International Union of Forest Research Organizations Interconnecting Forests, Science and People

# IUFRONEWS

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## **International Oak Symposium**

Report by Stacy Clark, Coordinator of IUFRO Working Party 1.01.13 Ecology and silviculture of chestnut

**Planning for the International Oak Symposium (IOS) started with a strong vision.** Although international meetings had been held on oak by IUFRO and other organizations in the past, the IOS was not part of an established series. This lack of infrastructure gave IOS Committee Chair, *Dr. Stacy Clark* (USDA Forest Service, Knoxville, TN USA) freedom to be bold in making decisions, but she also had to build the vision, the planning, and the methods of execution.

**The planning committee included** *Dr. Magnus Löf* (outgoing 1.01.06 <u>Ecology and silviculture of oak</u> Working Party Coordinator) and *Dr. Dan Dey* (incoming 1.01.06 Working Party Coordinator) as well as faculty members from the host organizations, the University of Tennessee and the USDA Forest Service. The committee was thoughtful and innovative in their approach because they wanted to combine the format of a traditional research conference with progressive and culturally integrated platforms. *The IOS was held on October 7-10 in Knoxville, TN, USA, including 75 oral presentations (85% offered, 15% invited), 31 poster presentations, and 3 field tours.* 

One of the primary goals of the IOS was to attract young professionals and students to contribute to training and educating the next generation of professionals working in oak forests and landscapes. Approximately 40% of the 240 attendees were students or early career professionals who participated in mentoring programs, speed networking, socials, and competitions for best presentations. Students were also offered a 64% discount over the regular professional registration fee.

Hardwoods, oaks in particular, have unique and difficult challenges to their sustainability due to novel and interacting effects of disturbance regime change, climate change, and nonnative species. Unfortunately, there are few universities that specialize in hardwood forest management or ecology, and that is why it was important to partner with the newly formed School of Natural Resources (SNR) at The University of Tennessee, directed by Dr. Don Hodges (Co-Coordinator of IUFRO Division 4 Forest Assessment, Modelling and Management). The SNR includes one of the oldest hardwood tree improvement programs in the country and has a long history of research, education, and outreach in oak ecosystems.

The committee encouraged participants to be actively engaged during the IOS through various platforms such as panel discussions on carbon and fire organized by partners from The Nature Conservancy, the USDA Forest Service, and Extension programs from UCLA. Field trips were held in the middle of the Symposium as part of the regular registration fee and featured research and management from industry, NGOs, academia, and



Co Chairs – Dr. Stacy Clark (left) and Dr. Callie Schweitzer (right) were lead chair and deputy chair, respectively, of the International Oak Symposium. Photo by Christine Martens, USDA Forest Service, Asheville, NC

state natural resource organizations. The symposium attracted researchers and practitioners from 11 different countries and 27 states including representatives from wood product companies and distilleries who use oak to produce whiskey.

## Learning and building from the experience at the IUFRO

**World Congress in Sweden**, Dr. Clark felt that the IOS should feature local culture. Several local artists provided Bluegrass and Americana music during the introductory welcome and at an evening southern-style BBQ reception. Music focused on environmental topics and local history were interwoven between introductory speakers. Plenary speakers from the USA, Portugal, Germany, and Sweden presented on a variety of emerging and important topics such as cork oak management, prescribed fire, and genetic adaptability.

A second International Oak Symposium is being tentatively planned for 2027, and there is interest from scientists in Portugal, India, and Poland to host. Looking ahead, the Symposium could be expanded through additional virtual platforms and social events and by offering stipends for students and participants from underdeveloped countries.'

You can find more information on the <u>Symposium website</u>, and by contacting *Stacy Clark* at stacy.l.clark(at)usda.gov

Tour to Little River Railroad Museum in Townsend, learning about logging history of the area. Photo by Christine Martens, USDA Forest Service, Asheville, NC



## Modern Silviculture Symposium: Silviculture 4.0 - Smart Technology from Nursery to Field

Report by Muedanyi Ramantswana, Deputy Coordinator Division 3.00.00 – <u>Forest operations engineering and management</u> and Deputy Coordinator of Working Party 3.01.02 – <u>Road engineering and management</u>

The Silviculture 4.0 Symposium focused on the application of smart technology in forestry, from nurseries to field operations. Organized by Nelson Mandela University and Ellepot, involving IUFRO Units 3.01.00 Harvesting and transportation engineering, and <u>3.02.00 Stand establishment and treatment</u>, the symposium provided a platform for industry stakeholders to explore digitalization, automation, robotics, and big data in modern silviculture.

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The event took place from 15 to 17 October 2024, at Oasis Church Auditorium in Howick, KwaZulu-Natal, South Africa, and brought together 200 participants from South Africa, Brazil, Denmark, Eswatini, Kenya, New Zealand, Sweden and Uruguay. The meeting, which was hosted by Nelson Mandela University, Ellepot, and sponsored by Ellepot, ISO Horti Innovators, Forsilvitech, Novelquip Forestry, Stihl and Bracke Forest. Participants also had the opportunity to join a study tour to learn about silviculture operations and demonstrations (Mondi, Tetworth plantation) and visit a Forestry Nursery (Sappi Clan Nursery) in KwaZulu-Natal. **Website:** <u>https://www.modernsilviculturesymposium.co.za/</u>



Demonstration of semi-mechanised planting using a tractor mounted rig. Photo by Lianne Ashton

The Silviculture 4.0 Symposium highlighted that modernizing silviculture operations is critical for addressing labor shortages, improving productivity, and promoting sustainability. Across the presentations, it was evident that mechanization and automation are transforming both nursery and field operations. Automated systems, such as robotic planting and Al-powered nursery technologies, showcased by companies

like TTA (Netherlands) and ISO Group (Netherlands), are reducing the reliance on manual labor while improving precision and consistency in forestry processes. Additionally, digital tools such as drones, real-time telemetry, and AI-enabled pest detection systems—demonstrated by CROPWATCH AFRICA (BIOSYNTRIX) (South Africa) and Dexco (Brazil)—are revolutionizing forest monitoring and pest management by enabling early detection of issues and providing critical data for decision-making.

Environmental sustainability also emerged as a major focus, with companies like Suzano (Brazil) and Ellepot (South Africa) emphasizing the importance of biodegradable materials, water recycling, and climate-resilient seedlings to reduce the ecological footprint of forestry operations. Mulching, as showcased by Sappi (South Africa), has proven (in some cases) to enhance soil health, improve tree survival, and conserve water, making it a valuable tool in sustainable silviculture. The role of mechanized planting and site preparation technologies, such as those developed by Bracke Forest (Sweden) and Novelquip Forestry (South



Setting the scene, Dr Muedanyi Ramantswana presenting about global modern silviculture technology trends. Photo by Lianne Ashton

Africa), was also emphasized, especially in improving productivity on steep and challenging terrains. These technologies not only boost planting efficiency but also improve seedling establishment and survival rates.

Balancing socioeconomic impacts was highlighted, particularly in regions like South Africa where forestry-dependent communities rely heavily on manual labor. DFFE (South Africa) stressed the importance of balancing modernization with job retention, ensuring that mechanization benefits both operational efficiency and local employment. Innovation in herbicide application and pre-canopy weeding is also advancing, with PACSys (South Africa) and Mondi (South Africa) demonstrating how drones and boom sprayers are enhancing accuracy, reducing chemical use, and lowering labor costs.

The shift towards containerized stock for more effective planting, particularly in New Zealand and South Africa, was also a key takeaway. Biodegradable paper pots were shown to improve root development and increase survival rates, supporting global sustainability goals. Training and skill development were recognized as essential for successfully adopting new technologies, with companies like Dexco (Brazil) and Mondi (South Africa) emphasizing the need to upskill rural workforces to manage mechanized and digital technologies effectively.

In conclusion, the future of silviculture lies in integrating cutting-edge technology with sustainable practices. The symposium underscored the importance of continuous innovation, collaboration between industry and academia, and the careful management of socioeconomic impacts. These steps are vital to ensure that the benefits of modernization in silviculture are maximized while minimizing any negative consequences. In future, the annual Modern Silviculture webinars hosted by NMU will continue (intervals of physical meetings still to be confirmed).

## **Forest Engineering and Technologies**

Report by Abdullah E. Akay, Deputy Coordinator IUFRO Research Group 3.01.00 Harvesting and transportation engineering

On 16-18 September, 85 participants from 19 countries gathered in Ljubljana, Slovenia, for the **5th International Conference of Forest Engineering and Technologies (FETEC 2024): Forest operation technologies and systems for small-scale forestry applications**. The meeting, which involved IUFRO RG 3.01.00, was kindly hosted by the University of Ljubljana, Biotechnical Faculty and sponsored by Tajfun LLC, which also hosted the technical excursion in Sevnica.

Meeting website: https://www.ormantransportu.org/fetec2024

Forestry plays a crucial role in maintaining biodiversity, providing habitats, regulating the water cycle, and serving as a carbon sink to mitigate the effects of climate change. Forest resources should be managed according to principles of sustainable and close-to-nature forest management in order to meet the needs of current and future generations.

These two approaches aim to maximize the benefits of forests and to minimize environmental damage by using modern techniques and technological tools in forestry activities. Particularly, forest operations producing wood-based forest products should abide by the precision forestry approach. In recent decades, advanced small-scale forest operations, which are used in non-industrial and site-specific forestry, provide alternative methods well suited for use with precision forestry concept.

Besides, small-scale forestry significantly contributes to the bioeconomy through forest-based businesses, rural communities, and provision of multiple ecosystem services in many regions of the world. Small-scale harvesting machines have low initial cost and relatively low operating cost, while at the same time, their potential environmental impacts can be considerably lower than with use of large-scale machinery.

#### Key issues that were discussed:

- Planning, organization and implementation of small-scale logging and transportation activities
- Forest mechanization-trends in small-scale operations
- Economic sustainability of small-scale forestry
- Forest bioenergy challenges in small-scale forestry sector
- Work safety and ergonomics in forest engineering
- Assessment of stand damage and soil impact from smallscale logging

## 23rd International Nondestructive Testing and Evaluation (NDTE) of Wood Symposium 2024

Report by Xiping Wang, USDA Forest Service, Forest Products Laboratory (xiping.wang(at)usda.gov), Deputy Coordinator, IUFRO Research Group 5.01.00 <u>Wood and fiber quality</u>; and Raquel Gonçalves, University of Campinas (raquelg(at)g.unicamp.br), Deputy Coordinator, IUFRO Division 5 <u>Forest products</u>



Technical excursion at Tajfun Company in Sevnica, Slovenia. Photo provided by conference organizers.

- Implementation of smart forestry (GIS, ICT, IoT, etc.) in smallscale forest operations
- Using remote sensing data (UAV, LiDAR, etc.) and machine learning in small-scale forestry
- Forest roads and road infrastructure in small-scale forestry



At the conference, **the most recent scientific and professional research related to small-scale forestry applications was discussed** in 16 technical sessions by international researchers, practitioners, and relevant shareholders from all over the world.

Keynote speech by Raffaele Spinelli, Italy. Photo provided by conference organizers.

Proceedings of the conference will be published online by mid-November 2024. High-quality papers will be published in the

European Journal Forest Engineering and ACTA Silvae et Ligni.

*The "International Conference of KSFE-FETEC 2025" will be hosted by the Korean Society of Forest Engineering (KSFE) in Seoul, South Korea on 23-25 June 2025.* 

The 23rd International Nondestructive Testing and Evaluation of Wood <u>Symposium (FPS | NDTE Symposium | Brazil</u>) was hosted by the School of Agricultural Engineering of the Universidade Estadual de Campinas (FEAGRI/ UNICAMP) and the Brazilian Association of Nondestructive Testing and Evaluation (ABENDI). It was held in Campinas, São Paulo, Brazil, September 17-21, 2024.

This symposium was a forum for those involved in nondestructive testing and evaluation (NDT/NDE) of wood and brought together many international researchers, NDT/NDE users and suppliers, representatives from various government agencies, and other groups to share research results, products, and technology for evaluating a wide range of wood products, including standing trees, logs, structural lumber, engineered wood products, and wood structures. Networking among participants encouraged international collaborative efforts and fostered the implementation of NDT/NDE technologies around the world.

The opening ceremony was attended by authorities from UNI-CAMP, FEAGRI, ABENDI, and the Forest Products Laboratory, and participants were welcomed by the International Committee and the symposium co-chairs, *Dr. Raquel Gonçalves* and *Dr. Robert Ross.* The ceremony ended with a performance by the Unicamp choir, Ziper na Boca.

**During the symposium's banquet, special recognition awards** were presented to *Dr. Xiping Wang* for his distinguished service in the symposium series and research efforts in the field of nondestructive evaluation and to *Dr. Houjiang Zhang* for his outstanding research, support of the symposium series, and excellent teaching efforts in the field of nondestructive evaluation of wood. *Dr. Robert Ross* and *Dr. Peter Niemz*, both recently retired, were also honored for the significant contributions they have made throughout their careers to the field of NDT and to the success of the symposium series.

On Tuesday (Sept. 17) before the official symposium, a day-long technical workshop was conducted on "Urban Tree Evaluation and Monitoring – a systemic approach", followed by the welcome reception in the evening.

A total of 81 scientists, technology developers, practitioners, and students from 18 countries (Australia, Brazil, China, Croatia, Estonia, Germany, Hungary, Iran, Italy, Japan, Portugal, Russian Federation, Slovenia, Spain, Switzerland, Uruguay, United States, and Vietnam) attended the event (Photo 1). In addition to the general session, the program included five technical sessions and



Participants of the 23rd International NDTE of Wood Symposium in Campinas, São Paulo, Brazil. Photo by University of Campinas

one poster session. A total of 63 technical presentations were delivered during the three-and-half-day conference, including 43 oral presentations and 20 poster presentations. The technical content of the symposium has been captured in 309 pages of **proceedings**, which can be accessed from the <u>FPL website</u>.

The 24th International NDTE of Wood Symposium will be held in Vicksburg, MS USA (late summer/autumn 2026)! Stay tuned for further information!

## Optimization and Wildfire Conference

Report by José G. Borges (Coordinator of IUFRO Unit 4.04.04 <u>Sustainable forest</u> <u>management scheduling</u> and Keynote Speaker), Filipe P. Alvelos (Chair of the Program and Organizing Committees) and Sándor Tóth (Coordinator of IUFRO Unit 3.04.01 <u>Operations systems analysis and</u> <u>modeling</u> and Member of the Program Committee).

## Meeting Website: https://ow.dps.uminho.pt/

The Optimization and Wildfire Conference

(O&W) brought together researchers and practitioners who develop and/or use operational research and decision-making methods including optimization models and solution approaches for wildfire-related decision problems. It reported the state-of-



Conference participants. Photo provided by the conference organizers

the art on the development and use of management science approach to address wildfire concerns in forest management planning. The conference took place on 1-4 October 2024 in Luso, Portugal. It involved 58 participants from 13 countries in Europe, America and Oceania. Its program encompassed **three keynote presenta-tions:** 

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- Dr. Dave Martell discussed the operational research perspective in wildfire management, described research conducted in Canada and identified open problems where operational researchers can make important contributions.
- *Dr. Yu Wei* focused on two aspects of developing operations research models for wildland fire decision support, namely spatially explicit modeling and managing uncertainty.
- Dr. José Borges outlined research targeting the integration of forest and fire management as well as the provision of a wide range of ecosystem services in contexts of global change and presented recent research on adaptive territorial management to address extreme wildfire events.

It encompassed further 46 oral presentations organized into 10 sessions focusing on key areas within wildfire management, including fuel management and characterization, fire detection, resource allocation, suppression resource dispatch and deployment, assets and values-at-risk protection, combined decision problems, budgeting, fire spread simulation, risk analysis, remote sensing and decision-support systems.

The full list of abstracts is available: <u>HERE</u>

The conference worked well as a meeting place for experts on fire and forest management in a broad sense. It brought together researchers at very different stages of their careers, from PhD students to senior researchers from different continents. The arrangements in Luso, a small town in Central Portugal renowned for its thermal waters, was ideal for the conference.

The three days of scientific work included a **visit to the historical Buçaco Forest**, a 17th century walled national forest extending over 105 ha and home to one of the finest dendrological collections in Europe; and a much-appraised conference dinner and musical recital of Fado de Coimbra at the Curia Palace Hotel.

The Optimization and Wildfire Conference (O&W) was organized by *Prof. Filipe P. Alvelos* from the School of Engineering, Department of Production and Systems at the University of Minho, Portugal. It was supported by IUFRO Units 4.04.04 and 3.04.01 as well as by the project "O3F - An Optimization Framework to reduce Forest Fire" funded by the Portuguese Science Foundation (DOI 10.54499/PCIF/GRF/0141/2019) and the Associação Portuguesa para a Investigação Operacional (APDIO).

The conference provided a) a venue for the presentation of state-of-the-art applications ranging from operations research to wildfire-related decision problems and b) opportunities for a fertile exchange of ideas among participants.

The O&W presenters were welcomed to submit their research to a **post-conference proceedings** volume to be published by Springer in the series Lecture Notes in Operations Research (the deadline for submitting manuscripts is January 15, 2025).

## **Old-Growth Beech Forests in Europe**

Report by Manuela Hirschmugl, Alfredo DiFilippo, Miroslav Swoboda, Coordinators of IUFRO Working Parties 4.02.05 <u>Remote</u> <u>sensing</u>, 1.01.07 <u>Ecology and silviculture of beech</u>, 8.01.01 <u>Old</u> <u>growth forests and forest reserves</u>, respectively

The final conference of the LIFE+ PROGNOSES project brought together leading scientists, policymakers at the European level, and national experts in the field of forest management and conservation. Based on the insights gained in the PROGNOSES project, participants discussed means and methods to implement the EU regulation on the strict protection of all primary and old-growth forests in Europe.



Lying deadwood in old-growth beech forest. Photo by Manuela Hirschmugl

The conference titled **Characteristics of Ecosystem Services of European Old-Growth Beech Forests** took place on 2 October 2024 in Bruges, Belgium, attracted 56 participants from Austria, Belgium, Bulgaria, Czech Republic, France, Germany, Italy, Slovenia, Slovakia and Ukraine. It involved IUFRO Working Parties 4.02.05, 1.01.07, and 8.01.01, and was kindly hosted and supported by: Sonian Forest Foundation (Belgium), University of Ljubljana (Slovenia), Ministry of Natural Resources and Spatial Planning (Slovenia), and INBO - Institute for Nature and Forest Research (Belgium).

#### Meeting website: https://lifeprognoses.eu/

#### Key findings and conclusions

- Field measurements across European old-growth forests underpin their high ecosystem value including carbon storage, biodiversity indicators and leisure activities.
- Preliminary results show the feasibility of using remote sensing for pre-stratification in order to identify the remaining not-protected old-growth forests of Europe.
- Primary and set-aside forests generally provide higher ecosystem services in terms of carbon stock and biodiversity structures than managed ones. However, substantial variability between - and within- ecosystems remains across the forest network as a consequence of differences in fertility, disturbance regime and forest history.

- In terms of carbon stocks, previously managed mature forests set-aside from logging are able to recover the average biomass values comparable to those of primary forests. However, they generally lack the same amount of deadwood, oversized trees and tree-microhabitats and wildlife trees found in primary and long unmanaged forests.
- More research is still needed to clearly link biodiversity indicators with biodiversity values.
- Visitors to UNESCO sites were interviewed and showed a clear preference for unmanaged, primary and old-growth forests. Still, only ½ of the visitors was aware of the UNESCO World Heritage forest area they visited. Thus, more awareness raising is needed.

At the end of the conference, a debate was organized with different stakeholders on the implementation of the mapping and strict protection of old-growth forests in Europe. Although there is a lot of goodwill and effort from scientists as well as local policymakers and management authorities, identification of relics of old-growth on the local level still remains challenging. Further clarifications and efforts will be needed to reconcile competing interests.

For the remaining project duration, the publication of the results in scientific journals is amonbg the main next steps. Furthermore, a COST action for further networking and knowledge exchange on Europe's old-growth beech forests is being prepared. The expansion and application of the results on beech forests to include also other old-growth forests, e.g. boreal forests or forests consisting of other tree species, is a main further line of activity.

## Close to Nature and Close to People Forestry: Building Research and Education Capacity for Ukraine with a Training School

Report by Mariana Melnykovych, Deputy Coordinator of IUFRO Working Party 4.05.05 – <u>Social innovation and entrepreneurship</u>

The BFH-HAFL School of Agriculture, Forestry, and Food Sciences (HAFL) at Bern University of Applied Sciences (BFH), a Member Organization of IUFRO, recently organized a Mobility Program for Ukrainian scholars. This initiative included a one-week Training School titled "Close to Nature and Close to People Forestry: Building Research and Education Capacity for Ukraine". Representatives from six leading Ukrainian forest institutions were selected to participate. **The Training School covered key topics, including:** 

- Innovative tools and methods in forest research and education
- Approaches to teaching and implementing close-to-nature forest management using the <u>martelage.sylvotheque.ch</u> platform
- Multi-actor governance of forest landscapes with <u>strategy</u> <u>games</u>
- Social-ecological innovations in forestry



Photo of Training School participants provided by HAFL

**Designed to build capacity for early-career Ukrainian professors**, the Training School addressed priority actions identified by Ukrainian forestry scientists, students, and experts at the "<u>IUFRO</u> <u>Forum on Ukraine Forest Science and Education: Needs and Pri-</u> <u>orities for Collaboration</u>" (2023). These actions include strengthening forest science to support evidence-based post-war forest recovery strategies, updating forestry education, and building international partnerships and enhancing collaboration.

*Prof. Dr. Sergiy Zibtsev*, head of the IUFRO Forum on Ukraine Forest Science and Education, highlighted during the Training School's closing session, *"This initiative builds on our discussions at the IUFRO Forum on Ukraine*, where BFH-HAFL played an important role. Back then, we discussed the idea of a Training School, and it's great that it was implemented with such success. The Training School has provided invaluable knowledge, as well as many wonderful experiences, which participants bring back to Ukraine".

To strengthen collaboration with Ukraine, BFH-HAFL has launched the **Close-to-Nature Forestry Network in Ukraine**, further supporting knowledge sharing, exchange, and the sharing of tools and innovations, particularly in digitalization and forest landscape governance. This initiative includes establishing pilot demonstration sites (marteloscopes) in Ukraine as hands-on training facilities for explor-



Photo provided by HAFL

ing, learning, and sharing knowledge on close-to-nature forestry via the open-access platform martelage.sylvotheque.ch.

The Training School was organized by *Dr. Mariana Melnykovych* and *Prof. Dr. Christian Rosset* from the School of Agriculture, Forestry, and Food Sciences HAFL at Bern University of Applied Sciences (BFH). It was supported by the IUFRO 4.05.05 Working Party on Social innovation and entrepreneurship, WSL and the S4C Science for the Carpathians Eastern Europe Research Network. **Find more, including the summary report of the 2023 Forum: HERE** 

# First In-Person Meeting of the GFEP Expert Panel on Forests for Social and Economic Resilience

Report by Viola Belohrad, IUFRO SciPol

On 8-9 October 2024, the Expert Panel of the GFEP assessment on Forests for Social and Economic Resilience convened in Rome for its first in-person meeting, hosted by the University of Notre Dame, Rome, Italy. **The meeting provided an opportunity to review the first draft of the assessment chapters and discuss key emerging issues.** Bringing together 14 key experts from across the world and from different disciplines allowed refining the conceptual framework for analyzing the multi-dimensional relationships between forests and social and economic resilience. Discussions also focused on harmonizing the different chapters and addressing cross-cutting issues.

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Looking ahead, the third and last Expert Panel meeting is planned for January 2025 and the assessment is on track to be published in mid-2025. **The ultimate goal of the GFEP assessment on Forests for Social and Economic Resilience is to inform ongoing policy discussions on the 2030 Agenda for Sustainable Development and to support more informed decision-making.** Additionally, the assessment will provide inputs to the future sessions of the Conference of the Parties to the UNFCCC, the Conference of the Parties to the CBD, the United Nations Forum on Forests (UNFF), and to the High-Level Political Forum on Sustainable Development (HLPF).

Listen to three of the panel members in this: <u>VIDEO</u> Find out more about the panel and its activities: <u>HERE</u>

## WoodPoP and Wood for Globe -WoodCircle Event Showcases Projects

## Read at: https://woodpop.eu/woodpop-at-woodcircle-2024/

The woodCircle, a forum that is part of the Austrian Wood Initiative (<u>Österreichische Holzinitiative</u>, ÖHI), took place at the Apothekertrakt in Schloss Schönbrunn on November 22, 2024. This event brought together experts from policy, research, industry, and science to discuss challenges and share ideas related to the material and energetic use of wood.

As a platform for discussing bioeconomy and circular economy innovations, the woodCircle highlighted the successes of the Austrian Wood Initiative while exploring future priorities for wood-related projects. The event showcased projects funded by the Austrian Forest Fund, including the European Wood Policy Platform (<u>WoodPoP</u>) and <u>WoodForGlobe</u> both hosted by International Union of Forest Research Organizations (IUFRO).

The event opened with remarks by *Elfriede Moser* (<u>BML</u>) and *Isabella Plimon* (<u>BMK</u>), followed by presentations on the priorities of the Austrian Wood Initiative. A key highlight was the "Connect and Inspire" session, where project organizers showcased their achievements and engaged in discussions.



GFEP meeting participants. Photo IUFRO

About GFEP: Coordinated by IUFRO, GFEP (Global Forest Expert Panels) is an initiative of the Collaborative Partnership on Forests (CPF). By producing objective and independent scientific assessments on key forest-related issues, GFEP aims to effectively link the information requirements of intergovernmental processes related to forests with existing scientific expertise, thus supporting informed decision-making at the global level. - Global assessments are one of the workstreams of IUFRO's Science-Policy Programme (SciPol).



Veronika Steinhofer-Juch, woodPoP Secretariat Coordinator, joined one of the feedback panels. Photo IUFRO

**WoodPoP presented its recent milestones**, such as the Wood Policy Lab in Austria, participation in the Pre-World Forest Week High-Level Dialogue, and the joint Study Tour in Norway. Project outputs like the WoodPoP cloud, WoodFlash newsletter, LinkedIn page, and the Fire Safe Building technical bulletin were also presented. The cover of the current draft of WoodPoP's Wood Policy Paper was also unveiled in this session.

The WoodForGlobe project highlighted its work towards strengthening wood policy networks and platforms globally in line with Sustainable Wood for a Sustainable World (SW4SW), a Joint Initiative of the Collaborative Partnership on Forests (<u>CPF</u>). Interconnecting IUFR(

The main activity areas comprised technical knowledge and policy experience exchange, scientific knowledge and experience exchange, and global and regional policy dialogues. WoodFor-Globe produced a series of valuable publications, including a scientific background paper on "Sustainable use of wood in construction, textile and packaging sector towards a carbon-neutral bioeconomy".



IUFRO and BML colleagues at the Wood for Globe stand at the Wood Circle event, with María Fernanda Gonzalez Montes, IFSA intern (on the left). Photo IUFRO

## My Experience at IUFRO HQ

By María Fernanda Gonzalez Montes, IFSA intern

During September and October, I had the incredible opportunity to intern at IUFRO HQ. I never imagined that an international organization could feel so much like family or offer such a perfect balance between life and work. Every member of the IUFRO Secretariat welcomed me with open arms, shared their knowledge and experiences, and offered support in every possible way.

Throughout my internship, I worked on diverse tasks that strengthened my skills in project management, content creation, and strategic planning. I supported the final outreach stages of WoodForGlobe (which allowed me to work closely with FAO and BOKU members), and collaborated on content for IUFRO's new website, projects that deepened my understanding of effective communication. My work also involved assisting with content organization on the WoodPoP website and operational processes, which helped me strengthen both my analytical and technical skills. Attending events like woodCircle and participating in countless team meetings allowed me to build strong connections within the organization, gain insights into international project management, understand each member's unique role, and witness their inspiring dedication to bringing projects to life (plus, I started getting familiar with German again, which motivates me to keep practicing!).

If I were to name each person at IUFRO and the invaluable lessons I've learned from them, it would take quite some time! But I leave this experience with a renewed sense of purpose and the tools to confidently continue building my career. I may not know exactly where life will take me, but I am certain that the impact each of you has had on me will stay with me wherever I go. I may not have the perfect words, but from the bottom of my heart, thank you for believing in me! This isn't farewell, it's just until next time.

## Announcements

## A New Look for the IUFRO Website

After two years of planning, designing, developing and perfecting, we are eager to announce the relaunch of the IUFRO website, which will go live in a few weeks. We have not only revamped the look of the website but also upgraded the whole system to include improved key functionalities and exciting new features.

Over the next few months, the website will gradually be expanded as more features will be added. Of course, IUFRO News will soon come to you in a fresh design, too! We are looking forward to welcoming you to the new *iufro.org* and showcasing your news and content there.



# Survey: Share Your Views on Silviculture and Ungulates

Are you interested in the joint management of grazing ungulates and forest ecosystems? Do you want to contribute to mapping the silvicultural challenges and opportunities posed by ungulates?



IUFRO Working Party 1.01.12 <u>Silviculture</u> and ungulates has developed a questionnaire for you to help shape and enhance future activities of the unit. **Please fill in the questionnaire by Sunday 15th December 2024:** <u>Link</u>

By Kathy Büscher on Pixabay

The Working Party aims at identifying and developing scientifically based, socially relevant and sustainable solutions for integrated wildlife, forestry,

and forest landscape management. Your input is highly welcome!

# Survey: Ecology and Management of Bark and Wood Boring Insects

Jess Hartshorn, Coordinator for IUFRO Working Party WP 7.03.05 Ecology and management of bark and wood boring insects, has set up a survey to request your input and feedback on potential events and collaborations with the Working Party.

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To do this, please fill out a quick (<5 min) survey on your interest in WP 7.03.05 through different activities, events, and collaborations. If you are not a member of the WP but are interested in possible collaborations, we want to hear from you! The survey is anonymous, but you will have the option to include your name and contact info if desired.



Photo IUFRO

Survey link: https://forms.office.com/r/WUKPsYVdsy

## **Awards**

## Joan Carling Receives Right Livelihood Award

"For raising Indigenous voices in the face of the global ecological breakdown and her leadership in defending people, lands and culture."



Joan Carling is a Filipino Indigenous activist who has been defending the rights of Indigenous Peoples for more than 30 years. Her work spans grassroots and international levels, focusing on human rights, sustainable development, climate justice and the fight against land exploitation. Since the late 1990s, Carling has led multiple Indige-

nous rights organizsations. She continues to play a pivotal role in amplifying the voices of Indigenous Peoples across the Philippines, Asia, and globally, with a focus on combating the systemic marginalization and criminalization of Indigenous communities. *Source:* Joan Carling - Right Livelihood

Joan Carling was a speaker at the IUFRO World Congress 2024 in Stockholm at the session on Regional Forest Governance organized by IUFRO's Science-Policy Program. Listen to an interview that she gave to IUFRO at the Congress:

Joan Carling, Indigenous Peoples Rights International (IPRI): https://youtu.be/XDr4kIkHwow

## Marcus Wallenberg Prize Symposium

The 2024 Marcus Wallenberg Prize Symposium, held on 12 November 2024 online as well as on premises in Stockholm, celebrates the MWP 2024 Laureates. https://www.mwpsymposium.org

The 2024 Marcus Wallenberg Prize is awarded to *Professors Wout Boerjan* and *John Ralph* for their groundbreaking research leading to a fuller understanding of lignin biosynthesis and structural diversity. Both scientists developed and innovatively applied advanced analytical techniques in ways that greatly enhance our view of lignin biosynthesis and structure in trees. Their research provides a basis for the development of wood deconstruction processes and new applications for lignin, the most abundant source of natural aromatics in the biosphere.



Read an interview with the laureates: HERE

The purpose of the Prize is to recognize, encourage and stimulate pathbreaking scientific achievements which contribute significantly to broadening knowledge and to technical development within the fields of importance to forestry and forest industries.

## **Obituary: Dr John Dargavel**

BScFor (Edin), MScFor (Melb), PhD (ANU), Honorary Associate Professor, ANU College of Science

Dr. John Dargavel, a long-standing member of the IUFRO Research Group 9.03.00 Forest history and traditional knowledge, passed away on 25 July 2024, leaving behind a remarkable legacy in forestry and environmental sciences. Born in London on August 15, 1932, John's career was marked by ground-breaking contributions to the



field of Forestry, Forest History, Environmental History, and particularly in integrating social sciences into forestry practices.

John's academic career began with a BSc in Forestry from the University of Edinburgh in 1956, followed by an MSc in Forestry from the University of Melbourne in 1970. His PhD from the ANU in 1983 presented a radical analysis of the Tasmanian wood industries, highlighting his innovative approach and deep understanding of forest economics, planning, politics, and history.

John Dargavel's engagement in IUFRO started in 1986 at the World Congress in Ljubljana, where he was appointed Coordinator of Subject Group Tropical Forest History S 6.07.01. One of his main contributions was the organization of the conference on "Changing Pacific forests: historical perspectives on the forest economy of the Pacific basin" in Hawaii.

John was known for his collegiality and dedication to his students. His engagement with various academics and his contributions to numerous research and advisory committees reflected his lifelong dedication to forestry and environmental science. It was a pleasure and inspiration to work together on several projects and the collaboration was marked by a deep friendship. His friendliness, dedication, kindness, competence, humor, and never-ending interest will be deeply missed.

**By Elisabeth Johann**, IUFRO 9.03.02 <u>Forest culture</u>, Vienna, Austria, and **Mauro Agnoletti**, Cattedra UNESCO - Paesaggi del Patrimonio Agricolo, Dip. Di Scienze e Tecnologie Agrarie, Alimentari, Ambientali e Forestali, Firenze, Italy (*abridged by the editor*)

## **Publications**

## New Study on Adaptability of Forest Trees in Europe

Source: Adaptability of trees persists after millions of years of climate change: EUFORGEN - European forest genetic resources programme



Seven of the most common forest trees in Europe have been shown to be able to shelter their genetic diversity from major shifts in environmental conditions. This is despite their ranges having shrunk and the number of trees having fallen sharply during ice age cycles.

These are the findings of a study by a European consortium jointly led by Uppsala and Helsinki Universities, published in Nature Communications. Several IUFRO officeholders are among the authors.

## The Forest Factor



The role of protection, restoration and sustainable management of forests for the implementation of the Kunming-Montreal Global Biodiversity Framework

Published by the Secretariat of the Convention on Biological Diversity (2024). Available for download: HERE

The purpose of this report, developed in partnership with members of the

Collaborative Partnership on Forests, is to highlight the role of the conservation of forest biodiversity and sustainable forest management (SFM) in achieving the goals and targets of the Kunming-Montreal Global Biodiversity Framework (KMGBF). Find out more: HERE

## Now Available in French: Unasylva 254 "Towards more resilient and diverse planted forests"



Developed by FAO together with a coalition of external partners, including the former IUFRO Task Force on Planted Forests and the TreeDivNet network, Unasylva Issue 254 responds to the need for wider information-sharing on data, tools and approaches available for leveraging the contributions of planted forests to meet the target of increasing

the global forest area of 3 percent by 2030, which Global Forest Goal 1 provides for.

Unasylva issue 254 launched in English in November 2023 is now also available in French:

Vers des forêts plantées plus résilientes et plus diversifies

## **Does Climate Drive the Defoliation of European Beech** (Fagus sylvatica L.)?

Authors: Shah Rukh, Inken Krüger, Nenad Potočić, Volkmar Timmermann, Andreas Bolte

Stress on tree vitality is expected to increase due to climatic extremes in European forests. The decline in vitality of European beech (Fagus sylvatica L.) that has been reported recently, makes it necessary to rethink its future adaptive potential under ongoing climate change. The authors performed a pan European assessment of defoliation chronologies on 414 ICP Forests Level I beech plots, between 1995 and 2022. Read: HERE

## **Mixed Active and Passive Forest Restoration Facilitates Plant Diversity Recovery in Southern Ethiopia**

Authors: Alfred Aleeje, Martin Ehbrecht, Vianny Ahimbisibwe, Markus Höhl, Sven Günter, John A. Stanturf, Andreas Bolte https://doi.org/10.1111/rec.14301

Global deforestation and forest degradation threaten the sustainability of natural and human systems. Forest landscape restoration, through active approaches such as plantations, woodlots, boundary planting, and agroforestry, and passive approaches like exclosures, presents an opportunity to mitigate adverse effects, enhance ecosystem service recovery, and associated benefits for livelihoods.

## Forest Disturbance and Damage: Perspectives for **Forest Monitoring and Reporting**

Authors: Guy Robertson, Stefanie Linser, Michael Köhl https://forestsmonitor.com/index.php/fm/forest-disturbance-damage-monitoring

In this forest perspectives paper, authors explore issues and concepts involved in the enhancement of regional monitoring frameworks for reporting on forest disturbances and damage. They consider the different meanings of "forest disturbance" and "forest damage," terms that are often used interchangeably but have important differences in meaning and management implications.

## **Carbon Farming in the European Forestry Sector:** From Science to Policy 17

Authors: Tommaso Chiti, Ana Rey, Jens Abildtrup, Hannes Böttcher, Jurij Diaci, Oliver Frings, Aleksi Lehtonen, Andreas Schindlbacher, Miguel A. Zavala

The EFI report shows how the EU's forests, covering 40% of the continent, can increase their capacity as long-term carbon sinks and help the bloc meet its goal of being carbon neutral by 2050. Find out more: Carbon Farming in The European Forestry Sector

#### Forest Education – Merging Theory and Practice with **Help of Digital Tools** Proceedings

Conference on 2-4 October 2023, online and Helsinki and Hyytiälä, Finland, involving IUFRO Research Group 6.09.00 Forest education

Link to online file: Proceedings (279.5 KB, PDF)

## Positions

Find position announcments at: IUFRO Noticeboard

#### **Research Associate**

Apply by 20 December 2024 EDT

The College of Social Science, Michigan State University, East Lansing, Michigan, USA, invites applications for the post of Research Associate. The position provides support for a NASA funded research project. Knowledge and skills in spatial modeling, data/information synthesis of qualitative and quantitative data at multiple scales, and the manipulation and processing of geospatial data are expected.

Contact: Professor Jiquan Chen, jqchen(at)msu.edu Details

#### Assistant or Associate Professor of Forest Health

Open until filled; deadline for priority consideration: 13 December 2024

The Department of Forest, Rangeland and Fire Sciences at the University of Idaho in Moscow, Idaho, USA, invites applications for a full-time (9-month academic year; 40% teaching, 45% research, 10% outreach, 5% service) tenure-track faculty position at the Assistant or Associate Professor level. The successful candidate will develop a strong, internationally recognized, externally funded research program focused on biotic agents affecting forest health.

Details

## Assistant/Associate Professor of Sustainability **Sciences**

Deadline not indicated; review of applications will begin on 15 November 2024

The Warnell School of Forestry and Natural Resources at the University of Georgia in Athens, GA, USA, invites applications for a tenure-track faculty position in Sustainability Sciences at the Assistant or Associate Professor level with research, instruction, and university and professional service expectations as part of a 9-month appointment. Successful candidates will be part of the Forestry and Forest Biology faculty groups but will potentially cut across multiple disciplines and will be expected to establish interdisciplinary collaborations in teaching and research with faculty in the Warnell School and across campus. **Details** 

## **Assistant Professor of Silviculture**

#### Apply by 30 November 2024

The Department of Forest Resources and Environmental Conservation in the College of Natural Resources and Environment at Virginia Tech, Blacksburg, VA, USA, invites applicants for the position of Assistant Professor of Silviculture. This is a full-time, tenure-track, 9-month appointment with primary responsibilities in research (50%) and teaching (50%). The successful candidate will lead a vibrant, externally funded research program that is recognized for scientific excellence, mentor a diverse population of graduate and undergraduate students, and provide high-quality instruction.

Details

## **IUFRO Meetings**

For a full list of meetings go to our online calendar! Find non-IUFRO meetings on the IUFRO Noticeboard!

## 10 Dec 2024

50 Years of Forest-Related Research and Development **Personal Experiences and Critical Review** Public lecture by Michael Kleine Online and in person, Vienna, Austria, BOKU University Register by 1 December 2024 In-person attendance: Register Here Online attendance: Zoom Meeting Registration Link Details

#### 17-19 Mar 2025

Int'l Symposium on Wood Science and Technology 2025 (ISWST2025) with Session of 2025 World Wood Day Symposium and Seventh IUFRO Forest Products Culture Colloquium Sendai, Japan IUFRO 5.00.00, 5.15.00, 9.03.02

Contact: Charlotte Chia Hua Lee, chiahua.lee(at)iwcs.com <u>Website</u>

14-15 Apr 2025 26th International Wood Machining Seminar (IWMS26) Florence, Italy IUFRO 5.00.00 Contact: Giacomo Goli, giacomo.goli(at)unifi.it Website

## Other Meetings

16 Nov 2024

**COP29 FOREST PAVILION Theme Day: Science, Technology, and** Innovation / Digitalization

#### 2024 UN Climate Change Conference

Blue Zone, Baku, Azerbaijan, Jointly organized by IUFRO and CIFOR-ICRAF If you are in Baku, visit IUFRO at the booth shared with CIFOR-**ICRAF and ITTO!** For details, contact Nelson Grima: grima(at)iufro.org <u>Website</u>

#### 17-19 Dec 2024

#### WoodCircle Communication & Annual Workshop Meeting of **UNECE/FAO Forest Communicators' Network**

Austrian BML, Forest Communicators' Network, co-organized by IUFRO. The meeting will be in English. Website

#### 12-14 Mar 2025

Kohlenstoffbindung in Waldökosystemen und Holzprodukten (Carbon sequestration in forest ecosystems and wood products) Göttingen, Germany

Deutscher Verband Forstlicher Versuchsanstalten (DVFFA) The meeting will be in German. **Website**