

Ozone Affects Plant, Insect, and Soil Microbial Communities and Threatens Terrestrial Ecosystems and Biodiversity

In a new study published in the journal *Science Advances*, authors, including IUFRO Officeholders, provide the first comprehensive assessment of how ozone pollution can alter the structure and function of terrestrial ecosystems, and, thus, threaten biodiversity

Report by Evgenios Agathokleous, Coordinator of IUFRO Working Party 8.04.05 - Ground-level ozone

Biodiversity can be considered as an index of planetary health.

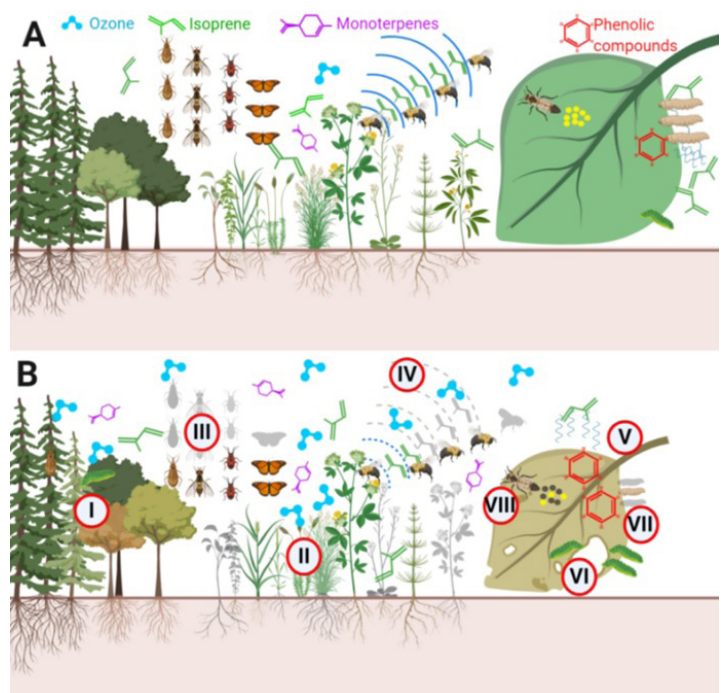
Ground-level ozone is a greenhouse gas formed from precursors emitted by anthropogenic activities. Ozone concentrations have been considerably elevated since the pre-industrial period, and are predicted to stay elevated for many decades to come. Because ozone is a strong oxidant, ozone pollution presents potential risks to the health of organisms.

Can ozone pollution affect terrestrial biodiversity? In a new study published in the journal *Science Advances*, authors provide the first comprehensive assessment of how ozone pollution can alter the structure and function of terrestrial ecosystems, and, thus, threaten biodiversity.

Authors demonstrate that the composition of plant communities can change as a result of different sensitivity to ozone among plants. They also demonstrate that ozone affects the foliar chemical composition and the composition of emitted biogenic volatile organic compounds (BVOCs). Such changes in plant chemical composition can alter herbivory, i.e. the consumption of plant material by animals, as the selection of host plants by insect herbivores and grazing depend on the nutritional quality of plant tissues. Likewise, BVOCs act as communication signals not only among plants but also between plants and insects. Insects use the information from the BVOCs to orient themselves in the environment and trace host plants. Hence, authors show that changes in the foliar chemical composition and the composition of the emitted BVOCs can alter plant-insect interactions.

Authors also illustrate that ozone can affect the decomposition process, alter the expression of microbial genes involved in carbon cycling, and decrease carbon cycling. In addition, they concentrate evidence showing that ozone pollution can impair nitrogen cycling and decrease soil microbial biomass. These suggest disturbed plant-soil feedbacks, with potentially affected soil microbial communities.

Finally, authors suggested that Atlantic islands in the Northern Hemisphere, the Mediterranean Basin, equatorial Africa, Ethiopia, the Indian coastline, the Himalayan region, southern Asia, and Japan host a high endemic richness that is at high ozone risk by 2100.



Effects of elevated ozone on aboveground ecosystem processes. Source: Agathokleous et al. (2020).

The results of this study suggest that ozone should be included in global assessments of threats to terrestrial biodiversity. "The study sets the path forward for a new generation of studies that will address ozone impacts on the biodiversity, and is expected to generate much interest for advanced interdisciplinary researches addressing this environmental issue" says the lead author, Prof. Evgenios Agathokleous of the Nanjing University of Information Science & Technology, China.

Reference: Agathokleous, E., Feng, Z., Oksanen, E., Sicard, P., Wang, Q., Saitanis, C.J., Araminiene, V., Blande, J.D., Hayes, F., Calatayud, V., Domingos, M., Veresoglou, S.D., Peñuelas, J., Wardle, D.A., De Marco, A., Li, Z., Harmens, H., Yuan, X., Vitale, M., Paoletti, E. (2020). Ozone affects plant, insect, and soil microbial communities: A threat to terrestrial ecosystems and biodiversity. *Science Advances* 6: eabc1176. DOI: 10.1126/sciadv.abc1176.

Direct link to paper: <https://advances.sciencemag.org/content/6/33/eabc1176>

Find this and related publications here: <https://www.iufro.org/science/divisions/division-8/80000/80400/80405/publications/>

News from IUFRO Headquarters

Welcoming New GFEP Team Member Nelson Grima



Nelson Grima joined the Global Forest Expert Panels Programme (GFEP) on 1 September, after conducting a two-year postdoctoral research at Rubenstein School of Environment and Natural Resources at the University of Vermont (USA). Nelson holds a PhD in Social Ecology from the *Alpen-Adria* University (Austria), where he focused on the effects of Payments for Ecosystem Services on human wellbeing and the environment, a double degree MSc in European Forestry from the University of Eastern Finland and the University of Natural Resources and Life Sciences Vienna (BOKU), and two degrees (MSc and BSc) in Forest Engineering from the University of Lleida (Spain).

Nelson has a wide experience working in multicultural and multidisciplinary teams and projects. He grew up in Spain and studied and worked in Poland, Mexico, Sweden, Finland, Austria, Switzerland, and the United States.

As **one of the two GFEP Project Managers**, Nelson will facilitate the developments of publications by Forest Expert Panels, as well as represent the Programme at international meetings and conferences.

Nelson Grima will follow **Andre Purret**, who has held this position for several years and will continue to work in IUFRO Headquarters.



Andre will start to work in October in his **new function as the IUFRO Operations Manager**, providing strategic support and assistance in relation to the planning, coordination and monitoring of HQ operations. His tasks include the facilitation and monitoring of HQ operations; the communication with IUFRO governing bodies and selected committees; and support regarding international relations and future IUFRO congresses.

Mark Your Calendar!
24-26 Sep 2021
IUFRO Regional Conference
*Sustaining the Forests of
Russia and Eurasia:*
*Management, Innovation,
Conservation and Restoration*

Moscow, Russian Federation
Contact: Vladimir Valentinovich Nikitin, nikitinvv(at)bmstu.ru

<https://mf.bmstu.ru/info/science/conf/2021/iufro/eng>

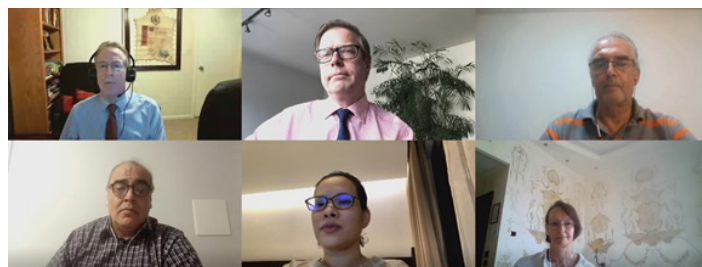


Forests and Transformative Pathways to Sustainability

IUFRO-WFSE Side Event at the 2020 High-Level Political Forum on Sustainable Development (HLPF) - 9 July 2020

Forests can be directly or indirectly linked to almost all SDGs and are central for nature based-solutions and transformative pathways towards sustainability.

This side event discussed the role of forests and forestry in transformative change, the levers of change across complex systems and ways to accelerate the progress towards sustainability. Special focus was devoted to equity, gender and governance. The event also illustrated the large potential for synergies among the SDG targets that focus on sustainable land and resource use and the importance of policy and regulatory environment and capacities that support and incentivize sustainable forest-related livelihoods and development.



The event was organized by IUFRO-WFSE, WWF, Ministry for Foreign Affairs of Finland and Natural Resources Institute Finland. *Read more:*

<https://www.iufro.org/science/wfse/wfse-news/#c30867>

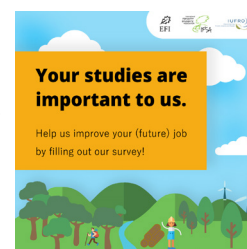
The recording of the event can be watched at:

https://youtu.be/39L_ucV7Fsc

Two Important Surveys on Forest Education!

Students: Take this survey and help improve forest education!

The [EFI-IFSA-IUFRO project](#) has launched a global survey entitled **“Educating towards forest-related employment”** among students. It is now available in Chinese (simple) English, French, Spanish and Portuguese and will run until October. **Survey link:** <https://www.surveymgizmo.eu/s3/90242538/8b61967933ae>



Global Survey on the Status of Forest Education

The [FAO-ITTO-IUFRO](#) global forest education project is undertaking an ambitious global survey. **Your opinion counts:** <http://www.fao.org/forestry/forest-education/97368/en/>



IUFRO Values Ongoing Close Collaboration with IFSA

The first digital General Assembly of the International Forestry Students' Association took place from 17-22 August 2020. IUFRO President John Parrotta delivered a welcome address and underlined the longstanding and excellent relationship between IUFRO and IFSA dating back to 2002.



It has been a tradition for IUFRO's President to participate in the annual International Forestry Students' Symposium, and IFSA's President and Liaison Officer have been valued participants at the IUFRO annual Board Meetings. Just last year, IUFRO's International Council – IUFRO's highest-level governing body – unanimously decided to make IFSA a permanent observer on the IUFRO Board.

IFSA students regularly participate in, and enrich, major IUFRO meetings. Recently, IFSA has agreed to be a partner for the IUFRO Regional Conference entitled "Sustaining the Forests of Russia and Eurasia: Management, Innovation, Conservation and Restoration", to be held in September 2021 in Moscow (Russia).

Another cornerstone of our collaboration has been to host and support IFSA students every year as interns at IUFRO Headquarters in Vienna. In all, 30 internships have been completed by students coming from 18 countries on all continents.

IFSA and IUFRO work together to advance forest education worldwide. The IUFRO-IFSA Joint Task Force (JTF) on Forest Education, for example, has succeeded in implementing a broad range of activities producing highly valuable outputs: <https://www.iufro.org/science/task-forces/forest-education/>

IUFRO and IFSA also collaborate with other international organizations to shine a light on the importance of forest education worldwide. "Global student networking and green jobs in the forest sector", for example, is a joint EFI (European Forest Institute) -IFSA-IUFRO Capacity Development Project that will investigate the transforming employment trends in the forest sector.

IUFRO values the ongoing close collaboration and friendship with IFSA and looks forward to working together to enhance the value of each other's work!

Excerpts from Dr. Parrotta's speech

Awards Congratulations to Prof. Mike Wingfield!

IUFRO's Immediate Past President Mike Wingfield, University of Pretoria (UP), won the **"Special Annual Theme Award: Plant Health"**, one of this year's National Science and Technology Forum (NST-F)-South22 Awards, also known as the **"Science Oscars" of South Africa**.



Professor Wingfield said, "Receiving the award in the United Nations International Year of Plant Health (IYPH-2020) is particularly gratifying. I have spent my entire career working as a plant pathologist/entomologist and am increasingly concerned about the health of plants globally. The world's plants are deeply threatened by pests and pathogens and also by human activities, including those that are leading to climate change."

Read more: https://www.up.ac.za/news/post_2912146-two-up-experts-win-awards-at-national-science-and-technology-forum-science-oscars

Video of award ceremony: <https://youtu.be/eHX9t3gG710> (Mike Wingfield starts to speak at 49:20).

Dr. Richard Guldin to Receive 2020 Sir William Schlich Memorial Award

This award of the Society of American Foresters (SAF) recognizes broad and outstanding contributions to the field of forestry with emphasis on, but not limited to, policy and national or international activities. The award is presented at the SAF National Convention and will be presented this year on Oct. 29.



Dr. Richard (Rich) Guldin's leadership over many decades has had a significant impact in forest inventory, assessment and reporting processes within the United States and internationally.

In IUFRO, Rich is known as an energetic motor behind the most important activities of promoting communication of forest science to larger audiences.

As Coordinator of the IUFRO Task Force on Forest Science-Policy Interface he contributed to developing a better understanding of the ways forest research results influence the development and implementation of policies to protect, manage, and utilize forests and forest resources.

He also initiated the creation of the IUFRO Task Force on "Public Relations for Forest Sciences".

Furthermore, Rich was particularly committed towards bringing the IUFRO XXIV World Congress to the United States of America. Between 2010 and 2014 he chaired the IUFRO World Congress Organizing Committee and, thus, contributed significantly to the success of the 2014 World Congress in Salt Lake City, Utah.

Sincerest congratulations from the whole IUFRO community!

Read a related press release: <https://news.psu.edu/story/628051/2020/08/11/campus-life/forestry-alumnus-receive-2020-sir-william-schlich-memorial-award>

Wangari Maathai Award Call for Nominations

The Collaborative Partnership on Forests (CPF), of which IUFRO is a member, is awarding one extraordinary individual for improving our forests and the lives of people who depend on them!



The CPF launched the first Wangari Maathai Award in 2012 to honour and commemorate the impact of this extraordinary woman who championed forest issues around the world. The 2019 award ceremony took place at the IUFRO World Congress in Curitiba, Brazil.

In 2021, the CPF will award another individual for her/his outstanding achievements for forests during the XV World Forestry Congress on 24-28 May 2021, in Seoul, Korea.

Send nominations to the CPF Secretariat at [cpf\(at\)un.org](mailto:cpf(at)un.org) **by 15 September 2020!** Find out more: <http://www.cpfweb.org/97445/en/>

Marcus Wallenberg Prize - Postponed to Autumn 2021

<https://mwp.org/the-marcus-wallenberg-prize-postponed-to-autumn-2021/>



The purpose of the Prize is to recognize, encourage and stimulate path-breaking scientific achievements which

contribute significantly to broadening knowledge and to technical development within the fields of importance to forestry and forest industries.

The 2020 Marcus Wallenberg Prize event will be held in the autumn of 2021. The Prize event was planned for October 2020. The Marcus Wallenberg Foundation has however decided to postpone the ceremony and symposium due to the COVID-19 pandemic with its increased uncertainty regarding travelling recommendations.

Obituary:

Professor Nikolai Alexandrovich Moiseev

We are sad to inform you that the active IUFRO officeholder and promoter of IUFRO in the Soviet Union and the Russian Federation, Professor Nikolai Alexandrovich Moiseev, passed away on 23 July 2020 at the age of 90.



Dr. Moiseev was an eminent forest researcher recognized as Honored Forester (1979) and Honored Scientist of the Russian Federation (1999), and a member of many governmental, academic, and research councils, and editorial boards.

From 1977 to 1996 he was Director of the All-Union Forest Research Institute and Forestry Mechanization (VNIILM) in Pushkino, Moscow region. Between 1970 and 1977, he served as Head of the Department of Science and International Relations of the USSR State Committee on Forestry, and, from 1996, he headed the Department of Economics of Forestry and Wood Industry at Moscow State Forest University.

Dr. Moiseev played a crucial role in promoting the active participation of Russian (and previously USSR) scientists and institutions in IUFRO and in supporting international collaboration. In 1972 he approached VNIILM to become a member of IUFRO.

He was one of the key organizers of IUFRO meetings in the USSR and Russia (1976, 1979, 1985, 1992, 1994), served as a member of IUFRO Executive Board (1977–1981), President's Nominee (1982–1986), and representative of the USSR to the IUFRO International Council (1987–1990). He was actively involved in holding the IUFRO Enlarged Board Meeting in Moscow and Sochi in 1980 and the IUFRO Management Committee Meeting in Pushkino in 2003. For his long-term activities and promoting IUFRO in the USSR and Russia he received the IUFRO Distinguished Service Award in 2004.

On behalf of the IUFRO forest science community, we express our sincerest condolences to his family and friends.

New Books

The Distinguished Service Award (DSA) of the International Union of Forest Research Organizations: 1981 - 2019

This book presents biographical sketches of recipients of the IUFRO Distinguished Service Award.

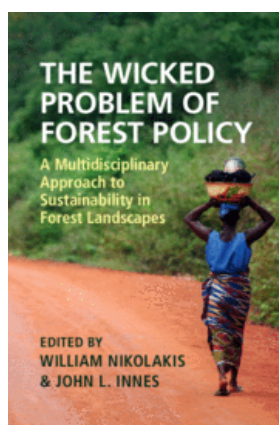
In the forest-related community, service to IUFRO is recognized as a highly valued and prestigious professional and public activity that occurs in a voluntary capacity outside normal terms of employment. The Distinguished Service Award (DSA) was the third IUFRO award to be established, being approved in 1978 and awarded for the first time in 1981.

In the almost 40 years of its existence, the Distinguished Service Award has been bestowed on 114 scientists representing 31 countries from all continents. These scientists undertook not only their personal research, but also served in different capacities for IUFRO, starting with regular participation in meetings and extending to the management of various projects, research and working units, as well as in Divisions, Congress Organizing Committees and senior management bodies. Many of the awardees have an impressive record of service in IUFRO in various positions for over 25–30 and more years. Some even went on to become IUFRO Vice-Presidents and IUFRO Presidents.

Teplyakov, Victor K. 2020. *The Distinguished Service Award of the International Union of Forest Research Organizations: 1981–2019*. Vienna, IUFRO. 138 p. ISBN: 978-3-903345-04-1
<https://www.iufro.org/publications/general-publications/>

The Wicked Problem of Forest Policy - A Multidisciplinary Approach to Sustainability in Forest Landscapes

Editors: William Nikolakis, University of British Columbia, Vancouver; John Innes, University of British Columbia, Vancouver. Published in July 2020, hardback, ISBN: 9781108471404
<https://www.cambridge.org/9781108471404>



Forests play an important role in resolving global challenges such as sustainable development, climate change, biodiversity loss, and food and water security. Stopping deforestation is crucial for the future of our planet. At the

same time, national level efforts to support human development, reflected in the United Nations (UN) Sustainable Development Goals, aim to increase the welfare and well-being of populations living in poverty.

Meeting these development goals will inevitably have crosscutting effects on initiatives to address deforestation. In balancing these goals, policy makers are confronted with wicked problems – or problems where there are moral considerations and where limited information is available for policy makers.

Newsletters

What's on in IUFRO Division 4?

IUFRO Division 4 - *Forest Assessment, Modelling and Management* - has started a newsletter to keep everyone connected and updated on Research Group and Working Party activities – as well as IUFRO-wide news.



The newsletter will be published four times a year and will provide information on upcoming meetings, pertinent special issues, and job opportunities for professionals and graduate students.

Contact Donald Hodges: dhodges2(at) utk.edu
<https://www.iufro.org/science/divisions/division-4/40000/publications/>

IUFRO-JAPAN News No. 128

IUFRO-J now has a New Chair, Dr. Tohru Nakashizuka. News Issue No. 128 contains a message from him. Reports of the IUFRO International Council Meetings in Curitiba and an annual report of IUFRO-J activities are also included in this issue.

The IUFRO-Japan (IUFRO-J) Committee http://www.fffri.affrc.go.jp/labs/iufroj/index_Eng.html is an organization launched in 1970 to promote global and domestic partnerships in forest-related research, which cooperates with IUFRO Headquarters.

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

Photo by Thanapat Pirmphol on Pixabay



New on the IUFRO Blog

<https://blog.iufro.org/>

SPOTLIGHT #80 Becoming Visible – Non-timber Forest Products and a Sustainable Economy

The IUFRO Task Force on Unlocking the Bioeconomy and Non-Timber Forest Products aims to support the integration of non-timber forest products into bioeconomic approaches worldwide.

One positive and largely overlooked outcome of the current coronavirus crisis could be a stronger bioeconomy. "I think the pandemic is going to spur the bioeconomy," said Dr. James Chamberlain of the United States Forest Service, Southern Research Station in Blacksburg, Virginia, and Coordinator of IUFRO's Unlocking the Bioeconomy and Non-Timber Forest Products Task Force.



Becoming visible - here leaves of Cinnamomum tamala, traded in thousands of tonnes. Photo by Carsten Smith-Hall.

Dr. Carsten Smith-Hall of the University of Copenhagen, Department of Food and Resource Economics, and Deputy Coordinator of the Task Force concurs. "A bioeconomy approach," he says, "offers an opportunity to refocus and strengthen efforts to achieve sustainable management of renewable natural resources, including forests. What works locally and how can that be scaled up?"

The impetus for the bioeconomy movement was biotechnology oriented – contributing to replacing fossil fuels with biofuels. By pointing to shea nuts in Burkina Faso and medicinal plants in Nepal as examples, he maintains that non-timber forest products (NTFPs) can become a major component in local, and even national, economies, provided supporting legislative and socio-economic environments are created.

Read more:

<http://blog.iufro.org/2020/07/30/spotlight-80-becoming-visible-non-timber-forest-products-and-a-sustainable-economy/>

Lignin from Wood and Agricultural Waste to be used in Automotive, Mass Timber (CLT) and Construction Applications

MSU and Michigan Tech researchers study using lignin from wood and agricultural waste to replace petroleum-based polyols in polyurethane foams and adhesives.

Guest blog by Lauren Noel, Communications Manager for the Department of Forestry at Michigan State University (IUFRO Member Organization)

EAST LANSING, Mich. – Mojgan Nejad, an assistant professor in the Department of Forestry at Michigan State University (MSU) is using her years of experience working with lignin to support multiple industries and create more sustainable bioproducts.

Nejad has been working with adhesive manufacturers for several years in pursuit of alternatives to petrochemicals. She previously worked with manufacturers in the construction industry and is now aiming her efforts at the automotive industry.



MSU Forestry doctoral student Saeid Nikafshar formulating lignin-based polyurethane adhesive. Photo credit: Michigan State University

In a partnership with Michigan Tech, Ford Motor Company has funded a project to replace petroleum-based polyol in polyurethane foams with lignin. Lignin, which is a byproduct of paper and biofuel production and formerly thought to be a waste product, is an under-utilized raw material with potential to replace petrochemicals.

Using lignin could provide a positive impact on the environment and creates a more sustainable product that is potentially biodegradable. Replacing just 20% of petroleum-based polyol with lignin provides a significant improvement to the fire performance and flame retardancy of the flexible foams.

Read more: <https://blog.iufro.org/2020/08/05/lignin-from-wood-and-agricultural-waste-to-be-used-in-automotive-mass-timber-clt-and-construction-applications/>

Harnessing Synergies between Agriculture and Forest Restoration:

Communities work together to restore forests - an example from Nepal

Guest blog by Lila Nath Sharma, PhD, from IUFRO Member Organization ForestAction Nepal
<https://www.forestaction.org/>

Jalthal forest is a 6,000 ha forested land in the densely populated region in the lowland of Southeastern Nepal. It is a remnant moist tropical forest with diverse ecosystems and habitats comprising swamps, rivers, ponds, hillocks and plain areas. It is an important biodiversity hotspot with several threatened floras and faunas including the Asiatic elephant and pangolin.

The forest has unique assemblages of tropical and subtropical plant species found in the sub Himalayan tract. Floristic elements from different bio-geographical regions – Sino Himalayan, East Asian and Indian, for example – makes the forest diverse and unique.

The forest is an important source of environmental services including fresh water and multitudes of forest products for people living around the forest. It is currently managed by 22 Community Forest User Groups (CFUGs) and is an important livelihood source for over 80,000 people.



Local people preparing field for plantation in a *Mikania* cleared area. Photo by Lila Nath Sharma

In spite of high ecological and social significance, the Jalihal forest is subjected to multiple pressures. These include invasive species, human-wildlife conflict (particularly human-elephant), wildlife poaching, illegal felling of trees and timber focused forest management.

For the last two decades the forest has been vastly invaded by *Mikania micrantha*, popularly known as 'mile a minute', locally called as 'pyangri lahara'. The weed is one among the 100 worst invasive species ever found in the world and is spreading rapidly in Nepal. (...)

ForestAction Nepal, one of the IUFRO Member Organizations in Nepal, in close collaboration with the Division Forest Office (DFO) and collaborating partner organization has provided technical support to communities in the difficult and long but necessary battle against the weed.

Read more: <https://blog.iufro.org/2020/07/02/harnessing-synergies-between-agriculture-and-forest-restoration/>

The World is Fighting Forest Fires in the Midst of a Pandemic

Interview with Dr. Andrey Krasovskiy originally published in French: <https://journalmetro.com/perspective/2477417/monde-lutte-feux-de-foret-pandemie/>
On 25 June 2020 by Miguel Velazquez, *Métro World News*

Dr. Andrey Krasovskiy is a Research Scholar working with the Ecosystems Services and Management Program (ESM) of the International Institute for Applied Systems Analysis (IIASA), Austria: <https://iiasa.ac.at/>

He is a Member of the IUFRO Task Force "Fire\$: Economic Drivers of Global Wildland Fire Activity": <https://www.iufro.org/science/task-forces/global-wildland-fire-activity/>

What is the outlook for forest fires this year?

Forest fires are likely to keep the dynamics from previous years. Along with the problematic regions, such as Amazon, where forest fires are driven by deforestation, and Indonesia, where extremely vulnerable peatland areas are located, considerable fire events are to be expected in boreal forests of Russia, the US, and Canada. The forest fires might also show relative increase compared to previous years in Central European countries. There is a danger

that post-quarantine human activities will further add to forest fire frequency in the Mediterranean region, as well as globally.

What percentage of forest fires are caused by humans?

A great deal of forest fires is caused by humans. For example, 95% of fires in Europe are started because of human activity. Activities such as deforestation in the Amazon region are well correlated with increasing risks of forest fires. Natural source of ignition is lightning strike, which is a more common ignition source in Africa, as well as in Boreal forest.

Recent studies show the growing rate of forest fires caused by lightnings in Central Europe, for example in Austria.

It is also well proven that one of the main drivers of forest fires – climate change – is of an anthropogenic origin.

Read more: <https://blog.iufro.org/2020/07/06/the-world-is-fighting-forest-fires-in-the-midst-of-a-pandemic/>



Photo by Skeeze on Pixabay

More News from Members

Detecting Tree Pests in under Two Hours with PCR Test

Asian gypsy moths feed on a wide range of important plants and trees. White pine blister rust can kill young trees in only a couple of years. But it's not always easy to detect the presence of these destructive species just by looking at spots and bumps on a tree, or on the exterior of a cargo ship.



Photo credit: Paul H Joseph/UBC

Now a new rapid DNA detection method developed at the University of British Columbia can identify these pests and pathogens in less than two hours, without using complicated processes or chemicals – a substantial time savings compared to the several days it currently takes to send samples to a lab for testing. The method relies on PCR testing, the method that is currently also the gold standard for COVID-19.

Forestry professor Richard Hamelin designed the system with collaborators from UBC, Natural Resources Canada

and the Canadian Food Inspection Agency. *UBC and NR-Canada are member organizations of IUFRO.*

Read here: <https://news.ubc.ca/2020/07/20/portable-dna-device-can-detect-tree-pests-in-under-two-hours/>

Deforestation Is Not Inevitable, but a Political Choice

Plinio Sist and Claude Garcia of CIRAD, France, published an article entitled "La déforestation n'est pas une fatalité, mais un choix politique" in the French newspaper "Le Monde": https://www.lemonde.fr/idees/article/2020/08/15/la-deforestation-n-est-pas-une-fatalite-mais-un-choix-politique_6049013_3232.html

Plinio Sist is the representative of France on the International Council of IUFRO.

Research Papers

The Ethics of Isolation, the Spread of Pandemics, and Landscape Ecology

Editorial of *Landscape Ecology* by João C. Azevedo, Sandra Luque, Cinnamon Dobbs, Giovanni Sanesi, Terry C. H. Sunderland

Find the article here: <https://www.iufro.org/science/divisions/division-8/80000/80100/80102/publications/>

This editorial is motivated by a webinar organized by the IUFRO (International Union of Forest Research Organizations) Forest Landscape Ecology Working Party <https://iufrole-wp.weebly.com/> held on June 24th, 2020.

Authors discuss what landscape ecology has to learn from this unprecedented crisis generated by the coronavirus pandemic and, simultaneously, demonstrate how this discipline can be useful to support integrated solutions to minimize the spread of diseases and to create increasingly safer, and sustainable landscapes.



Deforestation and landscape encroachment in the South of Chile, Araucania Region (@S. Luque)

Fighting deforestation and forest degradation is paramount if we are to achieve the Millennium Development Goals while managing forested landscapes for limiting the spread of diseases keeping communities safe and healthy.

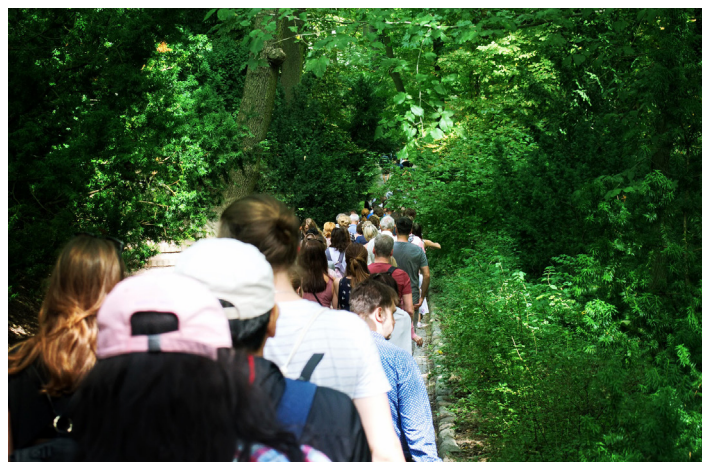
COVID-19-induced Visitor Boom Reveals the Importance of Forests as Critical Infrastructure

Article in *Forest Policy and Economics*, by Jakob Derks, Lukas Giessen, Georg Winkel (EFI, Bonn, Germany)

During the 2020 COVID-19 pandemic, countries around the globe have implemented a certain degree of lockdown, restricting citizens' freedom of movement and freedom of assembly.

This article aims to illustrate the impact that the measures against the spread of COVID-19 have on forest recreation, building on a study in an urban context around Bonn, Germany, that was conducted between April 2019 and February 2020.

<https://www.sciencedirect.com/science/article/pii/S138993412030277X?via%3Dihub>



Silviu Costin Iancu on Pixabay

Scaling up Forest Landscape Restoration in Canada in an Era of Cumulative Effects and Climate Change

Nicolas Mansuy, Philip J. Burton, John Stanturf, Craig Beatty, Christa Mooney, Peter Besseau, Dani Degenhardt, Katalijn MacAfee, Renée Lapointe

While the global restoration movement is rapidly gaining momentum, understanding the concept and benefits of forest and landscape restoration (FLR) is paramount to safeguarding the natural capital of Canada's forests. To inform policymakers and practitioners, the authors suggested key collaborative actions to move towards a national restoration framework. <https://www.sciencedirect.com/science/article/abs/pii/S1389934120300678?via%3Dihub>

One of the authors, John Stanturf (IUFRO Task Force on Transforming Forest Landscapes for Future Climates and Human Well-Being) has co-edited several IUFRO Publications on FLR.

Find out more: <https://www.iufro.org/science/special/spdc/netw/flr/flr/>

The Fire and Tree Mortality (FTM Database)

U.S. Forest Service scientists have developed a comprehensive repository of information on individual tree responses to fire in the United States. The Fire and Tree Mortality (FTM) database contains records from over 160,000 trees, including descriptions of fire injury and post-fire behavior. Its data can be used for decision support, integrated into improved models, and used to explore patterns of tree mortality: <https://www.fs.usda.gov/rmrs/publications/fire-and-tree-mortality-database-empirical-modeling-individual-tree-mortality-after>

(Source: U.S. Forest Service R&D News/August 2020; News from the Washington Office and Research Stations; SPECIAL ISSUE ON FIRE RESEARCH)

Pathologists and Entomologists Must Join Forces against Forest Pest and Pathogen Invasions

The world's forests have never been more threatened by invasions of exotic pests and pathogens, whose causes and impacts are reinforced by global change. However, forest entomologists and pathologists have, for too long, worked independently, used different concepts and proposed specific management methods without recognizing parallels and synergies between their respective fields.

The authors of this article published in *NeoBiota*, a number of IUFRO officeholders among them, are proposing the development of interdisciplinary research programs, the development of generic tools or methods for pest and pathogen management and capacity building for the education and training of students, managers, decision-makers and citizens concerned with forest health.

Read: <https://neobiota.pensoft.net/article/54389/>

Calls for Journal Manuscripts

Special Issue of Forest Ecology and Management

The submission portal will be open from 1 September until 1 December 2020.

Marie Ange Ngo Bieng (IUFRO officeholder) is the editor of an upcoming special issue entitled "**Active restoration of timber production and other ecosystem services in secondary and degraded forest**".

The Open call of the SI is located at: <https://www.journals.elsevier.com/forest-ecology-and-management/call-for-papers/open-call-active-restoration-of-timber-production>

Special Issue of Forests with a focus on climate, globalization and forest health

Deadline for manuscript submissions: 3 February 2021

Mariella Marzano (IUFRO officeholder) and Julie Urquhart are guest editors on an upcoming special issue, which will focus on the complex interrelationships between climate, globalisation and forest health.

Find out more:

https://www.mdpi.com/journal/forests/special_issues/forest_health_management

Special Issue of Forests "Forest Sustainability: Wood Yield and Biomass Utilization"

The submission deadline is 5 June 2021 and you may send manuscript now or up until the deadline.

Guest editors Kazuhiro Aruga (IUFRO 3.01.00), Nathaniel Anderson (IUFRO 3.09.00) and Robert Prinz invite you to consider the opportunity to contribute to the Special Issue with a manuscript.

https://www.mdpi.com/journal/forests/special_issues/Wood_Yield_Biomass_Utilization
https://twitter.com/Forests_MDPI/status/1293579474336792576

Special Issue of Forests on Forest Management and Operations

The deadline for submissions expires on 30 September 2021.

Guest editors Mauricio Acuna, University of the Sunshine Coast, Australia, John Sessions, Oregon State University, USA, and Andres Weintraub, University of Chile, are accepting submissions for a special issue titled "Operations Research and Optimisation Techniques in Forest Management and Operations".

More details about the scope and submission process can be found on this link: https://www.mdpi.com/journal/forests/special_issues/optimisation_techniques

Positions

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

Post-doctoral fellowship: Non-destructive imaging of the living cambium and developing xylem

Deadline: 18 September 2020

Institution: Stellenbosch University, South Africa

The incumbent will primarily lead research into non-destructive methods for observing and quantifying developmental processes in differentiating xylem in eucalypts.

Details: http://blogs.sun.ac.za/eucxylo/files/2020/07/EucXylo_Post-Doc_2_DevXylem_B.pdf

Tenure Track Professorship for Pathology of Trees

Deadline: 30 September 2020

The University of Freiburg, Germany, invites applications for the full-time Tenure-Track Professorship for Pathology of Trees at the Faculty of Environment and Natural Resources in the Department of Forest Sciences.

Details: <http://www.uni-freiburg.de/administration/stellenboerse/00001187>

Dean, Faculty of Forestry, UBC

Open until filled

The University of British Columbia (UBC), Vancouver, BC, Canada, invites applications and nominations for the position of Dean of the Faculty of Forestry. UBC's Faculty of Forestry is recognized globally as one of the leading forestry schools in the world.

Details: <https://forestry.ubc.ca/career-opportunities/dean-faculty-of-forestry/>

Scholarships/Fellowships

<https://www.iufro.org/discover/noticeboard/fellowshipsscholarshipsresearch-funding/>

DAAD Scholarships available for the 2021 MSc Course in Tropical Forestry at TU Dresden, Germany
Closing date: 31 October 2020 for the intake October 2021.

Institution: Chair of Tropical Forestry, Technische Universität Dresden, Germany

https://tu-dresden.de/bu/umwelt/forst/inter/tropen/studium/studiengaenge?set_language=en

To apply or to get more information write to:
tropentutor(at)mailbox.tu-dresden.de

Apply for OECD conference/travel funds

Are you organizing a conference or workshop on state-of-the-art research issues in agriculture, food, fisheries or forests in 2021? Or would you like to spend time working with researchers in another country to help your research project, maybe as part of a sabbatical? If so, the OECD CRP (Co-operative Research Programme: Biological Resource Management for Sustainable Agricultural Systems) would welcome an application from you. *The call for applications for funding in 2021 is open until Thursday, 10 September 2020, midnight (Paris time):* <http://www.oecd.org/agriculture/crp/applications/#d.en.504909>

IUFRO Meetings

For a full list of meetings go to our online calendar!

<https://www.iufro.org/events/calendar/current/>

Find non-IUFRO meetings on the IUFRO Noticeboard!

<https://www.iufro.org/discover/noticeboard/>

Search forest-related events in GFIS at <https://www.gfis.net>



27-29 Sep 2020 (new date)

IUFRO RG 5.10.00 Conference "Pathways of forest bioeconomy – past, present and future"

Online, Finland

IUFRO 5.10.00

Contact: Anne M K Toppinen, anne.toppinen(at)helsinki.fi
<https://iufro-finland-2020.events/>

16-17 Oct 2020

9th International Symposium on Forest and Sustainable Development

Brasov, Romania

IUFRO 4.03.00, IUFRO 4.03.02

Contact: Bogdan Strimbu, Bogdan.Strimbu(at)oregon-state.edu

<https://silvic.unitbv.ro/cercetare/conferin%C8%9Be.html>
Information about Special Issue Forests: https://www.mdpi.com/journal/forests/special_issues/sus_dev

17 Mar 2021 (planned)

3rd International Forest Policy Meetings (IFPM3)

Freiburg, Germany

IUFRO 9.05.00

Organized by the Chair of Forest and Environmental Policy, University of Freiburg

Contact: ifpm2021(at)gmail.com

<http://www.forstpolitik-umweltpolitik.uni-freiburg.de/lehre/IFPM%203>

17-21 May 2021 (new date)

Air Pollution threats to Plant Ecosystems

Paphos, Cyprus

IUFRO 8.04.00 and Working Parties

Contact: Pierre Sicard, pierre.sicard(at)arches-conseils.fr
<https://cyprus2021.com/>

25-28 May 2021 (new date)

University of Belgrade – Faculty of Forestry – 100th Anniversary Congress

Belgrade, Serbia

IUFRO 1.00.00, IUFRO 3.00.00, IUFRO 9.00.00

Joint IUFRO-IFSA Task Force on Forest Education

Contact: Vladan Ivetić, vladan.ivetic(at)sfb.bg.ac.rs
<https://www.100anniv-forestryfaculty.sfb.bg.ac.rs/>

Other Meetings

28-29 Oct 2020

Global Landscapes

Forum (GLF) Bio-

diversity Digital

Conference

'One World – One Health'

Contact: Melissa Angel, m.kayeangel(at)cgiar.org

<https://events.globallandscapesforum.org/biodiversity-2020/>



15-30 Nov 2020

1st International Electronic Conference on Forests (IECF): Forests for a Better Future: Sustainability, Innovation, Interdisciplinarity

IECF is a virtual conference sponsored by Forests

Contact: iecf2020(at)mdpi.com

<https://iecf2020.sciforum.net/>

24-28 May 2021

XV World Forestry Congress: Building a Green, Healthy and Resilient Future with Forests

Seoul, Republic of Korea

Organized by Korea Forest Service, Republic of Korea (KFS), Food and Agriculture Organization of the United Nations (FAO)

Contact:

info(at)wfc2021korea.org

<http://wfc2021korea.org/index.html>



3-4 Nov 2021

Trees for the Future - Diversity and complexity for resilience and carbon storage

Birmingham, UK

Association of Applied Biologists (AAB), University of Birmingham, Birmingham Institute of Forest Research (BI-FOR). Contact: Deanne Brettell, d.brettell(at)bham.ac.uk

<https://www.iufro.org/fileadmin/material/discover/nb-trees-4-future-cfp.pdf>