.mont, too, plays a crucial role. As a platform for knowledge exchange and a driver of innovation, it supports the essential work of communication, exchange and collaboration in protected mountain areas. In my role as co-editor, I look forward to contributing to this mission and to fostering the dialogue and collaboration needed to safeguard extraordinary mountain landscapes for future generations.

Stefanie Gubler, *Head of the Research Commission of the Swiss National Park (FOK SNP), Swiss Academy of Sciences (SCNAT)*