

Science and Business News: January 2006

Innovation funding success

Forest Research has won a £495K grant from the Office of Science and Technology's Public Sector Research Exploitation Fund. Part of the funding will be used to build Forest Research's expertise in managing our intellectual property. It will also enable us to intensify and extend our existing links with industry.

"We already enjoy good networks with many industrial groups and practitioners in forestry and the environmental industries. However, by focusing new efforts on innovation partnerships, we believe we will be able to significantly increase the impact of our work," noted Forest Research Chief Executive, Professor Jim Lynch. "I'm especially pleased that our bid received such strong support from the forestry and environmental industries. Strong industrial partnerships will help us gain the confidence needed to develop successful new products."

Forestry Commission Chairman Lord David Clark also welcomed the grant. "Innovation is critical for the future success of UK's woodlands and forest industries, and it is also critical for the continued growth of the UK's environmental industries. I'm delighted that Forest Research has been awarded this substantial help to bring the products of its world-class research and development work to the marketplace."

Head of South East Development Agency visits Alice Holt

Pam Alexander, the Chief Executive of the South East Regional Development Agency, (SEEDA) visited Alice Holt on 16 January, as part of a tour of Surrey's research and enterprise base, organised by the Surrey Economic Partnership.

SEEDA is currently revising its Regional Economic Strategy, and is particularly focusing on the role of the knowledge economy and sustainable resource management to support quality of life and economic success in the UK's economic powerhouse.

Sixteen delegates, representing leaders from a wide selection of the region's sustainable development bodies, visited Alice Holt. Presentations were made by Forest Research's Alison Melvin and Andy Moffat and by Alan Betts, the Forestry Commission Conservator for the South East region. These were followed by a lively debate about how best to embed 'sustainable prosperity' into regional economic strategies. A hot topic was the role that centres of excellence such as Forest Research could play in meeting the economic growth targets set out in the Regional Economic Strategy.

In addition to visiting Alice Holt, the delegates also visited: the Farnham campus of the University College for the Creative Arts, the UK headquarters of Philips, the electronics giant, and IDBS, a software company that has grown, in 15 years, from a 2-person start-up to a 160-staff international company based on the Guildford Research Park.



From right to left: Rob Douglas CBE, Acting Chair of the Surrey Economic Partnership and Deputy Chairman of SEEDA; Pam Alexander, Chief Executive of SEEDA; FR's Professor Jim Lynch; Ian Christie, Joint Head of Economic and Sustainable Resources at Surrey County Council; Nigel Horton-Baker, Chief Executive of Surrey Economic Partnership; and Alan Betts, Forestry Commission Conservator for SE England. The group is reviewing young conifers raised by FR for the International Conifer Conservation project.

Forest Research's Official Seed Testing Station to close

Forest Research's Official Seed Testing Station for tree species (OSTS) will be closing on 1 April 2006. The reasons for closure are as follows. The cost of tree seed testing carried out by Forest Research has traditionally been significantly subsidised by the Forestry Commission. In recent years the operating environment for seed testing has changed appreciably. New EU regulations, transposed into GB legislation through the Statutory Instrument (SI3026) on forest reproductive material, remove any obligation for provision of an Official Seed Testing Station and permit suppliers to test their own seed. For all these reasons the seed testing unit is no longer commercially viable.

The closure of the OSTs marks the end of a significant era at Alice Holt. A seed laboratory was first established here in the late 1940s and the OSTs has run continuously since 1973.



Pictures of the seed laboratories in November 1951. Probably taken to mark their elevation to the status of 'licensed' to the 'Official Seed Testing Station' at Cambridge under the Seeds Act of 1920!

Importantly, however, Forest Research's 'Seed and Seedling Biology research programme will continue. This programme aims to improve the reliability and success of all methods of woodland establishment from seed – whether it is via natural regeneration, direct sowing or nursery propagation. It will also continue to provide an important internal resource, ensuring that Forest Research's scientists sow the best quality seed into their research experiments.

Staff News

- Congratulations to Professor Roland Clift, a Member of the Advisory Committee on Forest Research, who received a CBE in 2006's New Year Honours, for services to the Environment. Roland established the Centre for Environmental Strategy (CES) at Surrey University in 1992, as a focus for multi-disciplinary work in Sustainable Development. His own research specialisation is Environmental Systems analysis, including Life Cycle Assessment and Industrial Ecology.
- Congratulations also to Forest Research staff Kirsten Wright and Sue Benham, in the Environmental and Human Sciences Division. Sue received a postgraduate certificate in Biological Recording & Species Identification from Birmingham University. Kirsten obtained a DTA scholarship to examine wetland restoration on brownfield sites, based at Reading University.
- Dr Alan Brewer will join Forest Research as Head of Empirical Modelling Unit within Biometrics Division at Alice Holt on 1 February. Alan's early career was spent as a biometrician working on tropical food crops, followed by a chillier sojourn in animal nutrition at the Rowett Research Institute. Alan next worked in the cocoa market, most recently as an econometrician at the International Cocoa Organization (ICCO), providing market forecasts, with particular focus on growth-yield models of cocoa production. Alan looks forward to transferring this expertise to modelling at Forest Research.



'Woodlands for Wales' Strategy meeting

The Woodlands for Wales Strategy is five years old. Forestry Commission Wales and the Welsh National Assembly are seeking feedback on how well it's being implemented. In January, stakeholders were invited to a meeting at Llandrindod Wells, to discuss progress. Staff from Forest Research were in attendance, in the shape of Chris Jones (Forest Research's Welsh Liaison Officer), Paul Tabbush (Environmental and Human Sciences Division), Amy Eycott and Kevin Watts (both Ecology Division).



Carwyn Jones the Welsh Assembly Minister for Environment, Planning and the Countryside.

The day was introduced by the Welsh Assembly Minister for Environment, Planning and the Countryside, Carwyn Jones. Delegates then broke into groups, to discuss the progress achieved against the fifteen specific objectives of the Strategy. Forest Research staff were involved in groups addressing

new woodland creation, woodlands in landscape, woodlands for disadvantaged communities and novel silviculture. After lunch, stakeholders reconvened to discuss where the strategy could be progressed. Findings will be presented shortly, by FC Wales.

Collaboration with English Heritage

English Heritage staff visited the Alice Holt Forest in January, with Forest Research's woodland geoarchaeologist Peter Crow, to recover the first set of samples from a joint study of the stability of buried artefacts. The study is examining the rates of artefact decay in woodland soils using buried reference materials and environmental data. Such information may allow archaeologists to examine a simple soil solution and potentially predict what types of archaeological materials may survive on a site, or what may have been lost. In turn, this would guide the prioritisation of costly excavations and aid site interpretation.

"Forest Research's work in this area has been ongoing since 1997 and is showing changes in the weathering rates of buried reference minerals due to both sites and individual soil horizons. We are also having success at predicting weathering rates by using soil solution chemistry and geochemical modelling software. The intensive environmental monitoring work which Forest Research undertakes makes our field sites ideal locations for other monitoring experiments, since so much is known about them," commented Peter. "It seemed logical to offer English Heritage the chance to use Forest Research's monitoring sites as an opportunity to study rates of degradation for buried archaeological materials."



Karla Graham from English Heritage, burying cotton samples at Alice Holt.



A net bag containing horn and antler samples, ready for burial.

Conservators from English Heritage's archaeological science department agreed. They have since buried replicated samples of iron, copper, horn, antler and cotton at the Alice Holt monitoring site. The first set of samples have just been recovered. They showed visible differences between different soil horizons. English Heritage staff will now analyse the results in detail. "If the feasibility study proves successful, we hope to be able to further develop Forest Research's collaboration with English Heritage. "We are excited about the potential which these results may have, to explain and predict the changes to artefacts buried in woodland," added Peter

Further information on our work in this area is detailed at: www.forestresearch.gov.uk/heritage

Horse chestnut bleeding canker: new website resources

Forest Research has published new [website](#) pages with in-depth information about this disease. The website details the extent of the disease, its symptoms and advice on managing the disease.

The problem of bleeding canker on horse chestnut is now very widespread. Forest Research's pathologists estimate that between 35,000 and 50,000 trees are affected. Prior to 2000, Forest Research's Disease Diagnostic and Advisory Service would have two or three enquiries per year about bleeding cankers on horse chestnut, from the south of England. These numbers have now risen to 80-100 enquiries per year and the problem now occurs all over the country, as far north as Scotland. Affected trees are often in parks, avenues and public gardens and some are important key features in historic gardens and landmarks.



Stem bleeding on Horse chestnut in the UK.

Pathologists at Forest Research are exploring the reasons for the explosion in cases of bleeding canker. It seems likely that a previously unrecognised agent (a bacterium) is the causal agent, and work is currently underway to confirm this and find out more about the disease.

A new website to promote development of woodland recreation

Suzanne Martin (Environmental and Human Sciences Division) has been helping organisations in the East of England to develop a new website, to provide woodland managers and others with guidance on how to develop woodlands for recreation. It details when and how to seek professional advice and demonstrates how recreation, leisure and tourism activities can provide a sustainable financial return alongside other woodland priorities such as timber production and biodiversity.



Ian Plowman, Danny Crates, Pat Holtom, Steve Scott and pupils from Bosmere Primary School.

The website, www.naturallyactive.org.uk was launched on 18 January at Thetford Forest. The venture is a collaboration between the Forestry Commission, the East of England Development Agency (EEDA), the East of England Tourist Board and Sport England East. To underline the opportunities to use woodland for sport, Danny Crates, a paralympic Gold Medal winning athlete attended the launch, with local primary school children.

New land regeneration website

Another new website, www.forestry.gov.uk/landregeneration, has just been launched for the Forestry Commission by Forest Research. It gives comprehensible information about establishing green spacing in the urban and periurban environment. This new website will be featured in more detail in next month's newsletter.

Publications

Forest Research Annual Report and Accounts 2004–2005 was laid before Parliament in January and will be available from early February in hard copy and on FR's website.

FCIN079 *Use of Sludges and Composts in Forestry*. A Moffat, Forest Research. January 2006.

FCTN010 *Extraction Route Trials on Sensitive Sites*. C J Saunders, D Ireland, Forest Research. December 2005.

FCTN011 *Protecting the Environment during Mechanised Harvesting Operations*. I Murgatroyd, C Saunders, Forest Research. December 2005.

Taking action on Sustainable Development

One of the commitments made under the government's Sustainable Development strategy is for government Departments to develop, and report on, Sustainable Development Action Plans for their Department. Work is now underway to develop a draft Framework covering Forest Research, FC England and the Forestry Commission's other GB-wise activities (such as Plant Health). "This is really about how we manage ourselves and understanding the priorities for the different parts of the Forestry Commission," noted Marcus Sangster, from the Forestry Commission's Corporate Forestry Services. "There are existing areas of good and excellent practice, but we want to make these much more widespread."

Meanwhile, at Forest Research's Northern Research Station, a grassroots group has been formed by staff who are keen to improve NRS' environmental footprint. "Sustainable Development is obviously at the heart of the Forestry Commission's work, yet we aren't always well informed about the environmental impact of our own day-to-day management decision-making, or how improvements can best be taken forward," explained Steve Lee, of Forest Management Division. "We're starting with a fact-finding assessment of NRS' current resource usage, from which we'll be better equipped to assess and prioritise the areas most likely to yield improvements."

Forthcoming Events

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

24 February, NRS Research Update Seminar

The Scottish Native Woodlands Survey Pilot Project.

1–3 March, Manchester - Woodland Birds: their ecology & management

British Ornithologists' Union – Annual Spring Conference.

21 March, Wendover Woods, Buckinghamshire – Grey squirrel control day

Explaining Forestry Commission squirrel policy, critical threat criterion and demonstrations of acceptable approved control methods. Forestry Commission, England.

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