

From Perception to Prediction and Action: Managing Risk in Uncertain Times

Report by David R. Gray, Coordinator of [IUFRO Working Party 4.04.07 Risk Analysis](#)

Forest management planning and decision making have been able, in the past, to give only slight regard to risk and uncertainty. A substantial body of knowledge has been derived from empirical evidence regarding the significant factors that are important in achieving desired ecosystem goods and services; and the levels of uncertainty in this knowledge were considered sufficiently small and static. This includes knowledge of post-disturbance regeneration, post-establishment succession and silvics, and the frequency and impact of natural disturbances.

Today, our climate is changing at an unprecedented rate, and this changing climate is dramatically increasing our level of uncertainty regarding the frequency and impacts of future natural disturbances, and the post-disturbance (natural or anthropogenic) silvics that will determine the delivery of ecosystem goods and services.

The combination of our perception of climate change—which future climate scenario is the most probable?—and our uncertain predictions of natural disturbances and silvics under any given climate scenario, influence the decision-making processes that form the management actions whose objective is the delivery of prescribed ecosystem goods and services.

The conference held in Freiburg, Germany, on 21-23 April 2016 brought together leading scientists from 18 countries to discuss:

- the risks posed to the forest resource by our changing climate
- natural disturbances (including insects, pathogens, fire, extreme weather)
- post-disturbance (natural and anthropogenic) silvics
- species range and biodiversity (including invasive organisms)
- how these risks are perceived and predicted in the forest science and management community

The conference, which was attended by 41 participants, was hosted and sponsored by the Institute of Forestry, Faculty of Environment and Natural Resources, University of Freiburg, Germany, and co-sponsored by IUFRO Working Party 4.04.07.

Abstracts and many of the presentations can be viewed and downloaded at the Risk Analysis webpage: <http://riskanalysis-iufro.org/2016meeting.html>



Simon Riguelle



Simon Riguelle

Storm damage trail in the Black Forest where storm Lothar heavily devastated forest areas in 1999. Photos by Simon Riguelle

Call for Session Proposals

The Congress Scientific Committee (CSC) invites submissions of session proposals for the **IUFRO 125th Anniversary Congress**, 19-22 September 2017, in Freiburg, Germany.

Deadline: 15 June 2016

Learn more at: <http://iufro2017.com/call-for-session/>



World Wood Day 2016

Report from the Celebration in Kathmandu, Nepal, by Howard Rosen, Coordinator of IUFRO Working Party 5.10.01 Wood Culture and Chair of World Wood Day Foundation; and Andrew H.H. Wong, Deputy Coordinator, IUFRO Division 5 Forest Products

Nature and Culture was the theme of the 2016 World Wood Day (WWD) held March 21, 2016 in Kathmandu, Nepal, organized by both the Ministry of Forests and Soil Conservation of Nepal and the International Wood Culture Society (IWCS), with the sponsorship of the World Wood Day Foundation. **That theme increased awareness of wood as an eco-friendly renewable biomaterial and demonstrated the key role of wood in a sustainable future.** The theme explored the interrelationship between nature and culture that influences the way we use wood in our daily lives.

IUFRO proudly supported the WWD program which is meaningful to the strategy of its Forest Products Division. Although WWD is celebrated on March 21st each year, three pre-events projects began as early as February 27th and other events continued until March 26th. **About 500 people representing 100 countries and regions attended this event and over 40,000 local people participated.** Andrew Wong (for IUFRO) and Howard Rosen (for World Wood Day Foundation) both spoke in the opening ceremony with the President of Nepal, Bidhya Devi Bhandari, and Nepal Minister of Forests and Soil Conservation Agni Sapkota.

The WWD event also received the **cooperation of an exhaustive list of key organizations among which are:** Department of Forests Nepal, the International Union for Conservation of Nature (IUCN) Nepal, World Wide Fund for Nature (WWF Nepal), Safe the Planet Nepal, International Center for Integrated Mountain Development (ICIMOD), Tribhuvan University, Kathmandu University, Global Alliance of Community Forestry (GACF), Federation of Forest Based Industry and Trade Nepal, Federation of Nepalese Chamber of Commerce & Industry, Nepal Foresters' Association (NFA), Nepal Furniture & Furnishing Association (NFFA), Nepal Plywood Manufacturers Association, American Association of Woodturners (AAW), Japan Wood Research Society (JWRS) and the International Association of Wood Anatomists (IAWA).

The **main event was held at the Nepal Academy in the center of Kathmandu,** that consisted of the Hall which enclosed displays, concerts, symposium presentations, exhibitions, and ceremonies; and the large Outdoor Squares where wood carving, wood turning, furniture making, folk art, a children's wood education event, special wood architecture projects, and individual musical performances were held.

A **3-day technical symposium under the theme of Nature and Culture: Interdisciplinary Approaches to Peaceful Coexistence and Sustainable Development** featured 24 international and 19 Ne-

pali experts who spoke on wood technology, innovations in wood and fiber materials, choice of timber species for various wooden structures and wooden artifacts, historical and cultural significance of forest environments and wood products/materials, Nepali forest management strategies and forest landscape restoration for a greener future, designing with wood as an art-form, architecture of traditional wooden tall buildings in Asia, climate change effects on Himalayan forest vegetation and biodiversity, the damaging consequences of fire, earthquake and drought on forests and wood products, ancient civilization and present traditional woodcrafts, and much more. The topics focused on raising awareness of current issues and enhancing multidisciplinary discussions for the crucial role of wood in human civilization and the environment.

The WWD program culminated with an entertaining evening concert at the Nepal Academy, of mainly **cultural wooden musical performances from nearly all corners of the globe** to delight delegates and the public. The day after the WWD program, a Tree Planting Ceremony, officiated by the Minister of Forests and Soil Conservation, saw many of the attendees and representatives of organizations in the WWD program, at the National Botanical Garden in Godawari, Lalitpur, planting saplings of various indigenous species to emphasize the need for a sustainable source of trees to continue making wood products.

A Rhododendron arboretum (National flower of Nepal) sapling planted by Andrew Wong perpetually displays a visible IUFRO tag in the garden. Attendees were then treated to a tour exploring particularly the historic Kathmandu city square area of Patan that held some of the finest wood carvings and historic wooden buildings and temples of Nepal.

Nepal had a major earthquake on April 25, 2015 and is still recovering from its aftermath. **The city of Kathmandu is named after the Kasthamandap Temple that means "wood covered shelter" in Sanskrit.** The temple was built entirely of wood with no iron nails or metal supports in the 16th century. According to legend, all the timber used to build the pagoda was obtained from a single tree.

This temple collapsed during the devastating earthquake on April 25, 2015. Several unique projects of the 2016 WWD celebration from recycled Nepalese wood refuse reflected on this tragedy and hope for the future: an international collaborative project with 19 artisans from 14 countries that designed and constructed a "Brick by Brick" wooden statue, two architectural projects; the Two-Tiered Temple (Nepal) and the Memorial Temple (US), and the "Elephant in the Room," a US wood design project, which was made from recycled Nepalese refuse. From tours to central Kathmandu and its environs, it was obvious that Nepal has suffered considerable damage from the 2015 earthquake and has a long recovery and restoration period ahead.



Howard Rosen in front of Two-Tiered Hindu Temple project by Nepalese carpentry team

More details and pictures from these meetings and tours can be found at the World Wood Day 2016 websites:
<http://www.worldwoodday.org/2016/>
<https://www.facebook.com/worldwoodday>

Publications

Can Legality Verification enhance local rights to forest resources? Piloting the policy learning protocol in the Peruvian forest context

Coordinating Lead Authors:
Ben Cashore and Ingrid Visseren-Hamakers

This report presents the results of the application of a *Means-Oriented Policy Learning Protocol* that was piloted in Peru during 2015 and the spring of 2016. The Protocol was developed through the International Union of Forest Research Organizations (IUFRO), including its Unit "Forest policy learning architectures", and Yale University's Governance, Environment and Markets (GEM) Initiative. This effort was generously funded by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

Find the full report and an executive summary at: <http://www.iufro.org/science/divisions/division-9/90000/90500/90505/publications/>

Protocol for Policy Learning through Pathways of Influence

By Ben Cashore and Sarah Lupberger



This protocol is designed to generate creative ideas and strategies among practitioners seeking to find solutions to complex global environmental and social problems. To do this, we draw on insights from political science work on "policy pathways" and policy learning scholarship. The protocol was designed to combine research and knowledge on historical efforts as well as current trends to identify strategies to create durable change.

See: <http://www.iufro.org/science/divisions/division-9/90000/90500/90505/publications/>

Can Legality Verification enhance local rights to forest resources?

Piloting the policy learning protocol in the Peruvian forest context



 	<p>Coordinating Lead Authors: Ben Cashore and Ingrid Visseren-Hamakers</p> <p>Lead Authors: Paloma Caro Torres Wil de Jong Audrey Denvir David Humphreys Kathleen McGinley</p> <p>Contributing Authors: Graeme Auld Sarah Lupberger Constance McDermott Sarah Sax Daphne Yin</p>
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Proceedings

Proceedings from the "Tree Biotechnology 2015 Conference: Forest: the importance to the planet and society" held 8-12 June 2015 in Florence, Italy, co-sponsored by IUFRO Working Party 2.04.06:

<http://www.iufro.org/publications/proceedings/proceedings-meetings-2015/#c23099>

Find electronic versions of Proceedings of IUFRO meetings in our proceedings archive: <http://www.iufro.org/publications/proceedings/>

Silvopastoral Systems in Southern South America

Editors: Pablo Luis Peri, Francis Dube, Alexandre Varella

This multi-authored volume contains peer-reviewed chapters from leading researchers and professionals in silvopastoral systems in Southern South America (Argentina, Chile and South Brazil).

<http://www.springer.com/us/book/9783319241074>

IUFRO Annual Report 2015

Now the full version and an abridged version are available for download at: <http://www.iufro.org/publications/annual-report/>

WFSE Newsletter 1/2016

The latest newsletter published by the Special Project on World Forests, Society and Environment (IUFRO-WFSE) is available at: <http://www.iufro.org/science/special/wfse/>

Newsletter 1/2016: IUFRO Research Group 9.03.00 Forest History and Traditional Knowledge

Find a series of activity reports from Research Group members and read about future plans such as the "Wilder Visions" symposium: <http://www.iufro.org/science/divisions/division-9/90000/90300/publications/>

Announcements

Call for Bids Now Open for Hosting the XXVI IUFRO World Congress in 2024!

IUFRO Member Organizations are encouraged to consider submitting a bid for this highly important IUFRO event. If you feel that your country is a potential candidate for hosting the Congress 2024, please read the Bidding Rules:

http://www.iufro.org/download/file/24927/81/iwc24-congress-bidding-rules_pdf/

The IUFRO World Congress will be a unique opportunity for your organization and your country to host a global research community and advance science for the benefit of forests and people!

Deadline for submitting your bid is 31 May 2017!

Episode 6 of IUFRO's Division 3 Podcasts: Forestry and Forest Education from Students' Perspective

This episode features an **interview with Oregon State University College of Forestry students** (Jessica Kessinger, Ken Dryden, Jesse Hohlt, and Preston Green) after their trip to the 2015 Society of American Foresters National Convention. In the interview, the four students share their experience and perspectives on forest management practices, forest industry and forest education in the United States: <http://www.iufro.org/science/divisions/division-3/30000/podcasts/>

Governance of Landscapes, Forests and People

3-14 April 2017, hosted by CIFOR, Indonesia

Course organized by Wageningen UR Centre for Development Innovation, CIFOR, ICRAF

Submit application by: 20 February 2017

This course challenges forest and nature management

professionals to adopt an integrative perspective, to look beyond the forest, and build bridges between the public and the private sector. Details at: <http://bit.ly/1X838II>

Research Fellowships and Conference Sponsorship 2017

The CRP's (Co-operative Research Programme) Call for Applications for funding international conferences (such as workshops, congresses and symposia) and research fellowship grants for funding in 2017 is now open. Applications are invited from research scientists working in agriculture, forestry or fisheries and who would like to conduct research projects abroad, in another member country of the Co-operative Research Programme.

Submit application by 10 September 2016, midnight (Paris time)!

Details: <http://www.oecd.org/tad/crp/crp-research-fellowships-and-conference-sponsorship.htm>

EFI Seeks Head of Resilience Programme

The European Forest Institute is seeking a senior professional with strong international research and leadership experience to develop EFI's new Programme on Resilience. Interested candidates are requested to send a CV with a cover letter by 13 June 2016, using our online application form (http://www.efi.int/portal/about_efi/0816). If it is not possible to apply online, please send your application to: efi.hr@efi.int

For more information about the post please contact Dr Robert Mavsar, Deputy Director: robert.mavsar@efi.int, and see http://www.efi.int/portal/careers/open_jobs/?bid=2478

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.gfis.net>

11-15 Jul 2016

Climate-induced Range Shifts in Boreal Forest pests and their Ecological, Economic and Social Consequences

Baie-Comeau, Sept-Iles, Quebec, Canada

IUFRO [8.01.06](#), [7.03.05](#), [7.03.07](#)

Contact: Pierre Godbout, pierre.godbout@canada.ca
<http://www.cef-cfr.ca/index.php?n=Colloque.IUFROQuebec2016>

11-15 Jul 2016

4th International Conference on Soil Bio- and Eco-engineering: "The Use of Vegetation to Improve Slope Stability"

Sydney, Australia

IUFRO [8.03.00](#)

Contact: Tom Hubble, hubble@mail.usyd.edu.au
<http://sydney.edu.au/science/geosciences/soil/index.shtml>

16-22 Jul 2016

Mistletoes: Pathogens, Keystone Resource, and Medicinal Wonder

Ashland, Oregon, United States

IUFRO [7.02.11](#)

Contact: Dave Shaw, Dave.Shaw@oregonstate.edu
<http://blogs.oregonstate.edu/mistletoe/>

18-21 Jul 2016

Workshop on Biological Invasions in Forests

Shepherdstown, WV, United States

IUFRO TF Forests and Biological Invasions

Contact: Andrew Liebhold, aliebhold@fs.fed.us
<https://sites.google.com/site/iufroinvasions2016/>

8-11 Aug 2016

1st International Conference on Sustainable Forest Development in View of Climate Change

Kuala Lumpur, Malaysia

IUFRO [3.07.00](#), [3.03.00](#)

Contact: Seca Gandaseca, seca@upm.edu.my
<http://www.sfdcc.upm.edu.my/home.php>

15-19 Aug 2016

15th International Peat Congress (IPC)

Kuching, Sarawak, Malaysia

IUFRO [1.01.02](#), [1.02.00](#), [8.02.00](#), [8.02.05](#)

Contact: Andrew Wong, awong.unimas@gmail.com,
Lulie Melling, luliemelling@gmail.com
<http://www.ipc2016.com/>

29 Aug – 1 Sep 2016

Forest Communication Meeting - Joint Meeting with UNECE-FAO Forest Communicators Network

Portland, Oregon, United States

IUFRO [9.01.02](#)

Contact: Cynthia Miner, clminer@fs.fed.us
<http://www.iufro.org/science/divisions/division-9/90000/90100/90102/activities/>

29 Aug – 2 Sep 2016

Pine Wilt Disease Conference 2016

Seoul, South Korea

IUFRO [7.02.10](#)

Contact: Katsunori Nakamura, knakam@affrc.go.jp
<http://www.pinewilt-disease2016.or.kr/>

29 Aug -2 Sep 2016

EcoSummit 2016: Ecological Sustainability: Engineering Change

Montpellier, France

IUFRO [8.03.00](#)

Contact: Alexia Stokes, alexia.stokes@cirad.fr
<http://www.ecosummit2016.org/>

4-7 Sep 2016

49th International Symposium on Forestry Mechanization (FORMEC)

Warsaw, Poland

IUFRO [3.00.00](#)

Contact: Woodam Chung, woodam.chung@oregonstate.edu
<https://www.formec.org/22-important/48-symposium-2016.html>



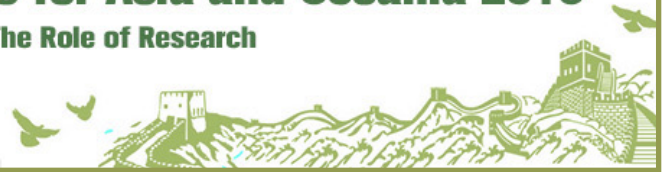
Contact: IUFRO AO 2016 Congress Secretariat, [iufro_ao2016\(at\)163.com](mailto:iufro_ao2016@163.com)

IUFRO Regional Congress for Asia and Oceania 2016

Forests for Sustainable Development: The Role of Research

📍 Beijing, China 🕒 October 24 - 27, 2016

<http://www.iufro-ao2016.org/en/>



21-23 Oct 2016

IUFRO-AO 2016 Pre-Congress Training Workshop: Systematic Review in Forest Science - Learning from Traditional Forest Knowledge

Beijing, China

If you are interested, contact: [spdc\(at\)iufro.org](mailto:spdc@iufro.org)

<http://www.iufro.org/science/special/spdc/actproj/tws-beij/>

17-19 May 2017

International Conference on Landscape & Human Health - Forests, Parks and Green Care

Vienna, Austria

IUFRO [6.06.00](https://doi.org/10.5541/6.06.00)

Contact: Conference Organizing Committee,
[petra.schwarz\(at\)bfw.gv.at](mailto:petra.schwarz@bfw.gv.at)

<http://bfw.ac.at/internationalconference>

21-25 Aug 2017

12th International Congress of Ecology "Ecology and Civilization in a Changing World" - INTECOL 2017

Beijing, China

IUFRO [8.00.00](https://doi.org/10.5541/8.00.00)

Contact: Sandra Luque, [sandra.luque\(at\)irstea.fr](mailto:sandra.luque@irstea.fr)

<http://www.intecol2017.org/dct/page/70010>

19-22 Sep 2017

IUFRO 125th Anniversary Congress 2017

Freiburg, Germany

Visit: <http://iufro2017.com/>

Call for Session

Proposals now open:

<http://iufro2017.com/call-for-session/>

Deadline:

15 June 2016



Other Meetings

7 Jun 2016

Building the Bioeconomy: Insights from European Strategies

Helsinki, Finland

Chair: Göran Persson, ThinkForest President and Esko

Aho, EFI Strategic Advisor

Contact: Lauri Hetemäki, [lauri.hetemaki\(at\)efi.int](mailto:lauri.hetemaki@efi.int) http://www.efi.int/portal/policy_advice/thinkforest/upcoming_events/

9 Jun 2016

Towards a Green Economy in the Context of Susta- inable Development: Practical Tools for the Forest Sector

Batumi, Georgia

UNECE/FAO Forestry and Timber Section side event,
Environment for Europe Ministerial Conference, Batumi,
Georgia. <http://www.unece.org/index.php?id=42598#/>

22 Jun 2016

Forests, Bioenergy and the Global Climate

Stockholm, Sweden

Organized by Future Forests and the Royal Swedish Aca-
demy of Agriculture & Forestry

<http://www.ksla.se/aktivitet/forests-bioenergy-and-the-global-climate/>

22-23 Jun 2016

First International Forum on Urban Forestry in Me- diterranean Cities: Innovation, Monitoring, Social Participation and Cooperation

Valladolid, Spain

Contact: [info\(at\)quickurbanforest.eu](mailto:info@quickurbanforest.eu)

<http://www.quickurbanforest.eu/forobosquesurbanos>

18-22 Jul 2016

COFO 23, Committee on Forestry - 23rd Session

Rome, Italy

Organized by FAO

Contact: Peter Csoka, [peter.csoka\(at\)fao.org](mailto:peter.csoka@fao.org); COFO-
2016(at)fao.org

<http://www.fao.org/forestry/57758/en/>

19-20 Sep 2016

DIABOLO European Workshop

Distributed, Integrated and Harmonised Forest In-
formation for Bioeconomy Outlooks

Vienna, Austria

<https://www.luke.fi/en/news/diablo-bridges-the-gap-between-forest-information-demand-and-supply-in-europe/>

10-14 Oct 2016

3rd GreenInUrbs Training School

Duisburg, Germany

Organized by the Ministry of Environment Nordrhein-
Westfalen, together with Biologische Station Westliches
Ruhrgebiet and the local forest administration on behalf of
COST Action FP1204 "GreenInUrbs"

(<http://www.greeninurbs.com>) and is free of charge.

Send application/CV by 10 July 2016 to:

[renate.spaeth\(at\)mkulnv.nrw.de](mailto:renate.spaeth@mkulnv.nrw.de)

http://www.cost.eu/domains_actions/fps/Actions/FP1204

29 May - 2 June 2017

XVI World Water Congress: Bridging Science and Policy

Cancun, Mexico

Organized by the International Water Resources Associa-
tion (IWRA) <http://www.worldwatercongress.com/>