

## THE ONLINE INFORMATION BULLETIN OF THE GLOBAL FOREST SCIENCE NETWORK

### Congress Highlights Forest Science Challenges and Solutions

*Cynthia Miner, Deputy Coordinator of IUFRO Task Force on Communicating Forest Science, seconded by the U.S. Forest Service to IUFRO Headquarters*

#### Global Issues and Trends Affect Rural Communities

What at first seems to be local in scale instead may be a global phenomenon. This theme emerged at the [IUFRO European Congress](#) on "Forests and Forestry in the Context of Rural Development" in September 2007 in Warsaw, Poland. "Protecting significant forest resources for the success of rural areas," said IUFRO President Don Koo Lee, "requires understanding of how these local areas are linked to global issues such as climate change, deforestation, loss of biodiversity, and bio-energy."

In an example of potential links, policy makers in Europe are considering a bio-based economy approach to mitigate climate change. Konstantin von Teuffel, Forest Research Institute of Baden-Württemberg, described that increases in employment from such an economy could be relatively significant for rural areas.

Rural communities are feeling their links to global shifts in the forest industry. Anne Toppinen, European Forest Institute, described the merging of forest industries. Her study shows that these merges have yet to result in increased profitability perhaps due to less strategic fit among companies than anticipated and the challenges of integrating distinct company cultures. Other factors: demand for paper is being affected by the Internet and about half of the world's wood supply is from tropical plantations.

In another economic sector, tourism is on the rise worldwide. Mountain tourism, for example, is growing quickly in developing countries. Non-wood forest products also generate significant income for rural communities worldwide. For example, in a study presented by Wiesława Nowacka, Warsaw Agricultural University, 70 percent of the rural families she surveyed collected mushrooms of which 80 percent were sold.

#### Rural Development Topic Informs Research Agenda Setting

A panel discussion on the future research agenda followed the scientific presentations. Panelists noted from the presentations that non-wood products, environmental services, and social values are not sufficiently addressed by forest science. "Interaction between forest management and rural development must be seen from the social perspective," said Piotr Paschalis-Jakubowicz, Warsaw Agricultural University. Further, "based on an EFI study," said Risto Seppälä, Finnish Forest Research Institute, "two-thirds of European forest issues need socioeconomic research but only 10 percent of existing research is now dedicated to it."



*Photo: Michal Orzechowski*

Susan Edda Seehusen, one of 36 students attending the Congress and past president of the International Forestry Students Association responded, "We cannot solve issues such as biodiversity without understanding the social and economic factors that influence human decisions. These factors are what determine whether or not biodiversity and other values of the forest will exist into the future."

As the discussion continued, the topic of stakeholder involvement emerged. Von Teuffel explained, "Whereas in the past, forest researchers could set their own agenda, development of such agendas has been professionalized to include stakeholders in setting the agenda." Rural development means you have to be engaged in the community of place," explained Ann Bartuska, U.S. Forest Service. "We need new ways to engage these communities as stakeholders in research", she said.

In considering the issues facing forest scientists today, Seppälä noted that global climate change, bio-based economies, and GMOs, will be issues for at least the next 10 years. The panelists urged IUFRO to be used as a network to find who has the best capabilities for examining particular issues from a worldwide perspective and then at regional and national levels. "You have to participate globally in IUFRO, to be able to act locally in forest research," said Niels Koch, Danish Centre for Forest Landscape and Planning.

*(cont'd on next page)*

The panelists concluded with a discussion about future trends for funding of forest research in Europe. Risto Paivinen, European Forest Institute, shared that slight decreases are expected in public funding with increases externally.

About 225 researchers, policy makers, and other stakeholders attended the meeting that served as an IUFRO European Congress and the science portion of the EFI (European Forest Institute) annual meeting, sponsored by both these organizations and the Forestry Faculty of the Warsaw Agricultural University.

## Integrative Science for Integrative Management IUFRO Division 6 Symposium

August 14 – 18, 2007, Saariselkä, Finland

By James Johnson, Deputy Coordinator, IUFRO Division 6

Integration occurs across many boundaries, including geographic, administrative, ownership, time, and academic disciplines. The [IUFRO Division 6 Symposium](#), entitled *Integrative Science for Integrative Management*, focused on science conducted across the many different dimensions of integration and how such science relates to integrated land management. Issues of research administration, educational and scientific outreach, policy, recreation/tourism/nature conservation, forest and environmental history, gender studies, environmental economics, forest terminology, social and community studies, natural resource governance, and economic development were all addressed in this Symposium.

The setting for this Symposium was Saariselkä, in northern Finland (Lapland), a perfect setting in which to examine issues related to integration. Traditional forest management for wood products, tourism and outdoor recreation, indigenous agriculture including reindeer husbandry, and nature protection are all prominent features of this northern landscape. Adding to the complexity of natural resource management is a nearby border with Russia, which complicates issues such as regional trade, tourism, and migratory fish.

Throughout the world we are seeing increasingly complex natural resource management issues, and new approaches and tools will be necessary to appropriately deal with these issues. Landscape-scale issues involving regional wood supply, coupled with demands for nature protection, commercial recreation, enhanced water and air quality, and open accessibility make the manager's job more difficult than ever. Further, a recognition by society that private forest owners contribute significantly to environmental benefits enjoyed and demanded by all has led to new ways of placing monetary values on these benefits. The result will be a potential flow of public funding to compensate private owners who continue to provide these benefits in a continuous and sustainable fashion.



Photo: Jouni Hyvärinen/Metla

The 107 oral and poster papers delivered at the Symposium dealt with a myriad of related topics, furthering the science and allowing for outstanding networking opportunities between the participating 140 scientists from 26 countries throughout the world. Scientific results, new methodologies, and ideas for linking research and management were shared. Discussion time was maximized in a format that allowed for technical presentation, workshops, and roundtable discussions. Additionally, the new IUFRO Task Force on Forests and Human Health held its kick-off meeting (see the following article).

Post-conference field tours allowed the opportunity to explore real world natural resource management issues in Lapland. Demands of nature-based tourism, reindeer herding, and economic development were discussed over the two days following the Symposium, when participants visited a national park, reindeer corral, recent forest harvests, and the border with Russia.

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## A New IUFRO Task Force to Tackle Issues of Forests and Health

By Erkki Kauhanen/Metla

IUFRO has launched a Task Force (TF) on Forests and Human Health (ForHealth). The kick-off meeting was held in connection with the IUFRO Division 6 Symposium, 14-20 August, in Finland. The TF will cover the effects of forests and trees on mental and physical health as well as health-related forest products.

There are numerous active players in this field already. For example, CIFOR has its Forest and Human Health Initiative. Therefore our main purpose is not so much to create new research programs but to foster dialogue between all the existing players: scientists of different specialties, implementing agencies, policy-makers, research financiers and others.

We would like to see a proliferation of cross-sectoral cooperation, especially between forest and health professionals. This is a major challenge, indeed, as these two specialties only rarely meet but each has symposia, conferences and publication series of their own. If, after 2011, medical scientists more often than today, find value added in cooperation with forest scientists, and the other way around, we have succeeded in our effort.

We want to create greater awareness, not only among professionals but also in the general public, of these issues and of the importance of forests for the continued well-being of mankind on this planet.

We seek that goal by organizing meetings in cooperation with other actors, and publish a newsletter and a number of reports. We are going to build a networking portal where all interested parties can see who the others are and what they are up to. We will gather information on best practices and produce a state-of-the-art report by 2011. It will provide a good point of departure for projects and work groups that will carry on the work.

Strategically, we see two parallel avenues of action: to maximize the health benefits of forests and to manage the health-related risks. We look forward to a visionary project with great emphasis on the future.

The Coordinator of the TF is Professor **Hannu Raitio**, Director General of the Finnish Forest Research Institute (Metla). The Deputy Coordinator is Dr. **Matti Rousi**, of Metla.

Says Raitio: "The importance of the human-forest interaction has been great for almost all civilizations and cultures of the world. For example, numerous locally or even globally important medicines are based on chemicals from the forest. They will be needed also in the future."

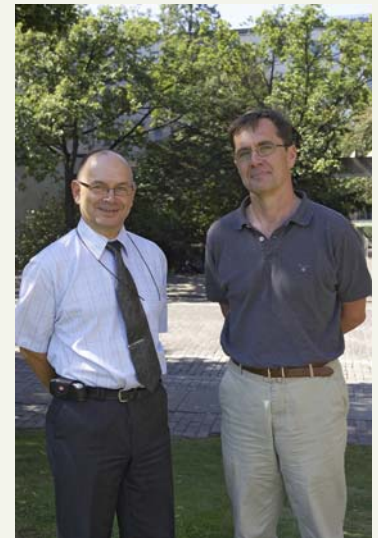
Adds Matti Rousi: "Recently there has been a growing awareness of the possibilities that forests offer in the way of mental health and well-being. We have to manage forest-related health risks and benefits in a balanced way."

All interested persons and parties are invited to contact the coordinator or the deputy (firstname.surname@metla.fi). Several subgroups are planned around more specific topics.

Our next major meeting will be held in connection with the IUFRO board meeting in Nairobi, April 28th to May 2nd, 2008. Regional meetings are planned also in Asia, the Americas and Europe.

### More information:

<http://www.iufro.org/science/task-forces/forests-trees-humans/>



Hannu Raitio (left), Matti Rousi  
Photo: Erkki Oksanen/Metla

## VI Latin American Congress on Forest and Environmental Law

The "VI Congreso Latinoamericano de Derecho Forestal y Ambiental" with the theme "The contribution of the forest sector and forest legislation to the achievement of the Millennium Development Goals" took place between 28 August and 1 September 2007 in Quito, Ecuador, and was a great success. One of the major achievements of the Congress was that the network of forest law experts could be extended considerably to other countries, particularly in North and Central America.

Visit the homepage of [IUFRO Working Party 6.13.01](http://www.derechoforestal.org/) as well as <http://www.derechoforestal.org/> for more information on the activities of the Latin American Network of Forest and Environmental Law and the **proceedings of the Congress**.

Prior to the Congress, [IUFRO-SPDC](http://www.iufro.org/science/task-forces/forests-trees-humans/) (Special Programme for Developing Countries) organized a training workshop on 'Working effectively at the interface of forest science and forest policy'. There were 22 participants from 12 Latin American countries and from different disciplines such as lawyers, agricultural and forest engineers, biologists and others. This allowed addressing science-policy interactions in a truly interdisciplinary fashion.

## Measuring and Modeling Complex Stands

Conference report by Peter F. Newton, IUFRO 4.01.02  
Coordinator and Conference Co-Chair

Complex forest stands arising from paradigm shifts in forest management practices (e.g., variable retention silvicultural systems, natural disturbance pattern emulation, systematic/selection mechanized thinning treatments) represent an increasing proportion of the productive forest land base throughout many of the world's forested ecosystems. Characterized by structural heterogeneity, complex stands are intrinsically difficult to measure and model, particularly in terms of their structural attributes and temporal dynamics.

In response to this analytical challenge, IUFRO Unit 4.01.02 (Growth models for tree and stand simulation) along with Unit 4.01.00 (Forest mensuration and modeling), Unit 4.01.03 (Instruments and methods in forest mensuration), and Unit 1.05.00 (Uneven-aged Silviculture) brought together over 100 scientists from 15 countries in Sault Ste. Marie, Ontario, Canada this summer in order to benchmark the current state of knowledge, share successes and compare various measurement and modeling approaches.

The conference program consisted of six plenary sessions, concurrent poster sessions and a field tour day in which some of the complex stand structures common to the Great Lakes – St. Lawrence Forest Region of central Canada were visited.

A panel discussion involving the 6 keynote speakers at the conclusion of the conference outlined and discussed the challenges for future research in this area. One of the major challenges identified was how to modify existing measurement techniques and models for use with complex forests. Another included preserving and enhancing global data bases for complex forests.

The success of the conference was made possible through the hard work and dedication of the conference organizing committee and supporting organizations. Specifically, Dr. Newton, Conference Co-chair, attributes the success of the conference to the collective involvement of the 1) numerous supporting organizations including the Canadian Wood Fibre Centre, Great Lakes Forestry Centre, Ontario Forest Research Institute, Forestry Research Partnership, Canadian Ecology Centre, Canadian Institute of Forestry and Clergue Forest Management Inc., and 2) organizational and scientific expertise among the committee members.

The final step is to produce a Special Issue of Forestry (Oxford University Press) which will include a subset of the research presentations given at the conference.

For complete details including popular summaries and pictures, please visit the conference website at [www.iufrosault.org](http://www.iufrosault.org).

## IUFRO Meetings

**NOTE: The following list of meetings is just a selection!**

For a full list of IUFRO events, please visit our online [calendar](#) or the [homepages](#) of IUFRO Units involved. Non-IUFRO meetings are also announced on the IUFRO [Noticeboard](#).

12-16 November 2007

### Water Management through Forest Management

Beijing, China

[IUFRO 8.01.04](#), UNESCO, FAO CAF and others

Contact: Michael Bredemeier, [mbredem\(at\)gwdg.de](mailto:mbredem(at)gwdg.de)

2-4 April 2008

### Mountain Forests in a Changing World

Vienna, Austria

Boku Univ. with [IUFRO-SPDC](#) and Mountain Partnership

Contact: Georg Gratzler, [mountainforestry@boku.ac.at](mailto:mountainforestry@boku.ac.at)

<http://mountainforestry.boku.ac.at>

26-30 May 2008

### Alien Invasive Species and International Trade

Shepherdstown, United States

[IUFRO 7.03.12](#)

Contact: Kerry Britton at [kbritton01\(at\)fs.fed.us](mailto:kbritton01(at)fs.fed.us)

23-27 June 2008

### Small-scale Rural Forest Use and Management : Global Policies versus Local Knowledge

Gérardmer, France

[IUFRO 3.08.00](#) and [6.12.01](#), Task Force on [Traditional](#)

Forest Knowledge, EFI, ENGREF

Contact: Gérard Buttoud, [Buttoud\(at\)Engref.Fr](mailto:Buttoud(at)Engref.Fr)

30 June – 5 July 2008

### Recent Advances in Forest Insect Science

Pretoria, South Africa

[IUFRO 7.03.00](#)

Contact: Mike Wingfield, [mike.wingfield\(at\)fabu.up.ac.za](mailto:mike.wingfield(at)fabu.up.ac.za)

<http://www.fs.fed.us/ne/morgantown/4557/iufro/>

24-29 August 2008

### Conservation Genomics and Molecular Breeding of Trees

Quebec City, Canada

[IUFRO 2.04.01](#) and [2.04.10](#), CTIA

Contact: [iufro-ctia2008\(at\)ffg.ulaval.ca](mailto:iufro-ctia2008(at)ffg.ulaval.ca)

<http://www.iufro-ctia2008.ca/>

27 August 2008

### Humus as an Ecological Indicator

Vienna Technical University, Austria

Workshop of [IUFRO 8.02.03](#) within Eurosoil 2008

Contact: Michael Englisch, [michael.englisch\(at\)bfw.gv.at](mailto:michael.englisch(at)bfw.gv.at)

<http://www.ecsss.net/web/frontend/view.php?>

16-18 September 2008

### Landscape Ecology and Forest Management: Challenges and Solutions

Chengdu, China

[IUFRO 6.14.00](#) and [8.01.02](#)

Contact: Shirong Liu, [liusr\(at\)caf.ac.cn](mailto:liusr(at)caf.ac.cn), [http://](http://research.eeescience.utoledo.edu/lees/IUFRO/2008MTG/)

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