

Forested Landscapes in the Post-2020 Global Biodiversity Framework

Report provided by Teresa Pinto Correia, Conference Scientific Committee Co-Chair

The IUFRO All-Division 8 **Forest Environment** conference on 24 to 27 October 2023 brought 150 participants from all over the world - 31 countries, ranging from Japan to Mexico and from Finland to Chile - to the historical UNESCO World Heritage town of Évora, Portugal. The event was kindly hosted and supported by the University of Évora; MED, the Mediterranean Institute for Agriculture, Environment and Development; and CHANGE, the Global Change and Sustainability Institute.

The conference focused on the critical role of “Forested Landscapes in the Post-2020 Global Biodiversity Framework: mitigation options towards implementation of the SDGs”.

[Visit the meeting website!](#)

A total of 4 keynote lectures, 87 oral communications, 49 posters and 6 round tables generated lively discussions on the following topics:

- Human-nature relationships to support multifunctional forested landscapes, including socio-ecological approaches
- Innovative tools, methods and approaches to improve decision-support and monitoring systems (e.g., coupling models, remote sensing, spatial tools, terrestrial sensors)
- Global change, vulnerability and adaptive management of forested landscapes – how to manage increasing pressures and threats above the current resilience tipping points
- Forest management, public policies, governance models and decision-making
- Silvopastoral systems and sustainable integrative solutions at the landscape level
- Forest landscape restoration initiatives: biodiversity, economy and people

The second day of the conference was dedicated to the field trips that enabled participants to gain insight into the various dimensions of the silvopastoral system *Montado* as well as its main product, cork. A visit to cork oak and umbrella pine forest stands was also offered.

- *Field trip 1* “Montado – a silvopastoral system with high biodiversity value”
- *Field trip 2* “Silvopastoral systems and sustainable integrative solutions at the landscape level”
- *Field trip 3* “Cork and Forest Stands”

As an output of this conference, the proposal of a Special Issue to be published in *Agroforestry Systems*, dedicated to the silvopastoral systems’ contributions to the sustainable Development Goals, is underway.



Photos by André Oliveira. From the top: Field trip 1; keynote discussion

The conference was closed with the launching of the new IUFRO Working Party on “Silvopastoral Systems and Pastoralism” to be hosted in the **“Forest ecosystem functions”** Research Group of IUFRO’s Division 8.

This multidisciplinary unit promotes and facilitates the understanding and acknowledgement of silvo-pastoral systems and their complexity and dynamics, to support knowledge-based management and decision making both by private owners and managers, and in public policies.

The new Working Party will welcome specialists from multiple disciplines and from around the world as the challenge of silvopastoral systems sustainability requires the integration of knowledge from the different components of the complex silvopastoral systems. The launching was made with a closing roundtable involving representatives from industry, administration and research.

5th International Congress on Planted Forests

With a world population projected to reach 9.8 billion in 2050 – an increase of nearly 30 percent from today's 7.6 billion – needs for food, fuel, fiber and other bio-based products and services will rise sharply. Demand for forest-based biomass will increase, driven by construction and packaging, and wood fuel will remain the main energy source for many households in emerging economies.

At the same time, climate change, ecosystem degradation and their impacts call for deep changes in our global production and consumption patterns. Societies are engaging in the decarbonization of their economies and the restoration of their environment – with a prominent role for nature-based solutions.

Planted forests are an essential nature-based solution to meet growing needs in wood products, restore forest ecosystems, and mitigate climate change.

Against this background, 130 participants from 35 countries came together in Nairobi, Kenya, from 7-10 November, for the 5th [International Congress on Planted Forests](#) (ICPF), discussing global challenges and opportunities of planted forests.

The ICPF is a global forum focused on planted forests held under the auspices of the [IUFRO Task Force on Resilient Planted Forests Serving Society and the Bioeconomy](#), an inclusive expert group bringing together leading global scientists, private sector organizations, NGOs and IGOs.

The 5th ICPF was the first to be held in Africa and was co-organized by the Institut Européen de la Forêt Cultivée (IEFC), the Food and Agriculture Organization of the United Nations (FAO), the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF), the International Union of Forest Research Organizations (IUFRO), the TreeDivNet network, the Kenya Forestry Research Institute (KEFRI), the Kenya Forest Service (KFS), and the Ministry of Environment, Climate Change and Forestry of Kenya.

The 5th ICPF emphasized the global significance of planted forests. The presentations and discussions covered various topics, including business models, governance, and innovative practices for sustainable forest management. Key takeaways include the importance of knowledge exchange, challenges related to value chain improvement and financing, and the positive perception of planted forests as tools for ecosystem restoration. The [livestreamed concluding session](#) summarized the congress outcomes and is available on Youtube. During this session, [FAO's Unasylva #254](#) "Towards more resilient and diverse planted forests" was launched (*read more in the publications section of this newsletter*).

In the closing, high-level speeches from the Cabinet Secretary of the Ministry of Environment and Climate Change of Kenya, the CEO of CIFOR-ICRAF and the FAO Kenya Representative,



Participants of the 5th International Congress on Planted Forests in Nairobi.
Photo by Lixlense Captures. [Click here to find more photos!](#)

highlighted commitment to support initiatives like Kenya's 15 billion tree campaign and the UN Decade of Ecosystem Restoration.

The congress was enriched by two FAO-led events. During the pre-event on ["Unlocking finance for sustainable and inclusive wood value chains"](#), presentations and discussions covered three key segments of wood value chains: (1) Developing end-markets for sustainable wood – the market for timber in the construction sector; (2) Processing wood for value addition, efficiency, and as an incentive to expand forest areas; and (3) Producing wood in a sustainable, responsible and inclusive way, with a special focus on the role of smallholder forest and farm producers. The event was attended by around 80 participants and was co-organized by FAO, ICRAF, the Swedish Embassy, Gatsby Africa, KFS and KEFRI.

In addition, the [Forest Invasive Species Network for Africa](#) (FISNA) held a side event titled "Enhancing forest resilience to invasive species and climate change impacts - tools for early warning", bringing together 15 focal points and members from 12 countries in the region to discuss the status of the health of forests in sub-Saharan Africa and share knowledge on the challenges and benefits associated with utilizing surveillance systems for forest health.

STOCKHOLM 2024 Early-bird registration until 15 January 2024!

WORLD CONGRESS 26th IUFRO Also book your Pre/Post Congress tours and exhibition space!

FORESTS & SOCIETY TOWARDS 2050

 DENMARK	 ESTONIA	 FINLAND	 ICELAND
 LATVIA	 LITHUANIA	 NORWAY	 SWEDEN

Forum on Ukraine Forest Science and Education: Needs and Priorities for Collaboration

On 21-22 November 2023 the two-day hybrid “Forum on Ukraine Forest Science and Education: Needs and Priorities for Collaboration” took place at the IIASA premises in Laxenburg, Austria. The event was organized jointly by the National University of Life and Environmental Sciences of Ukraine (NUBiP), the International Institute of Applied System Analysis (IIASA), and the International Union of Forest Research Organizations (IUFRO), with support from the Austrian Federal Ministry for Agriculture, Forestry, Regions and Water Management (BML).

“International collaboration in science and education is crucial to overcome the challenges posed by war and climate change. When planning this forum, keeping in mind the background and missions of the host organizations NUBiP, IIASA and IUFRO, a deliberate decision was therefore made to focus on forest research and education needs and priorities of Ukraine to address a gap in ongoing international collaborative efforts” said Alexander Buck, Executive Director of IUFRO.



Forum Chair Sergiy Zibtsev.
Photo by Jose Bolaños/IUFRO

“The forum brought together Ukrainian forestry students, early and mid-career forest researchers and representatives of leading European universities and international institutions to discuss practical measures and strategic steps toward supporting sustainable forest management in Ukraine,” noted Forum Chair, Professor Sergiy Zibtsev (NUBiP/IIASA).

“An integrated and systems-based approach is suggested to support forest science and – together with a healthy forest education system – prepare the sector for speedy recovery now in order to ensure forest restoration in the mid- to long-term,” said Florian Kraxner, who leads the Agriculture, Forestry, and Ecosystem Services Research Group in the IIASA Biodiversity and Natural Resources Program.

A report summarizing the main outcomes of the Forum will soon be published and shared widely with the intent of mobilizing coordinated and impactful action by stakeholders and policymakers in support of forest science and education in Ukraine. [Visit the Forum webpages!](#)

Improvement and Culture of Eucalypts

Report by Gustavo Balmelli, Deputy Coordinator of Working Party 2.08.03 [Improvement and culture of eucalypts](#)

The IUFRO 2.08.03 conference with the title “Enhancing the performance and sustainability of eucalypt plantations to broaden their benefits” focused on the sustainable use of eucalyptus plantations through appropriate genetic improvement strategies and effective silvicultural practices.

Meeting website: <https://iufroeucalyptusuy2023.org/>



Field trip. Photo by Luisina Mezquita, INIA Tacuarembó, Uruguay

It took place on 20-24 November 2023 in Colonia del Sacramento, Uruguay, and attracted a total of 157 participants from

Argentina, Australia, Bolivia, Brazil, Chile, China, Spain, India, Indonesia, Latvia, Malaysia, Paraguay, Portugal, South Africa, Sweden, United States of America, and Uruguay.

The meeting, which was organized by INIA and Universidad de la República, Uruguay, was kindly supported by Ministerio de Ganadería, Agricultura y Pesca and Universidad Tecnológica, Sociedad de Productores Forestales. Participants; and sponsored by UPM; MdP; CTFM; PONSSE; COFUSA; SPF; AGROENFOQUE; J. HARTWICH; KOMATSU; LUMIN; Grupo Forestal; and TERRE, JFBR.

The program had six thematic sessions: (1) tree breeding strategies; (2) molecular and genomic technologies; (3) breeding for resistance to biotic and abiotic stresses; (4) breeding for wood properties; (5) forest management and productivity; (6) environmental, social, and economic benefits.

Thematic sessions were opened by featured speakers: *Nuno Borralho* spoke on the importance and responsibility of eucalyptus plantations in the world's forests; *Dario Grattapaglia* provided an update on genomic selection in forest trees; *Jeremy Brawner* focused on breeding strategies for biotic and abiotic stresses; *Rafael Rubilar* summarized the environmental,

social and economic benefits of eucalypts; *Claudio Balocchi* spoke on sustainable wood supply: genetic diversity strategies to maintain forest productivity in a climate change scenario.

Both oral and poster presentations focused on the exploration of genetic resources in *Eucalyptus* and innovative tree improvement strategies, focusing on the evaluation, selection, propagation, and deployment of genetic stock, especially oriented to increase adaptability and resilience to new challenges such as climate change.

The latest research on eucalypt molecular genetics and genomics with a focus on new tools and methods to improve the efficiency of breeding programs was presented. Participants also showcased breeding tools for the selection of resistant

genotypes against biotic and abiotic stresses, with the aim of maintaining and improving the forest health, and the latest advances in genetic improvement for wood properties of eucalypts, especially those oriented to pulp and paper, solid wood, engineered wood products, biomass, and energy.

Furthermore, key elements in forest management such as genetics, ecology, silviculture, physiology, and forest protection for the effective implementation of sustainable forest management were discussed, and insights on the economic impact of eucalypt plantations, their contribution to the environment, including ecosystem services, were shared.

The proceedings with all presentation abstracts were published at the conference. [Click to access proceedings!](#)

Wood Science and Engineering in the 3rd Millennium

Report by *Marius Barbu*, Coordinator of Research Group (RG) 5.05.00 [Composite and reconstituted products](#) and Deputy Coordinator of RG 5.04.00 [Wood processing](#)

From 2-4 November 2023, around 100 participants from 30 countries came together at the 13th [ICWSE](#) conference in Brasov (Romania) to share the latest findings and developments in wood research. The conference, organized by the Faculty of Furniture Design and Wood Engineering, included eleven scientific sessions covering a wide range of topics from wood anatomy and drying methods to conservation and restoration of wooden objects, wood-based material technology, to furniture design and the role of the circular economy in the wood industry.

The conference was themed “Wood Science and Engineering in the 3rd Millennium” and was dedicated to the University’s “Transilvania” 75th anniversary. The head of Department of Wood Processing and Design of Wood Products of the host faculty, Professor *Mihaela Câmpean* (former coordinator of IUFRO 5.04.06), opened this event as the main organizer of this edition.

Professor *Marius Barbu* (Coordinator of IUFRO RG 5.05) a member of the conference organizing team, delivered greetings from IUFRO Division 5 and presented a keynote lecture on the use of *Paulownia* from European plantations. Professor *Rupert Wimmer* (Coordinator of IUFRO RG 5.04) gave a keynote lecture on the history of wood science. Both were members of the scientific committee and moderated scientific sessions.



Photo by *FD MIL* (Facultatea de Design de Mobilier si Inginerie a Lemnului) Brasov

There were many young researchers, PhD students and post docs from Europe, Asia and Africa among the participants and speakers, who provided insights into their current research projects. Some of them were able to gain their first international conference experience.

More than 80 papers presented at the conference will be published in the open access journal *ProLigno* and in the special issue of MDPI journal *Applied Sciences*.

2023 Joint Conference of Southern and Northeastern Mensurationists

Report by *Sheng-I Yang*, Deputy Coordinator of Working Party 4.01.03 [Instruments and methods in forest mensuration](#), and *Don Hodges*, Coordinator of Division 4, [Forest assessment, modelling and management](#)

The Joint Conference of Southern and Northeastern Mensurationists, denoted as SOMENS and NEMO, brings together people from various sectors to discuss and explore the latest advancements and opportunities in forest biometrics and measurements. It is a great platform for knowledge exchange, networking, and collaboration among industry, governmental

agencies, organizations, and universities. Multiple joint conferences have been held in the past. The last one was hosted in Blacksburg, VA in 2018. The 2023 edition on 8-10 October 2023 took place in Knoxville, Tennessee, USA, and attracted 84 participants from the USA and Canada.

[Meeting website](#)



Don Hodges introduced IUFRO at the conference. Photo by Sheng-I Yang

Two keynote presentations were delivered by *John Paul McTague* and *Greg Johnson*. In McTague's talk, two major themes of the 1993 IUFRO Conference, entitled 'Modern Methods of Estimating Tree and Log Volume' were re-examined.

Johnson took the audience on a journey to the future world of forest inventory and modeling given the advanced development of remote sensing technologies.

General sessions were held to discuss new issues and possible solutions in forest biometrics. Special sessions were focused on projects which aim to explore and expand upon the uses of the data produced by the USDA Forest Service, Forest Inventory and Analysis (FIA) program. A total of 33 presentations were given.

The participants of the meeting agreed to continue to host the conference between regions for sharing knowledge, fostering connections, and facilitating collaboration among industry, government agencies, organizations, and universities; and to continue to encourage students' participation in the conference. The 2024 joint conference of NEMO and SOMENS will be held in Vermont.

Systematic Review of Literature for Forest Science

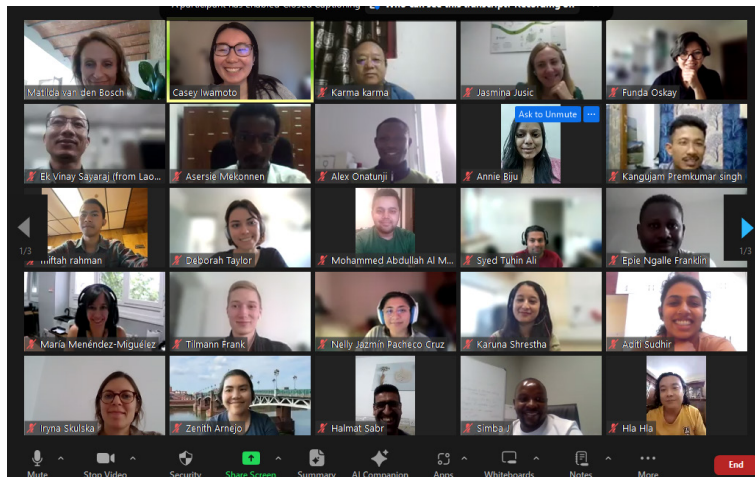
Report by *Annie Biju*, Co-Coordinator of [Joint IUFRO - IFSA Task Force on Forest Education](#), together with *Casey Iwamoto* and *Helena Nováčková*, Deputy Task Force Coordinator

On 11 October, more than 100 participants from 30 countries joined the online workshop titled "How to Conduct Systematic Review of Literature for Forest Science and Other Disciplines" organized by the Joint IUFRO - IFSA Task Force on Forest Education.

The [recording of the workshop](#) is now available on the IFSA YouTube Channel.

Systematic review of literature forms the basis of any research conducted in forest science. A Systematic Literature Review (SLR) is an independent academic method that aims to identify and evaluate all relevant literature on a topic to derive conclusions about the question under consideration. It helps to identify the research gaps and scope in the particular field of focus. SLR helps to answer a specific empirical question. Therefore, as young forestry professionals, it is necessary to carry out a proper review of literature.

There are materials available online on how to carry out SLR but none of them with a particular focus on forest science. The aim of this workshop was to provide the students with knowledge on how to carry out SLR for forest science, the database available for searching literature, how to identify which papers to include, how to organize bibliography for easy reference and how to arrange and formulate a research paper.



Screenshot of the group by Casey Iwamoto, IFSA

The students will be able to conduct SLR for their own research after the workshop. The objective of the workshop was to help students to carry out proper systematic review of literature (SLR) for forest science with step-by-step guidelines and provide information on various open databases for accessing literature for forest science.

The workshop was led by *Dr. Matilda Van Den Bosch*, a senior researcher at the Barcelona Institute for Global Health, Spain, and an In-house Consultant at the European Forest Institute Biocities Facility in Rome. She is also an Adjunct Professor at the University of British Columbia, Canada.

Why are literature reviews needed, and a history of reviews:

- Reviews require a sufficient number of studies, there must be at least some studies to review.
- Types of reviews (traditional, review of reviews, rapid, qualitative, mixed method, purpose specific reviews) and how to choose which review is the best for the question you are asking.

Specifically for systematic reviews, there are two powerful methods that can be used:

- Firstly, PRISMA, (Preferred Reporting Items for Systematic Reviews and Meta-analysis) is a methodology used to create the review using the PICO (Population of interest, Intervention, Control and Outcome) structure.

- The second is ROSES (Reporting Standards for Systematic Evidence Syntheses), another method that can be implemented for environmental sciences to properly report the review. To find more environmental reviews, it is suggested to use *The Collaboration for Environmental Evidence*, an online open network of people working on environmental based evidence.

Protocol for review

- Find your question and area of focus, consider conducting a survey to assess the need
- Databases used (Scopus, Google Scholar)
- Search terms and use Boolean operators

Data screening and spreadsheets are important to create a feasible workload for your review and to keep track of information. Artificial intelligence could be used to increase efficiency in a time of increasing outputs of research that needs to be included in a review.

Outcomes include conceptual models, to synthesize previous studies, find knowledge gaps, state of knowledge, overview of main theories.

Conclusions

- Students were provided with resources and a starting point to begin a systematic review process.
- Students are now able to better understand the process of how systematic reviews that they read are created.

Outlook

- Additional sources for review training include ES Training on Evidence Synthesis.
- Students were interested in applying these methods to their own work and collaborating with others in IFSA in the future to create a systematic review.
- Students were provided with Certificates of Participation for attending this workshop.

Forest Management and Provision of Hydrological Functions

Report by Adam Wei, Coordinator of Task Force on [Forest and Water Interactions in a Changing Environment](#)

The FAO-IUFRO Webinar Series “Forest management and provision of hydrological functions” is comprised of three webinars held on 21 September, 19 October and 16 November 2023, respectively:

- Forest Management Practices for Protection of Hydrological Functions
- Forest-Water Management under Climate Change
- Practical Tools for Managing the Forest-Water Nexus

A total of 1,562 people from 108 countries registered for the webinars and the three sessions had a total of 987 attendees. In 2023, IUFRO, and more specifically the members of the Forest and Water Interactions Task Force, contributed a series of review papers to a special issue of the scientific journal *Forest Ecology and Management*. The special issue has nine syntheses focusing on various key topics related to effects of forest management practices on hydrological processes and functions at the global scale. The objective of the reviews is to improve and inform forest management practices and planning processes that contribute to the protection and provision of water related services from forests.

The Food and Agriculture Organization (FAO) of the UN is the leading UN organization working on forest and water issues and on how forest management practices can contribute to the provision of water-related services including water quality, quantity and timing as well as amelioration of floods and droughts or rainfall generation and cooling benefits. These contributions are crucial for water and food security in a changing climate.

FAO and IUFRO have long been closely collaborating on the forest and water topic, and in 2021, together with the US Department of Agriculture, published “A guide to forest-water management”, the first comprehensive global publication on the monitoring, management and valuation of forest-water interactions. The special issue of *Forest Ecology and Management* complements this publication and contributes to informing and improving forest management practices for water-related services.

To share the findings of the papers in the special issue and provide a space for extensive discussion, including the implications and potential application in forest management practices, FAO and IUFRO organized a webinar series that took place in the second half of 2023. The discussions from the webinars will also feed into the sessions at the IUFRO Congress in 2024.



Photo by Adam Wei

Announcements

First Massive Open Online Course on Gender Equality, Diversity and Inclusion in Forestry

ForGEDI Massive Open Online Course (MOOC) will soon deliver expert knowledge on gender equality, diversity and inclusion in forestry to all!

Over the last year, members of the IUFRO [Task Force on Gender Equality in Forestry](#) have worked diligently and creatively to launch the world's first Massive Open Online Course (MOOC) on Gender Equality, Diversity and Inclusion (GEDI) in forestry. With the development of ForGEDI MOOC we advance GEDI in forestry through reducing the educational gap and making the latest research and best practices in the field easily available to everyone.

ForGEDI MOOC is primarily designed for forestry students and university educators. It will also be beneficial for students and educators from forest-related sectors such as rural development, trade, and environmental studies. It will also be possible for professionals in vocational training to take the course.



The course launch is scheduled to beginning of March 2024. For three weeks we will facilitate discussions and be available for the learners, but the course materials will be available at any time for anyone with an internet connection. We hope to organize at least two more facilitated runs and possibly more depending on resource availability. ForGEDI MOOC is delivered via the [FutureLearn](#) platform through the collaboration agreement with the University of Padova. We have planned for 12-15 hours of learning over three weeks, each week covering one significant aspect of the topic. Week 1 will introduce basic

Episode 4: Branching Out: The Forest Podcast

The latest podcast episode presented by IUFRO discusses the relationship between biodiversity and other services our forests provide. The topic is aligned with the [IUFRO World Congress](#) theme "Forest biodiversity and its ecosystem services".



The episode is presented by *Jose Bolaños* (IUFRO HQ) and co-host *Peter Edwards*, a senior researcher at Manaaki Whenua – Landcare Research, New Zealand. He urges to think beyond the physical forest products, but the services that forests provide. Listen to our guests *Sally Aitken*, University of British

Columbia, Canada; *Marjana Westergren*, Slovenian Forest Institute; *K.M.A. Bandara*, Department of Forest Conservation, Sri Lanka; and *Nazmus Sadath*, Khulna University, Bangladesh. [Find the podcast](#) on Spotify, Apple Podcasts, and the IUFRO website!



Screenshot from all-contributors' online meeting on Nov 20, 2023

concepts of gender equality, diversity and inclusion, Week 2 will present worldwide case studies, while Week 3 will offer practical tools for dealing with gender equality and diversity issues in forestry-related sectors. Importantly for all educators and curricula developers, it will be possible to cherry-pick materials from the MOOC and use within courses outside FutureLearn. We hope that this will increase the spread of GEDI research and practice even more.

Until March there is much to do and at the moment we are editing and putting together the many articles, videos and podcasts produced by around 40 contributors from four continents. ForGEDI MOOC will summarize the lessons learnt during the Task Force and the members' research about GEDI in forestry.

Learn more about how you can make forestry more equal, diverse and inclusive by signing up for the course in March. You can follow the course development on our website <https://forgedi.org/> and more information will be available over social media closer to the launch.

Authors: *Ida Wallin* (SLU) & *Todora Rogelja* (UNIPD), IUFRO Task Force on Gender Equality in Forestry

Course provider: University of Padova, Italy

Main sponsor: SLU Global

Contact and course coordinators: *Ida Wallin* (ida.wallin@slu.se), *Todora Rogelja* (todora.rogelja@unipd.it) & *Stephen Wyatt* (stephen.wyatt@umoncton.ca)

New Videos: Get to Know IUFRO Division 5 Forest Products

Want to know about what [IUFRO's Division 5](#) works on?

This Division includes research on the varied factors affecting the way forest plants grow and produce woody biomass and other products and the various ways the materials are used by



industries and communities. It also includes research on the production, characteristics, and use of non-wood forest products, such as medicinal and edible components of forest crops. A very strong theme is the efficient and sustainable use of forests for the good of humankind.

[Watch the new D5 video!](#)

Research Group videos coming soon!

Congratulations to Shirong Liu!

The Chinese Academy of Engineering (CAE), the top academic institution in the nation's fields of engineering sciences and technology, announced the enrollment of 74 new members on November 22, 2023.

Professor Shirong Liu, Vice-President (Task Forces) of IUFRO, is a newly elected member belonging to CAE's Agriculture Division. Membership with the CAE, one of whose main duties is to provide consultation for national decision-making, is the highest academic title in engineering sciences and technology in China.

The National Forestry and Grassland Administration (NFGA) of China, in the letter of congratulations, congratulated Shirong on his receipt of CAE membership and acknowledged his contribution to the ecological civilization of China through provision of science and technology support to the country's natural forest conservation, restoration and multipurpose forest management.



Prof. Shirong Liu in a field visit to New Zealand's temperate forest.

Congratulations to Purabi Bose!



The Royal Swedish Academy of Agriculture and Forestry (KSLA) appointed Purabi Bose as a new International Fellow for the Academy's General section.

Current Coordinator of IUFRO's Division 6, Social Aspect of Forests and Forestry, Purabi works with Indigenous Peoples and local communities on forest governance and policy, land use change, communication, and food security. She is a citizen of India, and currently based in Sweden working as a Senior Lecturer of Forest Policy for the Forest Faculty of Swedish University of Agricultural Sciences (SLU).

Congratulations to Mike Wingfield!



For the seventh consecutive year, former IUFRO President Mike Wingfield has been recognized as one of the Clarivate Web of Science Highly Cited Researchers 2023. Out of the ten esteemed academics in South Africa, Professor Wingfield proudly stands as one of only two from the University of Pretoria. An outstanding achievement and a testament to his impactful contributions to research.

Congratulations to Margarida Tomé!

Professor Margarida Tomé, IUFRO International Council representative from Portugal and Deputy Coordinator of IUFRO's Task Force on Sustainable Planted Forests for a Greener Future, has been nominated to receive an Honorary Doctorate from the Polytechnic University of Madrid (Official), a proposal that arose from Etsi Montforestnatur. According to the institution, Margarida Tomé is a reference in Mediterranean forestry, forest modeling, inventory, sustainable forest management, among others.



Obituary: Michael McManus

With sadness, we pass along news of the death of Dr. Michael McManus. He was a research scientist with the US Forest Service in Hamden, Connecticut for his entire career, beginning in 1966 and including his status as an active emeritus scientist up to the present. During his career with the US Forest Service, most of his research focused on *Lymantria dispar*, its dispersal behavior, ecology, host-pathogen interactions, and management.

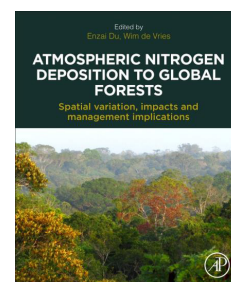
Dr. McManus was also very active in IUFRO (from 1991-2018) and engaged in other international activities. He founded Working Party 7.03.06 "Integrated Management of Forest Defoliating Insects" and led this group for over 10 years. During that period, he was a crucial player in the organization of several conferences in North America and Europe. In 2010 he was presented the George Varley Award for Achievement in Forest Entomology for his many career achievements.

We are grateful to Dr. Andrew Liebhold for sharing the information with the IUFRO network. (Please note that the obituary has been shortened by the editor.)

Publications

Atmospheric Nitrogen Deposition to Global Forests

Anthropogenic activities have increased the inputs of reactive nitrogen to the environment globally and caused an exceedance of the planetary boundary. As an important component of the nitrogen cycle, nitrogen deposition is found to exert significant impacts on forest ecosystems that cover approximately one third of the global land surface and provide essential ecosystem services. In view of this challenge, a new book "Atmospheric Nitrogen Deposition in Global Forests: Spatial Variation, Impacts, and Management Implications", edited by Professors Enzai Du and Wim de Vries, was published by Academic Press in October, 2023. [Publication link](#)



Unasylyva “Towards more resilient and diverse forests”

FAO. 2023. *Towards more resilient and diverse planted forests. Unasylyva, No. 254 – Vol. 74 2023/1. Rome.*



Planted forests can be a winning strategy to increase global forest cover and contribute to the SDGs if diverse, resilient, and inclusive models of planted forests are successfully deployed and sustainably managed.

The latest edition of FAO’s forestry flagship journal Unasylyva [“Towards more resilient and diverse forests”](#), presents novel findings and shares the state-of-the-art in models of planted forests meeting the essential objective of production, while delivering broader societal goals such as biodiversity, restoration of degraded ecosystems, resilience to and mitigation of climate change, and livelihood opportunities.

The issue was developed in close collaboration with a variety of partners including the global research network on planted forests [TreeDivNet](#), as a contribution to the [IUFRO Task Force on Resilient Planted Forests](#).

The Key Principles for Scientific Publishing

The International Science Council through its Members have identified a total of eight key principles for scientific publishing. This paper is complemented by a second, evaluating the extent to which the principles are attained and identifying opportunities for reform.

[Click here to learn more!](#)

Also see the related paper:

[The Case for Reform of Scientific Publishing](#)



Divergent Selection in a Mediterranean Pine on Local Spatial Scales

Katharina B. Budde, Christian Rellstab, Myriam Heuertz, Felix Gugerli, Tom Hanika, Miguel Verdú, Juli G. Pausas, Santiago C. González-Martínez

First published: 27 November 2023, *Journal of Ecology* [LINK](#)

The study highlights how divergent selection in heterogeneous microenvironments shapes and maintains the functional genetic variation within populations of long-lived forest tree species, being the first to focus on adaptive genetic divergence between south- and north-facing slopes within continuous forest stands. This is especially relevant in the current context of climate change, as this variation is at the base of plant population responses to future climate.

Forestry in the Face of Global Change: Results of a Global Survey of Professionals

Authors: Austin Himes, Jürgen Bauhus, Shankar Adhikari, Saroj Kanta Barik, Hugh Brown, Andreas Brunner, Philip J. Burton, Lluís Coll, Anthony W. D’Amato, Jurij Diaci, Yonten Dorji,

Ernest G. Foli, David J. Ganz, Jefferson S. Hall, Rodney Keenan, Yuanchang Lu, Christian Messier, Ian Munanura, Daniel Piotto, Thomas Seifert, Douglas Sheil, Ekaterina Shorohova, Kibruyesfa Sisay, Daniel Soto, Hiroshi Tanaka, Peter Umunay, Alejandro Velázquez Martínez, Klaus J. Puettmann [Click for details!](#)

This publication presents an overview of results from a global survey of 754 forestry professionals (370 researchers and educators, 227 practicing foresters, 37 policy makers, 64 administrators, and 56 with other or unspecified roles) from 61 countries across 6 continents who were interested in global change issues. These professionals were asked about their opinion regarding three different adaptation strategies: resist, adapt, and transform. Most respondents agreed that the majority of global change factors will negatively influence the ability of forests to provide desired ecosystem services.

Seven Country Case Studies on Gender Initiatives in Forestry

The [IUFRO Task Force Gender Equality in Forestry](#) has meanwhile published [seven case studies](#) in selected countries to examine the gender balance and analyze gender equality initiatives within the forest sector:

INDONESIA: Women leadership in the state-owned forestry enterprise, Perhutani

UGANDA: Addressing the gender gap in participation and representation in community forestry

CANADA: Addressing Systemic Gender, Diversity & Inclusion Issues in the Forest Sector

NORDIC REGION: Gender balance in the Nordic forest sector

AUSTRIA: Networks for equality - Practice and prospects with example of the female forest network “Forstfrauen”

SWEDEN: A national strategy for gender equality in the forestry sector

UNITED STATES: The WOWNet in Oregon - A grass root gender equality initiative

Proceedings: 25th European Forum on Urban Forestry 2023 (EFUF2023)

The Book of Abstracts of EFUF2023 held on 24-26 May 2023 in Kraków, Poland, supported by [IUFRO Research Group 6.07.00](#), have been edited by Rik De Vreese and Agata Czaplarska. [Download the PDF!](#)

Teaknet Bulletin (October 2023)

This issue includes a brief report of the new research study by TEAKNET, IUFRO and FAO on teak resources and markets. The last study was undertaken in 2010 under the aegis of FAO and had not been updated ever since. A report on the newly initiated ITTO-BMEL project, entitled “Promoting Quality Timber Production in Smallholders and Community-based Teak and Other Valuable Species Plantations in the Tropics” is also included [in this issue](#).

Position Announcements

[IUFRO Noticeboard](#)

Academic Research Fellow in Forest Ecosystem Research

The Department of Forest Protection and Wildlife Management, Faculty of Forestry Wood Technology, Mendel Universi-

ty in Brno, is looking for motivated researchers to join a cutting-edge interdisciplinary research group dedicated to forest ecosystem research led by leading scientist, Professor Douglas L. Godbold. The team is studying the impacts of projected climate scenarios on Central European forests. The necessary data collection and practical research are carried out at the Masaryk Forest Enterprise in Křtiny, Czech Republic. The research position is funded by the five-year prestigious Horizon project EXCELLENTIA started in May 2023.

Institution: Department of Forest Protection and Wildlife Management, Faculty of Forestry Wood Technology, Mendel University in Brno

Duty station: Brno, Czech Republic

Closing date: 1 January 2024 - 23:00 (UTC)

[Click for details](#)

Seeking Professor for Program of Landscape and Recreation

National Chung Hsing University (NCHU) is inviting applications for a Full-Time Tenure-Track Position at the rank of Assistant/Associate/Professor in the Program of Landscape and Recreation. Applicants must have a PhD degree from the relevant discipline and also fit the rule of the University. Required research fields (1) and courses (2) offering are: (1) landscape planning, leisure and recreation, landscape planning and designing and (2) designing-related courses, such as landscape and recreation planning/design, landscape engineering, CAD (Computer-Aided Design), Computer Rendering and Animation, Urban spatial study, DB programming, Data Processing, Big Data.

Institution: Program of Landscape and Recreation, National Chung Hsing University

Closing date: 3 January 2024

[Click for details](#)

Assistant Professor in Hydrologic Sciences

The Department of Forest Resources and Environmental Conservation in the College of Natural Resources and Environment at Virginia Tech invites applicants for the position of assistant professor in hydrologic sciences. This is a full-time, tenure-track, 9-month appointment with primary responsibilities in research (45%) and teaching (45%) with a 10% administrative appointment in the Virginia Water Resources Research Center.

Duty station: Blacksburg, Virginia, USA

Closing date: Review will start on 8 January 2024 and continue until the position is filled.

[Click for details](#)

Graduate Research Assistants - Forest Biomass Policy and Economics

The University of Maine's Forest Policy and Economics Lab invites applicants for a funded Master's-level graduate research assistant (GRA) position focusing on forest biomass policy and economics, with an emphasis on producing biochar products for agricultural uses, starting in 2024. This position is supported by a USDA Agricultural Research Service grant focused on evaluating policy and economic incentives that to scale up the use of forest-based biochar in Maine.

Duty station: Orono, Maine, USA

Closing date: 19 January 2024

[Click for details](#)

Gund Institute Funded PhD Opportunities

The Gund Institute is a research center dedicated to understanding and tackling the world's most critical environmental challenges, where over 250 faculty, global affiliates, postdocs, and graduate students collaborate widely to understand interactions among ecological, social, and economic systems. The Institute seeks PhD students working on the Gund Institute's five research themes, and especially the connections among them. These assistantships are for individuals who have not yet started their PhDs.

Institution: Gund Institute for Environment, University of Vermont (UVM)

Closing date: 15 January 2024

[Click for details](#)

Courses

[IUFRO Noticeboard](#)

New Non-credit Online Agroforestry Short Course

UF IFAS School of Forest, Fisheries, and Geomatics Sciences SFFGS is excited to announce the launch of our new non-credit online Agroforestry short course!

Available courses:

Agroforestry I: Principles and Practices

Agroforestry II: Major Systems of the World

Agroforestry III: Principles of Plant and Soil Management

Agroforestry IV: Climate Change, Carbon Storage and Agroforestry Systems

Agroforestry V: Ecosystem Services, Food Security and Sustainable Development

Date: open enrollment, self-paced

[Click for details](#)

IUFRO Meetings

For a full list of meetings go to our [online calendar!](#)

Find non-IUFRO meetings on the [IUFRO Noticeboard!](#)

Mark your calendar!

12 and 13 Feb 2024

Division 7 Webinars to celebrate the International Day of Women and Girls in Science

First webinar in three time zones:

Session 1 - 12th February 13:00 to 15:00 GMT

Session 2 - 12th February 20:00 to 22:00 GMT

Session 3 - 13th February 07:00 to 09:00 GMT

Hosted by Joséphine Queffelec, online from the Great Lakes Forestry Center (Sault Ste Marie, Canada), and session 3 will be hosted online from the Forestry and Agricultural Biotechnology Institute (Pretoria, South Africa).

More information coming soon at:

<https://www.iufro.org/science/divisions/division-7/70000/activities/>

13-16 May 2024

**Short Rotation Woody Crops International Conference -
The Future is Green: Integrating Short Rotation Woody
Crops**

(SRWC), Agroforestry, and Ecosystem Services for Sustainable, Productive Landscapes
Columbia, MO, United States

Call for abstracts is open!

IUFRO [1.03.00](#), [1.06.01](#), [2.08.04](#)

Contact: Ron Zalesny, Ronald.Zalesny@usda.gov

Website: <https://woodycrops.wixsite.com/srwc2024>

21-23 Aug 2024

Theory and Practice to Address Defoliating Insects, Invasive Pests and Biological Control of Insects and Pathogens in Forests

Tokyo, Japan

IUFRO [7.03.06](#), [7.03.12](#), [7.03.13](#)

Contact: René Eschen, R.Eschen@cabl.org

<https://www.iufro2024tokyodiv7.com/>

8-13 Sep 2024

11th Meeting of the IUFRO Working Party 7.02.09: Phytophthora in Forests and Natural Ecosystems

Paihia, Bay of Islands, New Zealand

IUFRO [7.02.09](#)

Contact: Yvonne McDiarmid, events@plantandfood.co.nz

<https://www.scienceevents.co.nz/iufro2024/>

17-21 Sep 2024

23rd International Nondestructive Testing and Evaluation of Wood Symposium

Campinas, São Paulo, Brazil

IUFRO [5.01.00](#), [5.01.04](#), [5.01.09](#)

Contact: Raquel Gonçalves, raquelg@unicamp.br

Xiping Wang, xiping.wang@usda.gov

<https://www.ndtesymposium.org/>

14-18 Oct 2024

**IX Congreso Chileno de Ciencias Forestales:
“Descubriendo, aceptando desafíos, y cultivando
sostenibilidad”**

Valdivia, Chile

IUFRO [3.01.00](#), [3.02.00](#), [4.01.00](#), [4.02.00](#)

Contact: Marco Contreras, marco.contreras@juach.cl

<https://www.ixcongresoforestal.cl/informacion/>

Mark your calendar!

17-21 Mar 2025

Forest Establishment and Early Growth Dynamics: Reinvigorating planted forest establishment research

Rotorua, New Zealand

IUFRO [1.01.04](#)

Contact: Charles Nock, nock@ualberta.ca

Carol Rolando, carol.rolando@scionresearch.com

STOCKHOLM 2024
WORLD CONGRESS
26th IUFRO

FORESTS & SOCIETY TOWARDS 2050

26TH IUFRO WORLD CONGRESS

**Welcome to Stockholm
June 23–29 2024**

The Swedish University of Agricultural Sciences and the City of Stockholm in close collaboration with the Nordic and Baltic partners, welcome delegates from all over the world to Stockholm 2024 under the theme *Forests and Society Towards 2050*.

ABOUT THE CONGRESS

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until 15 January:](#)

[Meet the keynote speakers:](#)

[Join a pre- and/or post-Congress tour!](#)

[Book a booth space!](#)

Other Meetings

14 Mar 2024

8th Forest and Wood Innovation Wood Forum

Eberswalde, Germany

Hosted by Eberswalde University for Sustainable Development (HNEE)

Contact: Ulf Leonhard, ulf.leonhard@leoven.com

<https://www.worldresourceventures.com/index.php>

6-10 May 2024

**19th Session of the UN Forum
on Forests (UNFF19)**

New York, United States

Organized by the UNFF Secretariat

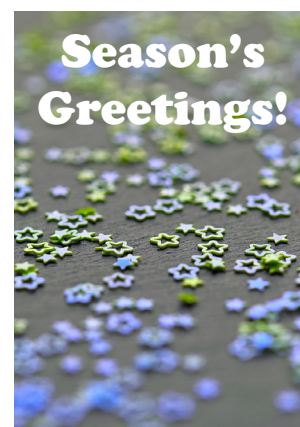
[Website](#)

19-21 Jun 2024

**4th European i-Tree
Conference & Urban Releaf
Conference**

Dundee, Scotland, UK

Organized by Treeconomics & the University of Dundee Botanic Garden: [Details](#)



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