

Science and Business News September 2005

Forest Research's partnership with National Arboreta at Westonbirt and Bedgebury



A young plant of *Cathaya argyrophylla*, propagated for Bedgebury National Pinetum. This handsome conifer originates from China.

Westonbirt Arboretum and Bedgebury Pinetum are amongst the Forestry Commission's finest tree collections. Each site is an important visitor attraction and a valuable resource for education. The botanical collections are internationally important, containing more than 5000 different taxa and about 25,000 numbered specimens of woody plants, many of which are rare or endangered in the wild. Richard Jinks, of Forest Research's Forest Management Division, is leading a programme that provides scientific and technical support to the arboreta. Funded by Forest Enterprise England, the programme's recent activities have included audits of collection-management, database support, specialist propagation of rare species, and support on plant health issues. Currently, Richard Jinks and Hugh Angus (Head of Tree Collections for the Forestry Commission) are completing a five year strategy for research and development activities within the National Arboreta.

One of the main projects involves collaboration between Bedgebury, Forest Research and the International Conifer Conservation Programme, which is based at the Royal Botanic Garden Edinburgh. It is concerned with the ex situ conservation of populations of some of the world's threatened conifers. Nearly half of the world's 800 conifer taxa are listed by the World Conservation Union (IUCN) as being of conservation concern. Our aim is to establish a series of sponsored conservation plots of selected species in the former Forest Plots area at Bedgebury, which was destroyed in the 1987 storm. Richard and Hugh are also reviewing how management of the Forestry Commission's tree collections, at Westonbirt, Bedgebury and the other important Forestry Commission arboreta such as Kilmun, will support the targets set out in the Global Strategy for Plant Conservation. This important strategy was adopted in 2001, by governments meeting at the Conference of the Parties of the Convention on Biological Diversity in The Hague. It sets out a series of measurable goals for the conservation of threatened plants to be achieved by 2010.

Forest Research website passes the million mark

This August, the Forest Research website received its one millionth hit since its launch in June 2004. Our website continues to be first on Google for both world-wide and UK searches on 'forest research'. "Users comment particularly on the usefulness of the events notification and the staff contact details", noted David Georghiou, FR's webmaster. Further website development is planned, including the launch of a subscription service later this year.

Chief Executive visits Malaysian Forestry Research Institute

Forest Research's Chief Executive, Jim Lynch, recently visited the Forestry Research Institute of Malaysia (FRIM). FRIM has approximately 1100 staff working on a very large campus, with a fine arboretum and tree canopy walk, about 15 miles from the centre of Kuala Lumpur. "A striking factor about FRIM is their move towards commercial co-operation and spin-out activity. I was extremely impressed with FRIM's dynamism in this area", Jim commented. A notable area of development has



been FRIM's production of cosmetics and biopharmaceuticals, such as phytoestrogens, using ingredients derived from trees. During his visit, Jim Lynch delivered a lecture to over 100 members of FRIM staff, giving an overview of the opportunities which the UK perceives for the development of forests and woodlands and associated research needs.

Microbial diversity in forest soils

Elena Vanguelova, of Forest Research's Environmental and Human Sciences Division, has started a new six month research collaboration with EMERGE, the Environmental Microbiology & Ecology Research Group at Exeter University (Hilary Lappin-Scott and Corinne Whitby). The project will investigate forest soil nitrogen processes in relation to soil microbial diversity and functions along a N pollution gradient. The research aims to extend, to polluted soils, the use of molecular (functional gene) analysis to assess soil microbial diversity. These techniques were developed in earlier work by Forest Research and EMERGE, examining soil nitrogen processes under conifer and broad-leaved forests in a non-polluted environment.

Forest Research joins SPIRE's strategy steering group

The aim of the Spatial Information Repository (SPIRE) programme is to enable the use of concise and consistent, up-to-date geographical information to support the objectives of the wider Defra family, including Forest Research. SPIRE is a three year strategic programme, which will implement a corporate spatial information repository and promote the use of geographic information as a corporate resource to support Defra's terrestrial and marine policies. In terms of storing data, SPIRE proposes a 'federated' approach, whereby some geographical information will be held in a central repository, with the rest distributed. Hence those areas of the Defra family which currently hold and manage spatial datasets locally may continue to do so, should they wish, making them available to a single, virtual, or logical, repository. Forest Research's Sam Evans has recently joined the strategy steering group, to help ensure that Forest Research is closely involved in the development and implementation of the project.

Developments in Countryside Recreation

Liz O'Brien, of Forest Research's Social Research Group, attended a meeting of the Countryside Recreation Network during the summer, held in the New Forest. Presentations were given on the formation of Natural England and the Progress Project. Natural England has a 'vesting date' of October 2006 when English Nature, Countryside Agency and Rural Development Service (RDS) will join together. The new organisation will cover all of the landscape, including urban areas and the marine environment.

The Progress project is focused on the New Forest and Fountainsbleau in France. This four-year project started in 2003. It explores how managers allow for recreation in ecologically sensitive areas. There are five partners in the project, including the Forestry Commission. The project will determine current levels of recreation use in each area, model its impacts and develop a strategy for recreation

Forthcoming Events

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

12 October – Research Strategy Workshop

www.forestresearch.gov.uk/fr/INFD-6GMD6N

13 and 14 October, Northwest England Woodfuel Workshop, Cumbria

One-day workshop and demonstration (repeated over 2 days) covering woodfuel production issues in the Northwest.

www.forestresearch.gov.uk/fr/INFD-6FUAV7

17-21 October, Bridging the gap, Alnarp, South Sweden

Policies and science as tools in implementing Sustainable Forest Management. Conference is part of European Commission (EC) COST action E25.

www.forestresearch.gov.uk/fr/INFD-6DKB36

18 October, Woodland for people, Newton

A seminar considering recent research into recreational use of woodland.

www.forestresearch.gov.uk/fr/INFD-6FTDTN

3 November – 10.30 – 11.30

Deadwoodology Down Under, Alice Holt Social Club Hut

A conservation biologist's perspective from the cool temperate production forests of Tasmania. Dr Simon Grove, Forestry Tasmania.

03-05 November, Cell wall macromolecules and reaction wood workshop, Montpellier, France

First workshop of COST Action E50.

<http://www.forestresearch.gov.uk/fr/INFD-6GDB4K>

25 November, Black Poplar Conservation Group Conference, Bucks

Reviewing progress in black poplar conservation and look at recent threats and management methods.

www.forestresearch.gov.uk/fr/INFD-6FRJCZ

New Publications

Forestry Commission Information Note: FCIN072 *Birch dieback in Scotland*. S Green. September 2005.

Forestry Commission Information Note: FCIN073 *Evaluating Biodiversity in Fragmented Landscapes: Principles*. K Watts, J W Humphrey, M Griffiths, C Quine and D Ray. September 2005.

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