

THE ONLINE INFORMATION BULLETIN OF THE GLOBAL FOREST SCIENCE NETWORK

Deadwood and Dying Trees: A Matter of Life and Diversity

by Stephen Pawson, Scion, Christchurch, New Zealand, Coordinator of [IUFRO 8.02.02](#)

Deadwood is a critical component of forest ecosystems that provides habitat for a range of deadwood dependent (saproxylic) invertebrates, birds, mammals, fungi and plants. Forest management alters the recruitment dynamics of fine and coarse wood debris, and dead standing trees. The reduced volume of deadwood in managed forests negatively impacts the population dynamics of species dependent on this resource. Many species, particularly those in fragmented forest landscapes, are now regionally or globally threatened.

Conference details

The first international symposium on the *Dynamics and Ecological Services of Deadwood in Forest Ecosystems* was held in Rouyn-Noranda (Quebec, Canada) from May 15-19th 2011.

The theme of the conference was: *Deadwood and Dying Trees: A matter of life and diversity.*



Photo (by Stephen Pawson, Scion): Dr Pierre Drapeau of the Université du Québec à Montréal explains to conference participants the importance of aspen as a host tree for cavity nesting bird species in the eastern boreal mixed forests.

The meeting was sponsored by IUFRO Working Party 8.02.02 (Forest Biodiversity and Resilience) and the Chaire industrielle CRSNG-UQAT-UQAM en aménagement forestier durable, the Université du Québec en Abitibi-Témiscamingue, the Université du Québec à Montréal, the Centre d'étude de la forêt, the Forêt du lac Duparquet, and Natural Resources Canada.

More than 110 presentations were given by the 120+ people that attended from 18 countries (Canada, Sweden, Germany, France, Spain, Ireland, USA, New Zealand, Australia, Switzerland, Japan, Estonia, Italy, Poland, Finland, Netherlands, Belgium and the Czech Republic).

Deadwood is declining

Global volumes of deadwood are declining. Forest management tends to promote shorter (and even aged) rotations that reduce the production of deadwood as trees are generally cut before they become old, die, and fall to the forest floor as deadwood. The demands on deadwood resources are increasing, new uses for wood, such as wood residue recovery for bioenergy, are placing additional pressure on deadwood.

Conference presentations began by examining deadwood recruitment processes and the impact of forest management on deadwood availability in forests.

Presentations then outlined the huge variety of saproxylic organisms (defined as species that are dependent on deadwood at some point in their lifecycle). Saproxylic species include invertebrates, fungi, birds, e.g., cavity nesters, mammals, and plants such as bryophytes. The conservation requirements of many of these groups were discussed, issues such as forest fragmentation, substrate availability, the role of natural disturbance were considered. As part of the conference a full day fieldtrip visited the Lake Duparquet Research and Teaching Forests where a number of scientists and graduate students presented their research on the ecology and management of deadwood in eastern boreal mixed wood forests.

Outlook

The conference concluded with a plea for "deadwoodologists" to take their message of the importance of deadwood to policy makers.

As a follow-up to the conference there will be two special issues of selected papers in the Canadian Journal of Forest Research and Ecoscience. Looking to the future it was decided that more regular 'deadwood' meetings should occur, and a new email list server will be established with working party 8.02.02 that will now include a special focus on the ecology and dynamics of deadwood.

Int'l Conference on Managed Forests in Future Landscapes

Michael Bredemeier, Forest Ecosystems Res. Ctr., Univ. of Göttingen, Germany; Coordinator of [IUFRO 8.01.04](#)

Forests are equally important in the regulation of both water and carbon cycles, on any scale from tree and plot, over the landscape and region, up to the global scale. Climatic and other environmental changes and the forest management options influence forest growth and the concomitant water redistribution between tree, stand and atmosphere and the carbon allocation and distribution. The contributions at the conference gave a broad account of those complex mechanisms and their feedbacks. Notably the role of climatic changes, land abandonment and reclamation of degraded sites for risks and potentials of forestry were reflected in the keynotes and contributed papers.

The conference

The International Conference "Managed Forests in Future Landscapes" was the final meeting of COST Action FP 0601 "Forest Management and the Water Cycle (FORMAN)", and co-organized by IUFRO Working Party 8.01.04 "Water Supply and Quality". It was held in Santiago de Compostela, a world heritage city (UNESCO), located in Galicia, NW Spain. Almost 250 people from 31 countries attended, not only from the EU and wider Europe, but also from overseas (USA, Mexico, Argentina, Chile) Russia, and China.

There were three invited plenary keynotes (Fernando Valladares, Spain; Jim Burger, USA; Irina Kurganova, Russia), a total of 37 invited oral presentations (mostly presented in two parallel running sessions) and 118 posters. The latter were presented in chaired and guided poster sessions.

Changing environmental conditions and forest management strategies

The topic of the conference makes reference to the important parallel changes in environmental conditions and forest management strategies around the globe. In many parts of the world, including Europe, most forestry systems are managed more or less intensively in order to obtain products and services, and other direct and indirect benefits. Two of the most important environmental benefits of forestry systems are: a) the provision and regulation of water quality, and b) the contribution to the global carbon balance.

In certain areas, such as on mountains and hillsides, intervention is minimal, whilst in other areas forestry systems are managed in a way which is comparable to traditional single crop farming systems. Furthermore, as a consequence of the implementation of conservation measures, the area of forested land has increased significantly in Europe in recent years, and continues to do so, as a consequence of reforestation of agricultural land (often after abandonment), as well as the rehabilitation of degraded land, such as mines and quarries. New areas of exploitation such as biomass for energy generation are also important.



Photo (by M. Bredemeier):
Opening of the conference
„Managed Forests in
Future Landscapes“

Reforestation or rehabilitation of degraded land and its conversion to forestry systems usually lead to better hydrological regulation and improved water quality. There is also a parallel increase in the capacity of the system in terms of soil and biomass carbon sequestration.

Whilst contribution of forests to flood control and cleaning of air masses are undoubtedly important, forest research has become particularly relevant with regard to climate change, as forests can help to reduce excessive CO₂ fluxes into the atmosphere and ensure sustainable water quality.

The conference was concluded on its third day by an excursion through western Galicia. The region features exceptional examples of highly productive woodlands. In some cases these forests are growing on former marginal agricultural land, so that carbon capture is substantial. There were also excellent examples of forests planted on highly degraded land, such as mines, marshes, sand dune systems and land affected by wildfires.



**INTERNATIONAL YEAR
OF FORESTS • 2011**

Celebrating Forests for People

The United Nations General Assembly declared 2011 as the International Year of Forests to raise awareness on sustainable management, conservation and sustainable development of all types of forests.

[IYoF Website](#)

International Training Course on Wood-based Panels: Processes, Properties and Uses

28th March – 2nd April 2011

Walailak University, Nakhon Si Thammarat, Thailand

Marius Barbu, Deputy Coordinator of [IUFRO 5.05.00](#)

In a globalized world with continuously changing technology and methods in the workplace, continuous professional training becomes more and more important. The times when one left university with sufficient knowledge for the entire working life are over. The term "lifelong learning" has been promoted for some time now. It does not only mean reading professional journals, but often requires participation in professional training programs and know-how exchanges.

There is a need for such training programs in the wood-working industry, too. Technological developments and product innovations, as well as the upcoming new markets and rapidly changing terms of competition require a continued updating of knowledge. To meet these demands, the International Wood Academy (IWA) offers concise and focused advanced training programs that enable participants to systematically expand their expert knowledge. The IWA was founded on the initiative of the University of Hamburg, Department of Wood Science and Applikatio GbR Freiburg, Germany specifically for the development and implementation of advanced training programs for the forest products industry.

After three successful years (2005, 2006 and 2008) of the Training Program on Wood-based Panels in Hamburg, the International Wood Academy (IWA) incorporation with the Wood Science and Engineering Research Unit, Walailak University, Thailand and the Faculty of Wood Engineering of the "Transilvania" University of Brasov, Romania arranged in 2009 for the 1st time a training program in South-East Asia. In response to the overwhelming demand from professionals and

newcomers in the wood-based panel industry and academic staff in universities and research institutes in South-East Asia, a 2nd IWA Training Program was organized. Both courses were co-sponsored by IUFRO Research Group 5.04.00.

While maintaining a high level of standard as regards the academic contents, the recent training course offered an opportunity for professionals from companies and research institutes from South-East Asia to get easy access to a comprehensive and up-to-date knowledge on wood-based panels. During the 6-day course the 31 participants from 15 private Asian wood industry companies and 2 universities acquired fundamental knowledge about all important aspects relevant to wood-based panel manufacture, with emphasis on production technology. Seminars were supplemented by various laboratory activities and computer simulation exercises.

Meeting website:

<http://wood.wu.ac.th/woodtraining/2011/index.php>



Workshop participants in the lab (photo provided by M Barbu)

South Africa Hosts 4th Forest Engineering Conference with Great Success

By Pierre Ackerman and Lise Gleasure

The 4th Forest Engineering Conference, held in White River, South Africa from April 5-7, 2011 attracted delegates from around the world. Cutting edge research was presented over many diverse topics from worker safety to reducing soil compaction to improving logistics and enhancing the value-chain. The cornerstone theme of this conference was that forest engineering must continue to innovate in order to cope with future economic and environmental challenges.

The theme of this 4th FEC was **Innovation in Forest Engineering – Adapting to Structural Change**. Within this unifying subject, the conference covered five major sub-themes:

New equipment monitoring approaches

Different methods of monitoring machines such as GPS coordinates in 3 Dimensions, Using StanForD, etc.

Man and machine interactions

New ergonomic training strategies, accident reporting among workers, worker comfort within the machine, etc.

Harvesting systems development

Design of new equipment for mechanized harvesting, stump removal, grapple designs, etc.

Value-chain optimization: from forest to industry/customer

All aspects of the supply chain, from inventory assessment using remote sensing techniques to logistics, changes in business environment and logistical impacts, etc.

Technology adaptation for specific environmental or technical demands

Specific environmental problems including GIS for avoiding high risk soil compaction areas, reduction of rutting, mechanized tree planting, etc.



*Photo from the field day
(by Lise Gleasure)*

This is the first FEC to be held in both the Southern Hemisphere and South Africa, and the field day demonstrated different aspects of South African timber harvesting technology. The operations presented were as follows: a motor-manual clear felling using a cable skidder and roadside merchandising; a tree-length and grapple skidder operation, also accompanied by roadside merchandising; and a cut-to-length forwarder with motor manual felling in conjunction with a first pass thinning operation. The conference closed with tentative plans for the 5th FEC to be held in France under the direction of l'Institut Technologique Forêt Cellulose Bois-Construction Ameublement (FCBA).

The Conference was jointly organized by Stellenbosch University and the International Union of Forest Research Organizations (IUFRO, [Division 3](#)) with sponsorship from Tigercat, Southern Mapping Company, Bell, Mondi, John Deere, Forest Engineering Southern Africa (FESA), Husqvarna, Komatiland Forests, Merensky, York Timbers, Stihl, SA Forestry Magazine and Wood Southern Africa & Timber Times. Over 130 delegates from Australia, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Latvia, Mozambique, New Zealand, Norway, Portugal, South Africa, Sweden, Switzerland and the United States of America attended.

Members of the WFSE Steering Committee Met at IUFRO Headquarters to Discuss and Plan Activities for 2011-2014

by Gerardo Mery, WFSE Coordinator

The Steering Committee of IUFRO's Special Project on World Forests, Society and Environment (WFSE) convened at IUFRO Headquarters in Vienna, Austria, 18-20 May to discuss the main themes and activities of the project's next phase (2011-2014). On the basis of existing scientific knowledge WFSE looks for innovative solutions to support and advance the formulation and implementation of forest-related initiatives and policies at the forest, society and environment interface.

The main outputs from the previous phase of WFSE included the book "Forest and Society – Responding to Global Drivers of Change", the global policy brief "Making forests work for people and nature – Responding to global drivers of change" and a series of regional policy briefs for Europe, Latin America, Sub-Saharan Africa and Asia. (Publications available at: <http://www.iufro.org/science/special/wfse/wfse-achievements/>)

In the next phase, WFSE will continue by building on the findings and conclusions of its previous books. It will focus on the local level implementation and outcomes of different policies and initiatives that have aimed at enhancing sustainable forest management and local livelihoods, and the links between national and international level processes and initiatives and local



*Photo (by G Wolfrum IUFRO HQ):
WFSE Steering Committee members*

implementation. The outcome will be a book and a related policy brief that will be launched at the IUFRO XXIV World Congress in Salt Lake City, USA, in 2014. WFSE is an open, non-profit, collaborative network of scientists and experts steered by ten international research organizations. We invite all interested parties, individual scientists and organisations, to participate in this collaborative research project. For further information please visit the WFSE web-page: <http://www.iufro.org/science/special/wfse> or contact WFSE Coordinator Gerardo Mery, gerardo.mery(at)metla.fi.

Publications

Proceedings

1st International Conference on Processing Technologies for the Forest and Biobased Products Industries:

<http://www.iufro.org/download/file/7096/4585/50500-kuchl10.pdf/>

Spanish Journal of Rural Development (SJRJ)

This multidisciplinary journal published by the Asociación Gallega de Investigadores para el Desarrollo Rural (AGAIDERU) strives to be a discussion forum that contributes to improving the knowledge of rural environment, focusing on sustainable development.

ISSN (paper version): 2171-1216;

ISSN (online version): 2172-2277.

Website: <http://www.sjruraldevelopment.org>

Latin America and Caribbean Regional Update

IISD's new publication includes the latest news and information on sustainable development issues throughout the region. The first issue includes several stories on forestry and biodiversity, including recent activities on bigleaf mahogany and on the International Year of Forests. <http://larc.iisd.org/latin-america-caribbean-regional-update/>

Journal 'Urban Forestry & Urban Greening' Celebrates its 10th Anniversary

In 2002, a new scientific journal focusing on research dealing with urban forests and urban green spaces was launched. This year marks Urban Forestry & Urban Greening's 10th anniversary. You can read more about this milestone and its celebration at the European Forum on Urban Forestry in Glasgow by visiting <http://www.unri.org/wsb4713307301/wp-content/uploads/2011/06/ufug.HTML>

This also gives you free access to the first issue of the 10th Volume.

New: Urban and Peri-urban Forestry Newsletter

FAO has published the first issue of the Urban and Peri-urban Forestry newsletter. The aim of the newsletter is to be a tribune for all actors promoting Urban and Peri-Urban Forestry (UPF). The objectives are to share information on an international basis and facilitate the exchange of good practice. The Newsletter will be issued every two months and available in English, French and Spanish.

Contact: Michelle Gauthier, FO-UPF-newsletter(at)fao.org

Die Forstbenutzung

by Gottlob König, edited by Carl Grebe

Reprint of the German edition of 1861 (Eisenach),

Verlag Kessel, ISBN: 978-3-941300-44-6

Announcements

Forest film contest

"Mensch Wald", Germany's official UN International Year of Forests campaign, invites filmmakers to enter a short film about how the forest inspires them.

Visit: <http://www.menschwald.nrw.de>

Call for Bids for the XXV IUFRO World Congress

If you feel that your country is a potential candidate for hosting the XXV IUFRO World Congress, scheduled for 2019, please contact the other IUFRO member organizations in your country as well as the appropriate government authorities and forward to them the bidding rules and discuss a formal proposal.

<http://www.iufro.org/news/article/2011/03/15/iufro-world-congress-2019-call-for-bids/>

Positions and Fellowships

Master's / PhD Fellowship:

Community ecology – Brown spruce longhorn beetle:

The University of New Brunswick (UNB) in Fredericton and the Canadian Forest Service (CFS) laboratories in Fredericton and Quebec City are seeking a Master's or PhD student whose research will evaluate the impact of biotic (i.e. trophic interactions) and abiotic (i.e. climate) factors that drive the population dynamics of exotic forest insects. More information:

<http://www.iufro.org/discover/noticeboard/#c12985>

Two PhD Fellowships available: Insect disturbance and forest dynamics

The Centre for Forest Research (Le centre d'étude de la forêt <http://www.ccf-cfr.ca/>), the University of Quebec at Montreal (UQAM), the University of Quebec at Chicoutimi (UQAC) and the Laurentian Forestry Centre, Canadian Forest Service in Quebec City are seeking two PhD students whose research will evaluate the susceptibility and vulnerability of the boreal forest to the current eastern spruce budworm outbreak. For information contact Louis De Grandpré (louis.degrandpre(at)rncan.gc.ca) or Dan Kneeshaw (kneeshaw.daniel(at)uqam.ca)

Position of Associated Professor (CBNRM)

The Forest and Nature Conservation Policy group (FNP) of Wageningen University, The Netherlands, offers a challenging career path as Associated Professor in the field of community-based natural resource management (CBNRM), with a focus on forests and/or biodiversity. Detailed information about this job can be obtained from Prof. B.J.M. Arts, e-mail Bas.Arts(at)wur.nl or from Dr. Esther Turnhout, e-mail Esther.Turnhout(at)wur.nl. Deadline for applications is 15 June 2011.

<http://www.iufro.org/discover/noticeboard/#c14607>

Metla Seeks Professor of Statistical Methods and Professor of Forest Planning

The Finnish Forest Research Institute (Metla) asks for applications by 10 June 2011, 4:00 p.m. Find the position announcements on our noticeboard or directly at:

<http://www.metla.fi/avoimetpaikat/2011/professor-statistical-methods-10-06-2011.htm>

<http://www.metla.fi/avoimetpaikat/2011/professor-forest-planning-10-06-2011.htm>

IUFRO Meetings

Search our [online calendar](#) for a full list of meetings!
Find non-IUFRO meetings on the IUFRO [Noticeboard](#)!
Also search for forest-related events in GFIS at:
<http://www.gfis.net>

Postponement

Due to the recent earthquakes in Christchurch, New Zealand, the
"Australasian Forest Genetics Conference:
integrating quantitative and molecular tools"
originally scheduled for October 2011 will be postponed to
next year. The new date and venue will be announced in
due time. IUFRO 2.00.00, 2.02.00, 2.04.00
Contact: Luis Apiolaza, luis.apiolaza(at)canterbury.ac.nz

21-26 Aug 2011

10th International Christmas Tree Research & Extension Conference

Altlenbach, Austria

IUFRO [2.02.09](#)

Contact: Chal Landgren, chal.landgren(at)oregonstate.edu
Karl Schuster, karl.schuster(at)lk-noe.at
<http://www.iufro.org/science/divisions/division-2/20000/20200/20209/activities/>

27-29 Sep 2011

Restoring Forests: Advances in Techniques and Theory

Madrid, Spain

IUFRO [1.06.00](#), [2.01.00](#), [3.02.00](#)

Contact: Juan A. Oliet, juan.oliet(at)upm.es
<http://www.restoringforests.net/>

9-13 October 2011

44th International Symposium on Forestry Mechanisation – FORMEC 2011: Pushing the Boundaries with Research and Innovation in Forest Engineering

Graz, Austria

IUFRO [3.06.00](#)

Contact: Martin Kühmaier, formec2011(at)boku.ac.at
<http://formec.boku.ac.at/home.html>

6-11 Nov 2011

The Future Role of Bio-Energy from Tree Biomass in Europe

Vienna, Austria

IUFRO

Contact: Rolf Björheden, Rolf.Bjorheden(at)skogforsk.se
<http://www.esf.org/index.php?id=8196>

18-27 May 2012

Biological Reaction of Forests to Climate and Air Pollution

Kaunas, Lithuania

IUFRO [7.00.00](#)

Contact: Algirdas Augustaitis, algirdas.augustaitis(at)lzuu.lt
Andrzej Bytnerowicz, abytnerowicz(at)fs.fed.us
<http://www.iufro-at-lzuu.lt/>

Other Meetings

29 Jun-1 Jul 2011

VII Congreso Forestal Centroamericano - "El Bosque sin Frontera para Todos y por el bien Común"

Managua, Nicaragua

<http://www.septimocongresoforestalca.com.ni/>

4-8 Jul 2011

EuroMAB 2011 Conference: Sharing Sustainable Futures

Lundsbrunn, Sweden

(with a pre-event in Joenköping during 30 June - 2 July)
<http://www.euromab2011.se/index.php>

8-9 Aug 2011

Second Regional Forum for People and Forests

Bangkok, Thailand

RECOFTC

<http://www.recoftc.org/site/resources/Second-Regional-Forum-for-People-and-Forests.php>

15-17 Aug 2011

International Student Conference: Climate Change and Indigenous Knowledge Systems (IKS), (CCIKS2011)

Johannesburg, South Africa

African Young Scientists Initiative on Climate Change and Indigenous Knowledge (AYSICCIK)

Contact: Anke Weisheit, ankeweisheit(at)web.de
<http://aysiccik.blog.com/ev/cciks-2011/>

19-21 Sep 2011

Who Will Own the Forest?

Portland, Oregon, USA

World Forestry Center

<http://wwotf.worldforestry.org/wwotf7/index.html>

21-25 Sep 2011

65th Annual Meeting of the German Forestry Association

Aachen, Germany

<http://www.forstverein.de/tagung/aachen2011/>

31 Oct-5 Nov 2011

Planted Teak Forests: a Globally Emerging Forest Resource

Guanacaste, Costa Rica

CATIE, FAO and TEAKNET

http://web.catie.ac.cr/conferencia_teca/home_ing.htm

9 Nov 2011

ISAE 2011- International Symposium on Agriculture & Environment

University of Ruhuna, Mapalana, Kamburupitiya, Sri Lanka

Contact: Mangala De Zoysa, mangalaxy(at)yahoo.com
<http://www.agri.ruh.ac.lk/sympo/ISAE2011/index.htm>

7-11 Nov 2011

Second Asia-Pacific Forestry Week: New Challenges – New Opportunities

Beijing, China

FAO Regional Office for Asia and the Pacific

<http://www.fao.org/forestry/ap-forestry-week/en/>

1 Dec 2011

International Symposium on Urban Open Spaces - Quality Provision and Assessment

Frederiksberg, Denmark

Contact: Cecil Konijnendijk, cck(at)life.ku.dk
<http://www.greenspaceaward.com>

4 Dec 2011

Forest Day 5

Durban, South Africa

http://www.forestsclimatechange.org/ForestDay-4_431.html

6-15 Sep 2012

IUCN World Conservation Congress

Jeju Island, Korea

<http://www.worldconservationcongress.org/>