Social Innovations in Forest Dependent Communities and **New Challenges Posed by COVID-19**

By Maria Nijnik and Mariana Melnykovych, Coordinator and Deputy Coordinator, respectively, of IUFRO Working Party 4.05.05 - Social innovation and entrepreneurship https://www.iufro.org/science/divisions/division-4/40000/40500/40505/

Forest dependent communities in rural and often marginalized areas are facing numerous challenges. These are, among others, the relatively low accessibility to public services, low economic competitiveness due to high production costs, a low level of entrepreneurship, ageing population, youth outmigration, and increasing environmental threats, such as those posed by the effects of climate change.

The current COVID-19 outbreak has further deepened the vulnerability of the people living in marginalized localities due to factors that these areas have in common, such as the lack of access to effective surveillance and early-warning systems, as well as to health services, and the shortage of personal protective equipment. Forest-dependent communities often depend heavily on informal economy (markets of non-wood forest products, for example). They have limited access to technologies, inadequate access to social services, lack political influence and have inadequate capacities and opportunities to cope and adapt.

Yet, social innovation is expected to respond to social demands that are traditionally not addressed well by markets or existing public institutions. Thus, it might be a solution and a response that these localities have been looking for in order to tackle the above-mentioned challenges and build resilient communities. Social innovations may lead to the creation of new institutions, networks and governance arrangements that necessarily rely on voluntary engagement of civil society actors.

The new IUFRO Unit 4.05.05 - Social innovation and entrepreneurship, launched during an IUFRO Conference in Lviv, Ukraine, in September 2019, aims to bring together international experts and promote social learning, as well as to contribute ideas on social innovation and entrepreneurship that are potentially helpful for the development of marginalized rural areas, as well as ideas useful for communities of practice, at various levels.



Prof. Maria Nijnik, Coordinator of IUFRO WP 4.05.05 - Social innovation and entrepreneurship, said: "Our aim is to guide actions through advanced and innovative knowledge that will increase the well-being

Prof. Nijnik speaking at IUFRO 2017 Congress in Freiburg. Photo IUFRO



Launching of IUFRO Unit 4.05.05 - Social innovation and entrepreneurship in Lviv, Ukraine, by Deputy Coordinator Dr. Mariana Melnykovych. Photo by Ihor Fedyshyn, UNFU

of forest-dependent communities and assist them in building resilience to challenges currently faced and expected in future".

Having a primary focus on social innovation, the Unit aims to contribute to advancing and exchanging scientific knowledge of innovation and entrepreneurship in the context of forestry and incorporates the following specific objectives:

- promote multi-/trans- disciplinary research into social innovation in forestry;
- develop networking around social innovation and promote social learning;
- improve the exchange of information and experiences between science and practice, and promote the coconstruction of knowledge with stakeholders;
- contribute ideas on entrepreneurship that are potentially helpful for the development of sustainable forestry, and ideas useful for decision-makers at various levels, including policy actors.

"We believe that it is timely and worthy for scientists, the community of practice and local people to join forces and explore the opportunities arising from innovation for the forestry sector, especially in this challenging time. It is important to share innovative ideas on social entrepreneurship, as well as to advance and exchange the knowledge of how to introduce various types of innovations on the ground in order to increase resilience of those communities who are forest-dependent," said Dr. Mariana Melnykovych, one of the Working Party Deputy Coordinators.



Restoring Forests for Sustainable Development – Policies, Practices and Impacts

By Pia Katila, IUFRO-WFSE Coordinator https://www.iufro.org/science/wfse/

IUFRO's Special Project on World Forests, Society and Environment (WFSE) has started the work on a new topic focusing on forest restoration.

There is a long history of conservation, reforestation and tree planting for various purposes in different parts of the world. But, due to the continuing alarming rates of deforestation and forest degradation the past decades have seen an unprecedented increase in the acknowledgement of the urgent need to restore forest ecosystems and political commitments towards this aim.

The United Nations has declared 2021-2030 the 'Decade of Ecosystem Restoration' and multiple international, national and sub-national initiatives now promote the restoration of degraded forest lands. Estimates of the degraded or deforested forest lands (or landscapes) that could potentially be restored range from 0.9 to 2 billion ha. (Bastin et al. 2019; Minnemeyer et al. 2011)

IUFRO-WFSE will provide an overview of the history of forest restoration, current commitments, assessments of restoration potentials and current achievements, and conduct a comprehensive review of and contribute to the knowledge on institutional, social, economic, ecological and technical issues that influence forest restoration and the outcomes and impacts of restoration efforts.

The project will, among other things, discuss the different "forest restoration" concepts, definitions and datasets, as well as the related perspectives and approaches and how the different understandings are linked to current debates on the ecological, social and environmental aspects of sustainable development.

It will review forest restoration paradigms, discourses and policies and drivers of forest restoration as well as different restoration scenarios and their ecological, economic, cultural and social feasibility. It will also consider the short- and long-term costs and benefits of forest restoration and discuss technological development and advances in silvicultural and ecological management and their implications for forest restoration.



Atlas Mountains, Morocco. Photo IUFRO

A special focus will be placed on the interrelationship between forest restoration and climate change. Furthermore, the research will review restoration in the context of local development, including governance issues, enabling conditions for restoration, and the distribution of restoration costs and benefits and related impacts on sustainable development and human well-being at the local scale.

The project is coordinated in Natural Resources Institute Finland (Luke) and it brings together scientists and experts from international research and development organizations and universities from different parts of the world, including CIFOR, ICRAF, IIASA, IUCN, WWF, EFI, University of Florida, University of Freiburg, University of Melbourne and Kyoto University, for example. The results of the project will be published as an open access book in early 2023.



Due to the ongoing COVID-19 pandemic, the International Day for Biological Diversity on 22 May 2020 was commemorated through its first ever online-only campaign.

2020 is a year of reflection, opportunity and solutions. It is expected, from each of us, that we will "Build Back Better" by using this time to increase the resilience of nations

and communities as we recover from this pandemic. 2020 is the year when, more than ever, the world can signal a strong will for a global framework that will "bend the curve" on biodiversity loss for the benefit of humans and all life on Earth." https://www.cbd.int/idb/2020

IUFRO President John Parrotta, in his inaugural speech at the IUFRO World Congress in 2019, underlined the importance of **forests as the home of an estimated 80% of the Earth's terrestrial biodiversity**. "While all forest types are critically important in this respect, it is worth noting that the world's shrinking rain forests, which cover less than 2 percent of our planet's total surface area, are home to 50 percent of Earth's plants and animals. Beyond their importance to biodiversity conservation, forests are critical to our own survival", he said.

Find his speech here: LINK

John Parrotta also chaired the Global Forest Expert Panel (GFEP) on Biodiversity, Forest Management and REDD+ in 2012 that produced the report "Understanding Relationships between Biodiversity, Carbon, Forests and People: The Key to Achieving REDD+ Objectives". Link to the Panel and the Report: https://www.iufro.org/science/gfep/gfep-initiative/panel-on-bfmr/

GFEP has now started to prepare a followup study on this report.

You may also want to watch John Parrotta's **World Wood Day** video message: https://www.youtube.com/watch?v=KL0dFi5jbII&t=16s



Photo collage by John Parrotta from his presentation on 5 October 2019

Governing and Managing Forests for Multiple Ecosystem Services across the Globe

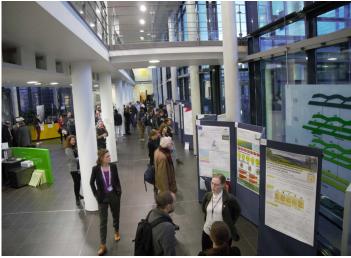
25-28 February 2020, CAESAR Research Center, Bonn, Germany Report by Georg Winkel, Coordinator 9.05.10 – Nature conservation & biodiversity Full report at: https://www.iufro.org/science/divisions/division-9/90000/90500/90507/activities/ Meeting website: https://informar.eu/final-conference

Governing and managing forests for multiple ecosystem services (ES) remains an important paradigm. Various forest management concepts have been developed to accommodate distinct social demands for different contexts and spatial scales. They are embedded in a large variety of policies and initiatives. Major global challenges and trends such as climate change and biodiversity loss impact on how forest are governed and managed, and how these approaches are implemented. The objective of this conference organized by the European Forest Institute and Swedish University of Agricultural Science and partners was to compile and synthesize the scientific evidence related to the current state of integrated forest management approaches worldwide.

Among the 189 participants from 30 countries who met in Bonn there were academic researchers from different disciplines such as policy analysis, ecology, economics, forest (ecosystem) management and conservation as well as policymakers and practitioners.

They addressed the following key questions:

- How are trade-offs and synergies between different forest ecosystem services perceived, governed and managed across Europe and beyond?
- What concepts exist for integrated forest management (IFM), what drives them (policy/market/environmental change, social demands), including their implementation in practice, and what are their prospects for the future?
- What do we know about how such management concepts impact the ecological structures and interactions in forests, and how are these linked to specific outcomes (biodiversity, ecosystem services)?



Poster hall. Photo by Maria Schlossmacher, EFI

This conference compiled and synthesized scientific evidence relating to the current state of "integrated" forest management approaches. All the abstracts from the conference have been compiled here: https://www.iufro.org/publications/proceedings/proceedings-meetings-2020/#c29770

This conference was mainly funded in the framework of the projects INFORMAR and POLYFORES. Other project partner projects are the European Network "Integrate", SINCERE, CONFOBI, the Swiss Forest Lab and oFOREST, the NFZforestnet as well as the Forest Bioeconomy Network.



Studying Forestry to be Part of a Solution to a Problem

Interview with IFSA President Amanubo Amos

Amos is a 25 year old Ugandan and a recent graduate from Makerere University, Kampala, holding a Bachelor's Degree in Conservation Forestry and Production Technology. He has been the President of the <u>International Forestry Students' Association (IFSA)</u> since August 2019. His favorite pastimes are cycling through natural landscapes and meeting friends.

Why did you choose to study forestry?

I grew up witnessing an unappealing trajectory, a transition from once heavily forested landscapes on which the livelihoods of my community depended, to now barely forested landscapes which hardly sustain livelihoods. This presented to me the opportunity to be part of a solution to a problem.

Are there many forestry students in your country?

Relative to other programs, there are very few forestry students in my country and much fewer females than males in this discipline.



During XXV IUFRO World Congress Gala Dinner. Photo by Morne Booij Liewes, FABI

What are the job perspectives as a graduated forester in your country?

They are moderate to high, depending on experience. The prospects range from the renewable energy sector to NGOs/INGOs working in shelter and livelihoods, private small scale forest tree seedling enterprises, commercial forest plantation management, environment and biodiversity conservation, and research NGOs.

How are your own studies affected by the coronavirus pandemic?

In a country that has been under a massive lockdown, academic institutions have been closed and studies put to a complete halt. As a developing country (LDC), there is no possibility of conducting studies efficiently in the virtual realm due to the low internet bandwidth.

How are IFSA activities affected by the pandemic?

IFSA has built a very strong sense of engagement around physical events, both internal events and external science-policy events. These events maintain the IFSA spirit of togetherness, create learning and networking opportunities and further the voice of young people on policy platforms. With travel restrictions, these opportunities and the values associated with physical engagement have been heavily limited.

What are you doing to keep the spirits high among IFSA students?

IFSA is blessed with an audience demographic (mainly young people) that are well acquainted with this era of digital communication. We have maintained our online presence through regional coffee hours, social media enga-

Why should anyone study forestry?

It is the diversity, providing one with the opportunity to specialize in any field and learn new things whilst directly solving relevant problems that affect the world now and into the future. If we look at the current global environmental challenges such as deforestation, biodiversity loss, and climate change, for example, I can't imagine a better time to study forestry to be part of a solution to a problem that threatens the future of humanity and the planet.

gement of our members, and have moved on to hold our Annual Regional Meetings online. We also have a Covid-19 Task Force that is particularly positioned to update our members on new developments.

What, in the light of the current crisis, do you see as the major strengths and weaknesses of IFSA?

Strengths: A highly flexible and diverse network well-versed with digital communication technology makes it is easy for IFSA to maintain a relevant and functional presence for most of the part, globally. Also

being a student-led voluntary network, the ability and resilience to maintain its local and international presence and contribute fundamentally to global forest education development projects whilst concurrently running its own education transformation initiatives, is an incredible strength.

Weakness: IFSA is a network whose spirit is mostly kept going through engagements at physical meetings and events that brings the connectedness and highlights the cultural richness and also learning through event based initiatives. Such a spirit is certainly difficult to maintain during such times of crisis with no physical events.

What threats and opportunities to you see for IFSA in this situation?

Threats: Given our international geographic coverage and noting that some of our membership is in developing countries that may have a low internet bandwidth, it may sometimes be difficult to reach information and engage members in these countries through the virtual realm.



Opportunities: Since physical events are usually accessible to few people due to capacity reasons, this situation provides us with the opportunity to engage a higher number of our membership in events that have since then moved online, without resource and capacity limitation.

After having established a Carbon and sustainability subcommission, this is a massive opportunity for IFSA to cut down its carbon footprint which was mainly from travels. It is also an opportunity to further adequately test the efficiency of our online engagement, which we aim to maintain even after the crisis.

How do you see the cooperation between IFSA and IUFRO?

The cooperation between IFSA and IUFRO is one of mutual benefit that has produced a lot of incredible results in enhancing forest education, with IFSA bringing students and youth perspectives and experiences to IUFRO, and IUFRO contributing to shaping the professional experience and exposure of IFSA members directly through trainings and indirectly through engagement at IUFRO events.

Having successfully collaborated on joint forest education development projects previously, it is imperative to explore prospective similar joint projects in order to continue enhancing forest education and also promoting exchanges at physical and online meetings and events. With a strong background in voluntary work, both organizations can explore avenues of exchanging capacity to support the work of each other.

What do you consider to be the greatest challenge for the future?

With IFSA the greatest challenge is the growing network/ membership which may need more resources and capacity to sustain and coordinate. Balancing this demand with the voluntary nature of the network is certainly a challenge.

The overall challenge for the future is to make the world realize the true value of forests besides other ecosystems, the ecosystem goods and services they provide and to maintain these values for the benefit of humans and nature. Also, then acknowledging the jeopardy of human future without these values and services. We will get there soon.

Tour of Vienna with members o the local IFSA committee of BOKU and IFSA officials in early 2020. Photo by Oindrila Basu

What is your greatest hope for the future?

To see that humans and nature are reconciled, acknow-ledging that their existence is not mutually exclusive, heeding to both scientific and indigenous knowledge to inform resource use behavior and also seeing the bioeconomy rising through to a rank higher than the fossil economy, with forestry as a leading drive of socioeconomic development and environmental sustainability.

Is there a positive proverb or famous quote that you would like to share with us?

"It is not the shoes we wear, but the steps we take, that get us where we want to be" – (Anonymous)

Do have an inspiring role model who you follow?

Apart from the admiration I have for every forester, former IUFRO President Prof. Mike Wingfield stands out as an inspiring role model for me because of his matchless achievements, leadership, wisdom and approachability, as well as the incredible contributions he has made to the forestry sector and the body of knowledge in forest sciences.

Thank you, Amos!

Amanubo Amos is listed as a speaker at the forthcoming 2020 Digital Global Landscapes Forum:

https://events.globallandscapesforum.org/bonn-2020/speaker/amanubo-amos-2/

News from IUFRO Members

Scientists obtain a thickening agent from pine and eucalyptus cellulose to produce alcohol hand sanitizer

Nanocellulose can replace the most common thickening agent, which is in short supply due to high demand

- Carbopol, the most common thickening agent used with alcohol, has become scarce.
- This new thickener, developed in a partnership between Embrapa and Klabin, is being produced on a laboratory scale.

- It is already being used by Ministry of Agriculture inspectors at border posts.
- The process will be refined at Embrapa's research units.

Researchers from Embrapa Florestas (PR) have shown that microfibrillated cellulose (MFC) derived from pine and eucalyptus is an effective thickening agent and emulsifier in the production of antiseptic alcohol and alcohol hand sanitizer, products used on the front lines against coronavirus infections which are in great demand among consumers.

According to the Brazilian Association of the Personal Hygiene, Perfume, and Cosmetics Industry (ABIHPEC), because of the coronavirus pandemic global demand for



alcohol hand sanitizing gel has grown ten times in comparison with 2019. This has caused a shortage of carbopol, a carbomer that is the most common thickening agent used to manufacture this product. As a result, the Brazilian Health Regulatory Agency (ANVISA) has eased standards for producing alcohol hand sanitizer, and various institutions have worked together to produce and deliver this product.

The Wood Technology Laboratory at Embrapa Florestas tested different formulations to produce 70% alcohol gel, using nanocellulose from pine and eucalyptus as a thickening agent instead of carbopol. Bleached cellulose pulp undergoes a process of mechanical defibrillation, which produces an aqueous nanocellulose dispersion with the properties of a gel that can replace carbopol in the emulsification process. (...)

Press release shortened by the editor; <u>click for full article</u>! For more information, contact: Katia Pichelli

florestas.imprensa(at)embrapa.br

Also watch: https://www.youtube.com/watch?v=APut70hBVfA&t=5s



Photo Embrapa Florestas (PR)

News from IUFRO HQ

Reducing the Carbon Footprint of IUFRO Headquarters Operations

By Michael Kleine, IUFRO Deputy Executive Director

IUFRO Headquarters, based in Vienna, Austria has developed a concise policy document on measures to reduce the carbon foot print of its operations (website link). Following a consultation process involving all members of the IUF-RO Headquarters' Team, a wide range of measures were identified that have the potential to contribute to a reduction in the use of fossil energy.

Over the years, IUFRO-HQ which is hosted by the Austrian Ministry of Agriculture, Regions and Tourism (BMLRT) in one of its government buildings has been participating in the Eco-Management and

Audit Scheme (EMAS) developed by the European Commission. Within this scheme IUFRO-HQ took an active role in reducing energy consumption within its office, avoiding daily waste through re-usable food containers and providing staff members with free public transport for the daily commuting between the office and their homes.



In view of the escalating climate crisis and the increased need to more drastically pursue changes towards a low-carbon economy, the IUFRO-HQ Team decided to accelerate its measures in the transition to a more sustainable future. To this end the new carbon policy outlines best practices

for reducing the carbon footprint for all IUFRO-HQ operations including those of the Special Programme and Projects. These measures include replacing short air travel for business trips by using trains, timely clustering of overseas meetings to reduce the numbers of long-distance flights, replacing physical meetings by virtual ones whenever possible and pursuing a green procurement policy for events and office materials. Unavoidable air travel by IUFRO HQ staff and sponsored participants of IUFRO's Special Programmes and Projects will be compensated by payments into selected carbon-offset schemes.

This carbon policy represents a self-commitment by members of IUFRO HQ and is in line with best practices for reducing the carbon foot print employed by an increasing number of companies and organizations around the world. https://www.iufro.org/discover/reducing-the-carbon-footprint/ (Illustration by Gerd Altmann on Pixabay)

Publications

IUFRO Spotlight #77 - Stepping up the Global Discussion on Forest Education

While there is a large body of knowledge in environmental education, research on forest education is meager. The Joint IUFRO-IFSA Task Force on Forest Education wants to

raise awareness on this gap: https://www.iufro.org/news/article/2020/05/14/iufro-spotlight-77-stepping-up-the-global-discussion-on-forest-education/

Listen to a talk given by Prof. Sandra Rodriguez, the IUF-RO Coordinator of the Joint Task Force in Spanish, in which she also informs about the Joint Task Force:

https://www.iufro.org/science/task-forces/forest-education/activities/



IUFRO Annual Report 2019

Read about the great variety of activities in the IUFRO network and the exciting XXV IUFRO World Congress in Curitiba, Brazil, in 2019. Those were the days...

In 2019 we celebrated the strength and vitality of our network at the XXV IUFRO World Congress in Curitiba, the first ever IUFRO World Congress held in Latin America. In 2020 the world is all of a sudden struggling with an unprecedented global pandemic. This would have made a World Congress and many other IUFRO activities simply impossible.

IUFRO Annual Report 2019

The first of the f

Enjoy the Highlights of 2019 (short Annual Report) and the

full version of the Annual Report now available at: https://www.iufro.org/news/article/2020/05/26/annual-report-2019/

IUFRO Blog: How I met my fellow scientists virtually

Have you had to postpone the conference that you were organizing? Has the conference you wanted to attend been cancelled completely? Would you still like to exchange



Alexandra Koch on Pixabay

knowledge with fellow scientists and hear about your colleagues' latest findings? This blog site is intended to serve as a platform and discussion forum where IUFRO office-holders can share information about virtual meetings and discuss with each other.

Join the discussion here: https://blog.iufro.org/how-i-met-my-fellow-scientists-virtually/

Subscribe to the IUFRO Blog: http://blog.iufro.org/

Tree Diseases Can Change Entire Landscapes and Must be Taken Seriously

Article published in the "Conversation", by Mike Wingfield, IUFRO Immediate Past President; Brenda Wingfield; and Casparus J. Crous

https://theconversation.com/tree-diseases-can-change-entire-landscapes-and-must-be-taken-seriously-135743

(...) Plant pathogens are a serious threat to global food security. In fact in December 2018, the United Nations General Assembly declared 2020 as the International Year of Plant Health. Farmers typically combat plant pathogens by spraying fungicide. A huge effort goes also into breeding varieties that are resistant to plant pathogens to sustain agricultural systems worldwide. Such options are not possible for trees in native woody ecosystems such as in the case of the American Chestnut and the Cape Beech.

Plants like the Cape Beech trees don't contribute directly to food security: their components can't be eaten or farmed for agricultural use. So they are seen as less valuable and their survival perhaps less important.



Cape beech damaged by a canker disease.

Photo by Mike Wingfield

However, while their value can't be immediately read as economic, these plants play a crucial role in a delicate ecosystem. If Cape Beech trees or in fact other native tree species are wiped out, that whole ecosystem shifts.

The ecological implications are enormous and typically underestimated. Other than contributing to the air we breathe and to a source of water, not to mention providing shade and beauty, trees are deeply interlinked with other plants, animals and microorganisms. When species disappear from their natural environment, many other species are lost, never to be seen again. (...) (excerpt)

More Publications...

European Forest Governance Post-2020

This new science-policy study takes a look at the forest governance in Europe and provides an outlook to potential pathways for the future. To maximize synergies and minimize trade-offs, consistent policymaking across all levels of governance is needed using evidence-based information, the findings of the study show. The publication, coauthored by the IUFRO officeholders Helga Pülzl, Daniela Kleinschmit, Georg Winkel, Laura Secco, IUFRO HQ member Magdalena Lackner and others has been published as Science to Policy Publication by the European Forest Institute (EFI).

Download the study: https://www.efi.int/sites/default/files/files/publication-bank/2020/efi fstp 10 2020.pdf

Non-wood Forest Products in Europe – A Quantitative Overview

Marko Lovrić, Riccardo Da Re, Enrico Vidale, Irina Prokofieva, Jennifer Wong, Davide Pettenella, Pieter Johannes Verkerk, Robert Mavsar

Mushrooms, berries and other Non-Wood Forest Products (NWFPs) are an important part of forest recreation, rural income and of cultural heritage. Due to poor data on their collection and use, they are often ignored in forest policy and management decisions, which could impair those livelihoods that depend on NWFPs as an income source. The authors conducted a survey involving 17,346 respondents from 28 European countries to estimate which and how much of these products are collected.

https://www.sciencedirect.com/science/article/pii/S1389934120300654



State of the World's Forests 2020

The State of the World's Forests 2020: Forests, Biodiversity and People (SOFO 2020), jointly prepared by FAO and UNEP, was launched with a virtual high-level event and discussion on 22 May on the occasion of the International Day for Biological Diversity.



The State of the World's Forests 2020 assesses progress to date

in meeting global targets and goals related to forest biodiversity, and examines the effectiveness of policies, actions and approaches, in terms of both conservation and sustainable development outcomes.

Download from: http://www.fao.org/state-of-forests/en/

Biodiversity Scientists: COVID-19 Stimulus Must Safeguard Nature to Reduce Risk of Future Pandemics

IPBES Expert Guest Article by Professors Josef Settele, Sandra Díaz and Eduardo Brondizio and Dr. Peter Daszak on 27 April 2020

"There is a single species that is responsible for the CO-VID-19 pandemic - us. As with the climate and biodiversity crises, recent pandemics are a direct consequence of human activity – particularly our global financial and economic systems, based on a limited paradigm that prizes economic growth at any cost. We have a small window of opportunity, in overcoming the challenges of the current crisis, to avoid sowing the seeds of future ones." (...) Read more here: https://ipbes.net/covid19stimulus

Underscoring celebrations of the International Day for Biological Diversity, the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) has been announced as the winner of the 2020 WIN WIN Gothenburg Sustainability Award!

https://ipbes.net/ipbes-winwin-sustainability-award

Forest Microclimate Dynamics Drive Plant Responses to Warming

Forests have again made it to the front page of *Science*! A group of scientists, many of whom from IUFRO Member Organizations, have published an article in the *Forest Ecology Section* of the 15 May *Science* issue.

In their study, corresponding author Florian Zellweger (University of Cambridge, UK, and Swiss Federal Institute for Forest, Snow and Landscape Research WSL) and colleagues "have provided evidence that forest community responses to climate change are most closely related to microclimate change and not to macroclimate change. (...) Accounting for the microclimate in assessments of the impact of global change on forest biodiversity and functioning is crucial if we are to better understand and counteract the increasing pressures imposed on forests." Supplementary materials are available for download at: https://science.sciencemag.org/content/sup-pl/2020/05/13/368.6492.772.DC1

Call for Manuscripts on Pests, Pathogens and Invasions

As Specialty Chief Editors, Kimberly Wallin and Pierluigi (Enrico) Bonello would like to warmly invite you to submit appropriate manuscripts to the section 'Pests, Pathogens and Invasions' of Frontiers in Forests and Global Change https://www.frontiersin.org/journals/forests-and-global-change/sections/pests-pathogens-and-invasions#about

News from Forest Policy and Economics

Journal Editor-in-Chief: Lukas Giessen, Coordinator of IUFRO RG 9.05.00 – Forest policy and governance

Article: Global timber investments, 2005 to 2017

Frederick Cubbage, Bruno Kanieski, Rafael Rubilar, Adriana Bussoni, Virginia Morales Olmos, Gustavo Balmelli, Patricio Mac Donagh, Roger Lord, Carmelo Hernández, Pu Zhang, Jin Huang, Jaana Korhonen, Richard Yao, Peter Hall, Rafael Del La Torre, Luis Diaz-Balteiro, Omar Carrero, Elizabeth Monges, Robert Abt

https://www.sciencedirect.com/science/article/pii/S1389934119302564

Freely available until August 17th 2020!

Article: Social-ecological sustainability of non-timber forest products: A review and theoretical considerations for future research

Natália Girão Rodriguesde Mello, HubertGulinck, PieterVan den Broeck, ConstanzaParra

https://www.sciencedirect.com/science/article/pii/S1389934119301303

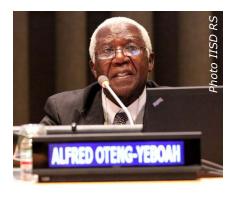
New open access journal: Trees, Forests and People https://www.journals.elsevier.com/trees-forests-and-people

Submissions are invited! No Article Publishing Charge till Dec 31st 2020.

Announcements

Congratulations! Alfred Oteng-Yeboah to Receive John C. Phillips Memorial Medal

"Dear Alfred, the entire IUFRO community sends their congratulations to you on showing such outstanding performance to receive this prestigious award that is presented every four years. This is a pure sign of your vast and rich



knowledge in the field of Conservation and Botany. You are a living inspiration to us all! **Ghana, Africa, IUFRO and the scientific community are proud of You!**"

Mercy Afua Adutwumwaa Derkyi (PhD), University of Energy and Natural Resources, Ghana, on behalf of the IUFRO community



Alfred Oteng-Yeboah was involved in IUFRO as the Africa regional coordinator for the 2005-2011 IUFRO Task Force on Traditional Forest Knowledge. In that role he helped to organize a regional workshop held in Accra in October 2008, and was the lead editor for the proceedings (with Joe Cobbinah and John Parrotta) that were published as IUFRO World Series Vol. 23.

The John C. Phillips Memorial Medal is the highest award of the IUCN (International Union for Conservation of Nature) and recognizes outstanding service in international conservation commemorating the life and work of Dr John C. Phillips, a pioneer of the conservation movement. The prize will be awarded to Prof. Alfred Oteng-Yeboah at the IUCN World Conservation Congress in January 2021.

2020 Marcus Wallenberg Prize: Model for forest growth during climate change

Joseph J Landsberg, Richard H Waring and Nicholas C Coops share the 2020 Marcus Wallenberg Prize for a model to predict forest growth in a changing climate. Satellite imagery offers the possibility to



scale up the model to show how different environmental conditions affect the world's forests. <u>Click here for more!</u> (Photo source: MWP media release)

Forest Europe Photo Contest

Do you have great photos of forests and other wooded land in the pan-



European region with people in forests, utilizing the forests, supporting forest workers, forest villagers and all society enjoying the forest benefits? Then why don't you take part in this photo contest organized on the occasion of the 8th Ministerial Conference on the Protection of Forests in Europe, Liaison Unit Bratislava.

The contest lasts until the end of July. Find out more: https://foresteurope.org/competition/

Rainforest XPRIZE: Discover. Understand. Preserve.

The \$10 Million Dollar Rainforest XPRIZE is a five-year competition to enhance our understanding of the rainforest ecosystem. The winning team will develop novel technologies to rapidly and comprehensively survey rainforest biodiversity and use that data to improve our understanding of this complex



Photo by 272447 on Pixabay

ecosystem. The new date for early registration has been changed to October 15, 2020, and the new regular registration deadline is March 15, 2021:

https://rainforest.xprize.org/prizes/rainforest

Obituary of Dr. Robert L. "Bob" Youngs

We regret to inform you that Dr. Robert L. (Bob) Youngs, age 96, passed away on April 25, 2020, in Blacksburg, Virginia, U.S.A.



Dr. Youngs earned degrees from Syracuse University, The University of Michigan, and Yale University. During his career he specialized in wood technology and forest resources conservation. Dr. Youngs was recognized as an international expert in paper science, wood products, and tropical hardwoods. He served on numerous professional boards, worked over 35 years for the US Forest Service, leading and served on the faculty of Virginia Technologic Institute and

State University, College of Forestry. (*Excerpt and photo from original post:* https://seaverbrown.com/tribute/details/2166/Robert-L-Youngs/obituary.html)

Dr. Youngs actively participated in the organization the XV IUFRO Congress in Gainesville, FL, USA in 1971. He also gave a presentation at the plenary session of Division 5 Forest Products and another, in co-authorship with B.A. Bendtsen, during the XVII IUFRO World Congress in Japan in 1981. At that Congress he was elected Division 5 Coordinator and then re-elected for the same position at the XVIII IUFRO World Congress in Yugoslavia in 1986. Thus, he served as IUFRO Division 5 Coordinator from 1982-1990. In 1992, Professor Robert L. Youngs was awarded IUFRO Honorary Membership during the IUFRO Centennial Congress in Berlin.

The IUFRO community express their heartfelt condolences to his family and friends!

IUFRO Meetings

Search our online calendar for a full list of meetings: https://www.iufro.org/events/calendar/current/
Find non-IUFRO meetings on the IUFRO Noticeboard: https://www.iufro.org/discover/noticeboard/
Also search for forest-related events in GFIS at: https://www.gfis.net

18-19 Nov 2020

3rd European i-Tree Conference

Amsterdam, Netherlands

IUFRO 6.07.00

Contact: Nadine Moreby, nadine(at)treeconomics.co.uk https://www.itree-europe.com/

17-19 Mar 2021(new date)

Managing for Resilient Forests in Variable Future Climate

Stellenbosch, South Africa

IUFRO 1.02.01, 1.09.00, 5.01.04

Contact: Deon Malherbe, gfmalherbe(at)sun.ac.za https://conferences.sun.ac.za/index.php/forests/1



12-14 April 2021 (new date)

Forests in Women's Hands

Traunkirchen, Austria

IUFRO Task Force on Gender Equality in Forestry, In cooperation with Die Forstfrauen and IFSA, coordinated by the Austrian Research Center for Forests (BFW), supported by BMLRT and Walddialog

Contact: Barbara Oellerer, barbara.oellerer(at)bfw.gv.at;

Janice Burns, burns(at)iufro.org

https://forstfrauen.at/en/konferenz-2021

5-8 May 2021 (new date)

International Scientific Conference -Forestry: Bridge to the Future

Sofia, Bulgaria

IUFRO <u>1.01.11</u>, <u>1.03.01</u>, <u>3.00.00</u>, <u>9.04.04</u>

Contact: Marius Dimitrov, mariusdimitrov(at)ltu.bg

https://conf2020.forestry-ideas.info/

31 May - 4 Jun 2021 (new date)

Biological Invasions in Forests: Trade, Ecology and Management

Prague, Czech Republic

IUFRO <u>7.03.07</u>, <u>7.03.12</u>, <u>8.02.04</u>

Contact: Andrew Liebhold, andrew.liebhold(at)usda.gov

Rene Eschen, R.Eschen(at)cabi.org

https://iufro.czu.cz/en/

1-9 Jun 2021 (new date)

2nd IUFRO Division 3 Doctoral Student Conference

Corvallis, Oregon, USA

IUFRO 3.00.00

Contact: Woodam Chung,

woodam.chung(at)oregonstate.edu

https://cofe-formec2020.org/conference-information

6-9 Jun 2021 (new date)

Joint Annual Meeting of COFE-FORMEC

Corvallis, Oregon, USA

IUFRO 3.00.00

Contact: Woodam Chung,

woodam.chung(at)oregonstate.edu

Karl Stampfer, karl.stampfer(at)boku.ac.at

https://cofe-formec2020.org/

8-11 Aug 2021

19th Symposium on Systems Analysis in Forest Resources (SSAFR 2021)

Estes Park, Colorado, USA

IUFRO 3.04.00, 4.04.04

Contact: José G. Borges, joseborges(at)isa.ulisboa.pt https://sites.warnercnr.colostate.edu/ssafr2021/

16-20 Aug 2021 (new date)

2021 IBFRA Conference: Changing Boreal Biome Identifying emerging trajectories and assessing vulnerability and resilience of boreal ecosystems and their socio-economical implications.

Fairbanks, Alaska, USA

Contact: IUFRO Headquarters, office(at)iufro.org https://sites.google.com/alaska.edu/ibfra2021

23-26 Aug 2021 (new date)

4th World Teak Conference 2020

Accra, Ghana IUFRO 5.06.02

Contact: P. K. Thulasidas, thulasidas(at)kfri.org https://www.worldteakconference2020.com/

11-15 Oct 2021

16th Conference of IUFRO Working Party 7.02.01 **Root & Stem Rots**

Xalapa, Mexico IUFRO 7.02.01

Contact: Jonas Rönnberg, Jonas.Ronnberg(at)slu.se https://www.iufro.org/science/divisions/divisi-

on-7/70000/70200/70201/activities/

Other Events

May-September 2020

MOOC on Landscape Ecology (self-paced re-run due to Corona situation)

ETH Zurich decided to re-run the MOOC Landscape Ecology online as a self-paced version until September 2020: https://www.edx.org/course/landscape-ecology-3

May-August 2020

Summer Webinar Series: Planning the Urban Forest

28 May 2020, 14:00 BST (9:00 am EST): Sustainable Management of the Urban Forest 18 June 2020, 14:00 BST (9:00 am EST):

Tree Planting Strategies: helping you achieve your canopy

goals, and more...

16 July 2020, 14:00 BST (9:00 am EST):

i-Tree and the Urban Forest

13 August 2020, 14:00 BST (9:00 am EST):

Trees, People, and Technology

Venue: online

Organizers: Treeco2nomics; Davey

https://resources.davey.com/acton/fs/blocks/ showLandingPage/a/33558/p/p-0079/t/page/fm/0



3-5 June 2020

GLF Bonn Digital Conference 2020: Food in the time of crises

#GLFBonn2020

Human health and livelihoods depend on planetary health. So, how can we feed a growing global population without eating

the planet? The 2020 theme of GLF is "Food and Livelihoods." Forests play a critical role in this discussion and several sessions and contributions will focus on this role. Find out more about the GLF:

https://events.globallandscapesforum.org/bonn-2020

Watch out for a GLF video talk by Professor Bhaskar Vira, University of Cambridge, Chair of the IUFRO-GFEP Expert Panel on Forests and Food Security (find the 2015 report here: https://www.iufro.org/science/gfep/gfep-initiative/panel-on-forests-and-food-security/)

4-6 November 2020

Workshop on water and nutrient fluxes in ecosystems under a changing climate - a tracerbased perspective

Heidelberg, Germany

Organizers: Heidelberger Akademie der Wissenschaften,

Freiburg University

Abstract submission deadline: 3 August 2020

Contact: Michael Rinderer,

michael.rinderer(at)hydrology.uni-freiburg.de https://www.eco-tracer.uni-freiburg.de/