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

## **Focusing on Forest Protection**

By Brian Richardson, GM Forestry Science, Scion, Conference\* Chair

Forests make vital contributions to economies, the conservation of biodiversity, environmental protection and to global carbon and water cycles. These benefits are increasingly at risk from biosecurity threats resulting from growth in international trade and tourism and also from changing climates. The IUFRO International Forest Biosecurity Conference featured over 90 speakers from 14 different countries, representing a huge body of knowledge aimed at protecting forests from the risks posed by invasive pests, weeds and diseases.

#### What is biosecurity?

The term "biosecurity" refers to the exclusion, eradication, or effective management of pests (weeds, insects, diseases). There are many recent examples of the destruction of large forest areas, entire ecosystems, and even threats to species through the spread or change in risk patterns of forest pests and diseases. Examples include the pinewood nematode devastation in East Asia, which is an exotic parasite vectored by native insects; emerald ash borer spreading through parts of the USA and Canada; and Phytophthora ramorum, an invasive pathogen in California and Europe.

#### **Trade risks**

The economic and global relevance of biosecurity was well highlighted by a range of international keynote speakers sponsored by the Organization for Economic Cooperation and Development (OECD). presentations showed how the risks associated with invasive organisms are growing worldwide due to continuous growth in trade and tourism, and also from changing climates. The need for policy makers to recognize and address these risks is more critical than ever, particularly in terms of shutting down major pathways that enable the movement of pests. A serious risk pathway identified by several speakers was the trade of ornamental plants, often whole trees up to three meters tall including root balls and soil. Effective risk management is far more likely to be realized with greater international science cooperation, which was clearly one of the benefits of this conference.



Photo by courtesy of Scion: Delegates at the International Forest Biosecurity Conference visited New Zealand's Port of Tauranga to learn about phytosanitary methods for treating export logs

#### Multi-disciplinary approach

Delegates represented an enormous range of disciplines, all with an important role to play in supporting effective biosecurity systems. Included were forest pathologists, entomologists, weed ecologists, molecular biologists, meteorologists, modeling specialists and many others. A highlight of the conference program was a one-day workshop sponsored by the OECD during which international guest speakers discussed the challenge of integrating biosecurity research and science in policy, regulation and operational management. This diverse gathering highlighted the need for effective communication across science disciplines and between science and policy, which is what this conference facilitated.

\* Report from the IUFRO International Forest Biosecurity Conference, 16-20 March 2009, Rotorua, New Zealand, hosted by New Zealand Crown Research Institute, Scion, involving IUFRO Units 7.02.00, 7.03.00, 1.01.04 and 8.02.02. A total of 14 countries were represented: New Zealand, Australia, UK, USA, Canada, South Africa, Ireland, France, Switzerland, Finland, Czech Republic, India, Indonesia, and Korea. Over 90 oral presentations and 20 poster presentations were made at the conference. For more information and a publication of summaries, visit: www.forestbiosecurity.com







## **XXIII IUFRO World Congress**

"Forests for the Future: Sustaining Society and the Environment" Seoul, Korea, 23-28 August 2010



## **Call for Papers**

The Congress Scientific Committee (CSC) invites submission of abstracts for presentations during technical and poster sessions. Both oral and poster papers accepted for presentation during the Congress should highlight the contributions that forest science is making to adapt to our changing world and to address the significant challenges facing our environment and our society. Submitted abstracts should address one or more of the Congress themes. Detailed information about Congress themes, online submission procedure, abstract format and criteria of selection are available in English, French and Spanish at: <a href="http://www.iufro.org">http://www.iufro.org</a> and <a href="http://www.iufro.oom/">http://www.iufro.oom/</a>

## Plant Invaders in Forest Ecosystems

By R. K. Kohli, D. R. Batish and H. P. Singh

As is well known, invasive alien plants threaten the world's species rich plant communities by encroaching the forest-land fast. They have already invaded various geographical regions of the world, especially the tropics. The main pathways of invasion include import of seeds of crops, ornamentals and other agricultural products contaminated with seeds of invasive plants. Some of the invasive aliens are transported through man-made introduction as ornamentals or source of medicine or for improving soil quality and landscape.

At the international conference\* on "Plant Invasion and Forest Ecology: Concerns & Solutions" at Panjab University in Chandigarh, India, participants discussed some of the worst plant invaders viz Parthenium hysterophorus, Ageratum conyzoides, Chromolaena odorata, Imperata cylindrica, Lantana camara and Prosopis juliflora. These have caused havoc in the world and have adversely affected the species diversity, caused fodder scarcity and impaired forest operations. One of the papers highlighted the need of using remote sensing and GIS techniques to map invasive alien plants. There was also a discussion on the mechanism and theories that help invaders to colonize the alien ecosystems. One of the important aspects that help them to colonize and dominate native vegetation is allelopathy - a plant mediated chemical interference in which invasive alien plants release chemical substances that deter the growth of other plants. This is in fact one of the major reasons for local spread of invasive plants. Absence of natural enemies and growth strategies are other reasons that impart invasion success to plant invaders.



Group photo by Navtej Singh from Panjab University

At the conference, the need of a research-based nationally coordinated project to identify invasive plant species in different eco-regions, their categorization into different functional life forms, their behavior and impact on the major vegetation type of the area and the development of a conceptual framework for their sustainable management was expressed. Adding value to invasive plants such as Lantana and Prosopis was also discussed. The main conclusion of the conference was to find out sustainable approaches to deal with the problem of invasion in the forest ecosystem that has altered vegetation firstly at the national level then in the context of Asia as a whole.

IUFRO-SPDC in cooperation with the Centre of Environment & Department of Botany, Panjab University, Chandigarh, India organized a training workshop on "Working effectively at the Interface of Forest Science and Forest Policy" from Chandigarh, India, 14-15 March, 2009. Visit: <a href="http://www.iufro.org/science/special/spdc/actpro/wkspmal07/indiawkshp/">http://www.iufro.org/science/special/spdc/actpro/wkspmal07/indiawkshp/</a>

<sup>\*</sup> The conference was organized by IUFRO Units <u>8.02.04</u> and <u>4.02.02</u> with support of the IUFRO Special Programme for Developing Countries (<u>IUFRO-SPDC</u>) and Dayanand National Academy of Environmental Sciences, India and Panjab University, Chandigarh, India from March 16-18, 2009. Over 65 scientists from 12 countries discussed a wide range of topics including the impact on plant diversity, early detection and rapid response of invasive species, pathways of invasion, and socio-economic impacts of the invasive plant species. A brainstorming and informative panel discussion with experts in the field of invasive plants in forest ecosystems also formed part of the event.

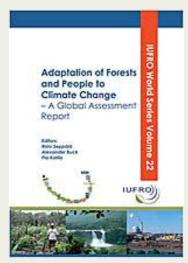


# Adaptation of Forests and People to Climate Change – A Global Assessment Report –

Formally released at the UN- Headquarters in New York on April 22 during the latest session of the United Nations Forum on Forests (UNFF), this report presents the state of scientific knowledge regarding the current and projected future impacts of climate change on forests and people along with options for adaptation.

After an exhaustive study by the IUFRO-led CPF-Global Forest Expert Panel on Adaptation of Forests to Climate Change, the conclusions that have been made are:

- Climate change has affected forest ecosystems, and carbon regulating services of forests are at risk of being lost entirely unless carbon emissions are reduced substantially.
- Sustainable forest management (SFM) is essential for reducing the vulnerability of forests to climate change. Commitment to achieving the goals of SFM must be strengthened at international and national levels.
- More research is required to improve knowledge about management and policy measures for adaptation.
- Climate change can increase timber supply in some regions, although there will be considerable temporal variations.
- Flexible approaches to policy design are needed and new modes of governance are required to enable meaningful stakeholder participation and provide secure land tenure and forest user rights and sufficient financial incentives.
- Even if adaptation measures are implemented, unmitigated climate change would exceed the adaptive capacity of many forests.
- Impacts of climate change on forest goods and services will have far-reaching social and economic consequences for forest-dependent people, particularly the forest dependent poor.
- There is no universally applicable measure for adapting forests to climate change. Forest managers, therefore, should have sufficient flexibility to deploy the adaptation measures most appropriate for their local situations.





Risto Seppälä, Alexander Buck and Pia Katila. (eds.). IUFRO World Series Volume 22. Helsinki, Finland, 2009 – 224 p.

ISBN 978-3-901347-80-1 ISSN 1016-3263

For free download at: http://www.iufro.org/ science/gfep/ For hardcopies, contact: office(at)iufro.org



The Panel provided also a policy brief in several languages:

## "Making forests fit for climate change" to ease the formulation of

effective policies and management options for the adaptation of forests and the forest sector to climate change.



We are proud to announce that many articles, with reference to IUFRO and the report have been written around the world (e.g. Le Monde - France, BBC News - UK, La Prensa - Panama, Teheran Times - Iran & Times of India). These few names are only a glimpse of the entire coverage we have received. In total, there have been more than 50 articles reporting the official release of the Global Assessment.

The media attention given to this report reflects the great importance of the detailed study and of IUFRO's continuous work.

By Tarun K. Bathija (IUFRO, PR & Communications Intern)

The "Global Forest Expert Panels" initiative of the Collaborative Partnership on Forests was launched in April 2007 to provide objective and independent scientific assessments of key issues in order to support more informed decision-making at the global level. The initiative is led and coordinated by the International Union of Forest Research Organizations (IUFRO). The assessments are carried out by thematic Global Forest Expert Panels uniting leading scientists from around the world.



### **Publications**

## New ITTO/IUCN Guidelines for the Conservation and Sustainable Use of Biodiversity in Tropical Timber Production Forests

These guidelines can be downloaded directly from their website (in English for now, Spanish and French forthcoming): <a href="http://www.itto.int/">http://www.itto.int/</a>

New Book on Forest Vegetation Management in Europe

Willoughby I., Balandier P., Bentsen N.S., McCarthy N. and Claridge J., eds (2009); Forest Vegetation Management in Europe: current practice and future requirements; COST office, Brussels.

A pdf is freely available from <a href="http://www.cost.esf.org.orwww2.clermont.inra.fr/cost-e47">http://www.cost.esf.org.orwww2.clermont.inra.fr/cost-e47</a>.

#### The Journal of Ecology and Natural Environment (JENE)

This multidisciplinary peer-reviewed journal will be published monthly by the Academic Journals starting in April 2009.

http://www.academicjournals.org/JENE/About.htm

### **Announcements**

#### **Courses at Wageningen International**

Wageningen International, in close collaboration with RECOFTC and CIFOR, organizes the following two courses:

1) Landscape functions and people: applying strategic planning approaches for good natural resource governance; and

2) Governance for forest, nature and people: managing mulit-stakeholder learning in sector programmes and policy processes.

For more information, please, contact: Cora van Oosten, cora.vanoosten(at)wur.nl

## Course: Economic Tools for Conservation - Training for Conservation Professionals

11-21 August 2009, Stanford University, California, USA This course is presented in partnership with the Center for Conservation Biology at Stanford University and The Nature Conservancy. <a href="http://conservation-strategy.org/training/international2009application">http://conservation-strategy.org/training/international2009application</a>

#### The Hubert H. Humphrey Fellowship Program

The HHH Fellowship Program provides a year of professional enrichment in the United States for experienced professionals from designated countries throughout the world. This year's competition is in the fields of: (...) Agricultural Development/Agricultural Economics and Natural Resources, Environmental Policy and Climate Change. For more information, visit:

http://www.humphreyfellowship.org/page/97339/

#### Bamboo Firewood and Charcoal Program

http://www.inbar.int/show.asp?BoardID=98&NewsID=522
The International Network for Bamboo and Rattan (INBAR) and the European Union, along with their partners recently announced the launch of its "Bamboo as sustainable biomass energy: A suitable alternative for firewood and charcoal production in Africa" program in Ethiopia and Ghana.

## **IUFRO Meetings**

#### NOTE: This is not a full list of IUFRO meetings!

For a comprehensive list of IUFRO events, please visit our <u>online calendar.</u> Find more details on the <u>homepages</u> of IUFRO Units involved. Non-IUFRO meetings are also announced on the IUFRO <u>Noticeboard</u>.

Also search for forest-related events at: <a href="http://www.gfis.net">http://www.gfis.net</a>

7-11 June 2009

#### **Small-scale Forestry Symposium**

*Morgantown, West Virginia, United States* IUFRO <u>3.08.00</u>

**Contact:** Dave McGill, dmcgill(at)wvu.edu http://ssf09.com/

9-12 June 2009

#### Forest Measurements in Complex Tropical Forests

Akure, Nigeria IUFRO <u>4.01.03</u>

**Contact:** Shadrach O. Akindele, femi\_akindele2(at)yahoo.com

http://www.futa-forestry.org/conference/index.htm

15-18 June 2009

## 2nd Gender and Forestry Conference: Making a Difference in Theory and Practice

Umeå, Sweden IUFRO <u>6.08.01</u>

 $Contact: Gun\,Lidestav,\,Gun.Lidestav(at)srh.slu.se$ 

http://www.sfak.slu.se/

ShowPage.cfm?OrgenhetSida\_ID=10300

21-24 June 2009

#### Change in Governance as Collective Learning Process: Management, Politics and Ethics in Forestry

Nancy, France

IUFRO 6.05.00, 6.12.00

**Contact:** Gérard Buttoud, Email: buttoud(at)engref.fr http://www.iufro.org/science/divisions/division-6/60000/ 61200/activities/

4-5 August 2009

#### International Conference on Woody Biomass Utilization

Starkville, Mississippi, United States

IUFRO <u>5.00.00</u>

Forest Products Society, Mississippi State University

Contact: David Cown,

dave.cown(at)scionresearch.com

http://www.forestprod.org/confbiomass09.html

31 August-3 September 2009

## Spruce in the Context of Global Change: Ecology, silviculture, forest products, management risks and conservation practices

Halmstad, Sweden

IUFRO 1.00.00, 1.01.08, 4.00.00, 8.00.00

**Contact:** Jens Peter Skovsgaard, jps(at)life.ku.dk <a href="https://arbetsplats.slu.se/sites/esf/tematillvaxt/spruce2009/default.aspx">https://arbetsplats.slu.se/sites/esf/tematillvaxt/spruce2009/default.aspx</a>



5-10 October 2009

1st International Advanced Training Program on Wood-Based Panels Technology for Professionals in South-East Asia

Walailak University, Nakhon Si Thammarat, Thailand IUFRO 5.05.00

**Contact:** Marius Barbu, marcat(at)gmx.at <a href="http://wood.wu.ac.th/woodtraining/home.html">http://wood.wu.ac.th/woodtraining/home.html</a>

20 October 2009

Extension and Technology Transfer: Emerging Concepts, Tools, and Practices

Buenos Aires, Argentina IUFRO <u>6.06.01</u>, <u>6.06.02</u>

Side event at World Forestry Congress 2009

Contact: Eric Norland, enorland(at)csrees.usda.gov

http://www.iufroextension.org

18-22 January 2010

11th International IUFRO Wood Drying Conference

Skelleftea, Sweden IUFRO <u>5.04.06</u>

Contact: Lena Antti, Email: lena.antti(at)ltu.se

http://www.wdc2010.org/

10-12 February, 2010

Global Change and Mediterranean Pines: Alternatives for Management

Palencia, Spain

IUFRO 1.01.10, 2.02.13, 4.01.00

University of Valladolid (UVa-INIA); FAO Silva Mediterranea, EFI Mediterranean Regional Office - EFIMED **Contact:** Felipe Bravo, secretariat(at)iufro2010.es <a href="http://www.iufro2010.es">http://www.iufro2010.es</a>

7-12 March 2010

Phytophthora in Forests and Natural Ecosystems

Rotorua, New Zealand

IUFRO 7.02.09

**Contact:** Pam Taylor, pam.taylor(at)scionresearch.com http://www.iufro.org/science/divisions/division-7/70000/70200/70209/activities/

22-26 March 2010

24th IUFRO Conference for Specialists in Air Pollution and Climate Change Effects on Forest Ecosystems: "Adaptation of Forest Ecosystems to Air Pollution and Climate Change"

Antalya, Turkey IUFRO 7.01.00

Contact: Elena Paolatti, e.paoletti(at)ipp.cnr.it http://www.orman.istanbul.edu.tr/ormankonferans/ index.php/2/iufro/index

24-27 July 2011

10th International Conference on Low-Volume Roads

Lake Buena Vista, Florida, USA

IUFRO 3.01.02, Transportation Research Board (TRB)

Contact: Glen Légère, glen.legere(at)fpinnovations.ca

http://www.trb.org/conferences/2011/10LVR/

#### **Other Meetings**

12-14 May 2009

Workshop on Forests and Water

Antalya, Turkey

Hosted by the Republic of Turkey, co-organized by Switzerland, Turkey, MCPFE, UNECE Water Convention,

and FAO

**Contact:** MCPFE Liaison Unit Oslo, liaison.unit.oslo(at)mcpfe.org

http://www.mcpfe.org/registration/forests\_and\_water

28-29 May 2009

8th Meeting of the Asia Forest Partnership and AFP Dialogue: REDD and Combating Illegal Logging

Bali, Indonesia

Cohosted by the Government of Indonesia in collaboration with the Governments of Japan and

Switzerland, CIFOR, WRI, IGES, DFID

Contact: AFP(at)cgiar.org http://www2.asiaforests.org

11-12 June 2009

3rd Meeting of the MCPFE Open-Ended Ad-Hoc Working Group on "sustainability criteria" for forest biomass production, including bioenergy

Uppsala, Sweden

**MCPFE** 

Contact: Ms. Berit Hauger Lindstad, Liaison Unit Oslo,

berit.lindstad(at)mcpfe.org

24 June 2009

2009 SWST International Annual Convention

Boise, Idaho, USA

Society of Wood Science and Technology, in cooperation with Forest Products Society Contact: Vicki Herian Vicki(at)swst.org

23-28 August 2009

2nd World Congress of Agroforestry - WCA200

Nairobi, Kenya

Contact: wca2009(at)cgiar.org

http://www.worldagroforestry.org/wca2009

28-30 September 2009

International Conference: 4 Degrees and Beyond

Oxford, United Kingdom

University of Oxford, Tyndall Centre for Climate Change Research, Met Office

http://www.eci.ox.ac.uk/4degrees

5-8 October 2009

**International Forest Genetic Resources Symposium** 

Kuala Lumpur, Malaysia

ITTO Project on Forest Genetic Resources; FRIM, APAFRI, Bioversity International.

Contact: Sim Heok-Choh, simhc(at)frim.gov.my

18-23 October 2009

XIII World Forestry Congress

Buenos Aires, Argentina

Argentina, FAO

http://www.wfc2009.org/