

## **Mountain Research and Development (MRD): Call for Papers, MRD 40.2** **Mountain Biodiversity and Sustainable Development**

**Deadlines:** submission of abstracts by **22 April 2019**; submission of full papers by **16 August 2019**

**Publication date: May 2020 (MRD 40.2)**

Mountains with their steep altitudinal gradients and high ecological and geophysical heterogeneity host an exceptionally rich biodiversity. They include as many as half of all global biodiversity hotspots and provide billions of upland and lowland inhabitants with vital ecosystem services and sources of livelihoods. Mountains are also home to extraordinary levels of agrobiodiversity, which reflect a rich history of interaction between local populations and their natural environment. The exceptionally high species and genetic diversity in mountains<sup>1</sup> not only contributes to human wellbeing by supporting the provision of food, feed, disease control, and other ecosystem services like cultural identity (Payne et al. 2017), but also strengthens the resilience of mountain social-ecological systems to climate change and other disturbances. As such, mountain biodiversity can be an important resource for adaptation to climate change.

While the Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets (CBD and UNEP 2010) constitute the main global initiative to promote biodiversity conservation, the United Nations 2030 Agenda explicitly refers to the conservation of biodiversity in mountains (SDG 15.4) and of genetic diversity (SDG 2.5) as crucial to achieving sustainable development (United Nations General Assembly 2015).

Mountains are increasingly exposed to environmental changes, political and socioeconomic transformations, and unsustainable use of natural resources. Changes in land use (eg intensification of land use in some mountain areas and land abandonment in others), climate, and socioeconomic factors (eg human migration, urbanization, increased insertion of mountain agriculture in market economies, or loss of traditional agricultural practices and related knowledge) affect (agro)biodiversity, and the impacts are often negative. In this context, concerted disciplinary, interdisciplinary, and transdisciplinary research efforts are needed “to understand, predict, and sustainably manage mountain biodiversity in support of human wellbeing” (Payne et al 2017: 40). MRD aims to contribute to a better understanding of the interrelationship between global change, mountain biodiversity, and human wellbeing. It further aims to provide insights into possible ways of harnessing mountain biodiversity for sustainable development both in mountains and in the lowlands. MRD is looking for contributions for its 3 peer-reviewed sections:

**MountainDevelopment** (*transformation knowledge*): Papers should present systematically assessed experiences and research insights into ways of managing and using mountain (agro)biodiversity so that it contributes to human wellbeing and the conservation of mountain ecosystems. Rigorous investigations of biodiversity conservation and management approaches that improve adaptation to climate change and strengthen the resilience of mountain social-ecological systems are especially welcome. Other topics of interest include the analysis of long-term monitoring of biodiversity and related socioeconomic variables and how these efforts support sustainable development in mountains; and ways of shaping sustainable markets and value chains so that benefits from biodiversity are shared more equitably.

**MountainResearch** (*systems knowledge*): Papers should take an integrative perspective on the interrelation between mountain biodiversity, global change, and people. We are interested in understanding the impacts of environmental and socioeconomic changes on mountain biodiversity, and the various ways in which these impacts affect people in mountains and in the surrounding lowlands. We are also seeking papers that investigate the role of mountain biodiversity in maintaining ecosystem services. Reviews and comparative

---

<sup>1</sup> This includes both biodiversity in general and agrobiodiversity in particular, and we welcome contributions on both.

studies within and across mountain areas are of special interest; studies of highland–lowland interactions are also welcome.

**MountainAgenda** (*target knowledge*): Papers should provide well-referenced and up-to-date reviews of the state of the art on interlinkages between biodiversity and human wellbeing, as well as between biodiversity and ecosystem services, in mountain areas; they should conclude with agendas for future research or policy. Comparative studies on the conceptual framing of mountain biodiversity in policies are highly welcome, as are reviews on the integration of biodiversity in mountain development policies and strategies at national, regional, or global levels. As we are approaching the 2020 target date of the Aichi Biodiversity Targets (CBD and UNEP 2010), papers that explicitly refer to them are of particular interest.

#### Submission details

- Please email a 300-word **abstract** indicating your main research question, your conceptual framework, and your methodology to the Editorial Office **by 22 April 2019**: [mrd-journal@cde.unibe.ch](mailto:mrd-journal@cde.unibe.ch)
- **Submit your full paper by 16 August 2019**
- Guidelines for authors are available at: [http://www.mrd-journal.org/submission\\_GAuthors.asp](http://www.mrd-journal.org/submission_GAuthors.asp)
- For more information on the journal, see: <http://www.mrd-journal.org>
- As a not-for-profit open access journal, MRD charges authors a publication fee to offset part of its production costs: [http://www.mrd-journal.org/About\\_pubfee.asp](http://www.mrd-journal.org/About_pubfee.asp)

#### REFERENCES

- CBD [Convention on Biological Diversity], UNEP [United Nations Environment Programme].** 2010. *Strategic Plan for Biodiversity 2011–2020 and the Aichi Biodiversity Targets*. COP 10 Decision X/2. <https://www.cbd.int/sp/>; accessed on 14 January 2019.
- Payne D, Spehn EM, Snethlage M, Fischer M.** 2017. Opportunities for research on mountain biodiversity under global change. *Current Opinion in Environmental Sustainability* 29:40–47. <https://doi.org/10.1016/j.cosust.2017.11.001>.
- United Nations General Assembly.** 2015. *Transforming Our World: The 2030 Agenda for Sustainable Development*. A/RES/70/1. New York, NY: United Nations. <https://sustainabledevelopment.un.org/post2015/transformingourworld/publication>; accessed on 14 January 2019.

Thomas Breu, David Molden, MRD Editorial Office  
January 2019