

## Special Issue

# Tree Responses to Climate Change

### Message from the Guest Editors

Climate change causes changes in the temperature regime and water availability or drought that can directly affect trees and forest ecosystems' growth and well-being in multiple ways.

(1) This can move the optimal climatic balance of trees from growing at their current place to forced migration to different areas—the large-scale impact on ecosystems and their adaptation, can be addressed through large-scale observations and remote sensing.

(2) This can affect gross primary production, net ecosystem production, net ecosystem exchange, and respiration – ecosystem intermediate-level impacts can be addressed through eddy-covariance and soil-respiration measurements.

(3) This can affect tree growth capabilities—single-tree level impacts can be addressed through direct tree observations and measurements.

These large-, intermediate-, and small-level scales can interconnect with each other to unravel the complexity of climate change's impact on trees and forests.

Investigating multi-scale effects could shed light on potential mitigation strategies to reduce the adverse effects of climate change on trees and forest ecosystems.

---

### Guest Editors

Dr. Sergey Kivalov

Institute of Physicochemical and Biological Problems in Soil Science, Russian Academy of Sciences, Institutskaya 2, 142290 Pushchino, Russia

Dr. Olga Kuricheva

A.N. Severtsov Institute of Ecology and Evolution, 119071 Moscow, Russia

---

### Deadline for manuscript submissions

closed (28 February 2024)



## Forests

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.5  
CiteScore 4.6



[mdpi.com/si/178327](https://mdpi.com/si/178327)

*Forests*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[forests@mdpi.com](mailto: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 16.8 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2025).