IUFRO News
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Interconnecting Forests , Science and People
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Landscape Ecology, Finite Resources and the Coronavirus Pandemic

An Interview with IUFRO's Landscape Ecology Working Party Coordinators
https://www.iufro.org/science/divisions/division-8/80000/80100/80102/

The IUFRO Landscape Ecology Working Party was established in 1991 as part of IUFRO Division 8 Forest Environment. This year the WP is celebrating its **30th anniversary!** In the following interview the current coordination team of the Working Party, **João Azevedo, Peilei Fan, Jose Alberto Gobbi** and **María Constanza Meza**[1)] will explain the holistic approach and interdisciplinary nature of landscape ecology, highlight emerging issues especially in forest landscape ecology and focus particularly on the importance of landscape ecology in the current health and climate crises.

Landscape ecology is a relatively young scientific field within ecology dating back to the 1980s. What were the main reasons for its development?
Actually, landscape ecology has been around longer than that. In some countries in Europe, for example, landscape ecology was established as a scientific field in the early 20th century and in several others in the middle of the 20th century.

But it is true that it expanded strongly and quickly in the 1980s and 1990s following technological developments in computer processing and data acquisition (satellite imagery), making landscape level information and the tools to analyze it available to researchers more than ever before. At the same time theoretical advances helped to integrate new knowledge conceptually.

All these processes were fueled by an increasing demand of landscape level indicators, methods and tools from scientific/technical fields such as conservation, urban and land planning, hydrology or forestry, where management is addressed at large spatial and temporal scales.

Today landscape ecology is being recognized more widely and is being integrated more often into resource management and land use planning on a broader scale. What is the added value?
All resources are affected simultaneously by processes that occur both locally and at the landscape scale. It is not possible, for instance, to address water yield without considering the types of land cover and uses in the watershed (landscape), their areas, their spatial attributes, the types and frequency of adjacencies among these types, for example.

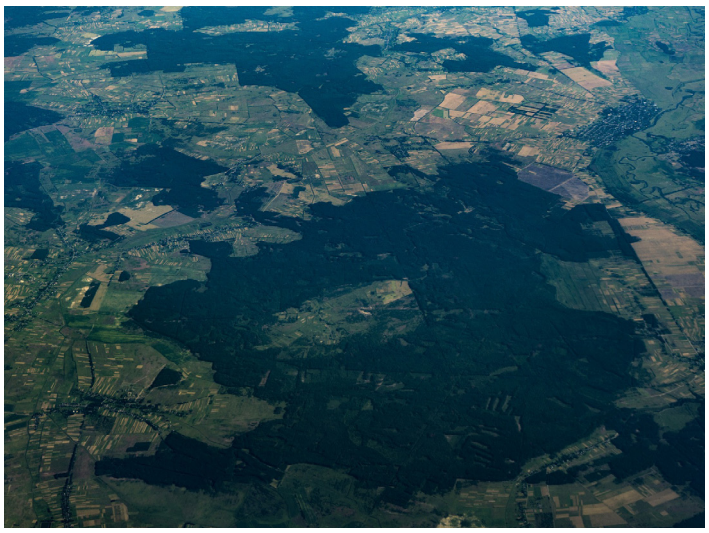


Photo by Daria Nepriakhina on Pixabay

Also, ecosystem services are, to a great extent, the result of processes and functions that take place mostly at the landscape scale and that are related to the composition, configuration and dynamics of the landscape system.

> *"To summarize, land resources cannot be properly explained, understood, modeled or forecast without considering the broader level systems they are part of, and that is where landscape ecology operates."*

Forestry was the first major field to recognize the importance of landscape ecology. How do foresters use landscape ecology principles?
Yes, forestry was certainly one of the first fields to look for applications and bring landscape ecology into practice. The fact that the *IUFRO Landscape Ecology WP* was established back in the 1990's is related to that. Actually, the mission of the WP is to bridge the gap between the theory of landscape ecology and its application to managing forest resources sustainably and applications have been an important guideline for the unit.

Foresters mostly use the landscape ecology approach, concepts, methods and tools in connection to sustainable forestry. Given that major ecological and many social and economic processes (and their indicators), namely those

João Azevedo is a Professor at the Instituto Politécnico de Bragança and researcher at Centro de Investigação de Montanha (CIMO), in Bragança, Portugal; Peilei Fan is a Professor of Urban and Regional Planning at the School of Planning, Design, and Construction, Michigan State University (MSU), USA, Jose Alberto Gobbi is a researcher at the Estación Experimental Agropecuaria Anguil, Instituto Nacional de Tecnología Agropecuaria (INTA), Argentina, and María Meza is a PhD student at the National University of Colombia, Bogotá, Colombia.

related to biodiversity conservation, hydrology, disturbance and aesthetics are related to landscapes, landscape ecology provides important insight and methods to assure that forests are managed sustainably.

Also, forest planning has incorporated landscape ecology knowledge and tools to maintain heterogeneity and connectivity, to reduce edge effects of management, to mimic disturbance regime patterns and many other aspects. In some countries, intensive forest management, for example, is guided and monitored based on landscape ecology principles and tools.

Your Working Party brings together a truly multidisciplinary group of researchers and practitioners with an interest in patterns and processes in forest landscapes. Why is this diversity so important?
It is tremendously important for the group and for landscape ecology to be able to receive contributions from people from so many and diverse backgrounds in addition to forestry, such as geography, plant ecology, wildlife management, hydrology, conservation, remote sensing, land use, urban planning, economy and health sciences, just to mention a few, both academics and practitioners.

These contributions build to the existing holistic perspective that we cultivate and follow. This makes landscape ecology evolve towards a multi- and trans-disciplinarity science taking advantage of the diversity of expertise and methods of research coming from these fields. We believe that this is very important for science, in particular when connecting scientific knowledge, management of natural resources, and society.

In 2020 your Working Party launched a webinar series to address critical emerging issues. The first webinar looked at the role of landscape ecology in the context of the spread of zoonoses and was entitled "Landscape Ecology and the COVID-19 Pandemic". What were the main conclusions?
Basically, we concluded that landscape ecology today offers a conceptual framework and many tools that are very useful to address zoonoses at several scales, to avoid zoonotic spillover and to increase resistance and resilience to pandemics, particularly in urban areas, where most of the transmission takes place.

Landscape ecology can also support the necessary rethinking and modification of economic growth and development models, food production and distribution systems, urban planning, mobility and transportation systems that impact the environment and the health of citizens and increase the chances of emergence and spread of zoonoses. We were able to publish an Editorial in the journal *Landscape Ecology* further debating the topics of the webinar (Azevedo *et al.* 2020).

João Azevedo during the first WP webinar

The second webinar discussed the contribution of urban green infrastructure to pandemic and climate resilience. How can landscape ecologists help to increase this resilience?

In this webinar, as in the previous case, we concluded that landscape ecology researchers and practitioners have a particular role to play in designing, planning, implementing, monitoring and communicating sustainable cities. These rely on a green (often blue, too) infrastructure responsible for numerous ecological processes and functions (e.g., biodiversity, water regulation, flood control, air quality regulation, recreation). They benefit city dwellers directly but also indirectly through increasing resistance to pandemics and climate change and therefore have a positive impact on the physical and mental health of urban dwellers. Urban population makes up the majority of the world's population and is growing at a fast pace in most parts of the world.

What other topics do you plan to address in future seminars and why have you chosen them?
The webinar series was established to debate major current and future topics in science and society that are relevant for the landscape ecology and other communities of scientists and practitioners.

Our next webinar will take place on 14 April 2021. We have joined efforts with the IUFRO Radioactive Contamination of Forest Ecosystems Working Party (8.04.07) to address **"Forests in Fukushima and Chernobyl - people, wildlife and landscape".** This co-organization will happen 10 years after the Fukushima disaster and we are all excited to learn from

the experience of outstanding scientists who will share major findings related to the effects of radiation on people, animal and plant communities and on landscape change.

We are still working on the definition of the remaining webinars for 2021. We follow internally a participative process of selection of topics as well as of organizing the webinars. The latest webinar was organized and hosted by Pınar Pamukçu Albers, the WP regional coordinator for Europe, and the coming webinar will be organized by Toshiya Matsuura, the WP regional coordinator for Japan and Oceania together with **Shoji Hashimoto** from unit 8.04.07.

What is the main goal of your Working Party for the period until the 2024 IUFRO World Congress in Stockholm?
Our main goal is to keep our regular activity going as it has happened since 1991. This has been and will be done at several levels, namely:

- maintaining strong interaction among WP members to increase knowledge and promote experience exchange and sustainable management of landscapes and forests;
- preserving the geographically decentralized structure of the WP with coordinators and representatives from all regions and continents in the world;
- improving cooperation with other organizations in fields related to landscapes and forests, in particular with IALE and in the field of urban forestry for which we have individual representatives; organizing international conferences and other events across the world on topics relevant for the landscape ecology and forest communities;
- maintaining regular publications (books, special issues and individual papers) resulting from the WP or WP members activity.

One particular goal for this term is to increase involvement of young researchers in the structure of the WP, to which we are strongly committed. The decision of creating the position of junior deputy in the coordinating team currently held by Maria Meza is related to this goal.

Working Party website:
https://www.iufro.org/science/divisions/division-8/80000/80100/80102/

Webinar website:
https://iufrole-wp.weebly.com/webinars.html

Next Webinar: April 14, 2021, Tokyo: 22:00, Beijing: 21:00, Delhi: 19:00, London: 13:00, Sao Paulo: 10:00, New York: 9:00, Los Angeles: 6:00 (more details will soon be available)

IALE-IUFRO Working Group on Forest Landscape Ecology:
https://iufrole-wp.weebly.com/iale-iufro.html

Publication of interest:
Azevedo, J.C., S. Luque, C. Dobbs, G. Sanesi, T.C.H. Sunderland. 2020. The ethics of isolation, the spread of pandemics, and landscape ecology. *Landscape Ecology* 35(10):2133-2140. https://doi.org/10.1007/s10980-020-01092-8

Capacity Building for Forest Landscape Restoration Implementation in Malawi and Sri Lanka

By Michael Kleine, Janice Burns, Ioana Grecu (IUFRO-SPDC)

Malawi landscape by Graham Hobster on Pixabay

Over the past 15 years, the importance of restoring deforested and degraded landscapes has gained significant international attention and is seen as one of the critical issues for sustainable development. To this end, numerous global, regional, and national initiatives have been established to bring millions of hectares of degraded lands under active restoration.

Besides new research and scientific synthesis through various IUFRO units, the **Special Programme for Development of Capacities (IUFRO-SPDC)** contributes to the global movement on forest landscape restoration through training programmes for forest scientists and practitioners in economically disadvantaged countries in Africa, Asia and Latin America.

The approach to forest landscape restoration (FLR) and the scope of the IUFRO-SPDC training program are illustrated in this article with the help of the ongoing IUFRO-SPDC project on **"Capacity Building for Forest Landscape Restoration Implementation in Malawi and Sri Lanka."**

Malawi and Sri Lanka are comparatively small countries by their land mass and considered highly populated. Land degradation has taken place in both countries for many years resulting in widespread soil erosion and loss of significant amounts of productive soil each year.

Impacts of climate change are particularly evident already in Malawi with an expected increase in negative consequences over the next decades. In Sri Lanka, in many areas human-wildlife conflicts occur because of growing populations and shrinking wildlife habitat. With over 80% of their population living in rural areas, **forests and woodlands are very important to the livelihoods of the people** through the provision of medicines, food, wood- and non-wood forest products.

FLR is defined as the process that aims at regaining and improving vital ecological functions and at the same time enhancing human wellbeing, in the long-term leading to more resilient and sustainable landscapes. Understanding FLR as an intervention into a complex socio-political and ecological system involving all relevant stakeholders provides the basis for devising effective FLR capacity development programs.

"The IUFRO-SPDC approach to FLR capacity building therefore entails (a) raising awareness on governance to inform policy makers, (b) training of FLR facilitators acting as change agents and (c) working with local FLR actors to restore the landscape."

Considering the role of forest science as an innovator for enhancing future land use and its benefits to society, IUFRO-SPDC is concentrating on capacity development of FLR facilitators in the various partner countries. To this end, **the project addresses the current shortage of trained FLR facilitators in Malawi and Sri Lanka by training a total of 50 land managers to become FLR facilitators in each country helping to speed up restoration progress throughout Malawi and Sri Lanka.**

In a first step, local training capacity has already been created by the project through an online train-the-trainer program as described below. Subsequently, these FLR trainers will lead mentorship programmes to familiarize frontline FLR facilitators and enable them to guide local FLR processes with stakeholders.

The local partners in this project include the Centre for Applied Systems Analysis (CASA) in Malawi and the Forest Department (FD) of Sri Lanka. Both organizations are actively involved in landscape restoration through local farmers associations to integrate trees on farmland in Malawi and through a World Bank supported project for development and implementation of a landscape management plan for two pilot areas in Sri Lanka. (Read the Sri Lanka guest blog: *http://blog.iufro.org/2021/01/20/seeing-the-forest-for-the-trees/*)

The project is funded by the Audemars-Watkins Foundation of Switzerland with additional financial input by the Ministry of Foreign Affairs of Finland, as well as in-kind contributions from the local partner organizations.

The **train-the-trainer program** was implemented in 2020 by means of a series of online workshops titled **"Practical Capacities for Forest Landscape Restoration Facilitators"**, separately for trainers in Malawi and Sri Lanka and following the structure of the **FLR Practitioner's Guide** (https://www.iufro.org/science/special/spdc/netw/flr/flr/pract-guide/) published by IUFRO scientists in 2017.

- The first session focused on **concepts and principles** relevant to building a case for FLR implementation on the ground.
- This was followed by an **analysis of issues and solutions** of landscape governance at specific stages of the restoration process.
- The third module was about **designing an FLR project** employing the tools of project cycle management and logical framework.
- In the fourth session **technical aspects** of restoring forest landscapes were introduced covering subjects ranging from site preparation and species selection to protecting trees and stands from wildfire and biotic agents.
- The fifth and sixth modules focused on **monitoring of progress** made in FLR implementation and **communication needs**,
- while in the final module **financing** FLR projects including funding mechanisms and potential sources were discussed.

The course content was tailored to the local context in Malawi and Sri Lanka by using a variety of approaches adapted to the local social, cultural, economic, and ecological values. To this end, each workshop series started with an overview about land use and forest restoration needs in both countries; for Malawi presented by *Dr Judith Kamoto* (Lilongwe University of Agriculture and Natural Resources) and for Sri Lanka by *Mr A. Saturusinghe* and *Mr H. G. Gunawardane* (Ecosystem Conservation & Management Project, Ministry of Mahaweli Development & Environment).

IUFRO's input to the workshops was provided by *Dr Michael Kleine* (Coordinator of IUFRO-SPDC), *Dr Andras Darabant* (Forestry Consultant) and *Dr John Stanturf* (Visiting Professor at the Estonian University of Life Sciences). *Ms Janice Burns* (Deputy Coordinator of IUFRO-SPDC) and *Ms Ioana Grecu* (IUFRO-SPDC Junior Administrator) helped with the technical coordination and facilitation of the online workshops.

Following the online workshops, the FLR training program will move into the **next project phase involving training of frontline facilitators** undergoing an eighteen-month mentorship program with hands-on consultative work with local communities and initial field operations. Besides coordinating this project, **IUFRO-SPDC in 2021 will expand its FLR training program by implementing online courses for forest scientists, students and landscape practitioners in India and Ethiopia.** *Find out more:* https://www.iufro.org/science/special/spdc/netw/flr/cb-flr-malsri/

Forest Roads in Europe

Report by Kevin Lyons, Oregon State University, USA, Coordinator of IUFRO WP 3.01.02, and Stelian Alexandru Borz, Transilvania University of Brasov, Romania, Deputy Coordinator of IUFRO WP 3.01.02 Road engineering and management

The seminar series **"Forest Roads: Regional Perspectives from around the World"** is hosted by IUFRO Working Party 3.01.02 and provides regional perspectives on the design, construction and management of forest road systems. The intent is to provide the participants with regional views of what forest roads are and the major factors affecting them. *Recordings of the presentations are available at:* https://www.iufro.org/science/divisions/division-3/30000/30100/30102/

Photog by Dr Stelian Alexandru Borz, April 9, 2019

The second seminar of the series was held on 1 December 2020 by Dr Stelian Alexandru Borz. He focused on forest roads in Europe. Europe is characterized by a wide variability in terms of economic development and technological context, topography, geology, soils, climate, harvesting technology and forest distribution. Heterogeneity of these factors is often reflected in the extent of the forest road network and the types of forest roads built.

Different definitions of forest roads exist, although not all the countries typically define forest roads. Road density varies widely, probably in relation to the economic development of the countries, with most of the countries requiring an extension of their existing forest road network. Only some highly industrialized countries with a strong background in forestry tend to move from the extension of forest road networks to the adaptation and consolidation of existing networks to enable high-capacity transportation.

The main dimensions of forest roads as well as the construction technology used are relatively homogeneous across European countries, and forest engineers are typically in charge of the design and planning of forest roads. Forest road construction, however, is commonly done by private companies.

The requirements for environmental impact assessments and for construction permits can vary between countries in Europe. In Romania, for example, conditions for forest road development are diverse due to the existing topography and distribution of forests. In Romania new research on the forest road network has mainly been financed by the National Forest Administration, which emphasized finding environmentally friendly solutions, digitalization and strategic prioritization.

Don't miss the next webinar with a focus on forest roads in Southern Africa scheduled for 9 February 2021: https://www.iufro.org/science/divisions/division-3/30000/30100/30102/activities/

Wood Anatomy and Wood Science

Report by Yafang Yin, Chinese Academy of Forestry, Coordinator of IUFRO Research Group 5.16.00 Wood identification

The seventh annual meeting of the IAWA-China Group with the theme **"Strengthening the Protection and Utilization of Forestry Resources, Broadening the Research Fields of Wood Anatomy and Wood Science"** was held in person from 28-29 November 2020 at Zhejiang Agricultural and Forestry University (ZAFU), Lin-an city, Hangzhou, China. It involved IUFRO Research Groups 5.16.00 and 5.06.00, was organized by the IAWA-China Group and Zhejiang Agricultural and Forestry University (ZAFU) and supported by IAWA, IUFRO and IAWS (International Academy of Wood Science).

The former Editor-in-Chief of IAWA Journal *Pieter Baas*, the Coordinator of IUFRO Division 5 Forest products *Pekka Saranpää* and the President of IAWS *Yoon-soo Kim* gave their welcome speeches via video. *Yafang Yin*, the IAWA Executive Secretary and IUFRO 5.16.00 Coordinator, and *Biao Pan*, the Chair of IAWA-China Group, also provided welcome remarks.

Welcome speech by Dr. Pekka Saranpää, Coordinator of IUFRO Division 5 Forest Products. Photo by IAWA-China Group

There were five keynote lectures and 48 oral presentations to show current research progress on:

- Wood identification
- Dendrochronology
- Plantation wood properties
- Xylem formation
- Wood and fiber utilization
- Plant ecology and environmental science
- Archaeological wood

Download meeting abstracts in English and Chinese: http://iawa-website.org/en/Downloads/Publications/index.shtml

This meeting attracted more than 160 representatives from 50 related universities, research institutes, forest products inspection centers and wood companies. The **Excellent Presentation Awards (EPA)** of the IAWA-China Group were awarded to10 qualified postgraduate students.

The event provided a memorable opportunity for strengthening mutual understanding and scientific cooperation between IAWA, IUFRO and IAWS, especially in these difficult times of the worldwide Covid-19 pandemic. *Tuo He*, Deputy Coordinator of IUFRO 5.16.01, *Lichao Jiao*, Deputy of 5.16.03, and *Juan Guo,* Deputy of 5.06.00, together with local committee members were involved in the organization of this annual meeting.

The next IAWA-China Group annual meeting will be held in 2021 at Sichuan Agricultural University, Chengdu, China.

(Note: The report has been shortened by the editor. For the full report, please visit the RG website: https://www.iufro.org/science/divisions/division-5/50000/51600/activities/)

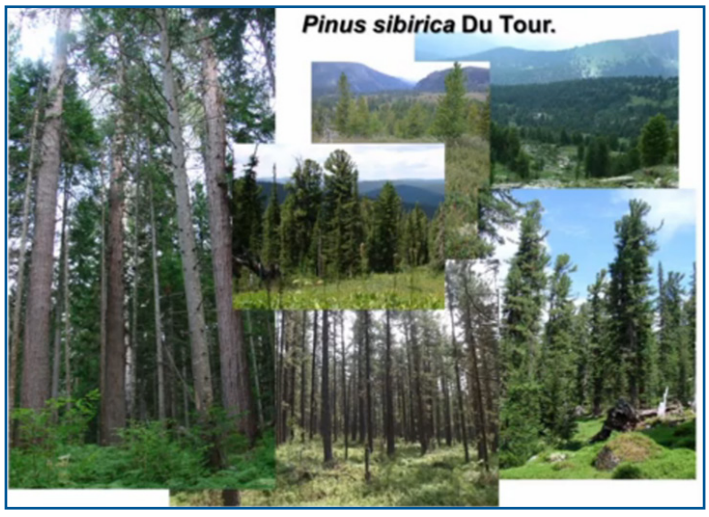
4th All-Russian Conference on Sustainable Forest Management

Report by Dmitry Schepaschenko, International Institute for Applied Systems Analysis, Coordinator of IUFRO Working Party 8.01.06 - Boreal and Alpine Forest Ecosystems

The **4th all-Russian scientific conference** with international participation entitled "Scientific Basis for Sustainable Forest Management" took place in hybrid format (online and in Moscow) on 27-30 October 2020: http://cepl.rssi.ru/confs/forest_management_2020/en/ (*in Russian*)

The conference considered the following aspects of sustainable forest management:

- monitoring and assessment of biological diversity and ecosystem functions/services of forests
- improvement of forestry legislation
- assessment of the impact of climate change on forests, climate change mitigation and adaptation (this session was co-organized by IUFRO WP 8.01.06)
- ways to solve the problems of reforestation and afforestation
- ways to solve the problems of forest protection from natural disturbances



Screenshot from a conference presentation

In the course of the conference round tables were held with a focus on monitoring climate change impacts on Russian forests and prospects for the development of forestry on abandoned arable land.

You can watch video recordings of this all-Russian conference. Also, conference proceedings in Russian have been published: ISBN 978-5-9905012-8-7

The meeting was co-sponsored by IUFRO Working Party 8.01.06 and kindly supported by the Center for Forest Ecology and Productivity of the Russian Academy of Sciences; Department of Biological Sciences of the Russian Academy of Sciences; Scientific Council of the Russian Academy of Sciences on the forest; Space Research Institute of the Russian Academy of Sciences; Soil Science Society named after V.V. Dokuchaev; and the Russian Society of Foresters.

Global Experts Collaborate Towards Policy Actions for Non-Wood Forest Products (NWFPs)

In early September 2020, the IUFRO Task Force Unlocking the Bioeconomy and Non-Timber Forest Products participated in a science-based review of policy recommendations of the INCREDIBLE project, an innovation network for cork, resins and edibles.

Photo by Dirk Dewulf on Pixabay

The webinar welcomed 36 experts from 14 countries to provide consultation on "the most urgent policy actions to be undertaken by the EU and national levels to un-tap the potential of NWFP to address the most relevant challenges in the EU agenda."

Read the full report and find out more: https://incredibleforest.net/content/global-experts-collaborate-towards-policy-actions-nwfps

Mark your calendar: The INCREDIBLE project is hosting an online policy forum "Untapping the potential of non-wood forest products for Europe's green economy" to consider the salient issues for NWFP policies on 2 and 3 February 2021 (also listed under "Other Meetings" at the end of this newsletter): https://www.incredibleforest.net/incredible-policy-forum

News from IUFRO Members

Building a House with Eucalyptus Wood


Screenshot from PPT

The first webinar SIN DIA NI HORARIO (anytime) in Spanish entitled **"Construcción de la casa de madera de Eucalipto en INTA Concordia"** is presented by Martín Sánchez Acosta, Ciro Mastrandrea and Ana Cerúsico of INTA Concordia, Argentina: https://www.youtube.com/watch?v=5JPD5DRJMmY

The accompanying Powerpoint presentation can be downloaded chapter by chapter at https://inta.gob.ar/documentos/pasos-en-la-construccion-de-una-casa-de-madera-de-eucalipto-en-inta-concordia

The information is available for free providing the source is acknowledged and can be distributed and used for education purposes.

Impacts of Urbanization on U.S. Watersheds

From **USDA Southern Research Station**: Full report


Photo by Ryan Qualls on Pixabay

Urbanization has a detrimental effect on watersheds by decreasing vegetation and increasing impermeable surfaces, says new research by SRS scientists.

Urbanization is inevitable with a growing population, but what consequences does this have for the water we rely on?

Cheng Li, a former visiting scholar at North Carolina State University from the Guangdong Academy of Sciences, along with USDA Forest Service scientists Ge Sun[1], Peter Caldwell, and Erika Mack modeled the effects of urbanization on surface water across the contiguous U.S. The results were published in *Water Resources Research*.

"Forests serve as powerful biological pumps and can return more than half of precipitation back to the air, and thus can greatly reduce urban runoff," says Sun. (...)

The study suggests that retaining and increasing appropriate vegetation cover can combat increased runoff in urbanizing watersheds.

[1]*Ge Sun is a member of the IUFRO Task Force Forests and Water Interactions in a Changing Environment*

Innovations in Forest Industry and Engineering Design

Screenshot from conference website

The 10th International Scientific and Technical Conference INNO 2020 organized by the Faculty of Forestry of the **University of Forestry, Bulgaria**, took place in Sofia on 1-3 October 2020: http://inno.ltu.bg/

Scientists and researchers from more than 10 European universities working in the field of forest industry from Romania, Greece, Croatia, Slovakia, Turkey, Poland, France, Northern Macedonia and Lebanon had registered and sent papers. Unfortunately, the COVID-19 pandemic hindered the on-site presence of foreign participants, but some of the papers were presented in the poster session, and others through video conferencing. Conference participants had the opportunity to learn about the latest innovations in industry from papers delivered by representatives of various companies. All conference papers are published in the Conference Proceedings. (*Source: INNO post-conference newsletter*)

Congratulations: Khosro Sagheb-Talebi Receives Prestigious Award


Photo provided by Khosro Sagheb -Talebi

On December 5, 2020 Prof Khosro Sagheb-Talebi was honored as National Top Researcher by the Ministry of Science, Research and Technology (MSRT) and the **Ministry of Agriculture (MA) of Iran** for his long-term research on Hyrcanian old-growth forests and the application of his results on close to nature management of Hyrcanian forests.

Dr Sagheb-Talebi has been involved for 20 years in IUFRO holding various positions in Division 1 *Silviculture*: Deputy Coordinator of Division 1, Coordinator and Deputy Coordinator of IUFRO Working Party 1.01.07 *Ecology and silviculture of beech* and Deputy Coordinator of IUFRO Research Group 1.05.00 *Uneven-aged silviculture*.

FORESTIST - Journal of İstanbul University - Cerrahpaşa Faculty of Forestry

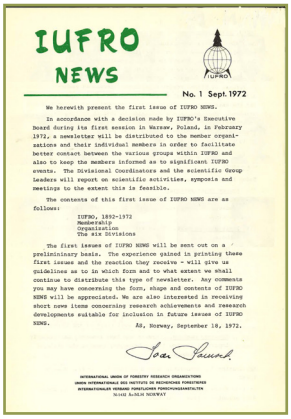
Forestist is an international, scientific, open access periodical published in accordance with independent, unbiased, and double-blinded peer-review principles. The journal is the official publication of **İstanbul University - Cerrahpaşa Faculty of Forestry** and has been published since 1951.

Forestist is published three times a year, in January, May and September, and the publication language of the journal is English.

Manuscript submission: https://mc04.manuscriptcentral.com/forestist
Journal guidelines and technical information: https://forestist.org
Find out more: https://www.iufro.org/discover/noticeboard/non-iufro-publications/

News from IUFRO Headquarters

50th Volume of IUFRO News!


IUFRO NEWS

No. 1 Sept. 1972

We herewith present the first issue of IUFRO NEWS.

In accordance with a decision made by IUFRO's Executive Board during its first session in Warsaw, Poland, in February 1972, a newsletter will be distributed to the member organizations and their individual members in order to facilitate better contact between the various groups within IUFRO and also to keep the members informed as to significant IUFRO events. The Divisional Coordinators and the scientific Group Leaders will report on scientific activities, symposia and meetings to the extent this is feasible.

The contents of this first issue of IUFRO NEWS are as follows:

IUFRO, 1892-1972
Membership
Organization
The six Divisions

The first issues of IUFRO NEWS will be sent out on a preliminary basis. The experience gained in printing these first issues and the reaction they receive - will give us guidelines as to in which form and to what extent we shall continue to distribute this type of newsletter. Any comments you may have concerning the form, shape and contents of IUFRO NEWS will be appreciated. We are also interested in receiving short news items concerning research achievements and research developments suitable for inclusion in future issues of IUFRO NEWS.

Ås, Norway, September 18, 1972.

Ivar Samset

This year we are starting IUFRO News Volume 50! Issue 1 of IUFRO News Volume 1 was published in September 1972 just prior to the IUFRO Secretariat's move to its permanent location in Vienna, Austria. It started with a message from the then IUFRO President *Ivar Samset* from Norway:

"**We herewith present the first issue of IUFRO News**. In accordance with a decision made by IUFRO's Executive Board during its first session in Warsaw, Poland, in February 1972, a newsletter will be distributed to the member organizations and their individual members in order to facilitate better contact between the various groups within IUFRO and also to keep members informed as to significant IUFRO event." (...)

After a series of 'facelifts', expansions, and changes from print to online, IUFRO News is still doing what it was originally intended to do, connecting the IUFRO community and informing about what is going on in IUFRO and in the world of forest science.

Its readership has meanwhile grown beyond IUFRO to include relevant stakeholders and communication networks, and it is now in the company of several other communication tools such as the IUFRO website, Spotlight and social media.

Throughout the year some important steps in the history of IUFRO News will be highlighted.

Helpful Documents for Meeting Organizers

Do you want to organize IUFRO meetings? Find information and helpful documents in your Unit's toolbox and here: https://www.iufro.org/media/general-background/
For example, you might find the "**Quick guide on steps to take before, during and after an event**" very useful.

IUFRO HQ Citation Style

In order to homogenize the different citation styles used by authors publishing with the Headquarters of the International Union of Forest Research Organizations (IUFRO HQ), at HQ we have developed a simple and harmonized citation style that will be available from the databases of the most commonly used reference management software under the name *'International Union of Forest Research Organizations – Headquarters'.* **We encourage our authors to make use of this citation style** and we offer its use to anyone in need of a simple and consistent citation style.
Find out more: https://www.iufro.org/publications/

Obituary: Dusan MLINŠEK

On 15 December 2020 IUFRO Honorary Member Professor Dr *Dusan Mlinšek* passed away in his home in Ljubljana, Slovenia, at the age of 95. Dušan's wife Jožica Verdelj had left him behind in 1997; they had three sons, Gorazd, Matjaž and Jurij.

Professor Mlinšek started his active participation in IUFRO in 1961 in the field of silviculture. In 1971 he became a Board Member leading IUFRO Division 1 Silviculture for two periods before he was elected IUFRO President for the period from 1982 to 1986. He then served as Immediate Past President until 1990.

For his long-term service to IUFRO and his achievements in the development of forest research, as well as for his role in the establishment of the IUFRO Special Programme for Development of Capacities (IUFRO-SPDC, formerly called Special Programme for Developing Countries), IUFRO bestowed Honorary Membership on Professor Mlinšek at the 1990 IUFRO World Congress in Montreal, Canada.

Professor Mlinšek graduated in 1958 from ETH Zurich under Professor Leibundgut. He was appointed Assistant Professor in 1966 and full-time Professor of Forestry and Landscape Ecology in 1971 He became Dean from 1973-75 at the Department of Forestry and Renewable Forest Resources of the Biotechnical Faculty, University of Ljubljana, Slovenia, where he worked until his retirement in 1996. Up to that time he had participated in several silvicultural IUFRO meetings and World Congresses.

He published more than 160 publications in Slovenian and over 120 publications in other languages. For his dedication to the forest sector and the development of forest education and the public service, Professor Mlinšek received a number of formal recognitions nationally and internationally. Among others, he became a Corresponding Member of the Academy of Forestry Sciences in Florence, Italy.

He had always advocated a holistic approach to silvicultural practices and aimed for their ecological implementation. He thus made important contributions to both nature conservation and sustainable forest management in planted forests and natural forests. He introduced the notion of "holistic forestry" in support of the "close-to-nature" approach in forestry, including developments of the nature-based forest tending system. He was a founding member of the renowned "Pro Silva" association in Europe (Ljubljana, 1989), which has meanwhile expanded overseas. The implementation of the four Pro Silva principles underlined, among other things, the importance of field excursions nationally and internationally.

IUFRO and the forest community have lost an extraordinary teacher, scientist, colleague and friend, who will also always be remembered for his embracing broad-leafed trees in spruce stands! His outstanding contributions to silviculture are an important legacy to future generations of foresters. RIP

By Heinz Schmutzenhofer, former IUFRO Executive Secretary

Obituary: Fujio KOBAYASHI

We are sad to inform you that Dr *Fujio Kobayashi* passed away on December 6, 2020 at the age of 88. He received the IUFRO Distinguished Service Award in 2000 for his important contributions to promoting and enhancing IUFRO's presence in the Asia-Pacific region.

Dr Kobayashi worked at the Forestry and Forest Products Research Institute (FFPRI) of which he became Director General in 1988. In 1991 he retired but remained active as President of the Japanese Forest Society (1990–1992), as Consultant at the Japan Forest Technology Association (1991–2005), and President (2001–2008) and then President Emeritus (since 2007) of the Japan Forestry Association.

Dr Kobayashi contributed to the work of IUFRO Division 2 and was a strong supporter of fundraising for IUFRO–SPDC as he promoted forest research in developing countries. He was also actively involved in the initiation of APAFRI as an Asian Chapter of IUFRO. Furthermore, he chaired the organizing committees of several national and international meetings held under the auspices of IUFRO, including Bio–Refor (Biotechnology Assisted Reforestation) in 1991. From 1991-1995 he served as IUFRO's International Council representative for Japan.

Dr Kobayashi was a dedicated entomologist who greatly contributed to the systematization of destructive forest insects, to the control of pine wilt disease insects and the development of preventative methods and wood-injuring insects in Japanese cedar and cypress plantations.

The world of forest science mourns the loss of this great researcher. Heartfelt condolences on behalf of IUFRO to his family and friends!

Publications

IUFRO Spotlight #86 - Analyzing the Complicated Forest-Water Relationship

iStock: Keikona

Forests play an integral role in the water cycle by enhancing the world's supply of clean water. Much of the globe's freshwater is provided through forested catchments. The IUFRO Task Force on Forests and Water Interactions in a Changing Environment examines interactions and feedbacks of forests and water in a broad context that will consider impacts of – and on – climate, variability and change, as well as emerging climate change mitigation strategies, markets and adaptive forest and water management. *Read here*: https://www.iufro.org/media/iufro-spotlights/

Call for Submissions!

Photo by Monika P on Pixabay

Special Issue of *Forests* "Genetic Control of Forest Tree Traits and Their Interaction with Environment"
Deadline 25 August 2021!
Contact: Rosario Garcia Gil, M.Rosario.Garcia(at)slu.se

Contributions should ideally provide novel models for the implementation of genomics and remote sensing tools to accelerate and assist forest genetic adaptation to secure production and biodiversity.

Details: https://www.mdpi.com/journal/forests/special_issues/tree_traits_gene

China-Europe Forest Bioeconomy: Assessment and Outlook

A new study from the European Forest Institute provides the first systematic assessment of the potential challenges and possibilities for the future and policy implications for Europe-China forest-based bioeconomy development.

Authors (including IUFRO officeholders): Kallio, M., Chen, X., Jonsson, R., Kunttu, J., Zhang, Y., Toppinen, A., Zhang, J., Chen, J., Krajnc, N., Cashore, B., Yu, B., Yong, C., Pettenella, D. 2020. From Science to Policy 11. European Forest Institute. Download here: https://doi.org/10.36333/fs11

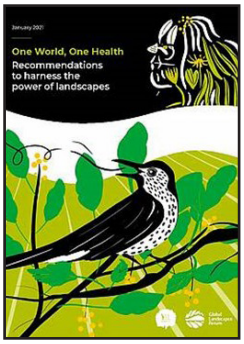
FAO Policy Brief on COVID-19 Impacts to Wood Value Chains

Photo G. Wolfrum, IUFRO

This policy brief summarizes findings from a global survey on the impacts of the coronavirus (COVID-19) outbreak on wood value chains and recovery measures from the forest sector. The survey received responses from 237 stakeholders registered in the Sustainable Wood for a Sustainable World (SW4SW) network, representing all segments of wood value chains.

FAO. 2020. Impacts of COVID-19 on wood value chains and forest sector response: Results from a global survey 2020. Rome.
http://www.fao.org/documents/card/en/c/cb1987en
Also Available in Spanish and French!

One World, One Health: Recommendations for Harnessing the Power of Landscapes



Recognizing the potential of the landscape approach to contribute towards biodiversity targets, the GLF and the Youth in Landscapes Initiative (YIL) facilitated the co-creation of the GLF Biodiversity Policy Recommendations. This report brings together perspectives from the GLF community as represented in the GLF Biodiversity Digital Conference sessions and inputs from partner and youth organizations. https://www.iufro.org/news/article/2021/01/21/global-landscapes-forum-community-urges-seven-ways-to-harness-the-power-of-landscapes-to-safeguard-b/

Illustration by Cheska Poon on Pixabay

Announcements

Miscellaneous

Call for Applications: Join Inaugural Board of the Global Network for Young Professionals in Forestry (ForYP) *Apply by 31 January 2021*

ForYP is a new membership organization concept that will provide a platform for young professionals to meet, learn, and interact in a professional capacity. Applications for the inaugural Board are now open! *Details*: http://bit.ly/CallForYP

Join Forest Multi-taxon Biodiversity Platform
In a large collaborative effort under the lead of IUFRO Officeholder *Sabina Burrascano* of Sapienza University, Rome, Italy, numerous researchers across Europe are teaming up to build a platform of forest biodiversity across multiple taxa with the goal to gather data to inform sustainable forest management. *Details:* https://www.bottoms-up.eu/en/

UBC Master of International Forestry
Today's forest conservation and resource management decisions are made in continuously changing landscapes. The University of British Columbia's Master of International Forestry (MIF) is an intensive 10-month course-based Master's program that provides the knowledge, skills and tools required to address the social, environmental, and economic challenges of the global forest and natural resources management.
Location: Vancouver, BC, Canada
Submit application by: not indicated
Details: https://forestry.ubc.ca/programs/graduate/professional-masters-degrees/master-of-international-forestry/

SCIENCEx Webinar Series
This series brings together scientists and land management experts from across U.S. Forest Service research stations and beyond to explore the latest science and best practices for addressing large natural resource challenges across the country. These webinars will be primarily management focused, but with applicability for participants from across sectors.
Visit: https://www.fs.fed.us/research/sciencex-webinars/

Positions

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

Postdoctoral Position in Modelling Forest Resources and Development Pathways
Apply by 8 February 2021
Applications are invited for the position of a postdoctoral researcher to participate in the project: 'Toward a future of wood cities and restored forests—modelling pathways for development of a new forest industry in the tropics'. The position is based at the Department of Forest Ecology and Management, Swedish University of Agricultural Sciences (SLU), Umeå, and will include close collaboration with the Eco-Innovation Foundation (EIF) based in Stockholm, Sweden.
Details: https://www.slu.se/en/about-slu/work-at-slu/jobs-vacancies/?rmpage=job&rmjob=4399&rmlang=UK

Lecturer, Climate Vulnerability and Adaptation
Apply by 12 February 2021
The Department of Forest Resources Management, Faculty of Forestry, University of British Columbia (Vancouver Campus) invites applications for a 50% Lecturer (term appointment) position.
Details: https://ubc.wd10.myworkdayjobs.com/en-US/ubc-facultyjobs/job/UBC-Vancouver-Campus/Lecturer--Climate-Vulnerability-and-Adaptation--CVA----50--time_JR751

Postdoctoral Fellowship in Forest Tree Genetics (2 years)
Apply by 28 February 2021
The Umeå Plant Science Centre, Sweden, is looking for candidates with experience in population genetics and SNP-based genetic modelling (e.g., GWAS). Candidates with additional education in statistical genetics are also encouraged to apply.
Details: https://www.upsc.se/jobs/6032-postdoc-2-years-kempe-stipend.html

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

Jan – Apr 2021
Webinar Series: Behavioural and Chemical Ecology of Bark and Woodboring Insects
IUFRO 7.03.05 and 7.03.16 / *Registration link:* https://www.fabinet.up.ac.za/index.php/event/IUFRO_WP_7.03.16/
(January 21 - Plant Defense and Biotic and Abiotic Stressors
Nadir Erbilgin, University of Alberta)
February 04 - **Visual Ecology of Forest Beetles**
Johannes Spaethe, University of Wurzburg
February 18 – **Finding a Point Source of Odor in a Turbulent World: Mechanisms and Constraints**
Ring Carde, University of California-Riverside
March 04 - C**limate Change Effects on Bark Beetle Range Expansion, Community Associates and Outbreak Dynamics**
Barbara Bentz, USDA Forest Service, Rocky Mountain Research Station
March 18 – **Behavioural and Invasion Ecology of *Hylurgus ligniperda***
Ecki Brockerhoff, Swiss Federal Research Institute WSL
April 01 -**Chemical Ecology of *Ips typographus* – Norway spruce Interactions**
Sigrid Netherer, University of Natural Resources and Life Sciences, Vienna
Recordings will be posted here:
https://www.youtube.com/channel/UCE1bhBiFrYSbUSh09LipkZw
Contact: Jeremy Allison, jeremy.allison(at)canada.ca
Juan C. Corley, corley.juan(at)inta.gob.ar

9 Feb 2021
Webinar Series Forest Roads: Regional perspectives from around the world / Forest Roads in Southern Africa
online from Oregon State University, United States / IUFRO 3.01.02
Contact: Kevin Lyons, kevin.lyons(at)oregonstate.edu
https://www.iufro.org/fileadmin/material/science/divisions/div3/30102/webinar-series-forest-roads21-africa.pdf

9-11 Feb 2021 (**new date**)
IUFRO Small Scale Forestry Conference: Keeping in touch: Exchange of Findings on Small-scale Forestry Research in Challenging Times
Online / IUFRO 3.08.00
For registration, please contact:
small-scale-forestry-2021(at)forst.bwl.de
https://www.iufro.org/science/divisions/division-3/30000/30800/activities/

2-26 Feb 2021
Digital ALPTREES Conference 2021: Sustainable Use and Management of Non-Native Trees in Urban, Peri-Urban and Forest Ecosystems in the Alpine Region
Online, Austria / IUFRO 8.01.06
Contact: Dmitry Shchepashchenko, schepd(at)iiasa.ac.at
https://www.alpine-space.eu/project-event-details/en/8144

21-22 Mar 2021
2021 World Wood Day Virtual Symposium and the Third IUFRO Forest Products Culture Colloquium: CO2 & Wood: Carbon Capture and Storage in Forests, Wood and Non-Wood Products
Online, United States
IUFRO 5.00.00, 5.15.00, 9.03.02
Contact: Howard N. Rosen, howard.rosen(at)usda.gov
Elisabeth Johann, elisabet.johann(at)aon.at
http://www.worldwoodday.org/2021/regions_event/39

12-14 Apr 2021
Forests in Women's Hands
Online and in-person at WALD-CAMPUS Austria, Traunkirchen
IUFRO TF Gender Equality in Forestry / *Contact*:
info.2021(at)forstfrauen.at
https://www.forstfrauen.at/en/konferenz-2021

16-20 Aug 2021
2021 IBFRA Conference: Changing Boreal Biome – Identifying Emerging Trajectories and Assessing Vulnerability & Resilience of Boreal Ecosystems and their Socio-economical Implications
Online, United States / IUFRO 1.01.08, 8.01.06
Contact: IUFRO Headquarters, office(at)iufro.org
https://sites.google.com/alaska.edu/ibfra2021

23-26 Aug 2021
4th World Teak Conference
Accra, Ghana / IUFRO 5.06.02
Contact: P. K. Thulasidas, pktdas(at)gmail.com
https://www.worldteakconference2020.com/

20-24 Sep 2021 (**new date**)
Biological Invasions in Forests: Trade, Ecology and Management
Prague, Czech Republic / IUFRO 7.03.07, 7.03.12, 8.02.04
Contact: Andrew Liebhold, andrew.liebhold(at)usda.gov
Rene Eschen, R.Eschen(at)cabi.org
https://iufro.czu.cz/en

4-6 Oct 2021 (**new date**)
Managerial, Social and Environmental Aspects of the Forest-based Sector for Sustainable Development: 40th Anniversary Conference for 4.05.00
Brno, Czech Republic / 4.05.00 and Working Parties
Contact: Lidija Zadnik Stirn, lidija.zadnik(at)bf.uni-lj.si
Pavlína Pancová Šimková, pavlina.simkova(at)mendelu.cz
https://iufro2021.ldf.mendelu.cz/

Other Meetings

2-3 Feb 2021
Untapping the Potential of Non-Wood Forest Products for Europe's Green Economy
Online policy forum
INCREDIBLE project
Contact: info(at)incredibleforest.net
https://www.incredibleforest.net/incredible-policy-forum

18-20 Feb 2021
Timelines and Critical Junctures: Re-examining Crises as Opportunities for Change
Virtual ISTF Conference, approx. 8am-3pm EST
https://istfconference.events.yale.edu/

16-19 Aug 2021
20th Commonwealth Forestry Conference
Online, hosted in Vancouver, British Columbia, Canada
Contact: cfc.20(at)ubc.ca
https://cfc2021.ubc.ca/