

Special Issue

Forest Operations under Challenging Conditions: Operating, Environmental and Safety Constraints

Message from the Guest Editors

Forest operations often need to take place on steep slopes. This is due to flatter land often being used for alternative land use. Operating on steep slopes presents technology and management challenges. Harvesting machines and systems are subjected to harsher working conditions that affect machine reliability, and can also reduce machine productivity due to the need to overcome gravity during uphill operations and the need for slower operations when working on side slopes or down steep slopes. Human manoeuvrability can also increase the safety risk as machines can roll over and ground-based workers can struggle to carry out manual work safely. Environmental damage can also be a consequence, as harvesting machines can disturb soil. Therefore, the correct technology must be applied according to the slope and soil conditions, and it needs to be operated according to good practice. This requires good planning as well as well trained and motivated employees. New technology can allow for forest operations to be cost effectively carried out on steep slopes while also minimising environmental impacts and reducing safety risks.

Guest Editors

Prof. Dr. Raffaele Cavalli

Department of Land, Environment, Agriculture and Forestry, Università degli Studi di Padova, Viale dell'Università 16, 35020 Legnaro (PD), Italy

Dr. Andrew McEwan

Forestry and Wood Technology, Nelson Mandela University, Port Elizabeth, South Africa

Deadline for manuscript submissions

closed (30 November 2021)



Forests

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.6



mdpi.com/si/63082

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).