

Supporting the Forest Science Community in Economically Disadvantaged Countries

An Interview with Michael Kleine and Janice Burns, Coordinator and Deputy Coordinator, respectively, of IUFRO's Special Programme for Development of Capacities (IUFRO-SPDC)

<https://www.iufro.org/science/special/spdc/>

The mission of the Special Programme for Development of Capacities - formerly called Special Programme for Developing Countries - is "to expand and foster forest research capacity in economically disadvantaged countries". Why is this important?

Many countries continue to be confronted with serious problems associated with poverty, food insecurity, unemployment, inequitable access to resources and education, and also struggle with environmental degradation. Supporting forest research capacity of individual scientists and institutions in economically disadvantaged countries contributes to alleviating this situation and realizing the potential of forests and trees to provide multiple social, ecological and economic benefits.



Michael Kleine has been the Coordinator of IUFRO-SPDC since 2001 and Deputy Executive Director of IUFRO since 2010. He is a forestry graduate of the University of Natural Resources and Applied Life Sciences (BOKU), Vienna, Austria, from where he also obtained his doctoral degree and habilitation in Silviculture. During his career he has participated in natural forest research and management, and rural development through residential assignments in Austria, Pakistan and Malaysia. He also worked as free-lance forestry consultant for the German Development Agency GIZ, the FAO and the European Commission among others in Asia and Central America.



Janice Burns, Deputy Coordinator of IUFRO-SPDC and Thematic Networking Manager, has experience in various regions of the world with specializations ranging from forest landscape restoration and forest education to remote sensing and fire management. She formerly held roles as a professional wildland firefighter and aviation coordinator in Canada and Deputy Coordinator of the Joint IUFRO-IFSA Task Force on Forest Education. She holds a joint master's degree in European Forestry from the University of Eastern Finland and AgroParisTech, France, and a bachelor's degree in Forest Resources Management from the University of British Columbia, Canada.



Workshops are appreciated for providing enhanced networking opportunities, inter-personal, and language skills development and for establishing professional connections among international peers, leading - more often than not - to lasting friendships. Photo credit: IUFRO

Training workshops and support for scientific exchange, for example through collaborative research and networking activities, can help to generate and apply knowledge, methods, and tools that make for effective work at the interface of forest science, practice, and policy. In this way, forest scientists and institutions in economically disadvantaged regions are enabled to play a more impactful role in achieving overall sustainable development.

Training workshops are one of the main building blocks to fulfil the mission of IUFRO-SPDC. What sort of skills do workshop participants acquire and how?

Participants acquire two key sorts of skills: i) to produce high quality research, and ii) to increase its impact on policy and practice. For example, our workshop on systematic evidence evaluation focuses on skills such as: framing policy and research questions; literature searching; data analysis; data visualization; and transparent reporting of research. Other workshops focus on research proposal writing or working effectively at the interface of forest science and policy.

Workshops are delivered either online or organized as physical events always including a combination of lectures, videos, breakout sessions for group work, quizzes and polls, and usually end with presentations by participants in working

groups. Overall, these workshops are appreciated for providing enhanced networking opportunities, inter-personal, and language skills development and for establishing professional connections among international peers, leading – more often than not - to lasting friendships.

How has the current pandemic affected the organization of training workshops and other IUFRO-SPDC activities? Can you give recent examples?

Training workshops have shifted from in-person meetings mostly of 3–4-day duration to a variety of online meetings of varying length and content. We’ve hosted activities to match a range of schedules and interests from intensive one-week courses with daily sessions, such as systematic evidence evaluation, to longer series of national or regional trainings on forest landscape restoration with content tailored to the local context and hosted in weekly sessions in Malawi, Sri Lanka, Latin America, and the South Pacific.



SPDC online training workshop on systematic evidence evaluation. Screenshot by IUFRO.

What is the purpose of thematic networking activities? Who are the target audiences and what are the main topics that are currently being addressed?

Thematic networking activities bring people together to exchange knowledge, debate and scale-up solutions, and thus help to fast-track actions on the ground. Restoring forest and tree-based ecosystems within the context of larger landscapes is a main topic and demands all types of expertise. We tackle complex global issues by taking an interdisciplinary approach to optimize outcomes for society.

A new model of thematic networking integrating in-person and online communities has emerged with GLF (Global Land-

scapes Forum) Chapters. We supported the initiation of a Chapter in Lilongwe, Malawi, in 2021. The model is working well so we plan to do something similar in Guatemala in 2022.

Capacity development and thematic networking activities often lead to published products. Can you give one or two examples and/or provide a sneak preview of upcoming publications?

A major scientific analyses of forest landscapes was implemented in 2019 as a thematic networking project across three continents and led to the publication of various individual country reports and a synthesis report in 2020. This prompted further investigation into the topic of governance--one of the key issues highlighted in the report. The findings of the follow-up study were just published in IUFRO Occasional Paper No. 34 “Governance of Forest Landscape Restoration: Selected Case Studies from Ghana and India”. (See page 10 of this issue)

IUFRO-SPDC is also well known for its Scientist Assistance Programme (SAP), which aims to enable researchers from economically disadvantaged regions to participate in IUFRO events, including the IUFRO World Congress. How successful has this program been so far, also with a view to involving more scientists from these regions in IUFRO activities in the long term?

This program has been a major success in broadening geographic representation in IUFRO’s many conferences. Over the past 20 years IUFRO-SPDC has mobilized funding to support participation in IUFRO meetings of an average of 100 forest scientists per year. SAP support covers air travel to the venue, accommodation, subsistence and the conference registration fees.

At the XXV World Congress in Brazil we sponsored 103 participants from 45 countries. Gender balance was achieved by allocating 54% of the SAP sponsorships to female and 46% to male scientists. In terms of regional participation, around 40% of scientists came from Latin America while 30% each from Africa and Asia.



Training course participants in Curitiba, Brazil, 2019. Photo by Ivan Lakyda

Obviously, sufficient funds are needed for all these activities to be successful. Why should donors invest in IUFRO-SPDC?

IUFRO-SPDC offers a systematic approach to increase capacity in economically disadvantaged countries with a long-term vision and diverse support base. Operating since 1983 we have proven experience working with local IUFRO members and their scientists. We support locally designed initiatives that are aligned with global goals and achieve long-term impacts and community ownership. With this bottom-up approach, IUFRO-SPDC contributes to shaping human resources needed for the kind of sustainable development sought-after by most donor agencies.

What are your hopes, plans and expectations for the future of IUFRO-SPDC? Are there any activities in the immediate future that you would like to highlight?

We hope that IUFRO-SPDC will continue providing capacity building services at least at the same level as in the past. However, new ways of interacting – e.g., online mode – will have a

significant impact on the way IUFRO-SPDC programs will be implemented in the future. We hope to utilize these opportunities and become more inclusive so that the forest science community working under less privileged conditions will benefit more. Plans for the immediate future include:

- expanding the currently ongoing forest landscape restoration mentorship program in Malawi and Sri Lanka, which combines training of scientists and field practitioners, to include other countries;
- production of training material in local languages; and
- updating current training modules to reflect latest developments in technology.

Overall, IUFRO-SPDC will continue to play its role in supporting the implementation of the IUFRO strategy, especially contributing to inclusion, diversity, and research excellence.

Thank you for the interview!

Un-earthing Local Experiences and Systems for Restoring Forest Landscapes

Report by IUFRO-SPDC

Taking action to address land degradation and the climate crisis, 75 experts from all regions of India and overseas convened online at the International Knowledge-Sharing Workshop “Best Practices for Implementing FLR in South Asia”, hosted from November 9th to 12th, 2021. Visit: <https://www.iufro.org/science/special/spdc/netw/flr/ks-ws/icfreflr/>

The workshop was intended to bring to the table a wide a range of experiences with implementing forest landscape restoration (FLR) in India and to find opportunities to upscale efforts to restore degraded lands. All with a view to transition to more sustainable land use as part of a green and circular economy. The local knowledge presented in the workshop was complemented by approaches developed and applied elsewhere in the world so that participants obtained better insights into the challenges associated with restoring forest landscapes on the ground.

Over the four days, participants exchanged experiences on topics including: (a) FLR approaches as interventions into social-ecological systems, (b) FLR as contributions to climate change mitigation and adaptation, (c) rehabilitating ex-mining areas, and (d) financing and capacity building for FLR.

The workshop was the first major activity jointly organized by the International Union of Forest Research Organizations (IUFRO) and the Indian Council of Forestry Research and Education (ICFRE) under their recently established Memorandum of Understanding. The workshop preparations, including mobilization of participation from India, moderation of sessions and reporting during the workshop was in the able hands of senior scientists of ICFRE. IUFRO-SPDC contributed speakers from the IUFRO network including from Austria,



Panelists discuss role of FLR in achieving SDG 15 (left). FLR activities in India (right). Photo by Forest College & Research Institute, Telangana, India

Serbia, Switzerland, and the United States. Financial support was provided by the Korean National Institute of Forest Science (NIFoS) and the Ministry for Foreign Affairs of Finland.

Presentations of forest landscape restoration initiatives in the various regions of India highlighted the diverse array of local FLR approaches pursued in terms of stakeholder processes, FLR objectives, technical solutions and progress made thus far. Panel discussions and participant interaction revealed the need to upscale the many successful FLR initiatives through adequate policy measures at state and national levels, incentive systems and benefit sharing in order to promote the transition to non-degrading land use practices. Given the size of India, such upscaled results would greatly contribute towards global goals and targets for restoring the world's degraded landscapes.

Forest Ecosystem Management Decision Making Methods: An Integrated Bioeconomic Approach to Sustainability

Report by José G. Borges (Coordinator of [IUFRO WP 4.04.04](#) and Member of the Conference Committee), Brigitte Botequim (Member of the Conference Committee), Barbara Pavani Biju (Member of the Conference Committee) and Harald Vacik, (Coordinator of [IUFRO WP 4.03.03](#))

The [2021 BIOECOSYS Final Conference](#) brought together expertise and experience in forest ecosystem management and economics, to communicate recent findings and to accelerate the transfer of knowledge and best practices to stakeholders and forest actors. The main focus of the conference was on a) the communication of innovations in forest ecosystem management and decision support tools as well as in mechanisms to attract payments for ecosystem services and b) the demonstration of its application to bridge the gap between science and practice.

The conference built from research and outreach activities by the BIOECOSYS project:

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

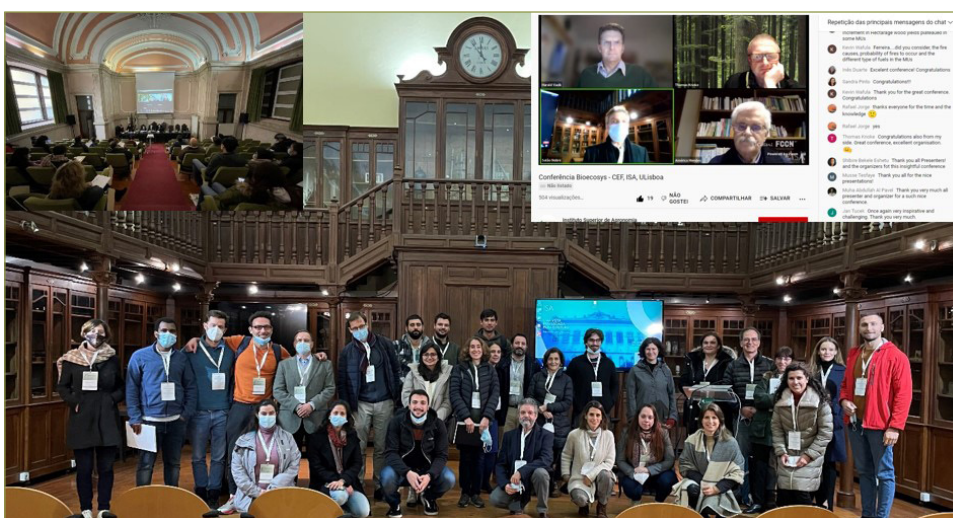
<https://www.researchgate.net/project/BIOECOSYS-Forest-ecosystem-management-decision-making-methods-an-integrated-bioeconomic-approach-to-sustainability>

targeting scientifically sound methods that can be used for forest ecosystem management by public administrators, non-industrial forest owners, industry and non-governmental organizations. These encompassed:

- (1) criteria and indicators for assessing the impacts of management strategies on biodiversity, vulnerability to wildfires, product and revenue flows and ecosystem sustainability,
- (2) planning methods that can link traditional stand level approaches for cork and timber production, with a landscape level approach that targets spatial structures associated with ecological functioning and the supply of forest-based services,
- (3) methods that may help assess risk and uncertainty as well as trade-offs between ecosystem services to develop better forest ecosystem management plans,
- (4) voluntary market mechanisms to match willing sellers (landowners) of forest ecosystem services with willing buyers (e. g. individuals, companies) and,
- (5) decision support systems as platforms for the transfer of technology and knowledge of forest ecosystems in a way that is understandable to everyone, thus addressing participatory planning concerns.

The presentations at the conference benefited from the synergies in research with the [MODFIRE](#) and the [NOBEL](#) projects and was supported by a case study, Vale do Sousa, a forested landscape of about 14 x 103 ha in Northern Portugal that is jointly managed by over 300 forest owners in Associação Florestal de Vale do Sousa.

In order to increase its effectiveness, the conference was structured into two sessions. In the first session, international keynote speakers provided a global perspective on advanced forest ecosystem management DSS, multiple criteria methods as well as approaches to attract payments for ecosystem ser-



Participants at the 2021 BIOECOSYS Final Conference in Lisbon, Portugal, December 6, 2021 (photos by Márcia Campana and Barbara Pavani, screenshot from the YouTube link below)

VICES. It was demonstrated that the demands for decision support are emerging from the rising challenges of forest management, considering the adaptation to climate change and the provision of multiple ecosystem services.

The second session included presentations of recent research activities targeting the application of forest ecosystem management planning methods, along with business models to implement payments for ecosystem services schemes. It encompassed demonstrations of a Pareto frontier computational platform result to select baskets of ecosystem services and of a web-based platform to support the auction process for different sets of ecosystem services.

Both sessions can be watched on YouTube:

<https://www.youtube.com/watch?v=Rz1FiIpnqx0>

The full video - available in the link above - had a total of 502 views in the first month after being made available.

Participants and Sponsorship:

The 2021 BIOECOSYS Final Conference took place on 6 December 2021 in Lisbon, Portugal. It was a hybrid onsite and online event that brought together researchers and stakeholders at very different stages of their careers. It encompassed fourteen presentations and involved approximately 110 participants (40 in loco and 70 online) from 42 countries. This conference was funded by the Bioecosys, Modfire and Nobel

projects at CEF/ISA and TERRA and was sponsored by IUFRO Units 4.04.04; 4.03.03) and ForestWISE and had Florestas.pt as media partner.

Visit: <https://www.bioecosys.com/bioecosys-conference>

Academic and non-academic participants were exposed to the evidence of how much forest ecosystem management plan-

ning methods and mechanisms can offer to attract payments for ecosystem services and support policies for sustainable and resilient landscapes. Additionally, the presentations and an eBook with the abstracts will be available soon at the project website and on ResearchGate.

Natural and Cultural Heritage in Forests – Contemporary Challenges

Report by Emilia Janeczko, Deputy Coordinator of IUFRO Research Group 6.01.00 Forest recreation

<https://www.iufro.org/science/divisions/division-6/60000/60100/>

The conference held on December 9-10, 2021, which gathered 86 participants from Nigeria, India, Ukraine, Poland, Lithuania, Latvia and Czech Republic, was kindly hosted by Warsaw University of Life Sciences, Poland, Institute of Forest Sciences and Forest Culture Center in Gołuchów, Poland and sponsored by National Forest Holding State Forest in Poland.

Meeting website: <https://inl.sggw.edu.pl/institute-of-forestry-sciences/conferences/?lang=en>

Natural and cultural heritage are development assets that offer unique development opportunities and a high-quality living environment. The concept of cultural heritage first included in the Convention concerning the Protection of the World Cultural and Natural Heritage of 16 November 1972 has evolved and expanded its meaning over the years. Forests today are part of Europe's identity and a cultural heritage to be passed on to future generations. Natural and cultural heritage sites are under increasing pressure from climate change, infrastructure development, mining, poaching, mass tourism and other threats. It is necessary to counter these threats.

Conference participants presented the conceptual framework, results of a systematic literature review, and empirical findings in the following areas:

- Natural and cultural heritage in forests - identification and interpretation
- Forest management in UNESCO World Heritage sites
- Cultural dimensions of forest use
- Natural (natural) heritage conservation
- Natural and cultural heritage in forests - tourism and recreation development

They concluded, among other things, that modern technologies for investigating inaccessible areas, as well as communication with the local community, make it possible to learn more and more about



Traces of ancient forest settlements in the Kampinoski National Park, Poland. Photo provided by Emilia Janeczko

places and read their history. Also, as each UNESCO World Heritage Site is unique, the management of these areas, including forests, requires diverse, and to some extent flexible, management approaches. The challenge in the face of growing expectations on the social functions of the forest is to adopt appropriate strategies for the moderate, sustainable use of the forest's biological, cultural and landscape diversity. Sustainable development of tourism and recreation in forest areas must be based on respect for the natural, cultural, customary and historical heritage of forests.

The meeting was rounded off by virtual tours in the Kampinos National Park and in Forest Culture Centre in Gołuchów.

A recording of the second day of the conference is now available at https://youtu.be/FN_Gp_Rtes (The video from the first day of the meeting is under preparation).

A scientific monograph entitled "Natural and cultural heritage in forests – contemporary challenges" is planned to be

published in Polish by SGGW Publishing in the near future. Material is also being collected for a special issue in Sustainability: "Conference Exclusive Selection: Natural and Cultural Heritage in Forests—Contemporary Challenges".

Photo: During the conference (from left): Dr. Wojciech Kędziora and Professor Bogdan Brzeziecki from the Institute of Forest Sciences, Warsaw University of Life Sciences



International IUFRO Symposium on Pine Wilt Disease (PWD2020)

Report by *Christelle Robinet (INRAE, France), Deputy Coordinator of IUFRO WP 7.02.10, and Géraldine Roux (University of Orléans, France)*

Find the full report at: <https://www.iufro.org/science/divisions/division-7/70000/70200/70210/activities/>

The symposium on 22-26 November 2021 attracted 208 participants from 35 countries, mostly from Europe and Asia. Originally, the event should have taken place on 9-13 March 2020 in Orléans, France, but had to be cancelled at short notice because of the COVID-19 outbreak and was later rescheduled and held as a virtual meeting. The symposium was kindly supported by INRAE, University of Orléans, EntomoCentre and MiDi (both are networks of the Région Centre Val de Loire), OEPP/EPPO, DGAL/DSF (French forest health department – Ministry of Agriculture).

Meeting website: <https://symposium.inrae.fr/pwd2020>

Native to North America, the pine wood nematode *Bursaphelenchus xylophilus* was accidentally introduced in Asia where it has been causing severe damage. The first damage presumably caused by the nematode infection was reported in Japan in 1905, before the nematode was actually detected a few years later. The nematode was then detected in China in 1982, in China-Taipei in 1985, and in Korea in 1988. In Europe it was detected for the first time in 1999 close to Lisbon, Portugal, and has since then spread to almost the entire country including the island of Madeira in 2009. It has also been found in different locations in Spain since 2008.

The scientific community is studying this invasive pathogenic nematode, its insect vector (*Monochamus* spp.), the susceptibility of pine trees, as well as associated fungi and bacteria. This requires multidisciplinary approaches bringing together experts in nematology, entomology, tree resistance, ecology, genetics and modelling. The symposium offered five sessions:

Session 1: Situation of the pine wood nematode spread in infested countries

Session 2: Potential spread of the insect vector

Session 3: Host trees and development of the pine wilt disease

Session 4: Interactions among the nematode, the insect vector, the host trees, fungi and bacteria

Session 5: Management

To avoid pine wilt disease establishment participants emphasized the need for careful surveys at entry hot-spots (i.e. harbours and airports) to detect signs of the presence of exotic insect-vectors in commodities and early detection of wilting trees in the surrounding conifer forest areas. It is of crucial importance to break the infection chain before it is too late. Trapping infested immature beetles would be important to prevent pine wood nematode transmissions but further research is needed since, so far, the beetles do not respond to available lures. The possibility of asymptomatic (latent) trees also appears to be *very important for the success of nematode management*.



*The pine wood nematode, *Bursaphelenchus xylophilus*, the insect vector, *Monochamus galloprovincialis*, and susceptible pine trees constitute a complex multi-player system that could lead to pine wilt and death. Picture kindly provided by INRAE*

A Book of Abstracts is available at (also see page 12):
<https://www.iufro.org/fileadmin/material/publications/proceedings-archive/70210-virtual21-abstracts.pdf>

A topical issue related to this symposium will be published in the journal *Annals of Forest Science* (deadline for submission in May 2022).

A session on pine wilt disease will be held in the course of the IUFRO "All Division 7 Conference in Lisbon, Portugal, on 7-9 September 2022: <https://iufro-lisbon2022.com>

The next symposium on Pine Wilt Disease will take place in 3-4 years, most likely in China. Previous symposiums took place in Korea in 2016, Germany in 2013, China in 2009 and Portugal in 2006.

Mediterranean Forest Health in the Context of Global Change

Report by *Andrea Battisti and Massimo Faccoli, Coordinators of IUFRO WP 7.03.06 and IUFRO WP 7.03.14, respectively*

Find the full report at:

WP 7.03.06 <https://www.iufro.org/science/divisions/division-7/70000/70300/70306/activities/>

WP 7.03.14 <https://www.iufro.org/science/divisions/division-7/70000/70300/70314/activities/>

This online advanced course from 22 November to 01 December 2021 had 31 participants from 10 countries. It was hosted/supported by International Centre for Advanced Mediterranean Agronomic Studies (CIHEAM), through the Mediterranean Agronomic Institute of Zaragoza (CIHEAM Zaragoza), European Forest Institute (EFI), through EFI's Mediterranean Facility (EFIMED), and IUFRO.

Meeting website:
<https://edu.iamz.ciheam.org/ForestHealth/en/>

Mediterranean forests are complex social-ecological systems characterized by wide biodiversity and a high level of spatial and environmental heterogeneity. They are considered as a hotspot of global change impacts and risks. Promoting forest adaptation to global change is particularly challenging because of considerable uncertainty in climatic scenarios, ecosystem responses, and impacts of forest management practices. Forest health is an essential part of sustainable forest management. A shifting pattern in the incidence of endemic threats to the Mediterranean forest is increasing their vulnerability. Furthermore, new threats for forest health are emerging from trade globalization, environmental pollution and climate change.



Beech stand partly killed by pests and pathogens in the Italian Apennine mountains. Photo provided by Andrea Battisti

The objective of the course was to present the current knowledge, concepts, criteria and methods concerning forest health assessment, monitoring and management in a context of global change. The course comprised a total of 31 hours of lectures with applied examples, practical and demonstration sessions and a debate. A total number of 18 highly qualified lecturers from universities, research centres, administration services and international organizations from Croatia (1), France (2), Italy (4), Portugal (5), Spain (3), Switzerland (1), Turkey (1) and United Kingdom (1) took part in the course. Lectures and practical sessions were provided in English, French and Spanish. Upon completion of the course the participants achieved:

- An overview of global change trends in Mediterranean forests.
- A better understanding of the impact of global change on forest health.
- A perspective of the most important climate change drivers threatening forest health in the Mediterranean.
- Insight into the risk of emerging health issues caused by different invasive plant species and forest pests and pathogens.
- A view of the use of available models and tools to support informed decision-making.
- Knowledge on methods and tools for an improved assessment, monitoring and surveillance of forest health.
- Approaches of integrated forest health management strategies to cope with global change.

Announcements

REMINDER – Call for Bids for Hosting the XXVII IUFRO World Congress in 2029 Still Open!

IUFRO Member Organizations around the world are encouraged to consider submitting a bid for this highly important IUFRO event. The IUFRO World Congress is a unique opportunity for your organization and your country to host a global research community and advance science for the benefit of forests and people.



Photo: absolutevision on Pixabay

If you feel that your country is a potential candidate for hosting the Congress 2029, please read the **Bidding Rules and Call for Bids**, posted at:

<https://www.iufro.org/fileadmin/material/eb-meetings/management/iwc29-bids/iwc29-congress-bidding-rules.pdf>

You are also encouraged to contact the other IUFRO Member Organizations as well as the appropriate government authorities in your country in order to discuss a formal bid. Please note that the deadline for submitting the bids electronically is **15 April 2022**. For further details please see the Bidding Rules and Call for Bids and/or contact IUFRO Headquarters office(at)iufro.org.

GFIS Global Forest Information Service Discontinued

After more than 20 years of disseminating forest-related information from around the world, the Global Forest Information Service (GFIS) operated by IUFRO and partners has come to an end. As of 31 December 2021, the GFIS website as a separate entity will no longer be available. IUFRO's new policy will concentrate on IUFRO-generated information with the vision of creating its own online information resources center.

Please visit the GFIS legacy webpage at <https://www.iufro.org/science/gfis/> for further information and find interesting reports on project activities, results and achievements, and various other material archived online.

Over the past two decades, GFIS provided a valuable contribution to facilitating knowledge sharing and fostering partnerships between knowledge producers and users in the field of forest science and forestry around the world. We would like to thank all partners that were involved in the GFIS project as well as all IUFRO members that contributed to the GFIS website. Furthermore, we want to thank the GFIS team for the achievements made and important milestones reached throughout the many years of GFIS.

XPRIZE Rainforest and IUFRO Partner up for a Better Understanding of Rainforests

While all forest types are critically important for biodiversity conservation, it is essential to remember that the world's shrinking rainforests, which cover less than 2% of our planet's total surface area, are home to about 50% of all known plant and animal species.

Launched in 2019, the \$10 Million XPRIZE Rainforest is a five-year global competition challenging innovators to develop new technologies to rapidly and comprehensively survey rainforest biodiversity and use those data to improve shared understandings of this ecosystem. To support and promote the competition, XPRIZE Rainforest has now entered into a partnership agreement with IUFRO, the International Union of Forest Research Organizations, which unites more than 15,000 scientists in around 650 Member Organizations in over 125 countries.

The competition calls on innovators to develop novel technologies for identifying and cataloging rainforest biodiversity and to deliver insights from integrating multiple sources of data to show the value of the biodiversity contained within standing tropical rainforests globally. Co-designing and co-creating solutions with Indigenous Peoples and local communities as

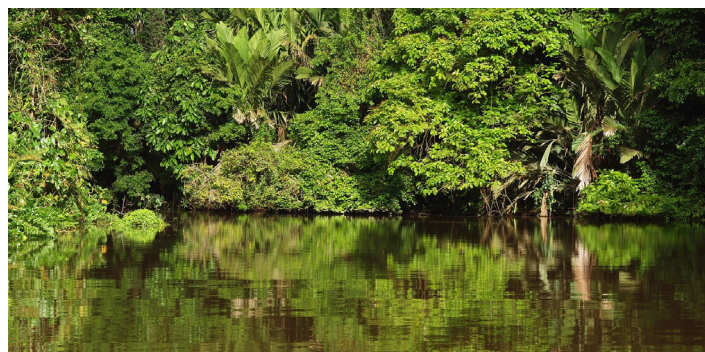


Photo by praesentator on Pixabay

key stakeholders is part of the prize framework. Based on the partners' knowledge, experience, as well as human and technical resources in the field of innovation, the partnership aims to foster global interdisciplinary scientific collaboration, including forest science, to find solutions to pressing global challenges.

IUFRO experts are invited to join teams in the competition. Additionally, they will be invited to support XPRIZE Rainforest with informational sessions, workshops, trainings, and/or other initiatives to support teams that participate in the competition, especially if they have gaps in expertise that IUFRO scientists could fill.

Read the full release: <https://www.iufro.org/news/article/2022/01/27/partnership-agreement-between-iufro-and-xprize-rainforest/>
Visit: <https://rainforest.xprize.org/prizes/rainforest>

Professor Jeffery Burley (1936-2021)

IUFRO Past President, forward thinker and leading expert in tropical forestry



It is with great sadness that we inform you of the passing of Professor Jeffery Burley, IUFRO Past President.

He will be dearly missed by the IUFRO community, and our heartfelt sympathy goes out to his wife Jean, his sons Jeremy and Timothy, and all his family.

Professor Burley studied Forestry at Oxford University, UK, and obtained his PhD in Forest Genetics from Yale University, USA, in 1965. In the same year he started his professional career in Zambia as a UNESCO expert in forest genetics and Head of the Tree Improvement Research Centre, Agricultural Research Council of Central Africa. He served as advisor to government research programs on tree breeding in Malawi, Zambia and Zimbabwe before returning to the University of Oxford as a Research Officer at the Commonwealth Forestry Institute in 1969.

Professor Burley was appointed as University Lecturer in Forestry in the University's Department of Forestry in 1976 and became the last Head of Department and first Director of the Oxford Forestry Institute (OFI) in 1982. After his retirement from the University in October 2002, Professor Burley remained at Green Templeton College until 2004 where for two years he was Emeritus Fellow in the Public Understanding of Forest Science.

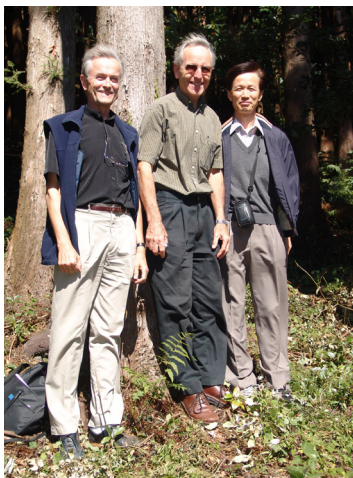
Professor Burley worked actively with the Marcus Wallenberg Prize (MWP) from 1994-2017, first as a member of the Selection Committee (1994-1998) and then as chairperson (1998-2006). He continued as a member of the Board of the Marcus Wallenberg Foundation until his resignation in 2017.

Throughout his professional career, Professor Burley was active in IUFRO. At the 15th IUFRO Congress in Gainesville, USA (1971) he was instrumental in the establishment of the first specifically tropical Working Group in the Union. At the Congress in Ljubljana, Yugoslavia (1986), he was elected Coordinator of Division 2 Forest Plants and Forest Protection and became a member of the Executive Board for 1987-1990. In 1995, at the 20th IUFRO World Congress in Tampere, Finland, Professor Burley was elected President for 1996-2000. In 2005, at the 22nd IUFRO World Congress in Brisbane, Australia, Professor Burley retired formally and was awarded IUFRO Honorary Membership.

When Professor Burley assumed the office of IUFRO President in 1995, he brought with him the knowledge gained from a rich variety of prior professional experiences. Having worked

in Africa, Asia, Latin America and in vulnerable forest regions across the world, he was able to bring IUFRO into greater dialogue with tropical countries.

As a forward-thinking leader, Professor Burley contributed decisively to making IUFRO ready for the 21st century. The change of IUFRO's name from "forestry" to "forest" research organizations, for example, was initiated during his Presidency and was meant to embrace a larger community and to duly recognize the environmental and social benefits of forests. It was also intended to encourage organizations which were not traditional forestry institutions to become involved in IUFRO. During his tenure as President, Professor Burley also emphasized the importance of effective communication of research findings not only within the scientific community but also to policymakers and the public at large.



Professor Burley, center, together with IUFRO past-Presidents Risto Seppälä (left) and Don Koo Lee (right)

"Jeff will be remembered for his warmth, humor, and generosity of spirit, and will continue to inspire all who had the good fortune to know him and work with him during his long and storied career. A dedicated educator, an accomplished scientist, and a wonderful mentor, he was also a tireless champion for forests and their sustainable management. During his decades of involvement in IUFRO, including his service as President from 1995 to 2000, Jeff was an exemplary leader in global forest science collaboration."

John Parrotta, IUFRO President

Dr. Frank H. Wadsworth (1915-2022)



Frank H. Wadsworth, an influential leader in tropical forest research, management and training over many decades, passed away on January 5th, 2022, at the age of 106 in Puerto Rico, his home since 1942.

Born in Chicago in 1915, he studied at the University of Michigan, earning B.S. and Master's degrees in 1937, and a PhD in forestry in

1950 for his dissertation on the management of the Caribbean National Forest in Puerto Rico. Dr. Wadsworth's distinguished 62-year career with the U.S. Forest Service included serving as supervisor of the Caribbean National Forest (1956-1974) and Director of Institute of Tropical Forestry from 1956 to 1978. Following his official retirement on the last day of 1999, he continued to work as a volunteer for the Institute for another 15 years, during which time he continued to be very active in research and conservation education activities.

Dr. Wadsworth was a pioneer in the field of tropical silviculture and a passionate advocate for tropical forest conservation and the importance of research and public education for the sustainable management of tropical forests worldwide. Among his over 130 scientific publications were several major books, including *Forest Production for Tropical America*, published in 1997 and translated into Spanish with support from CATIE and IUFRO in 2000 (currently used as a text in tropical forestry courses in several countries), and the two-volume *Trees of Puerto Rico and the US Virgin Islands* (1964, 1974, co-authored with E.K. Little and R.O. Woodbury), a standard reference for the Caribbean region. He was also very active in FAO's North American Forestry Commission and Latin American Forestry Commission and served as a consultant and adviser to FAO and USAID and other institutions worldwide, including throughout Latin America. Edited the Tropical Forest Station's quarterly "Caribbean Forester" for 24 years Editor of ISTF NEWS of the International Society of Tropical Foresters from 1978 until well after his retirement.

Dr. Wadsworth will be long remembered by the generations of foresters, researchers, students and youth who he mentored and generously shared his deep knowledge, experience and enthusiasm for tropical forests, their biodiversity, and the many benefits they provide to society.

Obituary kindly provided by John Parrotta, IUFRO President

Positions

<https://www.iufro.org/discover/noticeboard/position-announcements/>

Molecular Biologist / Plant Pathologist

Submission of applications until 6 February 2022

Forest Research (FR), the research agency of the UK Forestry Commission, is seeking to appoint a Molecular Biologist/Plant Pathologist on a Fixed Term Appointment for 27 months. The project the successful candidate will take on is beetle transmission and vectoring of bacteria in Acute Oak Decline (AOD). Duty Station: Alice Holt Research Station, Farnham, Surrey, UK Reference number: 179852

<https://www.iufro.org/fileadmin/material/discover/nb-forestresearch-molecular-biologist-plant-pathologist.pdf>

Assistant Professor in Forest Entomology

Submission of applications until 11 February 2022 or until filled Ohio State Entomology invites applications with a strong focus on the impacts of climate change, urbanization, species invasion and/or other disturbances as they relate to arthropod populations in forested ecosystems. This is a nine-month tenure track faculty position with a 70% research and 30% teaching appointment.

Duty station: CFAES campus in Wooster, Ohio, USA

<https://entomology.osu.edu/news/assistant-professor-forest-entomology>



PhD Opportunity in Mixed Forests Establishment and Management

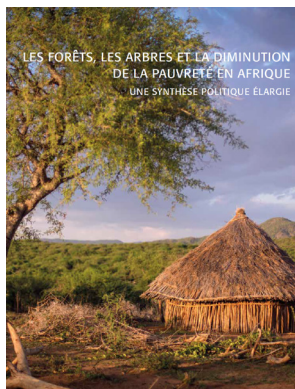
Submission of applications until 15 February 2022

The Silviculture Lab of the Faculty of Forestry, University of British Columbia (UBC), is seeking a highly motivated person to conduct research on the role of mixed forests management for enhancing the resilience of forest stands to disturbances such as droughts and insects, which are on the rise in western Canada.

Institution: Faculty of Forestry, University of British Columbia (UBC), under the supervision of Ignacio Barbeito
Details: <https://www.grad.ubc.ca/ad/55681>

Publications

Latest GFEP Policy Brief Now Available in French!



IUFRO's Global Forest Expert Panels (GFEP) Programme launched the French version of their latest publication, *Forests, Trees and Poverty Alleviation in Africa: An Expanded Policy Brief*, on 17 January 2022. The policy brief (in English) was launched in July 2021 during a virtual side event of the UN High-Level Political Forum on Sustainable Development (UN-HLPF).

This Expanded Policy Brief was prepared by 20 scientists and in consultation with 207 local stakeholders from various groups, including policymakers, international development organizations, civil society and other interest groups, and is based on the global assessment report of the Global Forest Expert Panel on Forests and Poverty published in 2020.

This Expanded Policy Brief contributes to the implementation of the African Union's Agenda 2063 and the 2030 Agenda for Sustainable Development by highlighting the nexus between SDG 1: No poverty and SDG 15: Life on land, as well as links to other relevant SDGs.

The publication outlines the most important scientific evidence of the nexus of forests, trees, and poverty in Africa, explains the context, and highlights key conclusions to be taken into account by stakeholders across Africa.

Further information and the Expanded Policy Brief are available for download at:

<https://www.iufro.org/science/gfep/regional-activities/forests-trees-and-poverty-alleviation-in-africa/>

Find "Forests, Trees and the Eradication of Poverty: Potential and Limitations. A Global Assessment Report" at: <https://www.iufro.org/science/gfep/gfep-initiative/panel-on-forests-and-poverty/>

IUFRO Occasional Paper 34: Forest Landscape Restoration Governance, Selected Cases in Ghana and India

An understanding of governance issues is key to implementing forest landscape restoration projects. This report looks at case studies in Ghana and India and highlights important differences in the political, legal and institutional environments and the need to recognise opportunities and limitations in restoring land based on the local context.



Eight key messages on governance of Forest Landscape Restoration were distilled from analyses of governance issues in cases from the Bono region of Ghana and in Gajwel and Mulu-gu Mandalas of Telangana, India:

- Recognise where and when restoration is a reasonable and feasible option
- Restoration decisions must take into account the stakeholders' different interests, skills, capacities and leverage
- FLR takes place within formal and informal regulatory frameworks and policies
- Create jobs and clear benefits for local communities and make trade-offs transparent
- Sustain FLR results through monitoring and adaptive management
- Conflict resolution mechanisms are integral part of FLR
- Political support is key
- Develop flexible governance structures allowing for different types of restoration alliances

[Click here to download the publication!](#)

Building a Successful Forestry Career - Now Available in French -



The French edition of the book "Building a Successful Forestry Career in Africa: Inspirational Stories and Opportunities" can be accessed and downloaded for free from the same page as the English version: [Click here!](#)

This book is an output of the Young African Forestry Professionals Publications project (YAFFP), an initiative of the Joint IUFRO-IFSA Task Force on Forest Education and IUFRO-SPDC. It provides insights into exciting forestry career opportunities also beyond the forests and offers inspiration and tips for the next generation of African foresters!

IUFRO Occasional Paper 35 Forest Legislation in Latin America

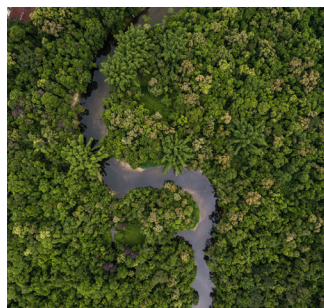


Photo Alessandro Panasolo

A new Occasional Paper has just been published electronically in English and Spanish:

Economía y legislación forestal ambiental en países de América Latina

Economics and Environmental Forestry Legislation in Latin American Countries”.

In this publication members of the Latin American Network of Environmental Forestry Law (RELADEFA), which operates in the framework of IUFRO Working Party 9.06.01, present comprehensive and in-depth information about the situation of forests and forest legislation in 15 Latin American countries.

Special emphasis has been placed on forest legal frameworks and related effects on management and administration, state of economy as well as forest and nature protection. The outcome is not a scientific publication but is mainly intended for communication purposes so that readers learn about the situation of each country.

The publication project has been coordinated by Working Party Coordinator Gloria Sanclemente together with IUFRO Honorary Member Heinrich Schmutzenhofer and Peter Herbst, Deputy Coordinator of IUFRO Research Group 9.06.00 Forestry Law and Environmental Legislation.

Find all papers in Spanish and English and additional information and articles in German at:

<https://www.iufro.org/science/divisions/division-9/90000/90600/90601/publications/op35-download-by-paper/>

IUFRO Spotlight #91 Science-Policy Practice Interface for Managing Forest and Water Interactions under a Changing Environment

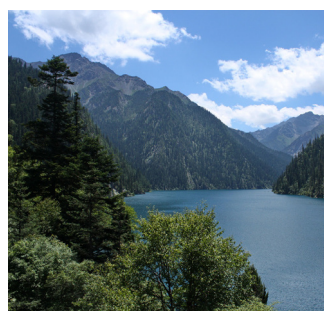


Photo Vandaagevanniet on Pixabay

The IUFRO-sponsored Forests and Water science-policy forum at the IUFRO World Day provided a platform for scientists, forest managers and decision-makers from the Asia-Oceania region to share insights and experiences about forest and water interactions from different perspectives.

Among the significant challenges discussed by the forum panelists were the increasing competition for water resources, the positive and negative impacts of carbon sequestration due to large scale afforestation and reforestation, climate change-related shifts in rainfall patterns and capacity building requirements among civil groups at various levels to ensure competent engagement in forest and water management.

The article was published in December 2021 at:

<https://www.iufro.org/media/iufro-spotlights/forests-and-water/>

IUFRO Spotlight #92 Forests and Fire Intersectionality of Forests and People



Photo by Balbina Soriano

An IUFRO World Day panel discussion between scientists, practitioners and decision-makers examined forests and wildfire research in the Americas.

Throughout the Americas wildfires are changing. Forests are experiencing longer fire seasons, fires occurring outside of historic fire regions, fires burning more land on average each

year, and more extreme fire behavior; some of which is attributed to a changing climate. Additionally, we are seeing an increased frequency of wildfires in populated area, impacting more homes and communities.

Panelists noted that some of the wildfire management methods currently employed have been overtaken by events – primarily climate change – and new approaches and strategies that are more reflective of current conditions must be developed.

Read more at: <https://www.iufro.org/media/iufro-spotlights/forests-and-fire-intersectionality-of-forests-and-people/>

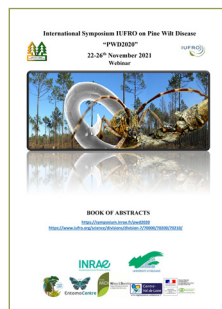
Proceedings, Books, Journals

International Conference “European Forests – Our Cultural heritage”

IUFRO Working Party (WP) 9.03.01 Economic and Social Forest History and IUFRO WP 9.03.02 Forest and Culture, jointly with the Austrian Forest Association’s Working Party Forest History held a conference on 4–7 December 2018 in St. Georgen am Längsee, Carinthia, Austria.

Editors: Elisabeth Johann, Jürgen Kusmin, Jiří Woitsch
<https://www.iufro.org/fileadmin/material/publications/proceedings-archive/90301-90302-st-georgen-laengssee18-proceedings.pdf>





International Symposium on Pine Wilt Disease "PWD2020"

22-26 November 2021, Webinar

The pine wood nematode, *Bursaphelenchus xylophilus*, is one of the most important pests of pine forests in Asia and in Europe. Despite huge efforts to control this pine wilt disease, no effective environmentally and socially friendly solution has been found yet.

<https://www.iufro.org/fileadmin/material/publications/proceedings-archive/70210-virtual21-abstracts.pdf>



Forest Governance: Hydra or Chloris?

Part of Elements in Earth System Governance

By Bas Arts, Wageningen University & Research, Radboud University Nijmegen, published by Cambridge University Press

Many forest-related problems are considered relevant today. One might think of deforestation, illegal logging and biodiversity loss. Yet, many governance initiatives have been initiated to work on their

solutions. This *Element* takes stock of these issues and initiatives. [Click here to find out more!](#)

Adaptive Collaborative Management in Forest Landscapes - Villagers, Bureaucrats and Civil Society

Edited by Carol J. Pierce Colfer, Ravi Prabhu, Anne M. Larson
Copyright Year 2022

This book examines the value of Adaptive Collaborative Management for facilitating learning and collaboration with local communities and beyond, utilizing detailed studies of forest landscapes and communities. [Link to the book.](#)

Two Papers on Pterocarpus Wood Identification

Attention to illegal logging practices and demanding policies in transnational timber trade have driven the need for species-level identification of timber. These two papers co-authored by Cady Lancaster, Deputy Coordinator of IUFRO Working Party 5.16.03 - Multidisciplinary identification of wood, present methods of Pterocarpus wood identification, as in Pterocarpus, three out of 46 tree species are listed as endangered.

Erin R. Price; Isabella Miles-Bunch; Peter E. Gasson; Cady A. Lancaster. **Inference of origin of Pterocarpus timber by chemical profiling of ambient ionization mass spectra.** November 2021. Forensic Science International: Animals and Environments. DOI: 10.1016/j.fsiae.2021.100032

Erin R. Price; Isabella Miles-Bunch; Peter E. Gasson; Cady A. Lancaster. **Pterocarpus wood identification by independent and complementary analysis of DART-TOFMS, microscopic anatomy, and fluorescence spectrometry.** June 2021. IAWA Journal. DOI: 10.1163/22941932-bja10064

Find the two papers at: <https://www.iufro.org/science/divisions/division-5/50000/51600/51603/publications/>

Special Issue "Non-Timber Forest Products Perspectives in a Bioeconomy"

The IUFRO Task Force "Unlocking the Bioeconomy and Non-Timber Forest Products" is facilitating this Special Issue of the journal *Forests*. It addresses the myriad of issues affecting efforts to improve the production, management and governance of NTFP to support inclusion in emerging models of forest-based bioeconomies.

Deadline for manuscript submissions: 31 August 2022.

Find out more at: <https://www.iufro.org/science/task-forces/bioeconomy-and-non-timber-forest-products/publications/>

Influence of Soil Water Table Depth on Amazon Forest Responses to Drought

New findings published by Michigan State University (MSU)

Researchers examine how climate change shapes the future of the world's largest rainforest and the impacts drought has on the forest growing on various soil water and water table conditions.

The research, published in the *New Phytologist* on January 17, 2022 presents a broad review of the importance of water table depth and summarizes previous studies showing the potential for shallow water table forests to act as hydrological 'refugia', or oases—showing resilience to droughts while other forests in the landscape are negatively affected.

<https://www.canr.msu.edu/news/the-other-side-of-amazon-forest-drought-could-amazon-forest-s-shallow-water-table-areas-act-as-climate-change-refugia>

Congratulations to IUFRO Members!



Photo by FinjaM on Pixabay

BOKU Celebrates its 150th Anniversary

In line with the slogan *150 Years – Featuring Future* the University of Natural Resources and Life Sciences (BOKU), Vienna, Austria, celebrates its 150th anniversary. Climate change, scarcity of resources, food safety – science has to address the critical areas of politics, the economy, administration and society and develop solutions that are relevant and applicable. BOKU through its holistic approach is well positioned to find answers to the major questions of the future. Celebrations will start on 31 January with a live streamed ceremony and discussion forum. [Find out more: LINK](#)

Forest Research Institute Baden-Württemberg Turns 150

The foundation of the FVA Baden-Württemberg in Freiburg, Germany, dates back to a decision made in 1870 to establish a special institution dedicated to forestry research experiments. Due to the Franco-German war, however, the institution only started to work in 1872. 150 years later FVA has grown into a modern institution focusing on research, monitoring, training as well as policy and management advice of high relevance to society. FVA is also one of the oldest members of IUFRO and listed under membership number 2! Together with the other members of NFZ.forestnet it hosted the IUFRO 125th Anniversary Congress in 2017. *More FVA history (in German): LINK*

IUFRO Meetings

For a full list of meetings go to our online calendar at:
<https://www.iufro.org/events/calendar/current/>
Find non-IUFRO meetings on the IUFRO Noticeboard at:
<https://www.iufro.org/discover/noticeboard/>

11 Feb 2022

Adaptative Collaborative Management of Forest Landscapes

Webinar, IUFRO [6.00.00](#)

Contact: Cecil C. Konijnendijk van den Bosch,
cecil.konijnendijk(at)ubc.ca

[Registration link](#)

15 Feb 2022

Webinar Series "Unlocking the Bioeconomy for Nontimber Forest Products": NTFP and Bioeconomy in the US Online

[IUFRO Task Force](#)

Contact: James Chamberlain,
james.l.chamberlain(at)usda.gov

<https://srs.fs.usda.gov/webinars/ntfp/>

14-17 Mar 2022

16th conference of IUFRO WP Party 7.02.01 "Root & Stem Rots"

Online

IUFRO [7.02.01](#)

Contact: Jonas Rönnerberg, Jonas.Ronnerberg(at)slu.se

<https://www.uv.mx/16-iufro/>

21 Mar 2022

International Day of Forests: Inspire for the Future – The Role of Forests in Ensuring Sustainable Production and Consumption

(Panel Discussion)

On site at Expo Dubai & online,
15.00 – 19.00 Gulf Standard Time

IUFRO, FAO and the Swedish University of Agricultural Sciences (SLU) as host organization of the IUFRO World Congress 2024

Contact: Fredrik Ingemarson, fredrik.ingemarson(at)slu.se

<https://expoupdate.se/event/inspire-for-the-future/>

International Day of Forests: <https://www.fao.org/international-day-of-forests/en/>



21 March
International Day of Forests

21-22 Mar 2022

The 2022 World Wood Day Online Symposium & The Fourth IUFRO Forest Products Culture Colloquium

Online, IUFRO [5.00.00](#), [5.15.00](#), [9.03.02](#)

Contact: Howard N. Rosen,
howard.rosen(at)usda.gov

http://www.worldwoodday.org/2022/regions_event/39



24-28 Apr 2022

IUFRO – Extension & Knowledge Exchange 2022 Conference

Asheville, North Carolina, United States

IUFRO [9.01.03](#)

Contact: William G Hubbard, whubbard(at)umd.edu

<https://conferences.coned.ncsu.edu/eke2022/>

24-27 May 2022

22nd International Nondestructive Testing & Evaluation of Wood Symposium

Quebec City, Quebec, Canada

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

Contact: Alexis Achim, Alexis.Achim(at)sbf.ulaval.ca

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

31 May – 2 Jun 2022

Socio-ecological conflicts in forest management: risks of (not) adapting?

Nancy, France

IUFRO [4.04.07](#)

Contact: Marielle Brunette, marielle.brunette(at)inrae.fr

<https://workshop.inrae.fr/iufro-risk-analysis-nancy/>

5-9 Jun 2022

15th International Christmas Tree Research and Extension Conference

Fallen Leaf Lake, CA, United States

IUFRO [2.02.09](#)

Contact: Bert Cregg, cregg(at)msu.edu

<https://www.iufro.org/science/divisions/division-2/20000/20200/20209/activities/>

5-8 Sep 2022

4th World Teak Conference 2022

Accra, Ghana

IUFRO [5.06.02](#)

Contact: P. K. Thulasidas, pktdas(at)gmail.com

<https://www.worldteakconference2020.com/>

6-9 Sep 2022

All-Division 7 Forest Health Conference

Lisbon, Portugal

IUFRO [7.00.00](#), [7.02.00](#), [7.03.00](#)

Contact: Manuela Branco, mrbranco(at)isa.ulisboa.pt

Tod Ramsfield, Tod.Ramsfield(at)canada.ca

<https://iufro-lisbon2022.com>

Other Meetings

2-6 May 2022

World Forestry Congress

COEX, Seoul, South Korea

Korea Forest Service (KFS) in collaboration with UN FAO

Website: <https://wfc2021korea.org/>

IUFRO-related events at WFC will soon be listed at:

<https://www.iufro.org/events/other-major-events/wfc-2022/>