# IUFRO LE Forestieres Control Le La Control Investigación Forestal

# 125 Years of International Forest Research Cooperation

An Interview with IUFRO President Mike Wingfield

From 18-22 September 2017 IUFRO will celebrate its 125th Anniversary Congress in Freiburg, Germany, Coincidentally, the current issue of IUFRO News is the **125th edition of the electronic newsletter**. This presents a perfect opportunity for an interview with IUFRO President Mike Wingfield, specifically to hear his views of the achievements of IUFRO during the past 125 years, but also what he sees as the challenges that lie ahead. Furthermore, what his hopes and expectations are for the forthcoming Anniversary Congress.

Q: Professor Wingfield, in the second half of the 19th century a substantial reduction of forest stands in mountainous regions of Central Europe was one of the main factors responsible for extreme floods. This problem and an increasing interest in learning more about the interrelationship between forests and climate, among other things, called for more effective international collaboration in forest research. And this led to the establishment of IUFRO in 1892. Today, 125 years later, why is there still a need for international science collaboration? What are the main challenges today?

A: It is now widely accepted that collaboration and especially international collaboration is a major driving force in global research across all scientific disciplines. It drives not only the amount of research conducted but also the quality of research. And this is precisely where the global IUFRO network plays a huge part. Our many research units have always been very actively engaged in collaborating on all of the major issues facing forests and forestry, and will continue to do so in future.

One of the current challenges coming to mind is an unfortunate global trend focused on establishing boundaries rather than breaking them down. However, the past 125 years have shown that IUFRO has managed quite successfully to overcome such boundaries and facilitate free scientific cooperation. Another challenge certainly is for us as forest scientists to more effectively communicate the outcomes of reliable research to stakeholders and policy

Q: After international cooperation in IUFRO had come to a halt due to World War I, it was not until 1926 that forest scientists met again at an international forum, the First World Forestry Congress in Rome. They immediately set out to revive the organization and make it more open with regard to membership and the inclusion of scientific themes. Today, IUFRO has members and officeholders in 125 countries worldwide and a scientific structure that addresses a very broad range of issues. What should IUFRO aim for in the future in terms of its scope and membership?



Forschungsanstalten

**A:** The first and most important point to make here is to consider what makes IUFRO DIFFERENT to other organizations that are involved in supporting various aspects of forests and forestry. Here IUFRO's mandate is very clear in having a focus specifically on research and in doing so globally. There is no other organization that links forest researchers in the way that IUFRO does.

But there are also challenges. One of these has to do with the extensive number of scientific fields that forestry encompasses. We need to attract researchers from specialist fields that study trees and forests but do not see themselves as foresters. Here I for example consider my own field of interest - plant pathology and entomology. There are many pathologists and entomologists who work on trees but do not participate in IUFRO. We miss opportunities in not engaging with them - they miss opportunities in not being part of IUFRO.

Q: The period after World War II until the mid-1970s was characterized by worldwide change, continuous economic growth and the growing visibility of developing countries on the global scene. In those years IUFRO also experienced a record growth, a great diversification of scientific themes and a growing representation of scientists from developing countries.



In recognition of the specific needs of scientists from economically disadvantaged countries IUFRO has worked towards strengthening their capacities for science cooperation since the 1980s. Why is it still so important in today's world? Is there one particular achievement in that area that stands out in your mind?

**A:** With my home country South Africa being in the socalled developing world, this is a topic of particular interest to me. During my time with IUFRO I have seen substantial advances in the manner that IUFRO is engaging particularly in countries of Asia, Africa and Latin America. Here I must also mention our Special Programme for Developing Capacities (IUFRO-SPDC) that has done an amazing job in providing training courses and other research support for forest scientists from economically disadvantaged regions.

But we have a lot more to do. Following on my comments above, collaboration is the key to success in research. And when one looks at high impact research from developing world countries, it is very clear that this often emerges from global collaboration. Here I see huge opportunities for IUFRO to more effectively link forest scientists across global boundaries.

Q: In the past 25 years we have witnessed a growing awareness of the limits of natural resources. Consequently, the idea of sustainability has been widely accepted as a guiding principle also in research. In 2015 the Sustainable Development Goals were adopted with the aim to end poverty, protect the planet and ensure prosperity for all. How will IUFRO contribute to attaining these goals?

**A:** As a global network facilitating forest research, IUFRO plays a crucial role in promoting the Sustainable Development Goals. This is because FORESTS are so important to the future of our planet and its people. IUFRO's very active role in the Collaborative Partnership on Forests (CPF) with its lead in the CPF's Global Forest Expert Panels Initiative (GFEP) and our Task Forces that promote activity and understanding of key issues linked to the SDGs are examples.

But it is the incredible network of more than 15000 forest researchers globally, seeking answers to problems and challenges facing the worlds' forests where our greatest impact on achieving the SDGs is. As an educator, I should also add that IUFRO's role in promoting and supporting particularly higher education in forestry is an important element of all of these efforts.

# Update on IUFRO 125th Anniversary Congress in Freiburg, Germany!

Early bird registration until 1 June 2017! <a href="http://iufro2017.com/registration/">http://iufro2017.com/registration/</a>

Subscribe to the Congress Newsletter: <a href="http://iufro2017.com/newsletter/">http://iufro2017.com/newsletter/</a>

What does "Interconnecting forests, science and people" mean to you? Find some answers here: <a href="http://iufro2017.com/testimonials/">http://iufro2017.com/testimonials/</a>



During his latest visit to Freiburg, Mike Wingfield also had the opportunity to meet the Minister for Rural Affairs and Consumer Protection of Baden-Württemberg, Peter Hauk.

Left to right: F. Reining, H. Desmond, P. Hauk, M. Wingfield, K. v. Teuffel, S. Werner, A. Buck, J. Fischbach-Einhoff (Photo MLR)

**Q:** The 125th Anniversary Congress of IUFRO will be a fine opportunity not only for presenting research and exchanging knowledge but also for strengthening the IUFRO network and increasing the visibility of IUFRO. **What are your personal expectations for this Congress?** 

**A:** It is a great privilege for me to be serving as IUFRO President at the time that we are to celebrate our 125th Anniversary. And I am looking forward to meeting with many colleagues and friends in Freiburg in just a few months' time. Freiburg is a delightful city and we are set to enjoy a remarkable congress fitting with the fact that our organization has reached its 125th year.

The meeting will bring together very large numbers of forestry scientists and policy makers. In addition to a very high level of scientific exchange that has been facilitated by a superb Congress Scientific Committee, it will also include new elements of debate and discussion that intersect areas of concern regarding the future of forests and forestry.

Overall, we will have the opportunity to look back over the rich and interesting history of IUFRO and to celebrate the accomplishments of our past. But we will also look to the future where knowledge from forest research is set to be more relevant than ever before.

Also read: http://iufro2017.com/testimonials/#wingfield

**Summer Schools** 

http://iufro2017.com/summer-schools/

**Excursions** 

http://iufro2017.com/excursions/



Interconnecting Forests, Science and People 125<sup>th</sup> Anniversary Congress 2017



### Towards Optimizing Value in the Bio-economy from Data Driven Decisions

Report by Pierre Ackerman, Stellenbosch University, South Africa

Precision Forestry 2017, an international symposium, is a forum where forest scientists and practitioners from around the world share their research, knowledge, experience, and emerging ideas with the greater forestry community.

The symposium titled **Precision Forestry – Towards optimizing value in the bio-economy from data driven decisions** was presented in Stellenbosch, South Africa, from 28 February to 2 March





This meeting followed previous symposia held in 2006, 2010 and 2014 in South Africa. The 2017 Precision Forestry Symposium was the largest of all those held at Stellenbosch University to date, with 116 delegates attending from 16 countries around the world.

The success of the 2017 Precision Forestry Symposium could be attributed to the quality of the science behind the presentations delivered, the status of the delegates attending from sixteen countries, and the current and continued interest in promoting the all-important facet of Precision Forestry to the forest industry.

Thirty-six high quality oral presentations were delivered over two days of the meeting equally spread amongst the following four themes:

- Precision measurements and modelling of quality and vield
- Utilising precision data for efficient forest management and operations
- Optimised logistics from seed to product
- Operations Research optimisation, heuristics and simulation

#### Three outcomes of the symposium stand out:

Firstly, to summarize the main conclusions of the talks presented, new and old technologies are being used to enhance the efficiency and accuracy of data collection in the forest industry. Through the use of these technologies, various industry operations are being optimized, improving the functionality of the forest industry across facets, world-wide. Some of the main outcomes of the research presented will allow the forest industry to maximize economic gains, minimize environmental impacts, maximize operations productivity, and enhance wood the quality of wood produced.



Second, the Department of Forest and Wood Science, Stellenbosch University is clearly working in the forefront of the international scientific community and is justified in continuing to promote precision forestry as a research focus area among areas such as integrated land-use management, biomass and biofuels, and wood quality. Interestingly enough, all of these fields were strongly endorsed at the symposium.

Finally, the third outcome is that precision forestry continues to be widely endorsed by the scientific and forestry communities as a recognized field of study. This outcome is supported by the number of new participants from various backgrounds and institutions in this year's symposium.

One outcome of the 2017 Precision Forestry Symposium was the confirmation of an interest from Stellenbosch University to continue hosting similar symposia every four years; the next meeting is expected to be in 2021. Similarly, a continued interest has been demonstrated by delegates to continue participating at these symposia to share their research and ideas, and receive insight from the global forestry community.

# Phytophthora in Forests and Natural Ecosystems

By Giles Hardy, Murdoch University, Australia, Coordinator of IUFRO Working Party 7.02.09 Phytophthora diseases on forest trees

The theme of the 8th Meeting of IUFRO Working Party 7.02.09 was "Phytophthora in Forests and Natural Ecosystems". The meeting, which attracted 100 participants from 25 different countries, was hosted and sponsored by the Centre for Phytophthora Science and Management, Murdoch University, Perth, Western Australia and the Forest Protection Research Center, Vietnam Academy of Forest Sciences.

Besides updating the community of forest Phytophthora researchers on recent research developments, the objective of the meeting in Hanoi and Sapa, Vietnam, on 19 – 25 March was to strengthen Phytophthora disease management and research in Southeast Asia and globally.



The meeting focused on five main issues:

- a) The exploration of new ecosystems continues to reveal undescribed species. The number of described Phytophthora species is predicted to rise from 146 to over 600.
- b) Phytophthora×alni originated from multiple hybridization events and many species formerly identified as species are hybrids or species complexes.
- c) Detection results vary depending on the diagnostic technique used: metabarcoding, or direct isolation from soil or plant tissue, or baiting. The use and reliability of metabarcoding is increasing but baiting and other techniques can help qualify species distribution.
- d) Many Phytophthora species can be found in urban areas and the number of species present globally is correlated with wealth. The greater a country's wealth, the higher the number of Phytophthora species detected.
- e) Social science considerations are being integrated into disease management strategies.

Participants concluded that infested nursery stock continues to be a pathway for Phytophthora introduction and spread. Once Phytophthoras are established into wildlands they are very difficult to eradicate. Prevention via best management practices and other measures is needed.

To improve and sustain forest health, multi-disciplinary research is needed to provide a basis for management strategies, as is increased monitoring, risk analysis and modeling. Improved understanding of genetics, tree physiology, ecology and Phytophthora species diversity is required to describe the full extent of damage to forest and natural vegetation caused by Phytophthoras and to manage their adverse impacts to global natural resources.



Delegates to the Eighth Meeting of IUFRO Working Party 7.02.09, Phytophthora in Forests and Natural Ecosystems, gathered in Sapa, Vietnam in March 2017 (Photo by Gary White)

#### **Outlook:**

Proceedings will be posted at Forest Phytophthoras of the World, <a href="http://forestphytophthoras.org/">http://forestphytophthoras.org/</a>.

Findings from a session that explored a 50 to 100 year vision for managing Phytophthora in forests and natural ecosystems will be issued by Nari Williams, Scion, New Zealand.

The ninth meeting is planned for 2019 in Sardinia, Italy to view diversity of Phytophthora species from declining Mediterranean forests and maguis vegetation.

Meeting website: www.iufrophytophthora2017.org

# **Successful Workshop on Forest Science - Society Interactions**

From 27-30 March 2017 a four-day training workshop on Forest Science - Society Interactions was held in Thimphu, Bhutan, under the framework of "Climate Change Adaptation Potentials of forests in Bhutan – building human capacities and knowledge base" project (BCCAP), organized by The Ugyen Wangchuck Institute for Conservation and Environmental Research.

The workshop was facilitated by IUFRO and had Bhutanese researchers and participants representing different agencies and stakeholders. As an initial outcome of the workshop, all research results of BCCAP Project will be translated and shall be communicated to the policy makers and other stakeholders.

One of the aims of the workshop was to create innovative packages to bridge the gap between science and society through development of key messages resulting from research for use in communication products and processes.



Report and photo source: <a href="http://uwice.gov.bt/read">http://uwice.gov.bt/read</a> fullnews.php?nid=201703271

Also read this news article: <a href="http://www.kuenselonline.com/using-science-for-better-policies/">http://www.kuenselonline.com/using-science-for-better-policies/</a>



#### **Announcements**

#### NIFoS and IUFRO Renew MoU!

IUFRO is pleased to announce that the existing Memorandum of Understanding with the **National Institute of Forest Science** of Korea was renewed to continue the excellent cooperation between the two institutions.

NIFoS President Dr. Lee Chang-Jae and IUFRO President Prof. Mike Wingfield signed the renewed agreement on forest research cooperation in a ceremony on 11 April 2017 in the course of the IUFRO Management Committee meeting held in Seoul, Republic of Korea (see photo).



#### **New Division 3 Podcast online!**

# Episode 14: Sustainable Forest Operations – A new concept for sustainable and responsible forest operations in changing climate

In this episode, Prof. Enrico Marchi from the University of Florence, Italy, introduces a new concept of forest operations sustainability. Evolving from the previous concepts of environmentally sound forest harvesting, reduced-impact logging and forest operations ecology, sustainable forest operations not only ensure forest operations efficiency and sustainable yields, but also recognize the importance of socially responsible forest practices, reduced waste and increased product quality, and human factors for health and safety. <a href="http://www.iufro.org/science/divisions/division-3/30000/podcasts/">http://www.iufro.org/science/divisions/division-3/30000/podcasts/</a>

### Congratulations

# New Executive Secretary of the Convention on Biological Diversity (CBD)

On 20 March 2017 Cristiana Paşca Palmer assumed office as the new Executive Secretary of the CBD, the principal global treaty on biodiversity. Ms. Paşca Palmer succeeds Braulio Ferreira de Souza Dias, who served as Executive Secretary between January 2012 and February 2017. She has extensive experience in policymaking on the environment and sustainable development, as well as with the implementation policies, programmes and projects at the national and international levels. A Romanian national, Ms. Paşca Palmer served from November 2015 to January 2017 as Romania's Minister for Environment, Waters and Forests.

#### The Chinese Society of Forestry turns 100!

On 5-7 May 2017 the Chinese Society of Forestry (CSF) will officially celebrate its 100th anniversary. Over the past 100 years CSF has witnessed a dramatic development. The time span reaches from 1917 (Chunghwa Forest Society period) to 1982 (China Forestry Society period) and to the founding of the new China (Chinese Society of Forestry (CSF) period). The centennial celebration marks a milestone in the history of CSF. Looking ahead, it is also a starting point for a glorious future.

On this special occasion, IUFRO would like to highlight the excellent and long-standing co-operation between the CSF and IUFRO, which was further strengthened at the IUFRO Regional Congress for Asia and Oceania in October 2016.



IUFRO President speaks at opening of 4th Forest Science Forum in Beijing, China (Photo G Wolfrum)

# 2017 Marcus Wallenberg Prize for Advancements in Forest Molecular Genetics

Professor Ronald R. Sederoff, North Carolina State University, USA, was awarded the 2017 Marcus Wallenberg Prize for his achievements in developing methods for gene discovery in conifer species and exploiting new breeding technologies for improved properties. The prize will be presented at a ceremony in October 2017, in Stockholm, Sweden.

http://www.mwp.org/forest-molecular-genetics-to-im-prove-the-quality-of-trees/

### Positions, Programs, Courses, Awards

# Graduate Student Position on Ecology and Evolution in Forest Ecosystems

The Garnas lab in Durham, New Hampshire, USA, seeks a highly motivated graduate student (MSc or PhD – PhD preferred) to begin in fall 2017. Applications are accepted until the position is filled.

https://colsa.unh.edu/nren/ecs/position-available-ecology-and-evolution-forest-ecosystems

#### **PhD Assistantship**

A fully funded four year position for an exceptional doctoral student is available at the Dwivedi Forest Sustainability Lab located at the University of Georgia's Warnell School of Forestry and Natural Resources in Athens, Georgia, USA. Submit your application by 15 July 2017!

http://forestsustainabilitylab.uga.edu/announcements.html



#### M.Sc. Program "Forest Science"

Become an International Forestry Expert! Within the M.Sc. Program "Forest Science", the University of Freiburg offers the Elective Track "International Forestry".

Registration is possible until 15 May 2017! http://www. msc-forst.uni-freiburg.de/en/general-information/elective-tracks/international-forestry?set language=en

#### APFNet Scholarship Program (ASP) 2017

Launched in 2010 under the Capacity Building Framework of the Asia Pacific Network for Sustainable Forest Management and Rehabilitation (APFNet), the ASP is a scholarship program that supports qualified students in completing a Master's degree program. Apply by 30 May 2017!

http://www.apfnet.cn/index.php?option=com\_content&vi ew=article&id=983&Itemid=128

#### **Tropical Forestry (International Commonwealth** Scholarship) MSc by Distance Learning

Bangor University announces that up to 10 scholarships from the Commonwealth Scholarship Commission are available for study on MSc Tropical Forestry (distance learning) for September 2017 entry. Apply by 12 May 2017! https://www.bangor.ac.uk/senrgy/postgraduate-courses/ tropical-forestry-msc-international-commonwealth-scholarship-distance-learning

#### **Sumforest Summer School for Young Researchers** 27-29 June 2017, Minsk, Belarus.

Practical approaches to transnational research proposal writing in the area of sustainable forest management Capacity building and better integration of young forestry researchers from Eastern Partnership (EaP) countries (Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine), Russia and North African Mediterranean countries. Register by 10 May! <a href="https://www.sumforest.org/events/">https://www.sumforest.org/events/</a> sumforest-summer-school-for-young-researchers-27-29-june-2017-minsk-belarus/

#### 2017 Gregory Award

The Society of American Foresters is accepting applications for the 2017 Gregory Award until 8 May 2017. For more information, visit: <a href="http://www.eforester.org/Main/">http://www.eforester.org/Main/</a> Community/Scholarships/Gregory Award.aspx

#### **Publications and Media**

#### **Conserving Teak for Future Generations**

Find an article in the recently published issue of *The Tro*pical Forest Update (TFU) newsletter 26-1 on the ex-post evaluation of an ITTO teak project in Myanmar: http://www.itto.int/tfu/ (starting on page 15).

ITTO commissioned the ex-post evaluation in 2016 from a consortium composed of scientists and experts from IUF-RO, FAO and TEAKNET.

#### Abies 2016 - Book of Abstracts

Abies 2016: The 15th International Conference on Ecology and Silviculture of Fir - Bringing Knowledge on Fir Species Together; Sapporo, Japan; 21-24 September 2016: http://www.iufro.org/science/divisions/division-1/10000/10100/10109/publications/

#### **Landing Together**

IUFRO's 6.08.00 Deputy Coordinator Purabi Bose is directing and producing a docu film series on indigenous peoples and mining, palmoil, women's land tenure & community forests. More at: <a href="http://landingtogether.weebly.com/">http://landingtogether.weebly.com/</a>

#### Beginner's Guide to Forestry in South Africa

The new portal "Forestry Explained" was launched on this year's International Day of Forests on 21 March and offers itself as "a beginner's guide to forestry in South Africa": http://forestryexplained.co.za/

## **IUFRO Meetings**

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

19-21 Jun 2017

#### **EuroCoppice Conference - Coppice Forests in Europe:** a Traditional Natural Resource with Great Potential

Limoges, France IUFRO 3.01.03

Contact: Vincent Morillon, Vincent.Morillon(at)fcba.fr https://www.eurocoppice.uni-freiburg.de/conferences/limoges

1-3 Aua 2017

#### International Symposium on Sustainable Forest Management in the Context of Global Change (ISSFM-CGC)

Harbin, China

IUFRO 8.00.00, Northeast Forestry University Contact: Chuanwang Cao, chuanwangcao(at)126.com

http://www.iufro.org/science/divisions/division-8/80000/activities/

6-9 Sep 2017

#### **Inaugural Global Forest Biodiversity Initiative Conference** & GFBI-FECS Joint Symposium 2017: Forest Research in the Big Data Era

Beijing, China IUFRO 4.02.07

Contact: Gert-Jan Nabuurs, gert-jan.nabuurs@wur.nl http://www.gfbinitiative.org/symposium2017

18-22 Sep 2017

#### **IUFRO 125th Anniversary Congress (see also page 2)**

Freiburg, Germany http://iufro2017.com/

March 2018 (dates tbc)

#### First Working Party 7.02.13 meeting: Improving forest health on commercial plantations

Punta del Este, Uruguay

IUFRO 7.02.13

Contact: Gustavo Balmelli, gbalmelli(at)tb.inia.org.uy

### **Other Meetings**

4-8 Sep 2017

#### **Ecology and Management of Alien Plant Invasions - Syn**theses, Challenges and New Opportunities

Lisbon, Portugal

**EMAPI** 

http://www.emapi2017.org/

25-27 Oct 2017

#### **2017 International Conference on Wood Adhesives**

Atlanta, Georgia, USA

Forest Products Lab/US Forest Service, Forest Products Society Details at: <a href="http://www.forestprod.org/woodadhesives/">http://www.forestprod.org/woodadhesives/</a>