

FR Eye

July 2006



CONTENTS

- Editorial
- CE Foreword
- New research liaison team
- Biomass Energy Centre unveiled
- Bosnian expedition
- Woodland birds meeting
- Woodfuel Research Centre
- Wild harvest from Scottish woodlands
- Symposium on Society & Research Management
- Tree breeding knowledge-share
- Successful germination for threatened plant
- Are you doing enough exercise?
- Grants for new woodland planting
- New Zealand news:
 - Closer links*
 - Cornish pathogen found*
- Royal Welsh Show
- Promoting Land Regeneration Research
- International soil expert meeting
- New publications
- Forthcoming events

EDITORIAL

Welcome to **FR Eye**, the revamped Forest Research newsletter! It looks quite different to previous editions, but still contains all the latest news and information about Forest Research.

We're hoping that the new design will make it easier to navigate to the particular articles that interest you — just click on the links from the contents list to go straight to the corresponding pages or, if you prefer, you can browse through one page at a time. In an effort to be environmentally friendly, we've designed the page layouts to be easier to read onscreen, saving you from printing it out each month and helping to reduce paper waste.

Over the next few issues, we'll be continuing to make a few tweaks here and there to try and make the newsletter as interesting, readable and informative as possible. Do let us know if you have any feedback on the new format — email us at newsletter@forestry.gsi.gov.uk

Joanne



Editors

Joanne Davies
Eleanor Harland
Kirsten Hutchison

Design

George Gate

FOREWORD

The arrival of our new-style FR Eye forms part of Forest Research's renewed focus on better interactions with the users of forestry and land use information. I welcome this opportunity to keep you, FR's key stakeholders, informed and encourage contact and feedback between us and the forestry/land use sectors. As we work with the Forestry Commission to deliver the FC Science and Innovation Strategy, we are taking up the challenge of making our research relevant to the needs of the forestry sector and better interaction will help us improve this.

Forestry is undergoing a surge in public interest relating to both climate change and the opportunities offered by woodfuel and biomass. FR is responding to this and has recently launched a virtual Woodfuel Research Centre; we have also been asked by Defra to host a virtual Biomass Energy Centre.

Another exciting development was the award of PSRE-3 funding to FR, enabling us to focus on exploitation of our intellectual property opportunities. We have also been awarded OECD fellowships for exchanges of researchers between FR and Scion/Ensis (New Zealand) and INRA (Bordeaux), and these opportunities allow us to better address the issues of forestry in Britain.

Some other recent highlights include the publication of the new "Blue Book" — Forest Mensuration: a handbook for practitioners, which will be presented by Robert Matthews and Ewan Mackie at the Royal Welsh Show.

I hope you will take a look at our newsletter and encourage you to pass on any comments about content or format to the editors.



Jim Lynch

STRENGTHENING LINKS BETWEEN RESEARCHER & FORESTER



Contact details

The RLOs can be contacted as follows:

Scotland: Kate Fielding

Northern Research Station, Roslin, Midlothian

0131 445 6973; e-mail: kate.fielding@forestry.gsi.gov.uk

Wales: Chris Jones

Talybont, Wales

01874 676444; e-mail: chris.jones@forestry.gsi.gov.uk

England: Susannah Kable

Alice Holt Lodge, near Farnham, Surrey

01420 526188; e-mail: susannah.kable@forestry.gsi.gov.uk

With the arrival of Susannah Kable, Forest Research now has a full complement of Research Liaison Officers (RLOs) across England, Scotland and Wales. The team forms part of the Commission's response to the Science & Innovation Strategy for British Forestry, as outlined by ministers in the UK Government and the devolved administrations last year.

The liaison team now comprises: Kate Fielding (Scotland), Chris Jones (Wales), and Susannah Kable (England). Their role is to improve communications between our researchers and those who use the research, both within the Forestry Commission and outside. The aim is to encourage and improve two-way communication, helping Forest Research to inform and explain new research and its practical uses, while also allowing end users to voice their requirements back to those who commission and carry out the research.

Jim Lynch, Forest Research's Chief Executive Officer, said: "I'm delighted that we now have this team in place to fulfil this key role for us. One of the perennial challenges for research organisations is to fully understand and fulfil what the end users of research results need, and to help them to take advantage of research results to achieve innovation. The Science & Innovation Strategy rightly focuses on the importance of this and challenges us to do better."

"I think it is important that we do this through individuals, because everything we know points to the efficacy of face-to-face contact in translating research findings into everyday practice, and these three will be in the front line of providing it and helping to bridge the gap between 'doer' and user."

BIOMASS ENERGY CENTRE UNVEILED

On behalf of the Department for Environment, Food and Rural Affairs (Defra), Forest Research has recently launched the new Biomass Energy Centre (BEC) to provide a central source of advice and guidance on a wide range of biomass fuels and conversion technologies. The Centre will act as a 'one-stop-shop', providing information and links to relevant specialised sources of advice, as necessary.

The launch comes as part of the Government's response to recommendations made by Defra's Biomass Task Force. Initially, the Centre will focus on woodfuel and some energy crops, drawing on results and knowledge accumulated over many years by staff from **FR's Woodfuel Research Centre**.

Future developments

Over the coming months, we'll be working to develop links with experts in other sectors of the bio-energy industry, such as waste management. We'll also be setting up a new information service, via a website and telephone helpline, dedicated to biomass heat and energy technologies and supply chains.

Specialist input

The BEC will be managed by the Forestry Commission, via Forest Research. A steering group, comprising representatives from the biomass industry and related sectors, will oversee its development and bring their own expertise to the initiative.

The services provided by the BEC will complement the functions of the National Non-Food Crops Centre (NFFCC), which promotes and advises on the whole range of non-food uses of crops. The NFFCC has particular expertise in the development of markets for farm crops, which includes their use for fuel and energy. The BEC and NFFCC will work closely together, with appropriate signposting to each other's activities.

More details

Further information on the Biomass Energy Centre is available from the Forest Research homepage. For specific queries, email Biomass.Centre@forestry.gsi.gov.uk or telephone Andy Hall on 07771 810 130 or Ian Tubby on 01420 526227.



BOSNIAN EXPEDITION

During March and April, Vanesa Castan Broto undertook a six-week fieldtrip to Tuzla in Bosnia and Herzegovina as part of her Engineering Doctorate project on participatory approaches to sustainable land use. The work will also contribute to an EU Project: *Reintegration of coal ash disposal sites and mitigation of pollution in the West Balkan area*, known as RECOAL, in which the Social Research Group is participating. The project aims to develop solutions for reintegration of coal ash disposal sites.

During her stay, Vanesa had opportunity to talk to local people through an interpreter. She says: “People live around the disposal sites; they’re so close to them that you can’t think about developing solutions without involving the local communities. There are mixed feelings amongst the locals — the disposals sites remain a sensitive issue. The success of RECOAL depends on our ability to understand the local demands for the disposal sites.”



For Vanesa, the highlight of the trip was spending time with the people and experiencing Bosnian hospitality: “It was fascinating. We would sit in their homes for hours and they would bring Turkish coffee and traditional sweets while we were talking about their environment.”

Vanesa is currently working towards an engineering doctorate in Environmental Technology from the University of Surrey and in partnership with Forest Research, and is based at Alice Holt Lodge.

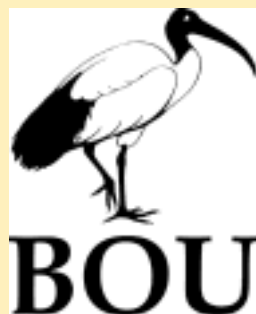
The disposal sites look like a moonscape, where nothing grows

WOODLAND BIRDS MEETING

Forest Research was well represented at a recent British Ornithologist's Union discussion meeting on '*Woodland Birds: their ecology and management*' held in early April at the University of Leicester. Bill Mason, Chris Quine and Robin Gill delivered talks describing forest management, stand management and herbivore impacts.

The conference also heard the results of a recently completed major resurvey of birds in broadleaved woodlands (further details of the Repeat Woodland Bird Survey can be found at www.forestry.gov.uk/woodlandbirdsurvey), and included a broad cross-section of talks outlining studies of particular woodland species. The proceedings of the conference will be published later this year in the journal *IBIS*.

Chris Quine



WOODFUEL RESEARCH CENTRE

Forest Research has created a Woodfuel Research Centre to integrate the activity of various project teams investigating aspects of the woodfuel supply chain, particularly in the economic and environmental areas. An ultimate aim is to provide results able to assist the establishment of woodfuel supply chains throughout the UK.

Over recent years, the number of woodfuel research projects commissioned by the FC via CFS has increased as interest in low-carbon fuel sources has grown. Current projects range from short, round wood drying trials to investigating possible routes for the disposal of ash from wood-fired boilers.

The Centre should provide greater focus for the research and improve communication between the researchers and their customers. This is an internal structure and is in addition to the separate **Biomass Energy Centre**.

For specific enquiries, contact:

- ▶ Andy Hall on 07771 810130
- ▶ Ian Tubby on 01420 526227

WILD HARVESTS FROM SCOTTISH WOODLANDS

In early May, the Forestry Commission, the US Forest Service, Scottish Enterprise and the Scottish Forestry Trust held a joint seminar to launch a new publication called: *Wild Harvests from Scottish Woodlands: Social, cultural and economic values of contemporary non-timber forest products*.

The report outlines the findings of a recent research project into non-timber forest products (NTFPs) and describes how, for many Scottish people, collecting NTFPs is a source of joy and satisfaction. Several gatherer profiles are included in the report – from a member of the House of Lords in his castle to a biology teacher on the outskirts of Dumfries – emphasising that although collection of NTFPs is often uneconomical in commercial terms, it can be of vast importance for the personal and cultural identity, social cohesion, public health and happiness of people from a broad range of socio-economic backgrounds. The authors propose that there is potential for more-active management of NTFPs in public and private woodlands, and put forward a number of recommendations for policy, practice and future research.

The report can be accessed at

www.forestresearch.gov.uk/website/forestresearch.nsf/ByUnique/INFD-5WBLHH

The seminar, which was attended by over 80 policy makers, land managers, gatherers and non-timber forest product enterprises, went on to explore how best to develop the non-timber forest product sector in Scotland.

The following link provides a summary of the seminar:

www.forestharvest.org.uk/WH_seminar_report.htm

Suzanne Martin



12TH INTERNATIONAL SYMPOSIUM ON SOCIETY AND RESOURCE MANAGEMENT (ISSRM)

In early June, Liz O'Brien went to Canada to attend the 12th International Symposium on Society and Resource Management (ISSRM). The event is held each year by the International Association for Society and Natural Resources and forms the largest gathering of social scientists and natural resource managers worldwide.

Liz represented Forest Research at the event and gave a presentation about the impact that urban woods in London have on the community, entitled: 'Trees and woods in inner London: residents from two social housing estates and their perspectives on Peabody Hill Wood'.

Liz said: "It was a great opportunity to meet and talk to such a diverse range of scientists from across the world – from psychologists to economists, geographers to sociologists."

The conference covered a range of themes, including the social and cultural values of places, collaborative management, sustainable land use and community participation.

Finding out about research on collaborative management was particularly useful for a new project on collaborative deer management that the social and economic research group (SERG) and ecology division are working on with a range of external partners, funded by the Royal Economy and Land Use (RELU) research programme.



TREE BREEDING KNOWLEDGE-SHARE

A new, four-year European Union project has recently gained budget approval from Brussels to create a central, virtual knowledge centre on tree breeding for Europe. Called TreeBreedEx, the initiative aims to gather relevant information from across the EU into databases and best-practice manuals to provide a one-stop-shop for guidance on tree genotypes and breeding techniques.

In recent UK field trials, Hybrid Larch from Holland and Douglas Fir from France proved very successful in terms of adaptability and growth rate. Such information could be valuable to our European neighbours and one of the main goals of the project is to enable EU countries to share this sort of knowledge more easily. FR hopes to learn from the extensive marker-aided selection knowledge of the French and Germans, while offering access to its clone-replicated field marker-aided selection trials in return.

The project is to be co-ordinated by Luc Paques of the INRA (France's National Institute for Agricultural Research), while Forest Research's Steve Lee (Forest Management Division) will head up the tree breeding initiative for FR as well as running one of the six activities that make up the contract.

SUCCESSFUL GERMINATION FOR THREATENED PLANT

A recent success has been achieved in a Species Recovery Project in Perthshire. Small cow-wheat is a rare, annual woodland plant that has suffered a dramatic decline in recent years. It is a UK Biodiversity Action Plan (UK BAP) Priority species and has been identified as one of the top 10 species for action in Scotland in a recent review by Scottish Natural Heritage.

In 2005, Forest Research embarked on the project, in partnership with the UK BAP National Steering Group for small cow-wheat, with the aim to establish five populations of the species in an area of Scotland where it was once widespread. This was no easy task, since the plant has very specific site requirements and finding five suitable locations was difficult. At each site a mixture of seed from three donor populations was planted. It was important to sow the seed within a few days of collection — a challenge when some sites were more than 100 miles apart. All praise goes to Fraser McBirnie (TSU Newton) and Sarah Dalrymple (Research Student) for executing these tasks so well.

This spring, the hard work proved to be well worthwhile as we recorded germination at all five sites. At the first count, between 10% and 40% of the seed had germinated, with seeds from all three donor populations performing equally well. Further assessments later this year will establish growth performance. We're hoping this year's plants will set seed and that we'll be able to report a similar success next year.

Alice Broome



Photo courtesy Scottish Wildlife Trust

ARE YOU DOING ENOUGH EXERCISE?

A new social research project is underway to investigate how active we are and what stops us being more active. The research is being carried out to support a programme called Active England, funded by Sport England, which aims to encourage people to do more exercise in order to improve the nation's health and well-being. As part of the programme, the Forestry Commission, the National Forest and two community forests are creating trails and play areas for children and employing outreach workers to work with local communities.

At present, the Department of Health recommends we do at least 30 minutes of exercise five times a week. This may sound like a lot, but it doesn't necessarily have to be sport and can include anything that increases your breathing rate and heartbeat, such as domestic chores, gardening or walking.

Over the next three years, research will be carried out by Liz O'Brien, Jake Morris and Katherine King (Brighton University) to monitor and evaluate the habits of users and non-users at five different sites involved in the Active England project:

- ▶ Haldon (Devon)
- ▶ Bedgebury (Kent)
- ▶ Rosliston (Derbyshire)
- ▶ Greenwood Community Forest (Nottinghamshire)
- ▶ Great Western Community Forest (Wiltshire)

The project will investigate key under-represented groups within the community to identify what barriers stop them being more active and propose possible solutions.

Liz O'Brien





GRANTS FOR NEW WOODLAND PLANTING

A seminar was held in Inverness recently to give details of the Highland Locational Premium Scheme (HLPS), which awards grants for new planting proposals that will link up existing woodland areas. The aim is to help achieve a targeted expansion of Forest Habitat Networks (FHN) in the Highlands, using woodland 'stepping stones' to allow wildlife to disperse more widely. This will help improve forest diversity and biodiversity, and increase the ability of forest species and habitats to adapt to climatic changes.

Although the Scottish Forestry Grant Scheme (SFGS) has now closed, HLPS still enables applicants to receive a premium of up to £2,000 per qualifying hectare for new planting proposals that increase FHN connectivity.

FR has been using its range of landscape ecology models, called BEETLE (Biological and Environmental Evaluation Tools for Landscape Ecology), to evaluate new planting schemes in Highland Conservancy. It is hoped that this research will help to direct new planting and contribute to the development of robust forest habitat networks.

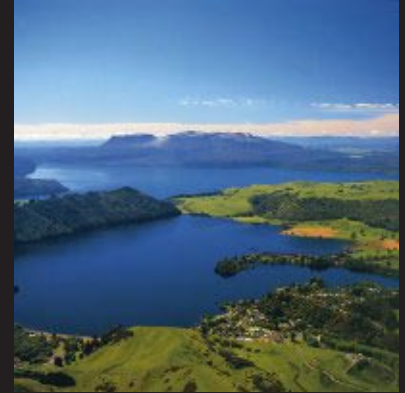
Darren Moseley

For further information, see www.forestresearch.gov.uk/habitatnetworks

NEW ZEALAND NEWS

CLOSER LINKS

Over the past few months, Forest Research has held discussions with Scion/Ensis (formerly the Forest Research Institute) in New Zealand with a view to developing more formal collaboration between the two organisations. As part of these talks, Hugh Evans recently met with Brian Richardson from Scion/Ensis at NRS to develop further a Memorandum of Understanding (MOU) between the two institutes. This was a very productive full day meeting and substantial progress was made in drafting the MOU and considering specific areas for collaboration relevant to the work of Tree Health Division and its equivalent department in Scion/Ensis: Forest Biosecurity & Protection. The MOU will be finalised and signed in the near future.



VISITING SCIENTIST FROM NEW ZEALAND

As part of the increased collaboration between our two institutes, two Economic Co-operation and Development (OECD) fellowships are set to take place between FR and Scion/Ensis scientists; the first of these commenced in May 2006 with the visit to FR of Dr Nod Kay from Scion/Ensis. Nod is based at Alice Holt and will work on aspects of island resource allocation in relation to colonisation of broadleaved trees by insect defoliators. The second fellowship will start later this year, when David Wainhouse visits Scion/Ensis.



CONT.

NEW ZEALAND NEWS (CONT.)

Cornish pathogen found in New Zealand

Finding a new species of invasive *Phytophthora*, *P. kernoviae*, attacking mature beech trees and rhododendron in woodlands in Cornwall was something of a dubious honour for FR scientists in November 2003. Its behaviour and genetic profile indicated it was a newly introduced pathogen, but it had not been found anywhere else in the world. However, this all changed with a recent press release from Biosecurity NZ, which announced that *P. kernoviae* had been discovered in New Zealand.

So far, the pathogen has only been found in two locations in New Zealand: Trounson Kauri Park (a forest reserve north of Auckland) and in a commercial orchard of cherimoya (*Annona cherimola*), also known as the custard apple. Work is now underway to find out



if the pathogen is widespread in New Zealand, and whether it is an introduced pathogen or a native species.

As a consequence of the *P. kernoviae* findings in New Zealand, FR pathologists at Alice Holt recently hosted visits from Dr Ross Beever, Landcare Research NZ, and Dr Beccy Ganley, Scion/Ensis. Both Ross and Beccy wanted to discuss current research at FR on *P. kernoviae* and *P. ramorum*, and to see the disease caused by *P. kernoviae* in Cornwall.

During her visit to Alice Holt, Beccy also had the opportunity for a field visit to look at red band needle blight on Corsican pine, and gave a presentation on her recent research into pitch canker in Spain.

Joan Webber

ROYAL WELSH SHOW

With summer now well underway, the annual Royal Welsh Show will soon be upon us again. This year the show runs from 24–27 July in Llanellwedd, Builth Wells, and will feature a wealth of agricultural and farming stands.

Forest Research will also be in attendance within the Forestry Commission pavilion and will be holding a number of presentations throughout the event:

- ▶ 26 July: Robert Matthews and Ewan Mackie will be presenting the newly published *Forest Mensuration: a handbook for practitioners*
- ▶ 27 July: Roger Trout will give a talk on his new book *FC Technical Guide: Forest fencing*
- ▶ 27 July: Ian Tubby will be giving a presentation on the new Biomass Energy Centre

The four-day event exhibits the quality of Welsh livestock and the craftsmanship of Welsh farmers, while emphasising the importance of the countryside to us all. It will be of particular interest to foresters, woodland owners and managers.

For further details, see:

www.forestresearch.gov.uk/fr/infd-6phhks

PROMOTING LAND REGENERATION RESEARCH



Forest Research's team of land regeneration experts went along to this year's Environmental Technologies (ET) exhibition at the NEC in Birmingham this May.

Running alongside the International Clean Up exhibition, the ET event is the UK's largest environmental technology, remediation and management services exhibition and attracts interest from a whole host of environmental and energy businesses.

Forest Research was there to inform industry visitors about the breadth of our research and promote our extensive capabilities in the land regeneration and urban greening sectors.

For information on FR's land regeneration research, visit www.forestresearch.gov.uk/landreclamation

FOREST RESEARCH HOSTS INTERNATIONAL SOIL EXPERT MEETING

This year it was the turn of Forest Research to host the Forest Soil Expert Panel (FSEP) meeting. The event took place at Alton House Hotel from 29–30 March and was the 13th gathering of the international group of soil specialists from across 20 countries.

Professor Peter Freer-Smith from Forest Research welcomed the group, amongst which were representatives from the European Commission (EC), the Program Coordinating Center (PCC), the Forest Soil Coordinating Center (FSCC), and the FSEP chairman, Professor E. Van Ranst. The UK delegates from Forest Research were Elena Vanguelova and Andy Moffat.

The meeting included discussions on future cooperation between the EC and ICP Forests, updates to the *Manual on Sampling and Analysis of Soil*, results from the 4th FSCC European Interlaboratory Comparison test, and progress of the EU Forest Focus Demonstration Project 'BioSoil'.



FSEP expressed its thanks to the UK for a well-organised meeting; the next FSEP meeting will be organised by the FSCC in 2007–2008.

For further information or to see the presentations from the meeting, visit the FSCC website: <http://fsc.inbo.be>

Elena Vanguelova

NEW PUBLICATIONS

Forest Mensuration: a handbook for practitioners

Robert Matthews and Ewan Mackie; April 2006, 330 pages (£24.00)

An essential, practice-based handbook designed to help those working in the timber trade and forestry understand how to measure trees and timber. Written for practitioners, researchers and students, this new edition cuts through some of the complexities of forest mensuration, providing a logical format and additional advice to help readers find the information they need more easily.



FC Technical Guide: Forest fencing

Roger Trout; April 2006, 50 pages (£7.50)

Essential guide for fencing in woods and forests and for specifications when applying for grant aid.

FCIN080: An update on nursery propagation and establishment best practice for larch in Britain

Mike Perks, Alan Harrison, Helen McKay and John Morgan; April 2006, 6 pages

Summarises the results of a series of experiments, including a synthesis of data from previous Forest Research publications, to provide information regarding recent advances in the propagation of hybrid larch using cutting production systems.



FCIN081: The principles of using woods for shelter

Barry Gardiner, Harriet Palmer and Max Hislop; April 2006, 8 pages

Describes the physical principles that determine the impact of woodland on shelter provision.

FCIN082: Choosing Provenance in Broadleaved Trees

Jason Hubert and Edward Cundall; May 2006, 12 pages

Reviews evidence from trials and provides recommendations and advice to growers seeking to select the best broadleaved provenances for British conditions.

For further details of these and other Forest Research publications, or to download PDFs, visit our website at www.forestresearch.gov.uk/publications

FORTHCOMING EVENTS

Full details of FR's events are available from the FR website: www.forestresearch.gov.uk/events

3–7 July 2006: *'Alien invasive species and international trade'*, Radom, Poland
Inaugural meeting of IUFRO Working Party S7.03.12 covering invasive organisms, including insects, pathogens and plants.

www.forestresearch.gov.uk/fr/INFD-6J7FHC

24–27 July 2006: Royal Welsh Show, Llanelwedd, Builth Wells, Powys
Annual farming and agriculture show ([see article](#)).

20 September 2006: *'Pests and diseases of amenity trees'*, Gloucestershire
Workshop to raise awareness of pests and diseases affecting amenity trees.

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