

Call for papers: Special Issue on "Past, present and future of mountain and island systems"

Theme

Islands and island-like systems such as mountain tops or edaphic islands have fascinated biologists for a long time because their geographical and environmental isolation support unique biotas and high endemism. Both islands and island-like systems have in the past been referred to as natural laboratories for studying evolutionary processes, dispersal, establishment and (adaptive) radiation. Several features (e.g., dispersal vectors, polyploidy, self-fertility) have been hypothesized to be characteristic for mountain and island colonizers. In turn, lineages that have adapted to island-like systems often show a reduced further dispersability. While mountains and islands have been compared in the past due to some similarities, recent studies have shown difficulties with this approach due to the unique features and associated differences of each, from their geological origin through their entire life cycle. Both, similarities and differences, are also crucial to consider for the implementation of conservation measures in view of global change scenarios.

In the context of global change, mountains and islands are facing modifications in biotic composition, predicted to continue and accelerate during the decades to come. Studies have shown how single plant species react to climate change, but also how entire communities change. For example, species richness is increasing on mountains due to warming and associated upward range shifts of many plant species. However, some species experience dieback meaning there are losers and winners among mountain plants. At the same time, with climate warming and glaciers melting, some mountain areas face increased human pressure by upward movement and extension of agricultural land. For islands, especially those of small size, climatic warming and associated sea level rise will lead to a substantial decrease of habitat or emergent area size, or complete submergence, with potentially drastic implications for islands biotas and its peoples. These combined effects of global change on biodiversity are expected to differ along latitudinal gradients.

Studies on historical biogeography and phylogeography of mountain and island organisms, employing genetic, ecological and trait data, revealed the impact of past global change on natural communities and their organisms. Knowledge about the past will be useful to make predictions about the future and inform conservation measures and policy. We hope that this collection of papers will increase our understanding of the past, present and future of mountain and island systems, with a focus on lower latitudes.

Subject Coverage

We welcome submissions in all aspects related to the biogeography, evolution, and conservation of mountain and island systems. Topics of interest include (but are not limited to):

—Phylogenomics and phylogenetics of large or complex groups occurring in mountains and/or islands

—Newly explored biogeographic and evolutionary aspects of major clades and mountain/island biomes

Organizers

Alexandra N. Muellner-Riehl, Suzette Flantua, Fabien Anthelme, Thomas Ibanez

Important Dates

Authors interested in contributing to the special issue should submit their manuscripts by **30 June 2023** at <http://mc.manuscriptcentral.com/josae>. Note that all manuscripts will be rigorously peer-reviewed and held to the standards of the journal.

The target date for publication of the special issue is November 2023, although accepted manuscripts will be published online in advance of the issue.

Questions?

Contact Alexandra N. Muellner-Riehl (muellner-riehl@uni-leipzig.de) and Suzette Flantua (s.g.a.flantua@gmail.com) for mountains, and Fabien Anthelme (fabien.anthelme@ird.fr) and Thomas Ibanez (thomas.ibanez@ird.fr) for islands.