

IUFRO CONGRESS 2005 - TEN SUB-THEMES

At its recent meeting in Manaus, Brazil, the Management Committee of IUFRO approved the ten sub-themes chosen by the Congress Scientific Committee for the 2005 World Congress "**Forests in the Balance: Linking Tradition and Technology**". The sub-themes are based on a large number of suggestions made by members of the IUFRO Executive Board, which includes the Coordinators of each Division and a number of General Members. Suggestions were also received from the coordinators of IUFRO's Task Forces and Special Programmes. Significant input was received from the Congress Organizing Committee in Australia. While the sub-themes are now fixed, the content within each may be altered to take into account feedback



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from the membership of IUFRO in coming months. As in previous World Congresses, sub-plenary sessions will focus on these sub-themes, and session organizers will be requested to orient their sessions towards these topics. Greater emphasis will be placed on the fit of individual papers to these topics. While only presentations that address one of the following sub-themes will be accepted for inclusion in the Congress, we believe that the vast majority of forest research is covered within these sub-themes. However, we encourage you not to look at the list of sub-themes for your particular area of research. Rather, we hope that you will look at the list and identify the topic(s) where your own research could best make a contribution.

The ten sub-themes are as follows:

Integrating approaches to achieve multiple goals: Intensive management, extensive management or conservation?

We have seen many different approaches to forest management, ranging from sustained yield through multiple-purpose management to sustainable forest management. This theme will examine recent developments in management approaches, and will include topics such as the various new models of forest tenure and management that are being developed, the problems associated with balancing forest production and active management against forest preservation, the adoption of natural disturbance as a model for forest management, forest conservation both in and out of reserves, threats to forest biodiversity and how these can be met through appropriate forest management, the identification of high conservation value forests, and commercial utilisation to benefit conservation.

Utilizing genetic resources to further sustainable forestry.

The development of genetic resources represents a controversial area, but one with significant potential for forestry. A key feature of this sub-theme will be the role of Australian germplasm in global forestry development, particularly the importance of eucalypts in many parts of the world. Other topics will include the

benefits and risks associated with utilizing genetic resources (including factors influencing community support for genetic modifications, and pest and disease issues), the use of genetically modified trees, advances in more traditional forms of tree improvement, the 'domestication' of tree species, trading in genetic resources, and taxa-specific case studies.

Meeting the challenge of climate change.

Although the Kyoto Protocol has dominated the news in recent months, it seems likely that climate change will still be a major issue three years from now. Presentations in this sub-theme will examine issues surrounding forest physiology and genetics, the impact of climate change on tree and forest health and its implications for the future of forests and forestry, the role of forests and forest soils in carbon sequestration, and risk analysis and the ability of forests to adapt to climate change. A final topic within this sub-theme will be concerned with large-scale disturbances, the carbon cycle and climate change.

Promoting development through improvements to the forest – wood and products chain.

Forestry has an important role to play in the local and regional development of many parts of the world. This role is often

overlooked and, in a variety of cases, could be increased through the adoption of appropriate techniques. This sub-theme will look at the entire forest – wood chain, from trees to forest products. It will include diverse issues, ranging from forest planning to optimize efficiency, through silvicultural modifications to change the nature of trees (e.g., branch density) in order to better meet end-product requirements, to the development of forest-based value-added industries. It will report on research being undertaken to promote regional development through improved value chains from forests to forest products. It will also look at the multipliers used in many studies to determine the benefits of forestry to communities, and will examine developments in the marketing of forest products, including both timber and non-timber products.

Involving indigenous groups in forest science and forestry.

With the role of indigenous groups in forestry growing in many parts of the world, this sub-theme will focus on the important new information that is being generated within this area of research. Topics will include the preservation of indigenous knowledge, indigenous involvement in commercial forestry enterprises (balancing land rights, co-management agreements, and other issues), and transferring forest benefits to indigenous communities.

In addition, those wishing to work with indigenous groups may be interested in the following proposed topics: links between western science and other forms of knowledge, intellectual property rights, and pitfalls and benefits for researchers working with indigenous groups.

Increasing the value of forests through innovative products and technologies.

Building on the forest – wood chain sub-theme, this sub-theme will address recent developments in the field of forest products and technologies, particularly as they relate to obtaining greater economic value from forests. Topics will include bioprospecting and biodiscovery, non-traditional forest biomass for forest products sustainability, composite products, value adding to residues, bio-fuels, environmentally friendly disposal of waste products, cross-sectoral technology innovation (applications from other industries, e.g. mining), and nutraceuticals and other non-traditional forest products.

Demonstrating sustainable forest management.

Almost all Divisions felt that one sub-theme should be devoted to the certification of forest management and the products of well-managed forests. This sub-theme will therefore look at the research needs associated with forest certification, certification standards in different parts of the world, present and future technologies to support sustainable forestry, and technology transfer and training programmes for further processing and trading of “green” labelled forest products from sustainably managed forests. Contributions that look at means of demonstrating sustainable forest management other than through

certification will also be encouraged within this sub-theme.

Sustaining forests: A duty for forestry and society?

Society has a responsibility to ensure that forests are managed sustainably. Presentations in this sub-theme will look at public participation in forest planning and management, the role of science in public policy formulation and the application of new technical and social methods to link forest research, the public and the policy-maker. In addition, a topic that will be included within this sub-theme is the management of invasive species, an issue that is important for forests but which society as a whole must deal with.

Realizing the environmental benefits of forests.

While there has been much talk about the environmental benefits of forests, we have been less successful at having these benefits included when considering the future of particular forests. This sub-theme will include topics such as the construction of New Forests in disturbed landscapes, using mining sites as case studies, forests and water, quantification of environmental changes/benefits, balancing natural disturbances with the maintenance of environmental values, and valuing forests and their environmental services.

Advancing the role of communication, education and capacity building in the future of forestry.

This final sub-theme will examine the role of education, communication and extension in the forestry of the future. Emphasis will be placed on methods to better interpret, disseminate and implement re-

search results. Topics will include the interaction between research, education and extension, different approaches to the delivery of technology transfer and extension, recent developments in visualization technologies as a means of obtaining greater stakeholder involvement, developments in teaching technologies, use of different media to communicate information about forestry, adjustment of organizational structures to accommodate the rapid changes occurring in forestry, and the training issues associated with the privatization of forestry in emerging market economies.

At the meeting of the IUFRO Management Committee, a number of other ideas were discussed.

The Congress Scientific Committee would welcome your comments on the following ideas:

- A series of training seminars dealing with
 - a) planning a forest sciences research programme,
 - b) writing a research proposal,
 - c) policy formulation for professional foresters, and
 - d) writing a scientific paper.
- A series of special sessions showcasing research that has been successfully applied. The idea for this came from the recent conference of the Canadian Sustainable Forest Management Network, where some sessions highlighted successful partnerships between industry and research in the solution of forest-related problems. Potential topics include long-term multi-purpose experiments in the forest sector, the Clean Development Mechanism and forestry, co-management agreements between indigenous peoples and others and the evaluation of sustainable forest management.

The nature and quality of presentations at the Congress was also discussed, and this will be dealt with in a future issue of IUFRO News.

If you have any comments about any of the above, please contact either myself or one of the Division representatives on the Congress Scientific Committee. These are as follows: Division 1 – Jerry Vanclay (JVanclay@scu.edu.au); Division 2 – Ladislav Paule (paule@vsld.tuzvo.sk); Division 3 – Hans-Rudolf Heinemann (heinemann@fowi.ethz.ch); Division 4 – Lauri Valsta (Lauri.valsta@helsinki.fi); Division 5 – Howard Rosen (hrosen@fs.fed.us); Division 6 – Niels Elers Koch (NEK@FSL.DK); Division 7 – Mike Wingfield (mike.wingfield@fabi.up.ac.za); and Division 8 – Alain Franc (franc@paris.inra.fr). The deadline for comments on the topics to be included in the sub-themes is 1 February 2003.

We look forward to hearing your comments.

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