

Annual Report 2023

The
Global Network
for Forest
Science
Cooperation





The International Union of Forest Research Organizations (IUFRO) is the global network for forest science cooperation, open to all individuals and organizations involved in forest research and forest-related sciences. It is a non-profit, non-governmental and non-discriminatory organization with a long tradition dating back to 1892. IUFRO attains its objectives by networking activities including the generation, exchange and dissemination of scientific knowledge and practices, by the provision of access to relevant information, and the assistance to scientists and institutions to strengthen their research capacities.

Vision

IUFRO is to be the global voice of forest science promoting a sustainable future of forests and society.

Mission

IUFRO advances research excellence and knowledge sharing, and fosters development of science-based solutions to forest-related challenges for the benefit of forests and people worldwide.



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A note from the editor:

This IUFRO Annual Report follows the design initiated in 2021. After a joint message by the IUFRO President and the Executive Director you will find selected activities from Divisions, Task Forces, Special Programmes and Projects presented under thematic clusters. This approach has been taken to minimize the reporting burden for IUFRO Units, to use the information collected for the Strategy Action Plan, and to move away from a mere documentation format towards a communication format. The electronic version provides hyperlinks to more information about activities, IUFRO Units and more. For the calendar of 2023 meetings, please click [here](#).

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www.iufro.org - office@iufro.org

Texts related to IUFRO activities have either been provided by IUFRO Officeholders or have been taken from IUFRO meeting webpages, flyers and reports for IUFRO News.

Please note that in the IUFRO context the term “to sponsor” a meeting does not imply any financial assistance. It means that IUFRO Officeholders are prominently involved in a meeting and that IUFRO supports the promotion of the event in its media.

A message from the IUFRO President and the Executive Director

The IUFRO network continues to provide a vital platform for global scientific exchange in all fields of forest science and its application for a more sustainable world. In 2023, our many activities included a variety of in-person, online and hybrid meetings, workshops, capacity-building courses, publications, podcasts, and other networking events organized by our Members and Officeholders in IUFRO Divisional Units and Task Forces, as well as IUFRO's Special Programmes and Projects.

Interdisciplinary and intersectoral collaboration were major themes highlighted in many events, including two regional meetings convened in March and in October: the [International Symposium Intersectoral Cooperation for Resilient Landscapes](#) hosted in India, and the [IUFRO 2023 Latin American Conference](#), hosted in Brazil. Each attracted diverse participation of around 300 participants from more than 15 countries, mostly from Asia and Latin America, respectively. Presentations and discussions focused on the role of science in building sustainable, resilient landscapes for the benefit of people and nature.

IUFRO continues to play a highly visible role on the world stage through our engagement in a number of policy forums including the [UN Forum on Forests](#), and our active involvement in the Collaborative Partnership on Forests (CPF), which launched a [Joint Call to Action for Forests towards 2030](#) that outlines how to scale up the efforts in supporting the role of forests in achieving the Global Forest Goals and SDGs. Under IUFRO's leadership, the Global Forest Expert Panels Initiative - coordinated by IUFRO's newly established Science-Policy Programme (SciPol) – produced a major global scientific assessment on [Forests and Human Health](#), launched on the International Day of Forests on 21 March. Additionally, IUFRO joined the CPF Joint Initiative “Sustainable Wood for a Sustainable World”, contributing with activities of a new IUFRO-led project, [WOOD for GLOBE](#), which aims at strengthening global exchange and dialogue on sustainable wood policy.

IUFRO's many partnerships with inter-governmental, governmental, private sector and non-governmental institutions, continue to thrive. [TEAMING UP 4 FORESTS](#), a Science-Business Platform initiated with the Mondi Group in 2021 to better understand climate change impacts on forests and identify response measures in line with the Sustainable Development Goals, organized several important activities in 2023. IUFRO also co-hosted a [forum](#) (in November) to catalyze coordinated and impactful

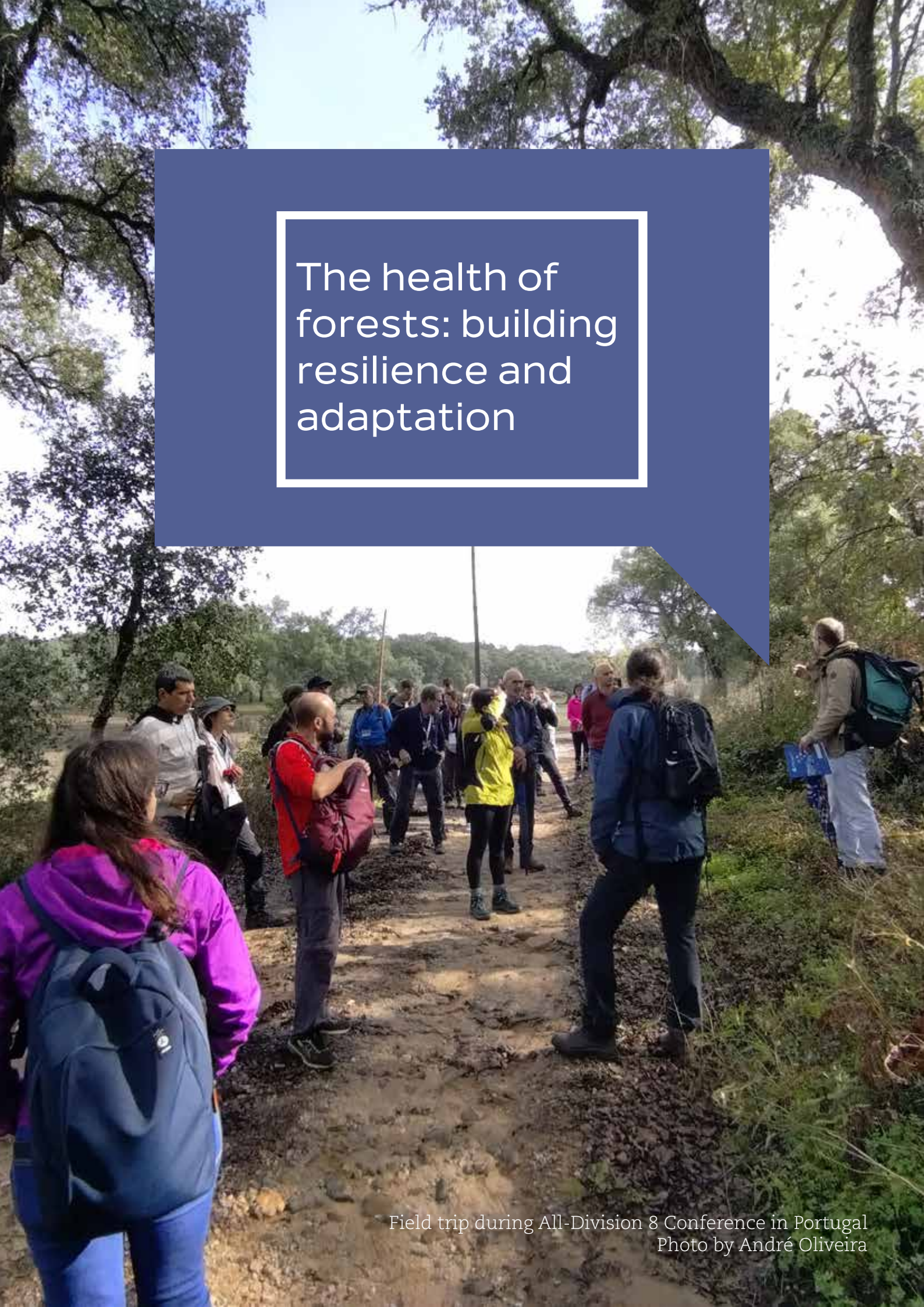
international action addressing forest research needs and priorities of Ukraine. In December 2023, IUFRO became the host of the Secretariat of the European Wood Policy Platform ([woodPoP](#)). WoodPoP is an innovative policy dialogue platform which brings together all relevant actors to advance the sustainable use of wood.

The 2023 IUFRO Board meeting, hosted by the Indian Council of Forestry Research and Education (ICFRE) in Dehradun, India, on 27-28 March 2023 was historic, yielding a number of decisions critical to advancing our post-2020 Strategy and strategic goals. These included recommendations (subsequently approved by IUFRO's International Council) for: (1) the host of the 2029 IUFRO World Congress, to be held for the first time on the African continent, in Nairobi, Kenya, and (2) the membership of the IUFRO Board for the 2024-2029 term beginning at the end of June. The new Board will be significantly more balanced in terms of gender and regional/cultural representation and led by the first female President in IUFRO's 132-year history, Prof. Daniela Kleinschmit from the University of Freiburg, Germany.

Looking ahead to 2024, preparations for the upcoming [XXVI IUFRO World Congress](#) “Forests & Society Towards 2050” in Stockholm are well advanced. This Congress presents an opportunity to showcase the many roles that forest science and our diverse global forest science community play in optimizing the contributions of forests to the 2030 Agenda and its Sustainable Development Goals, the 2050 vision of Living in Harmony with Nature of the Convention on Biological Diversity, and to meeting the critical climate target of zero net emissions. The tireless dedication and enthusiasm of the Congress Organizing Committee, the Congress Scientific Committee, IUFRO Headquarters, and the hundreds of IUFRO Officeholders who have been involved in the organization of the scientific program, guarantee that this will be a fantastic Congress.

We thank all our members, partners and donors, and the many individuals serving our network in a voluntary capacity for their continued support in connecting forests, science and people.

John Parrotta, IUFRO President
Alexander Buck, Executive Director

A group of people, mostly young adults, are gathered on a dirt path in a forest. They are dressed in outdoor gear like jackets and backpacks. Some are looking towards the camera, while others are talking or looking around. The forest has large trees and dense foliage. A blue semi-transparent box with a white border is overlaid on the top half of the image, containing the title text.

The health of forests: building resilience and adaptation

Field trip during All-Division 8 Conference in Portugal
Photo by André Oliveira

The health of forests: building resilience and adaptation

The effects of climate change are threatening forest health globally with increasing fire frequency and damage by forest pests and pathogens. This theme focuses on the impacts of climate change on forests and how to increase their resilience and capacity to adapt. The following selection of IUFRO events reflects the role of forests in management of risks for adaptation, mitigation and restoration measures in forest management.

Forested Landscapes in the Post-2020 Global Biodiversity Framework

24-27 October 2023

The IUFRO Forest Environment [Division 8 Conference](#) in Évora, Portugal, focused on the critical role of forested landscapes in the Post-2020 Global Biodiversity Framework. Participants discussed the relationship between humans and nature 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; and forest landscape restoration initiatives: biodiversity, economy and people.

The conference included field trips that enabled participants to gain insight into the various dimensions of the silvopastoral system *Montado* as well as its main product, cork.

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

The new IUFRO Working Party on “Silvopastoral Systems and Pastoralism” was also launched at the conference to be hosted in the “Forest

ecosystem functions” Research Group of IUFRO’s Division 8.

This multidisciplinary unit will promote and facilitate 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 welcomes 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.



IBFRA Conference in Finland
Photo by Lotta Mattila

IBFRA Conference: Climate Resilient and Sustainable Forest Management

28-31 August 2023

Apart from the impacts on the ecosystems, the livelihoods of those reliant on its resources are also affected. With this year’s theme of “Climate Resilient and Sustainable Forest Management”, the 20th [International Boreal Forest Research Association’s \(IBFRA\)](#) Conference in Helsinki, Finland, aimed to explore ways to address the challenges caused by these changes. The conference was supported by IUFRO Working Party 8.01.06 Boreal and alpine forest ecosystems.

The conference presentations covered a variety of topics from cross-cutting themes of biodiversity and climate change to forest



Conference in France
Photo provided by Christophe Orazio

management, forest operations, remote sensing, artificial intelligence, machine learning, economics, and policies.

Additionally, there was an interactive panel discussion on collaboration and communication between forest scientists and forest industry and a demonstration session on sensor technologies and gamification.

Global Challenges and Innovative Management of Bark and Wood Borers in Planted and Natural Forests

29-31 August 2023

The aforementioned changes, including climate change and economic globalization, pose serious threats to the health of the world's forests by favoring the emergence or invasion of an increasing number of forest pests. Wood and bark beetles play a prominent role in this context due to the spatial extension and intensity of their damage, with long or chronic outbreaks, causing the mortality of a considerable number of trees or forest areas.

Many [IUFRO Working Parties and Task Forces gathered](#) in Bordeaux, France, to provide knowledge and tools for forest scientists and practitioners searching for solutions to mitigate the risk of wood and bark beetle attacks.

The use of attractive molecules from trees or congeners is proving a useful and effective method for trapping native and invasive bark beetles and estimating their infestation levels. These semiochemicals are also important for understanding the interactions between the different species of bark beetles attacking the same trees and eventually manipulate their behavior. This approach could be complemented by visual lures, as shown by cutting-edge research into insect vision. Innovative detection

methods are being developed, such as smart traps and trained sniffer dogs.

Novel and Classical Strategies to Manage Forest Health in Plantations

18-21 September 2023

Mato Grosso do Sul, Brazil, has the second largest area of forest plantation in Brazil and faces challenges from a range of pests and diseases. It was therefore an excellent location to gather and discuss biological control of insect pests, biosecurity in forestry, new technologies in pest and disease management, and plant breeding resistance for pest and diseases, amongst others. The IUFRO WP 7.02.13 and 7.02.03 joint [meeting](#) enabled researchers and forest managers to present research and discuss operational management of pests and diseases from many countries across the Southern Hemisphere.

It highlighted differences across continents such as differing pests and disease issues of endemic and native pests of eucalypt plantations in Australia (where eucalypts are native) and South America (where eucalypts are introduced). Cross-country collaboration can assist in managing this broad suite of pests and pathogens.



Opening of meeting in Brazil
Photo provided by Stuart Fraser

ACID RAIN 2020: The Future Environment and Role of Multiple Air Pollutants

17-12 April 2023

The [International Conference on Acid Deposition](#) has since 1975 contributed to a comprehensive understanding of processes in air pollution. IUFRO Working Parties 8.04.01, 8.04.03 and 8.04.06 were part of the organization of this event in Niigata, Japan.

The conference addressed topics such as emissions and their evaluation by monitoring and modeling, atmospheric chemical and physical processes, air pollution and climate change, amongst others.

Special issues will be published in two scientific journals namely, *Aerosol and Air Quality Research* (AAQR) and *Ecological Research*. The next conference should be within 2 to 3 years.

Forest Factor Conference: More Nature to Fight Climate Change

6-7 June 2023

The protection of forests is recognized as an essential element in the global fight against climate change due to their exceptional capacity to absorb and store carbon, but it is also considered of vital importance for biodiversity and for the water and energy cycles. Solutions that effectively balance the conservation and sustainability of the use of forest resources are possible if the value of the forest in all its complexity is enhanced.

Scientists, representatives of international organizations, universities and research centers, environmental educators and journalists contributed to [this conference](#) in Rome, Italy, that covered topics like conservation and restoration of forests for our future; knowing, contrasting and preventing anthropic impact; champions of the forest: women, indigenous people, youth; forests and climate: storytelling and action; information, education and training: awareness and participation as a protection factor; and research and training: a transformative change.

Other online events

The fourth international [workshop](#) of IUFRO Working Party 2.08.05 Evolution and adaptation of *Fagaceae* and *Nothofagaceae* was held online on 16 May and addressed questions of species diversity and local adaptation, genome and pangenome studies, and systematics.

IUFRO Task Force on Monitoring Global Tree Mortality Patterns and Trends held the following webinars:

- Contributions of remote sensing to characterizing post-disturbance forest recovery in boreal forests. Watch [here](#)
- Tracking forest dynamics across spatial, temporal and ecological scales using airborne LiDAR. Watch [here](#)
- New approaches for monitoring forest functioning in a changing climate – crossing scales from molecular mechanisms to stand wide processes. Watch [here](#)
- Integrating plant physiology and community ecology across scales through trait-based models to predict drought mortality. Watch [here](#)
- Past disturbance history, tree longevity, and recent tree mortality in temperate primary forests of east and south-east Europe. Watch [here](#)



The management
of forests:
optimizing
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The management of forests: optimizing methods, tools and rules

As the world population is projected to increase by approximately 30 percent by 2050, the need for food, fuel, fiber and other bio-based products and services will rise sharply. This section provides an overview of activities in the framework of forest management, highlighting the optimization of methods, tools, and regulations for sustainable forestry to meet those needs. These IUFRO events cover silviculture, forest operations, planted forests, and the integration of technology and economics amongst others.



Latin America Conference: Sustainable Landscape Management – the role of forests, trees, agroforestry and their interactions with agriculture

17-18 October 2023

The [IUFRO LA-2023 Conference](#) took place in Curitiba, Brazil, and offered a platform for presenting and discussing different initiatives that aim to create more resilient landscapes for the benefit of people and nature.

The Conference provided an opportunity to present innovative research results on topics such as planted forests with native and exotic species, sustainable forest management in watersheds, sustainable forest mosaics in the landscape, sustainable natural forest management including secondary forests and forest restoration, and integrated agricultural production systems. Forest management in natural forests was one of the most discussed topics and the vision of the panelists converged on the need for greater visibility of the topic,

avoiding distortions and confusion with the topic of deforestation and illegal logging.

The event also strengthened the communication between the scientific community and public authorities and private initiatives in the region to promote regional and international cooperation. An example of this was the Regional Dialogue of the Sustainable Wood for a Sustainable World initiative organized by FAO.

Close-to-Nature Silviculture: Experiments and Modelling for Forestry Practice

7-8 February 2023

IUFRO Divisions 1 and 4 joined forces to host an All-Division [online conference](#) to showcase and discuss the concept, science, and practice of close-to-nature silviculture, focusing on experiments and modelling for forestry practice. Close-to-nature silviculture is considered an alternative approach to traditional or conventional silviculture. It aims to emulate nature and to integrate natural processes into management. Some of the challenges to implement close-to-nature silviculture are the lack of data to adequately model the impact of silviculture on growth, stem quality, and tree health in uneven-aged, mixed species stands.

Tree-based Diversified Land-use Systems: Augmenting Livelihood Security and Industrial Growth

15-17 February 2023

This [conference](#) on tree-based land use systems was hosted in Gujarat, India, and focused on the field of forestry including agroforestry. Topics ranged from production and raising to plantation, tending, harvesting, processing and marketing issues of trees, tree products and other products derived from tree-based land use systems.

***Pinus patula* Plantations in Africa**

23 May 2023

At the 3rd edition of the [webinar](#) series “Pine Silviculture: International Success Factors”,

keynote speaker and IUFRO Board Member Wubalem Tadesse Wondifraw of the Ethiopian Environment and Forest Research Institute (EEFRI), talked about: *Pinus patula* Plantations in Africa: An Overview of its Silvicultural Traits and Use under the Sustainable Development Goals.

Pinus patula is a very fast growing tree and the most widely planted pine species within African commercial plantations. The species is planted in Ethiopia, Kenya, Tanzania, Malawi, Zimbabwe, Madagascar, and South Africa and is mainly used for timber and firewood. The increase in forest area and its maintenance in good conditions contribute to the UN Agenda 2030.

Agroforestry Systems in the World: Differences and Similarities

26-27 July 2023

Agroforestry is a land use system that integrates forest crops, agriculture crops, and livestock, including medicinal and aromatic plants in a certain space and time. The IUFRO Agroforestry Research Group (1.04.00) held an online [conference](#) to examine the differences and similarities of agroforestry practices in the world.

The goals of this conference were to analyze and discuss the concepts, products and their ranking, the species and the stand structure, the management options, the modelling, and the practice of agroforestry systems. Key issues include research on agroforestry systems, namely silviculture, modelling, and management

Improvement and Culture of Eucalypts

20-24 November 2023

The IUFRO 2.08.03 [conference](#) in Colonia del Sacramento, Uruguay, entitled “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.

The event featured information about the exploration of genetic resources of *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.



Modern Technologies and Engineering in Sustainable Forest Utilization

4-6 June 2023

This [conference](#) in Krakow, Poland, was co-sponsored by IUFRO Division 3 Forest Operations Engineering and Management and Research Group 3.03.00 Forest Ergonomics. It aimed at exchanging knowledge on current scientific and practical achievements in the field of harvesting of timber and other forest raw materials, based on modern technologies and engineering management of stands. The discussions showed that integrated procurement methods (logistics) for wood raw material, non-timber raw materials and other ecosystem services are a challenge for actors in the broader forest-wood industry, especially after the pandemic period.



International Congress on Planted Forests

7-10 October 2023

The 5th [International Congress on Planted Forests \(ICPF\)](#) took place in Nairobi, Kenya, and discussed global challenges and opportunities of planted forests, with the support of the IUFRO Task Force on Resilient Planted Forests Serving Society and the Bioeconomy.

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 same Task Force co-organized [Let's Talk about Planted Forests](#), a webinar series. The videos are available under the following links (login required):

- [Tree breeding](#)
- [Flash talks](#)
- [Monitoring and Control of Invasive Pests and Pathogens in EU Planted Forests](#)
- [Results of the Virtual Forests Project: New IT Tools for Forest Education](#)

Other online events

Webinar: State-of-the-art NIR Spectroscopy for Wood Science and Technology, organized by Working Party 5.04.08 on sawing, milling and machining. Watch [here](#)

Advancing Silvicultural Technology

22-24 August 2023

This [conference](#) in Umeå, Sweden, which involved IUFRO Research Group 3.02.00, Stand Establishment and Treatment, provided an overview of ongoing research and development in the Nordic-Baltic region. The presentations covered the whole chain of forest regeneration and restoration activities like soil preparation and planting, young stand management as well as thinning operations. The key issues were new solutions for mechanized planting and especially different innovations for precision planting. Automation in planting operations was also an important topic with several new innovations connected with today's planting machines or installed on semiautonomous solutions for tomorrow, as well as new solutions for how to use different kinds of data collected with satellites, drones or from the ground, for planning regeneration activities or evaluating regeneration success.

Deal for Green?

25-27 September 2023

The [conference](#) 'Deal for Green? Contribution of managerial economics, accounting, and cross-sectoral policy analysis to climate neutrality and forest management' was held in Ljubljana, Slovenia, and discussed the potential outcomes of the EU Green Deal in relation to forests and forestry as well as the contribution of managerial economics, accounting, and cross-sectoral policy analysis to climate neutrality and forest management.

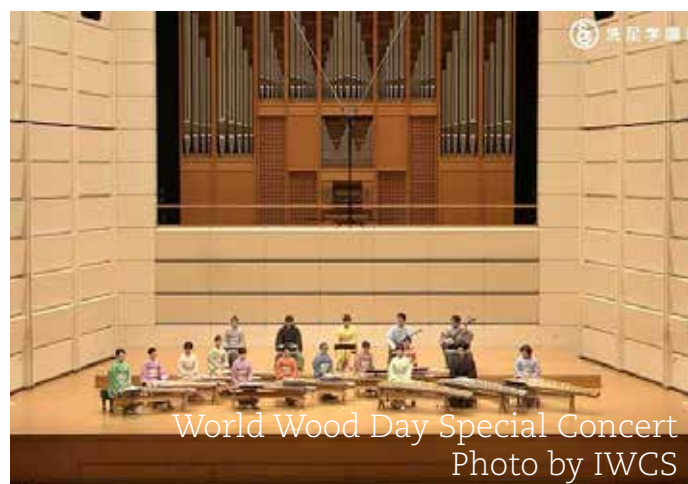
IUFRO Working Parties on Managerial Economics and Accounting, Social Innovation and Entrepreneurship, and Cross-sectoral Policy Impacts on Forests and Environment were actively involved in the event.

The societal
benefits of
forests: managing
resources, services
and expectations



The societal benefits of forests: managing resources, services and expectations

Forests are not just a collection of trees, they are complex ecosystems that play a critical role in the well-being of our planet and society. They provide a multitude of benefits, from supporting human health to offering ecosystem services, such as carbon sinks, absorbing CO₂ from the atmosphere and mitigating the effects of climate change. Forests regulate water cycles, prevent soil erosion, and maintain biodiversity, too. Beyond their environmental contributions, forests also offer a wealth of products. The IUFRO activities in this section deal with these benefits, exploring how IUFRO is committed to harnessing the forests' potential in a sustainable manner.



Towards A Better Understanding of Forest-Health Relations

21 March 2023

The International Day of Forests is celebrated to raise awareness of the importance of all types of forests. Each year the Collaborative Partnership on Forests (CPF) chooses a theme for the day. In 2023, the theme was Forests and Health. In line with the theme, IUFRO celebrated the day by launching the most comprehensive [global assessment](#) to date of the links between forests and human health.

The Global Forest Expert Panels (GFEP) report underpins the One Health perspective, which recognizes that the health of humans, animals, plants, and the wider environment are closely linked and interdependent. Forests, trees and green spaces impact human health across all life stages. Allergies, diseases transmitted by

animals or reduced air quality because of forest fires can also affect human health. In addition, global crises such as climate change, land-use change, urbanization and biodiversity loss endanger the important role that forests and trees provide as safety nets for food security and livelihoods of vulnerable populations.

Moreover, the GFEP initiative has now become a workstream within the fully-fledged Science-Policy Programme (SciPol) in accordance with the post-2020 Strategy of IUFRO and its objective to further enhance IUFRO's impact on policy processes, including the GFEP initiative, follow-up studies and regional activities.

In the context of follow-up studies, IUFRO initiated a new report on the complexities and challenges of international forest governance to analyze and synthesize information published since the previous global assessment in 2010.

Celebrating World Wood Day

21-22 March 2023

The International Day of Forests shares the date with the World Wood Day, which is a cultural event aimed to raise awareness on the importance and value of wood and its responsible uses, and the 2023 theme was Wood in Cultural Heritage. One of the events to mark the day was the [2023 Online World Wood Day Symposium and the Fifth IUFRO Forest Products Culture Colloquium](#). IUFRO Division 5.00.00 Forest Products, Research Group 5.15.00 Forest Products Culture and Working Party 9.03.02 Forest Culture co-organized the meeting.

Global Reviews on Forest Management and Provision of Hydrological Functions

22 March 2023

The day after the International Day of Forests is the World Water Day, which emphasized the need to accelerate change to solve the water and sanitation crises. To observe the day, a [special issue](#) of *Forest Ecology & Management* developed by the IUFRO Task Force Forests and Water Interactions in a Changing Environment was launched. It highlights the critical role that forests play in sustaining water resources and

the importance of managing forests with a view to water.

Linking Forests, Energy and Livelihoods can help to faster achieve SDGs

4 April 2023

More integrated approaches between forests, energy and livelihoods can accelerate progress towards the Sustainable Development Goals according to a [joint publication](#) of UNFF, FAO, IUFRO and UNDP.

Such approaches offer more effective and efficient models of development that enhance synergies and mitigate the negative impacts of trade-offs through stronger governance within and across these sectors.

Application of Forest Therapy Principles in the Creation of Green Environment

20 April 2023

With advances in technology and civilization, people feel more and more disconnected from the natural world, with very negative consequences for health. Visits to nature contribute to the renewal and maintenance of mental health. In line to what the report from the GFEP on Forests and Human Health evaluated, this [conference](#) in Birštonas, Lithuania, with participation of IUFRO Research Group 6.01.00 Forest Recreation, aimed to exchange ideas, strengthen cooperation between different research centers and share best practices in forest therapy and green and blue infrastructure planning and design.

Forest Plantations Congress 2023

23-25 May 2023

The Forest Plantations [Congress](#) took place in São Paulo, Brazil, and was supported by IUFRO Working Party 1.02.01 Ecology and Silviculture of Plantation Forests in the Tropics. The agenda focused on how forest plantations have contributed to society, including economic and social aspects and the consideration of ecosystem services. The take-home message

was that the forest plantation sector has a great potential to grow and improve with the advancement of new technologies based on artificial intelligence, modeling, and innovative processes.

The Forest Treasure Chest - Delivering Outcomes for Everyone

4-8 June 2023

The IUFRO All-Division 5 Forest Products [conference](#) took place in Cairns, Australia, and focused on improving sustainable trade in timber and forestry, adapting forests to climate change, and cooperation between regional forestry and indigenous communities.

As an introduction to Division 5, a video was produced. Watch [here](#)

Challenges and Opportunities for Boosting the Teak Value Chain

4-8 June 2023

Teak (*Tectona grandis* L. f.) is a high-priority tropical species for industries and planted forests in Asia-Pacific, Africa, Latin America and the Caribbean. A [side event](#) convened jointly by IUFRO Working Party 5.06.02 Utilization of Planted Teak, ITTO and TEAKNET during the IUFRO All-Division 5 Conference explored means of boosting the value of teakwood products.



Small-scale Forestry and Modern Society

22-26 August 2023

Small private forests are an important forest ownership type in almost all countries, varying greatly in terms of size, objectives, and organizational structures. This [conference](#) in Tartu, Estonia, highlighted the increasing influence of society and more intensive interaction between society and forest owners. It created a space to examine and understand these interactions, as well as provide guidance on how small private forests can thrive and evolve in a society that is undergoing rapid change.

Improving Access to Sustainable Forest Materials in a Resource-constrained World

20-22 September 2023

The 55th [International Symposium on Forest Mechanization \(FORMEC\) and 7th Forest Engineering Conference \(FEC\)](#) with the title *Improving access to sustainable forest materials in a resource-constrained world*, took place in Florence, Italy, with the objectives to share state-of-the-art knowledge about harvesting operations, with a focus on steep terrain, and to build a global community in order to improve the networking opportunities for forest scientists within the forest engineering sector. The event also involved IUFRO Working Party 3.01.03 Harvesting and Processing Systems.

Wood Science and Engineering in the 3rd Millennium

2-4 November 2023

This [conference](#) in Brasov, Romania, focused on the latest findings and developments in wood research, including topics such as 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. It was organized by members of IUFRO Division 5. The papers will be published in the open access journal *ProLigno* and in the special issue of MDPI journal *Applied Sciences*.

3rd Think Tank Meeting of TEAMING UP 4 FORESTS

15-16 June 2023

TEAMING UP 4 FORESTS, a science-business platform initiated by IUFRO and Mondi in 2021, held a [meeting](#) in Vienna to discuss the challenges of climate change faced by pan-European forests, and jointly identify solutions and response measures. In this event, some preliminary findings of a synthesis study were presented, exploring ecological, policy, socio-economic, and technological drivers for the future supply of wood and other forest goods and services. The discussions built on previous Think Tank and Stakeholder Dialogues.

WOOD FOR GLOBE

[WOOD FOR GLOBE](#) aims at creating a global wood policy platform to support the use of sustainable wood for a carbon-neutral bioeconomy worldwide. The project is led by IUFRO in collaboration with FAO and the Centre for Bioeconomy of the University of Natural Resources and Life Sciences, Vienna. This initiative comes as an answer to the Ministerial Call on Sustainable Wood announced at the XV World Forestry Congress.

Other online events

FAO-IUFRO (Task Force on Forest and Water Interactions in a Changing Environment) [webinar series](#) - Forest management and provision of hydrological functions:

- Forest management practices for protection of hydrological functions
- Forest-Water management under climate change
- Practical tools for managing the forest-water nexus



The future
of forests:
improving
knowledge, data
and capacities

Photo by Gerda Wolfrum

The future of forests: improving knowledge, data and capacities

This section is close to IUFRO's mission of advancing research excellence and knowledge sharing. It underlines the network's commitment to broadening the understanding of forests worldwide, sharing of data and building capacities. The following activities revolve around modelling and measurement techniques, innovation, and education, nurturing a new generation of forest stewards equipped with the knowledge and passion for forests. There are also some activities dealing with emerging issues, anticipating challenges and opportunities in a rapidly changing world.



Inaugural session of the Symposium
Photo by ICFRE

Cooperating Across Sectors for Resilient Landscapes

29-30 March 2023

This [international symposium](#) took place in Dehradun, India. Participants discussed forest landscape restoration (FLR) issues and shared experiences on innovative approaches with a view to preparing strategies and roadmaps for the future. The discussions put an emphasis on the use of nature-based solutions, indigenous species, cross-sectoral cooperation, upstream and down-stream integration, and on linking up landscape management with supply chain governance.

The event also offered a delegation of students from the International Forestry Students' Association (IFSA) an enriching experience and allowed them to gain knowledge first-hand from people involved in ecological restoration

and working on the ground in building climate resilient forests and landscape.

Forestry Science: Development and Progress Based on the Past

10 February 2023

This was the first scientific [conference](#) for young scientists of Southeast Europe in Jastrebarsko, Croatia, and was supported by IUFRO. It covered new scientific findings from the wider area of forestry – including ecology, genetics, silviculture, forest protection, forest management, and gave an opportunity for young scientists to present their research, as well as strengthening awareness of the role and importance of forests.

Forest Communicators Explore Innovation

20-22 June 2023

The European forest communicators got together in Prague, Czechia, for the UNECE/FAO Forest Communicators' Network (FCN) annual [meeting and workshop](#). The meeting focused on the role of innovative technology in impactful communication, such as generative artificial intelligence, virtual reality, and podcasting (including a presentation by IUFRO HQ), and included exciting hands-on training opportunities and valuable tips and guidance for the use of these tools.

Teaching at the Interface of Machine Learning and Forestry

7-18 August 2023

IUFRO Division 8 Forest Environment supported a [summer school](#) in Joensuu, Finland. During the first week students visited the field and discussed about the role of forest information for resilience. The second week focused on the application of machine learning. The course was based on an existing data ecosystem and all computations happened in the cloud. The use of these platforms makes analysis of remotely sensed data, and collaboration across organizations easy.



CPF Call to Action for Forests towards 2023 18 September 2023

During the 2023 SDG Summit in New York, USA, the call outlined how the Collaborative Partnership on Forests (CPF), of which IUFRO is a member, will scale up its efforts in supporting the role of forests in achieving the Global Forest Goals and SDGs towards 2030. This will result in a more effective and impactful implementation, with synergies and lower transaction costs, and will serve as a flagship for the Decade of Action for the SDGs.

Forest Education – Merging Theory and Practice with the Help of Digital Tools 2-4 October 2023

The IUFRO [Symposium](#) on Forest Education Helsinki, Finland, involving the IUFRO Research Group 6.09.00 and the Joint IUFRO-IFSA Task Force on Forest Education, discussed gaps in forest education at university and college level including further education, forest education curricula, and digital tools and platforms.

Joint Conference of Southern and Northeastern Mensurationists 8-10 October 2023

This [conference](#) in Knoxville, USA, gathered people to discuss and explore the latest advancements and opportunities in forest biometrics and measurements. IUFRO was represented by members of Division 4.

Forum on Ukraine Forest Science and Education: Needs and Priorities for Collaboration 21-22 November 2023

This [forum](#) took place in Laxenburg, Austria, to discuss practical measures and strategic

steps toward supporting sustainable forest management in Ukraine. It facilitated scientific bridge-building by identifying and opening necessary and new communication channels to improve research and education collaboration with the Ukraine forest science sector, gathered expert recommendations, and identified a sustainable pathway forward under war and post-war conditions.

Forest Related Nature-based Approaches: Review of Terms and Concepts – From Afforestation to Forest Landscape Restoration

[IUFRO Occasional Paper No. 36](#) seeks to clarify seven common terms and concepts used in the scientific literature, namely Nature-Based Solution, Ecosystem Based Adaptation, Integrated Landscape Management, Forest Restoration, Forest Landscape Restoration, Afforestation and Rewilding, and how to use them more effectively to support forest landscape restoration implementation.

GLF Restoration Stewards 2023

The Restoration Stewards program provides funding, mentorship and training to deepen the impact of youth-led restoration projects. IUFRO as a charter member of the Global Landscapes Forum is a strong partner in this initiative through its Special Programme for Development of Capacities (SPDC). This year IUFRO matched Gloria Amor Paredes from the Philippines with



her mentor, Marilyn Combalicer, Associate Professor in the Department of Forest Biological Sciences at the University of Philippines Los Baños. IUFRO nominated her given her expertise in forest and restoration ecology particularly in the Philippines.

Other online events

On 25 February, there was a workshop on scholarship application that involved the Joint IUFRO-IFSA Task Force on Forest Education. Watch [here](#)

Another online workshop about how to carry out a systematic review of literature for forest science was organized on 11 October. Watch [here](#)

Forest Mensuration and Modelling Chats series by IUFRO Research Group 4.01.00:

- Assessment of deforestation and forest degradation in community resource management areas in the Northern Savanna zone. Watch [here](#)
- Small area estimation in forest inventories, what to do when sample sizes become small. Watch [here](#)
- Tree species growth of oak and pine in mixture - a dynamic sensitive equilibrium. Watch [here](#)
- Measuring biomass and carbon stock in forests of southwestern Amazonia: from science generation to dissemination. Watch [here](#)
- Modeling allometric relationships for Caribbean trees using a mixed-effects random forest algorithm. Watch [here](#)

Forest Restoration Talks organized jointly by SUPERB and IUFRO's Task Force Transforming Forest Landscapes for Future Climates and Human Well-Being:

- Restoring mountain forests in the Berchtesgaden National Park. Watch [here](#)
- Assisted translocations of tree populations in support of the European forest carbon sink potential. Watch [here](#)
- (In)Coherences in EU Forest-Related Policies under the framework of the Nature Restoration Law. Watch [here](#)
- New Standards of Practice to Guide Ecosystem Restoration - Views from Science and Practice. Watch [here](#)
- Public perceptions of Forest Landscape Restoration across the world. Watch [here](#)
- Situating forest restoration with digital methods. Watch [here](#)
- Restoration Policy Accelerator: A journey to inspire, innovate and streamline restoration policies. Watch [here](#)
- Billions of trees? The how, where and don'ts of tree planting. Watch [here](#)
- Governments commit to forest restoration. But what does it take to restore forests? Watch [here](#)
- European forest restoration: urgently needed, but where and how? Watch [here](#)
- Forest Landscape Restoration and local community involvement: delivering on the promises to succeed in restoration. Watch [here](#)

Publications

IUFRO [Annual Report 2022](#)

[IUFRO News](#): 12 issues (3 double issues)

[IUFRO Vernetzt](#): 4 issues (German newsletter)

IUFRO's [Branching out: the forest podcast](#): 4 episodes

IUFRO Media [Releases](#): 7

Joint Publications:

- Forests, Energy and Livelihoods ([Download](#))

IUFRO World Series 41:

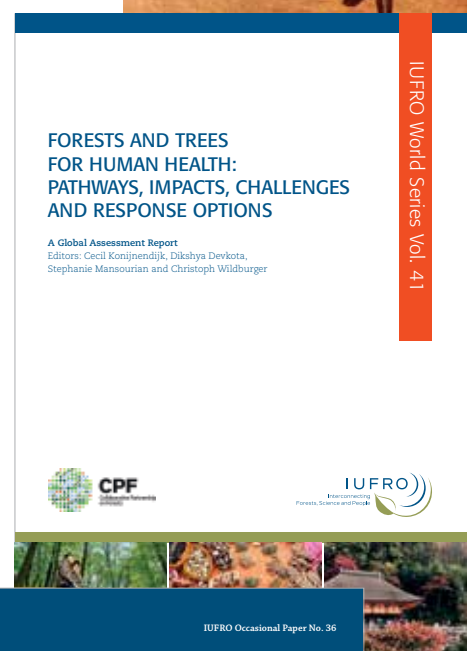
- Forests and Trees for Human Health: Pathways, Impacts, Challenges and Response Options. ([Download](#))

IUFRO Policy Briefs

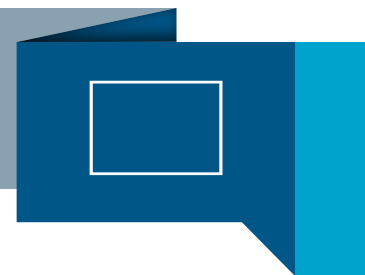
- Forests and Trees for Human Health: Pathways, Impacts, Challenges and Response Options. ([Download](#))
- Forests for Human Health in Asia. ([Download](#))

IUFRO Occasional Paper No. 36

- Forest Related Nature-Based Approaches - Review of Terms and Concepts – from Afforestation to Forest Landscape Restoration. ([Download](#))



IUFRO Structure and Meetings



1121 voluntary IUFRO Officeholders coordinate IUFRO Units and Task Forces.

A total of 91 meetings were organized, 44 virtual ones and 47 in-person (including 3 hybrid ones).

Region

Africa	48
Asia	163
Europe	433
Latin America	84
Northern America	207
Oceania	36

Region

Africa	2
Asia	6
Europe	28
Latin America	6
Northern America	4
Oceania	1

257 IUFRO Units: 9 Divisions with 63 Research Groups (RG) and 185 Working Parties (WP)

Division 1 – Silviculture (10 RGs; 21 WPs)

Division 2 – Physiology and Genetics (5 RGs; 29 WPs)

Division 3 – Forest Operations Engineering and Management (10 RGs; 5 WPs)

Division 4 – Forest Assessment, Modelling and Management (5 RGs; 27 WPs)

Division 5 – Forest Products (11 RGs; 21 WPs)

Division 6 – Social Aspects of Forests and Forestry (10 RGs; 3 WPs)

Division 7 – Forest Health (2 RGs; 25 WPs)

Division 8 – Forest Environment (4 RGs; 27 WPs)

Division 9 – Forest Policy and Economics (6 RGs; 27 WPs)

9 IUFRO Task Forces

Forest Education

Monitoring Global Tree Mortality Patterns and Trends

Forests and Water Interactions in a Changing Environment

Gender Equality in Forestry

Resilient Planted Forests Serving Society & Bioeconomy

Strengthening Mediterranean Nursery Systems for Forest Reproductive Material Procurement to Adapt to the Effects of Climate Change

Unlocking the Bioeconomy and Non-Timber Forest Products

Transforming Forest Landscapes for Futures Climates and Human Well-Being

Precision Pest Management (PPM) in Forest Ecosystems

4 IUFRO Special Programmes and Projects

Special Programme for Development of Capacities (IUFRO-SPDC)

Science-Policy Programme (SCIPOL)

Special Programme Directors' Forum (IUFRO-SPDF)

Special Project on World Forests, Society and Environment (IUFRO-WFSE)

IUFRO Honours and Awards

Distinguished Service Award

In recognition of her outstanding and valuable service to IUFRO, Maria Patek, Director General Forestry and Sustainability at the Austrian Federal Ministry for Agriculture, Forestry, Regions and Water Management, received IUFRO's Distinguished Service Award at the 26th Austrian Forest Forum on 13 June 2023.

Among other things, Maria Patek has played an instrumental role in initiating, guiding, and supporting new collaborative activities of IUFRO along the forest-based value chain and with other sectors such as water. She has been a strong advocate for strengthening communication and improving gender equality in IUFRO and the entire forest sector.

Certificates of Appreciation

Division 5

Charlotte Lee, International Wood Culture Society, IUFRO Division 5, for her valuable contributions to successfully organizing and managing the World Wood Day Symposium and Forest Products Culture Colloquium cooperatively with IUFRO Division 5 and Division 9 for several years.

Mike Hou, International Wood Culture Society, for the excellent preparation of a video presentation for the IUFRO All-Division 5 Conference The Forest Treasure Chest - Delivering Outcomes for Everyone on 4-8 June 2023 in Cairns, Australia.

Momo Hsiao, International Wood Culture Society, for the excellent preparation of a video presentation for the IUFRO All-Division 5 Conference The Forest Treasure Chest - Delivering Outcomes for Everyone on 4-8 June 2023 in Cairns, Australia.

Roger Meder, University of the Sunshine Coast & Meder Consulting, Australia, IUFRO Division 5, for the excellent organization of the IUFRO All-Division 5 Conference The Forest Treasure Chest - Delivering Outcomes for Everyone on 4-8 June 2023 in Cairns, Australia.



Maria Patek and Alexander Buck
Photo by IUFRO

For longstanding services

Swoyambhu Man Amatya, Agriculture and Forestry University (AFU), IUFRO Division 1, for his long-standing and dedicated work for IUFRO as an officeholder in Division 1 and member of the International Council, and his contributions to forestry and agroforestry in Nepal.

Ghana Management Committee Meeting

Mercy Afua Adutwumwaa Derkyi, University of Energy and Natural Resources, IUFRO Division 9, for the excellent organization of the IUFRO Management Committee meeting and associated events in Kumasi, Ghana on 20 September 2023.

India Board Meeting

Arun Singh Rawat, Indian Council of Forestry Research and Education (ICFRE), IUFRO International Council, for leading the organization of the International Symposium "Intersectoral Cooperation for Resilient Landscapes" on 29-30 March 2023 in Dehradun, India.

Dinesh Kumar, Forest Research Institute Dehradun, India, for contributing to the organization of the International Symposium “Intersectoral Cooperation for Resilient Landscapes” on 29-30 March 2023 in Dehradun, India.

H.S. Ginwal, Forest Research Institute Dehradun, India, for contributing to the organization of the International Symposium “Intersectoral Cooperation for Resilient Landscapes” on 29-30 March 2023 in Dehradun, India.

Manisha Thapliyal, Forest Research Institute Dehradun, India, for contributing to the organization of the International Symposium, “Intersectoral Cooperation for Resilient Landscapes”, on 29-30 March 2023 in Dehradun, India.

Khosro Sagheb-Talebi, Ministry of Agriculture, Forest Research Division, Iran, IUFRO Division 1, for contributing to the organization of the International Symposium “Intersectoral Cooperation for Resilient Landscapes” on 29-30 March 2023 in Dehradun, India.

Promode Kant, Institute of Green Economy, India, for contributing to the organization of the International Symposium “Intersectoral Cooperation for Resilient Landscapes” on 29-30 March 2023 in Dehradun, India.

Purabi Bose, Swedish University of Agricultural Sciences SLU, IUFRO Division 6, for contributing to the organization of the International Symposium “Intersectoral Cooperation for Resilient Landscapes” on 29-30 March 2023 in Dehradun, India.

R. S. Rawat, Indian Council of Forestry Research and Education, for contributing to the organization of the International Symposium “Intersectoral Cooperation for Resilient Landscapes” on 29-30 March 2023 in Dehradun, India.

Sanjeev Chauhan, Punjab Agricultural University, IUFRO Division 1, for contributing to the organization of the International Symposium “Intersectoral Cooperation for Resilient Landscapes” on 29-30 March 2023 in Dehradun, India.

Somidh Saha, Karlsruhe Institute of Technology (KIT), Germany, IUFRO Division 1, for contributing to the organization of the International Symposium “Intersectoral Cooperation for Resilient Landscapes” on 29-30 March 2023 in Dehradun, India.

IUFRO Thanks Donors

Austrian Federal Ministry for Agriculture, Forestry, Regions and Water Management (BML)	800,909 €
German Federal Ministry for Economic Cooperation and Development (BMZ)	400,500 €
Ministry for Foreign Affairs (MFA) of Finland	400,000 €
USDA Forest Service	203,977 €
Mondi Group	200,000 €
Swedish University of Agricultural Sciences (SLU)	120,300 €
National Institute of Forest Science (NIFoS), Republic of Korea	94,404 €
InNovaSilva	10,000 €
TOTAL	2,230,090 €

IUFRO Welcomes New Members

Member Organizations: 621

Region

Africa	72
Asia	130
Europe	216
Latin America	58
Northern America	124
Oceania	21

New Member Organizations (MO)

MO 1070.00.00 Finland
Aalto University Foundation sr

MO 1071.00.00 Guatemala
Private Institute for Climate Change Research
(ICC)

MO 1072.00.00 Germany
Wald und Holz NRW

MO 1073.00.00 Germany
Julius Kühn Institute (JKI) - Federal Research
Centre for Cultivated Plants

MO 1074.00.00 Greece
University Forests Administration and
Management Fund

MO 1075.00.00 Zambia
Zambia Forestry College

MO 1076.00.00 United States
Stephen F. Austin State University

MO 1077.00.00 Austria
Alpecon GmbH

Associate Members: 263

Region

Africa	41
Asia	77
Europe	78
Latin America	26
Northern America	34
Oceania	7

New Associate Members (AM)

AM 986 Germany
Faßnacht Fabian Ewald

AM 987 Hungary
Horvath Sandor

AM 988 Japan
Akashi Nobuhiro
Hokkaido Research Organization

AM 989 Sweden
Wu Minchao
Lunds Universitet

AM 991 China
Zhang Xufeng

AM 992 Gambia
Onyekwelu Emmanuel

AM 993 India
Shankar Anant
Office of District Forest Officer Visakhapatnam

AM 994 Nigeria
Ureigho Ufuoma Nelly
Delta State University

AM 995 United States
Elrod Brandon

AM 996 Brazil
Ramalho Carvalho Paulo Ernani

AM 997 Argentina
Gabay Monica

AM 998 India
Sharma Laxmi Kant
Central University of Rajasthan

AM 999 Indonesia
HARTONO Eddy Nurtjahya Budi
Universitas Bangka Belitung

AM 1000 Ecuador
Armijos Montaña Andres Roosevelt
National University of Loja

AM 1001 Cameroon
Nyong Princely Awazi

AM 1002 Spain
Castro-Rodriguez Vanessa Viviana
University of Malaga



Garden, Forest Research Institute, Dehradun, India
Photo by Janice Burns