

Science and Business News August 2005

Report from Forestry World Congress in Brisbane

Four members of staff from Forest Research (FR) were among the two thousand delegates attending the twenty-second IUFRO World Congress earlier this month. As suggested by the congress' title, 'Forests in the balance: linking tradition and technology', the Congress sought to focus on a wide range of forest-related technologies and to reflect the importance of tradition and technology, including the increasingly-recognised importance of the knowledge of indigenous peoples.

The six-day congress is a marathon event, with plenary sessions each morning followed by parallel sessions and poster presentations until 21:00 hours each day. Forest Research staff presented five papers:

- FR's Chief Executive, Jim Lynch, contributed to the invited Directors' Forum, along with the Heads of Forestry Research from Indonesia, USA, Australia and Austria.
- FR's Research Director, Peter Freer-Smith, delivered two papers: 'The effects of trees on pollutant transport and fate: modelling of the benefits to the urban and peri-urban environment' and 'The biological sustainability of European forests.'
- Liz O'Brien, of FR's Social Research group, gave a presentation on woodlands and wellbeing, which focused on the evaluation of two Forestry Commission health and well-being pilot projects in England.
- Bill Mason, Head of FR's Forest Management Division, presented a paper giving the Scottish perspective on 'Sustainable forest management in an era of declining timber prices.'

Professor Lynch noted: *'It was exciting to see just how much FR is at the cutting edge of world forestry research. It has also enabled us to start negotiations to develop memoranda of understanding with some of the other world leaders in forestry research.'*

Sustainable Development Commission publish wood fuel heating report

A report on the potential of wood fuel heating in Scotland was published in June, is based on research undertaken by Forest Research and [North Energy](#) Associates for the Sustainable Development Commission (SDC) earlier this year. The SDC report, entitled 'Wood Fuel for Warmth', makes a series of recommendations to policy leaders regarding the action which needs to be taken if the Scottish Executive's stretching targets for carbon emissions are to be met. Jonathan Porritt, Chair of the SDC, commented, *"This is a very timely and important report, the rest of the UK has a lot to learn from it, in terms of shifting attitudes and policies for a more sustainable energy future."* The report features three case studies, including the Whitegates housing development in Lochgilphead. Sophie Hale of Forest Research's Forest Management Division, co-ordinated the research project. Further details:

http://www.sd-commission.org.uk/news/resource_download_search.php?attach_id=T472CQY-76G8X6J-RPAG47Z-5THHT8H



Excursion to a Riverine Rainforest, near Brisbane

FR represents UK at Perth biomass workshop

FR's Andy Hall was recently elected UK National Team Leader for the International Energy Association's Bioenergy Task 31 'Biomass Production for Energy from Sustainable Forestry' for 2005 and 2006.

One of Andy's first tasks in this role has been to represent the UK at an international biomass workshop held in Perth, Western Australia. The workshop, held in early August, was organised jointly by IEA Bioenergy Tasks 30 and 31, in association with agencies of the Western Australian Government and Bioenergy Australia. The aim of the workshop was to further the Tasks' work of "collecting, synthesising and sharing leading-edge science and technology on sustainable production of biomass for energy from naturally regenerated forests and plantations." Within that broad framework, the workshop and its associated field study visits focused on the following issues:

- bioenergy and changing natural resource management
- establishing and managing forest energy systems for specific environmental benefits
- reducing environmental impacts from forest energy production systems
- effects of intensive forest energy use on site productivity
- efficiency and economics of forest energy operations
- social issues and community development
- certification of sustainable forest energy systems
- policy barriers and constraints and how to overcome them.

"The workshop was a great opportunity to compare the UK's recent progress in developing its biomass resources with other countries," noted Andy. "It was interesting to see how far we've progressed in recent years. We often think of ourselves as way behind most other developed countries. The reality is that we are catching up fast in many areas." Papers and posters presented at the workshop will be published on http://forestry.tamu.edu/Links/IEA_Bioenergy_Task_31.htm later this year.

ForestGALES software used in Puerto Rico hurricane research

In July, Alexis Achim, from Forest Research's Forest Management Division, travelled to Puerto Rico, with funding from the University of Puerto Rico, to meet and work with Professor Skip Van Bloem, as part of an American Science Foundation project.

Professor Van Bloem is a tree physiologist who is leading a research programme on the complex ecological processes of the dry tropical forest of Guanica. He got the bug for wind and tree stability research when Hurricane 'George' hit the Guanica Forest in 1998. Although most trees appeared undamaged after the hurricane, he noticed that



Guanica Forest, Puerto Rico



Tree sprouting from base after hurricane

one third of the stems had sprouted from the base, as illustrated in the photograph, as if they were damaged by the wind.

He is currently setting up an experiment to test the hypothesis that sprouting was induced by the production of ethylene at the base of the stem, a common plant reaction to sustained loading. Alexis provided Prof Van Bloem with a modified version of Forest Research's ForestGALES software programme, which estimates the average loading experienced by a tree during a given storm. The results will be used to recreate the conditions experienced during 'George', through a tree-flexing field trial.

EU *Phytophthora ramorum* project reaches mid-point

In July, the EU project on 'Risk Analysis of *Phytophthora ramorum*', which Forest Research is leading, reached its midpoint milestone. A meeting was held in California to allow the project consortium to see Sudden Oak Death in California both in nurseries and in the forest.

Forest Research's Clive Brasier, Sandra Denman and Joan Webber attended the July meeting, to present their new research findings on the threat which *Phytophthora ramorum* and *Phytophthora kernoviae* pose to trees in Europe and North America. Key figures from the USDA Forest Service, the University of California and the US Animal and Plant Health Inspection Service, who are involved with managing the Sudden Oak Death epidemic and its associated research investigations, were also present.

Forthcoming Events

Full details of Forest Research's events are available on FR's internet site:
www.forestresearch.gov.uk/events

6 September, Innovative tests, Oban

Innovative tests for nursery management. Informing operational practices under a changing climate.
<http://www.forestresearch.gov.uk/fr/INFD-6EJER3>

8 September, Barcaldine and Fearnoch forests, Argyll and Bute

Continuous cover forestry in west coast Scottish forests. Joint Continuous Cover Forestry Group/Royal Scottish Forestry Society site meeting.
<http://www.forestresearch.gov.uk/fr/INFD-6EGGCG>

13 September, Timber research update, NRS

'Strategic Timber Research, Making Best Use of the Home Grown Resource'. Updating the forest and timber processing industry on the latest research findings.
<http://www.forestresearch.gov.uk/fr/INFD-6C3H86>

14-16 September, Atlantic Oakwoods Symposium, Oban

Collating current knowledge with a view to identifying the need for further research and the role of these woods in conservation planning. <http://www.forestresearch.gov.uk/fr/INFD-6A5HK4>

28 September, Diseases and decay in trees, Surrey

Exploring the processes of disease and decay and how these impact on Hazard Tree Assessment.
<http://www.forestresearch.gov.uk/fr/INFD-6EWC79>

New Publications

Forestry Commission Information Note: FCIN070 *Utilisation of lodgepole pine*. July 2005. S Mochan, J Hubert.

Forestry Commission Information Note: FCIN071 *Golden eagles and new native woodland in Scotland*. August 2005. M J McGrady, S J Petty.

Newsletter Team

Editors:

Eleanor Harland
Kirsten Hutchison
Alison Melvin

Production:

Alice Holt Typing Group