Special Issue

Diversity and Ecology of Freshwater Benthic Macroinvertebrates

Message from the Guest Editor

Freshwater ecosystems harbor a significant portion of global biodiversity, playing a critical role in supporting terrestrial organisms and maintaining ecosystem processes. However, these ecosystems are among the most threatened by human activities, leading to an alarming loss of biodiversity. Freshwater benthic macroinvertebrates are vital components of aquatic food webs and serve as key indicators of environmental health. Despite advances in understanding their taxonomic, functional, and phylogenetic diversity, significant knowledge gaps remain. This Special Issue aims to synthesize research exploring the distribution patterns and underlying mechanisms of macroinvertebrate communities, with a focus on priority areas for conservation and restoration. We especially welcome studies utilizing emerging tools such as environmental DNA, metabarcoding, and stable isotopes to enhance our understanding of the dynamics and resilience of these communities in the face of environmental change.

Guest Editor

Dr. Diego Marcel Parreira De Castro

Departamento de Biologia Geral, Universidade Federal de Minas Gerais, Belo Horizonte, Brazil

Deadline for manuscript submissions

30 December 2025



an Open Access Journal by MDPI

Impact Factor 2.1 CiteScore 4.0



mdpi.com/si/228355

Diversity
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
diversity@mdpi.com

mdpi.com/journal/diversity





Diversity

an Open Access Journal by MDPI

Impact Factor 2.1 CiteScore 4.0



About the Journal

Message from the Editor-in-Chief

Diversity (ISSN 1424-2818) is a scholarly journal that covers all areas of diversity research. Our distinguished editorial board and refereeing process ensures the highest degree of scientific rigor for publishing. Original research articles and timely reviews are released online, with unlimited free access.

We invite papers and reviews on multidisciplinary topics of diversity that bridge organismic diversity (systematics, biodiversity, phylogeny, population genetics, and evolution) and molecular diversity (phytochemistry and biophysics).

Editor-in-Chief

Prof. Dr. Michael Wink

Institute of Pharmacy and Molecular Biotechnology, Heidelberg University, Im Neuenheimer Feld 329, D-69120 Heidelberg, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubAg, GEOBASE, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Biodiversity Conservation) / CiteScore - Q1 (Agricultural and Biological Sciences (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.1 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

