IUFRO Interconnecting Forests, Science and People

Highlights 2019 Annual Report

International Union of Forest Research Organizations Union Internationale des Instituts de Recherche Forestière Internationaler Verband Forstlicher Forschungsanstalten Unión Internacional de Organizaciones de Investigación Forestal

XXV IUFRO World Congress

New IUFRO President and leadership team

IUFRO Awards

and the difference

43 IUFRO co-sponsored meetings

257 Research Units led by 699 Officeholders

9 Interdisciplinary Task Forces

630 Member Organizations worldwide

Highlights 2019

Global Competition on Best Practices in Forest Education

The future of forests is in your classroom today

March 2019: World Wood Day, Austria, IUFRO Symposium participants T 8

May 2019 IUFRO at 14th Session of the United Nations Forum on Forests (UNFF 14) May 2019: Forest Respo nses to Climate Change: Why A Matter. Session at R20 Austrian World Summit co-organized b

rican Forests IUFRO

March 2019: Joint IUFRO-IFSA Task Force on Forest Education and collaborators announce winners.

August 2019: First Meeting of the IUFRO-GFEP Global Forest Expert Panel on Forests and Poverty

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May 2019: IUFRO HQ celebrates 80th birthday of former IUFRO Executive Secretary Heinz Schmutzenhofer

Message from IUFRO President John Parrotta

At the closing ceremony of the XXV IUFRO World Congress in Curitiba, Brazil, I began my term as President of our great organization, a role passed on to me by Mike Wingfield. Mike's leadership these past 5 years has been critical to the steady growth and success of IUFRO as *the* global network for forest science collaboration. Thanks to his outstanding work, supported by the dedication and professionalism of our Headquarters "Dream Team" in Vienna, the IUFRO Board, the involvement of our 630 Member Organizations in 127 countries, our 699 IUFRO officeholders throughout the world, and the generous support of our donors, IUFRO has never been stronger, more vibrant, or more relevant.

This is good news because the world urgently needs what IUFRO has to offer in these times of rapid environmental, economic, social and technological change. These changes present critical multi-dimensional challenges for forests, and people. Events of recent years and our deliberations during the Curitiba Congress forcefully reminded us of these mounting global challenges, including, among others: climate change; land degradation; biodiversity loss and biological invasions; depletion of freshwater resources; deforestation resulting from short-sighted and poorly planned land conversion for agriculture, infrastructure, mining, and urban development; and the imperative to move from a fossil fuel-based global economy to a sustainable bioeconomy.

The global forest science community represented by IUFRO already has the knowledge needed to face many of these challenges. Our collective work deepens our understanding of the complexities of forest systems, from molecular to continental scales. Our innovative multidisciplinary research shines a light on the relationships between forests and their utilization in the context of broader ecological, socio-economic and cultural landscapes. The knowledge we generate provides us with a solid, scientific basis for assessing both the positive and negative impacts of forest management, land-use change, and technological innovation.

In order to realize our full potential to translate this knowledge into the sustainable solutions that the world needs and is increasingly demanding, greater efforts are needed to harness the expertise, experience and creativity within our network through greater integration



Outgoing President Mike Wingfield (left) and incoming President John Parrotta at Closing Ceremony of the IUFRO World Congress in Curitiba. Photo courtesy of the Congress Organizing Committee.

of scientists and IUFRO member organizations. IUFRO can also multiply its impact by expanding our collaboration in research, science synthesis and communications well beyond the boundaries of our current network. This may include, for example, expanded collaboration with our scientific and professional colleagues in fields such as agriculture, medicine, spatial planning, environmental engineering, bio-refinery and chemistry, environmental education, the arts and humanities.

Our dedicated and creative leaders in IUFRO's nine disciplinary Divisions, as well as our Task Forces, Special Programmes, Projects and IUFRO-led Initiatives, are all well-positioned to lead such efforts. They can count on my enthusiastic support in these efforts, together with the support of IUFRO's outstanding Headquarters team, led by Executive Director Alexander Buck and Deputy Executive Director Michael Kleine, our new Vice-President for Divisions, Daniela Kleinschmit, and Vice-President for Task Forces, Shirong Liu. I look forward to working closely with them, as well as with others on the IUFRO Board, our Member Organizations and International Council representatives, to deepen and expand IUFRO's diverse efforts to interconnect, forests, science and people for a better world.

Highlights 2019

Sep/Oct 2019: IUFRO World Congress COC and CSC leaders: Joberto Veloso de Freitas (right), Yeda Maria Malheiros de Oliveira (left), Jerry Vanclay (center)

October 2019: Forest Landscape Restoration Snapshot Project group at IUFRO World Congress

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Sep/Oct 2019: IUFRO World Congress: Scientific Achievement Award Winners

> POLICY BRIEF Harnessing forests for the Sustainable Development Goals: Building synergies and mitigating trade-offs

December 2019: Report and policy brief by IUFRO Special Project World Forests, Society and Environment (WFSE)

October 2019, one of many IUFRO meetings: Sixth International Casuarina Workshop in Krabi, Thailand October 2019, one of many IUFRO meetings: Joint Annual Meeting of FORMEC and COFE held in Hungary and Austria

Message from Immediate Past President Mike Wingfield

One of the greatest honours of my career as a forest scientist has been to serve IUFRO as its President. When my five year-term (2014-2019) came to an end after our highly successful and impressive World Congress in Curitiba last October, I began a period of reflection on this amazing privilege. This also especially considering what IUFRO means to a huge community of researchers across a wide diversity of disciplines, policy makers and many other stakeholders that serve as custodians of our world's forests.

In my acceptance speech presented at the closing ceremony of our 2014 World Congress in Salt Lake City, I undertook to focus my Presidency on a number of goals. Other than guiding our Union with general leadership and ensuring our role as "the" global network for forest science cooperation", I sought to promote the interest of the youth in forest research and particularly as this pertains to mentorship and education. As IUFRO's first African President I also hoped to enhance the position of IUFRO in Africa (as well as other less well represented areas of the world).

Furthermore, one of my goals was to improve IUFRO's channels of communication and to build stronger relationships not only with the public but also with the private sector. While there will always be new challenges and many more goals to accomplish than can realistically be realised in a relatively short period of time, I am happy to report that IUFRO is much stronger in all these domains than we were five years ago.

Most importantly, all accomplishments and the growth that IUFRO has undergone during the past five years are due to a remarkable leadership team. This includes committed members of the IUFRO Management Committee, the IUFRO Board, the team at the IUFRO Headquarters and importantly a very large group of officeholders underpinned by our fundamentally important (approximately 250) Research Groups and Working Parties. Let me take this opportunity to thank this remarkable and globally distributed team for their support, not only for me personally but for IUFRO as a whole. It is this commitment and energy that enables IUFRO to connect and to serve more than 15,000 forest researchers globally.



Mike Wingfield at the Tree Planting Ceremony of the XXV IUFRO World Congress in Curitiba, Brazil. Photo courtesy of Congress Organizing Committee

I would like to briefly review some of the major highlights and achievements of IUFRO during our 2014 and 2019 Board Term.

In 2016, IUFRO organised a Regional Congress for Asia and Oceania. The theme of the event was "Forests for Sustainable Development: the Role of Research". This was the first regional IUFRO Congress to be held in Asia and Oceania and the largest international event related to forest science ever held in China.

In 2017, I had the special privilege of serving as IUFRO President when we celebrated our 125th Anniversary. The highlight of our celebrations was the 125th IUFRO Anniversary Congress held in Freiburg, Germany, an important 'milestone' event. We celebrated a remarkable history also including a small symposium held in Eberswalde where IUFRO was first established. And at the Congress, IUFRO launched its new slogan of "Interconnecting Forests, Science and People". I sincerely believe that these words project a clear view of our goals going forward.

From 29 September to 5 October 2019 we celebrated the XXV IUFRO World Congress in Curitiba, Brazil. This was the first ever IUFRO World Congress held in Latin America. More than 2,500 researchers and stakeholders representing civil society, women's groups, indigenous



peoples, the youth, the private sector, international organizations, NGOs and governments met at this meeting to share and discuss the latest findings in all fields related to forests and trees.

Consistent with the World Congress theme "Forest Research and Cooperation for Sustainable Development", the event represented a focal point underpinning the cooperation that the global IUFRO community has with scientists and research institutions in Latin America. The Congress was splendidly organized and hosted by the Brazilian Forest Service and Embrapa Florestas, both important IUFRO member organizations. My special thanks go to the teams of the Congress Organizing Committee, jointly chaired by Joberto Veloso de Freitas of the Brazilian Forest Service and Yeda Maria Malheiros de Oliveira of Embrapa Florestas, and the Congress Scientific Committee under the excellent leadership of Jerry Vanclay of Southern Cross University in Australia.

The impressive participation of students at the Curitiba Congress was a special feature of the event and this contributed substantially to its success. I was delighted by this outcome as it linked strongly to one of my priorities as IUFRO President to further promote the interests of students and education in forestry. In this regard, there has been substantial growth in our engagements with young forest researchers and students especially via the International Forestry Students' Association (IFSA). The IUFRO/IFSA Joint Task Force on Forest Education came into being more or less at the start of my term and it was a pleasure for me to promote this initiative, both in kind and with some financial support. Together with the IUFRO Headquarters staff, we also succeeded in establishing a mentorship programme with the European Forest Institute known as the EFI-IUFRO Young Scientists Initiative.

During the past five years, IUFRO has systematically strengthened its participation in international processes and enhanced its collaboration with partners and stakeholders. Our Union is now involved in a greater number of international processes and partnerships than ever before. IUFRO's contributions via these processes have also had a demonstrable impact. For example, I had the privilege of launching a global assessment report on "Forests, Trees and Landscapes for Food Security and Nutrition" at a session of the United Nations Forum on



Forests in May 2015. Two major assessments have subsequently been produced and a new one addressing the linkages between forests and poverty alleviation is under way.

When considering the impact of IUFRO, it is pertinent to mention the thematic networking activities of our Special Programme for Development of Capacities (IUFRO-SPDC). More specifically, IUFRO-SPDC's focus on "Forest Landscape Restoration". With an estimated quarter of the global land surface to some extent degraded, there are considerable opportunities to promote forest landscape restoration. And this will continue to be a major focus of IUFRO activities going forward.

Funding is always a challenge for organisations such as IUFRO. It is important to recognise our sponsors and donors. IUFRO's engagement in international processes and partnerships has allowed us to significantly expand our funding base. This in turn, provides essential support for networking and collaboration. As I said during the opening of our 125th Anniversary Congress "it is impossible to imagine the world of forestry research without IUFRO".

In closing, let me take this opportunity to thank all IUFRO Stakeholders for the privilege to lead our remarkable Union for the past five years. I assumed this role after some 35 years of involvement in a wide diversity of IUFRO's activities. This began as a student member of a small Working Party. IUFRO provided a crucial framework for my career and I know that this has also been true for many other researchers and leaders in the world of forests and forestry. Yet to eventually lead IUFRO as President has been an amazing learning and growth experience. And it is one that I have greatly enjoyed and appreciated. My hope now is that many of IUFRO's younger members will capture the opportunities that our Union offers them. And that they will benefit from this association as I have done.

One of the greatest privileges of a leadership position is to be able to hand over the responsibility to a highly competent and experienced new leadership team. I have no doubt that this great organisation will continue to grow from strength to strength, further shaping the future of forest and forestry research, thus serving the increasingly important role of "Interconnecting Forests, Science and People".





At the Curitiba Congress, a number of scientists received important IUFRO Awards for outstanding research and valuable services.

IUFRO World Congress Host Scientific Awards

Sebastião do Amaral Machado

Dr. Machado's work is dedicated to the area of forest resources and forest engineering, with an emphasis on forest measurement, inventories, and forest management.

José Natalino Macedo Silva

Dr. Silva devoted his life to study growth and yield of high Amazon forests under sustainable forest management regime.

Celso Edmundo Bochetti Foelkel

Dr. Foelkel's main expertise and experience is in chemical engineering, focusing on chemical technology for pulp and paper production.

Maria José Zakia (Zezé)

"Zezé" works in programs aiming at adopting social and environmental best practices in forest management. She represents women in forestry in an exemplary way.

IUFRO Scientific Achievement Awards (SAA)

S. Ellen Macdonald, Canada José L. de Moraes Gonçalves, Brazil Maria Nijnik, U.K. David J. Nowak, U.S.A. Elena Paoletti, Italy Marielos Peña-Claros, Netherlands Terence C.H. Sunderland, Canada Margarida Tomé, Portugal Daowei Zhang, U.S.A. Junyong Zhu, U.S.A.

Outstanding Doctoral Research Awards (ODRA)

Angela L. de Avila, Brazil/Germany Sarah L. Burns, Argentina Andrea Hevia Cabal, Spain Verónica F. Loewe Muñoz, Chile Lichao Jiao, China Rubén Valbuena, U.K. Ida Wallin, Germany Zhen Yu, U.S.A. René Zamora-Cristales, U.S.A./Guatemala

Student Awards for Excellence in Forest Science (ISA)

Shankar Adhikari, Nepal Katharina Albrich, Austria Shourav Dutta, Bangladesh Ange A. Raharivololoniaina, Madagascar Andrea M. Vasquez-Fernandez, Peru Khalil Walji, Canada

Best Poster Awards (BPA)

Elizabeth Neire da Silva, Brazil Angeline Martini, Brazil Masakazu G. Iwaizumi, Japan Wouyo Atakpam, Togo Naohiro Imamura, Japan Giovanni Mastrolonardo, Italy Luiz Felipe de Castro Galizia, Spain Tchegoun Blaise Tchetan, Benin

IUFRO Distinguished Service Awards (DSA)

Yeda M. Malheiros de Oliveira, Brazil, Congress Organizing Committee Co-Chair Joberto Veloso de Freitas, Brazil, Congress Organizing Committee Co-Chair Jerry Vanclay, Australia, Congress Scientific Committee Chair Piotr Paschalis Jakubowicz, Poland, promoter of IUFRO activities in forest education John Stanturf, U.S.A., engagement in IUFRO SPDC thematic networking and training activities

Honorary Membership

Professor Niels Elers Koch, Denmark, former IUFRO President, received Honorary Membership for increasing the visibility of IUFRO's sciencebased research serving the needs of decision-makers and researchers, his personal integrity and dedication to the work of IUFRO, and his strong support in involving students and young scientists in IUFRO.

Wangari Maathai 'Forest Champions' Award

Burundian forestry activist *Leonidas Nzigiyimpa* was awarded the 2019 Wangari Maathai 'Forest Champions' Award of the Collaborative Partnership on Forests (CPF) in recognition of his passionate commitment and outstanding contribution to improving forests and the lives of indigenous peoples, women and youth in his country. The award ceremony took place on 30 September 2019 on the sidelines of the 25th World Congress of the International Union of Forest Research Organizations.

Certificates of Appreciation for Congress organization

Juliana Mendes Gomes, Maristela Avila Abrantes, Katia Regina Pichelli, Erich Gomes Schaitza und Patrícia Póvoa do Mattos

Certificates of Appreciation not related to the Congress

Alberto Santini and Team, for organizing a most successful meeting of IUFRO WP 7.02.02 and WP 7.02.03 "Phyllosphere Diseases"

Michael Grabner, for the excellent organization of the 2019 World Wood Day Symposium and the 2nd IUFRO Forest Products Culture Research Group Colloquium

IUFRO Board until 5 October 2019

IUFRO Senior Officeholders:

President: Mike Wingfield, South Africa Vice-President Divisions: Björn Hånell, Sweden Vice-President Task Forces, Special Programmes, Projects and IUFROled Initiatives: John Parrotta, USA Immediate Past President: Niels Elers Koch, Denmark

Division Coordinators:

Division 1:	Jens Peter Skovsgaard, Sweden
Division 2:	Yousry El-Kassaby, Canada
Division 3:	Woodam Chung, USA
Division 4:	Jean-Luc Peyron, France
Division 5:	Pekka Saranpää, Finland
Division 6:	Tuija Sievänen, Finland
Division 7:	Eckehard Brockerhoff, New Zealand
Division 8:	Sandra Luque, France
Division 9:	Daniela Kleinschmit, Germany

President's Nominees:

John Innes, Canada Shirong Liu, China Ben Chikamai, Kenya Jung-Hwan Park, Republic of Korea Manuel Guariguata, Venezuela/Peru

IUFRO Executive Director: Alexander Buck, Austria

Alexander Buck, Austria

IUFRO Headquarters Host Country Representative: Maria Patek, Austria

Task Force (TF) Coordinators:

TF Forests, Soil and Water Interactions: Xiaohua (Adam) Wei, USA TF Forest Biomass Network: Maliwan Haruthaithanasan, Thailand TF Resources for the Future: Transformation in Forest Use: John Innes, Canada TF Sustainable Planted Forests for a Greener Future: Christophe Orazio, France TF Forest Adaptation and Restoration under Global Change: Andreas Bolte, Germany TF Climate Change and Forest Health: Elena Paoletti, Italy TF Forests and Biological Invasions: Andrew Liebhold, USA Joint IUFRO-IFSA Task Force on Forest Education: Sandra Rodríguez-Pineros, IUFRO/Mexico Khalil Walji, IFSA/UN-FAO Monitoring Global Tree Mortality Patterns and Trends: Henrik Hartmann, Germany

Special Programmes, Projects and IUFRO-led Initiatives:

IUFRO Special Programme for Development of Capacities (IUFRO-SPDC): Michael Kleine, Austria IUFRO World Forests, Society and Environment (IUFRO-WFSE): Pia Katila, Finland Global Forest Information Service (GFIS): Eero Mikkola, Finland CPF Global Forest Expert Panels (GFEP): Christoph Wildburger, Austria IUFRO Special Programme Directors' Forum (IUFRO-SPDF): Konstantin von Teuffel, Germany

XXV IUFRO World Congress Organizing Committee (COC) Chairs: Joberto Veloso de Freitas and Yeda Maria Malheiros de Oliveira, Brazil XXV IUFRO World Congress Scientific Committee (CSC) Chair: Jerry Vanclay, Australia FAO Representative: Hiroto Mitsugi, Japan/Italy



Photo by John Parrotta

IUFRO Headquarters (Vienna)

Executive Director: Alexander Buck, Austria Deputy Executive Director and IUFRO-SPDC Coordinator: Michael Kleine, Austria Project Coordinator: Renate Prüller, Austria Finances and Administration: Astrid Tippel, Austria Finances and Administration (Projects): Judith Stöger-Goiser, Austria Web Management, Communication and Social Media: Brigitte Burger, Austria Communication, PR, Publications and Translation: Gerda Wolfrum, Austria Library and Database Administration: Sylvia Fiege, Austria System Administrator: Heimo Schaffer, Austria GFEP Coordinator: Christoph Wildburger, Austria GFEP Project Manager: Andre Purret, Estonia GFEP Project Manager: Magdalena Lackner, Austria IUFRO-SPDC/GFEP Project Management and Translation Services: Eva Schimpf, Austria IUFRO-SPDC Project Management and Translation Services: Margareta Khorchidi, Austria Thematic Networking Manager: Janice Burns, Canada Junior Professional Officer (IUFRO-EFI YSI): Daniel Boehnke, South Africa

IUFRO Headquarters Publications 2019

- Honorary Members of IUFRO: 1953 2019
- The Scientific Achievements Award of the International Union of Forest Research Organizations: 1971 – 2019
- 12 issues of IUFRO News
- 6 Scientific Summaries related to IUFRO News
- 11 IUFRO Spotlight issues
- IUFRO Annual Report 2018

Editorial

Annual Report 2019 Highlights: Copyright by IUFRO, Vienna, 2019 Photos: IUFRO World Congress Organizing Committee, IUFRO HQ, John Parrotta, William Tadros, Woodam Chung, Cindy Miner, Int'l Casuarina Workshop Secretariat, World Wood Day Symposium

Full report at: https://www.iufro.org/publications/annual-report/

New Board: https://www.iufro.org/who-is-who/board/