

Special Issue

Forest Physiological and Ecological Processes: Ecophysiology from Molecules to Ecosystems

Message from the Guest Editors

Understanding how abiotic and biotic factors influence the physiology of forest organisms and how physiological mechanisms of forest organisms regulate ecosystem processes and biogeochemical cycles—in other words, the study of forest ecophysiology—is key to maintaining forest ecosystem services under intensifying natural and anthropogenic pressures.

Forest organisms have a range of 22 orders of magnitude in mass, from the tiniest microbes to the largest tree, and ecophysiological techniques measure processes at spatial scales that span even more orders of magnitude in size, from tracing individual molecules to satellite imagery of regional, continental, and global landscapes. The empirical and modeling approaches used to study forest ecophysiology are similarly diverse. In this Special Issue, we broadly explore current research designed to improve our understanding of interactions between forest physiological mechanisms and ecosystem processes in both managed and unmanaged forest ecosystems worldwide. We welcome contributions reporting experimental results from a variety of techniques, including modeling, as well as theoretical results and topical reviews.

Guest Editors

Dr. Doug P. Aubrey

Dr. Daniel Johnson

Dr. William M. Hammond

Deadline for manuscript submissions

closed (25 August 2022)



Forests

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.6



mdpi.com/si/88473

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

[mdpi.com/journal/
forests](https://mdpi.com/journal/forests)





Forests

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.6



[mdpi.com/journal/
forests](https://mdpi.com/journal/forests)



About the Journal

Message from the Editor-in-Chief

Forests (ISSN 1999-4907) is an international and cross-disciplinary, scholarly forestry journal. The distinguished editorial board and refereeing process ensures the highest degree of scientific rigor and review of all published articles. Original research articles and timely reviews are released online, with unlimited free access. Our goal is to have *Forests* be recognized as one of the foremost publication outlets for high quality, leading edge research in this broad and diverse field. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global forestry community.

Editor-in-Chief

Prof. Dr. Giacomo Alessandro Gerosa

Department of Mathematics and Physics, Catholic University of Brescia,
I-25121 Brescia, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, PubAg, AGRIS, PaperChem, and other databases.

Journal Rank:

JCR - Q2 (Forestry) / CiteScore - Q1 (Forestry)

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 2.4 days (median values for papers published in this journal in the first half of 2025).