

**17<sup>th</sup> November 2011**  
***Peregrine Suite, Macdonald Aviemore Highland Resort***  
***Aviemore, PH22 1PN.***



Every year Forest Research produces many new pieces of work. Some of these are the results of long term experiment whilst others are responses to more immediate issues. However, all are intended to support policy makers and practitioners across the forest industry and those with an interest in forests. This Update Seminar aims to provide the attendee with an overview of a number of different current topics.

Forest Research has been supporting the industry since the early days of the Forestry Commission and has a wealth of information available for dissemination. Much of this information can be found on the website [www.forestry.gov.uk/forestresearch](http://www.forestry.gov.uk/forestresearch) . Information is disseminated through the website, publications, newsletters, seminars, workshops and direct contact with Forest Research staff. For assistance or for more information please feel free to contact Steve Penny, Research Liaison Officer (Scotland) [steve.penny@forestry.gsi.gov.uk](mailto:steve.penny@forestry.gsi.gov.uk) or 0780 890 0331

Whilst it is up to each delegate to make an assessment in relation to their own personal development, it is reasonable for ICF Professional Members to allocate 5-6 hours CPD when attending this event.

If you would like an email notification of announced events, please send your contact details to: [fr.events@forestry.gsi.gov.uk](mailto:fr.events@forestry.gsi.gov.uk)

The following organisations have helped by sending out seminar details to their members:



Royal Scottish Forestry Society  
Patron: Her Majesty The Queen



## Seminar Programme

**Chair- Dr James Pendlebury, Chief Executive, Forest Research**

**0930-0950** Coffee and registration

**0950-1000** **Introduction**

*Steve Penny, Research Liaison Officer (Scotland)*

**1000-1030** **Emerging pests and diseases - A global crisis ?**

There has been a recent, unprecedented rise in numbers of alien pests and pathogens emerging in natural and planted forest ecosystems in all parts of the globe. Is this linked to the ever burgeoning international trade in plant material? Presenting examples of emerging pests and pathogens from a number of different countries, this talk aims to generate discussion on what is deemed by many to be a new 'global crisis'.

*Sarah Green, Forest Research*

**1030-1100** **Dothistroma Needle Blight**

In Britain Dothistroma needle blight (also known as red band needle blight) is caused by the fungus Dothistroma septosporum. It has been found on a range of conifer species in Great Britain but Pine species are by far the most common hosts, with Corsican pine, lodgepole pine and Scots pine all now affected. Between 2006 and 2010 the disease was found in over 500 stands of pine, and in 2010 it was also found infecting pine plants in three forestry nurseries in Scotland. This presentation will provide an update on this disease which has significant implications for forestry in Scotland.

*Anna Brown, Forest Research*

**1100-1130** **Pine-tree lappet moth future climate evaluation - analysis of probabilistic climate projections data from the UKCP09 weather generator**

Only recently, pine-tree lappet moth (*Denrolimus pini*) was discovered in Scots pine forest in north-east Scotland and subsequent research has shown that a small breeding population has been established. Duncan will present a climatic study of the region in Scotland where the population has been found, focusing on recent changes in the climate and examining the projected decadal changes over the coming century. He will show how the projected changes in climate might improve conditions for pine-tree lappet moth in eastern Scotland and compare these to contemporary climatic conditions in Poland where lappet moth is a serious forest pest. The results show an increasing likelihood of suitable summer climatic conditions for pine-tree lappet moth outbreaks in Scotland in future decades.

*Duncan Ray, Forest Research*

**1130-1145** Short break (tea/coffee available)

**1145-1215** **UK National Ecosystem Assessment - A brief introduction**

The UK NEA represented the first analysis of the benefits the UK's natural environment provides to society and our continuing prosperity. As a result, the concept of 'ecosystem services' is becoming more widely discussed and may be

influential in future land use decisions. Woodlands were one of the eight ecosystems that were assessed - the findings and future scope will be briefly summarised.

*Chris Quine, Forest Research*

## **1215-1245 Forest Operations On Steep Terrain (FOST)**

The management of harvesting and ground preparation on steep terrain is of significant importance to the industry. With harvesting operations increasing and more steep terrain being brought into production the industry needs to review the machinery, method and techniques to remove the timber safely. This in turn leads to the major issues of ground preparation; how can it be undertaken, with particular reference to machinery selection method and techniques. This presentation will give information on the investigations/work already undertaken by the industry, the current situation and potential future developments.

*Colin Saunders, Technical Development, Forest Research*

## **1245-1255 Past and present research into *Rhododendron ponticum* control.**

Forest Research has been actively involved in *Rhododendron ponticum* management and control since the 1920's. During this time we have seen many changes in availability of approved pesticides, improvements in application techniques and modifications in machines and accessibility for clearance operations. More recently *Rhododendron ponticum* has been identified as one of the main hosts for phytophthora pathogens, and will be subject to close scrutiny under the newly introduced Wildlife & Natural Environment (Scotland) Act 2011. In the past we have successfully provided the industry with practical advice on each new challenge, and our aim is to continue to do so into the future. (This is a short session only).

*Colin Edwards, Forest Research*

## **1300-1345 Lunch**

## **1345-1430 Forestry and water - An update on water services and disbenefits**

Research continues to improve our understanding of the interactions between woodland and water to help develop forestry practices and guide future policy to secure water services and minimise disbenefits. This presentation will provide an update on a number of water issues, including diffuse pollution and flood risk management.

*Tom Nisbet, Forest Research*

## **1430-1500 Reviewing the human dimensions of wildlife management and recreation.**

Recreating in natural areas, including woodlands and forests, provides substantial health and wellbeing benefits to society. However, recreational activities, which range from walking to driving off-road vehicles, can also impact directly and indirectly on wildlife. An appreciation of the substantial social and cultural differences between recreationalists and their activities is

vital if land managers are to deliver social, economic and environmental benefits and provide informed and legitimate management responses. We conducted an extensive review of the recreation ecology literature on disturbance in woodlands and forests in an attempt to answer a number of important social scientific questions, for example, what affects recreational users' behaviour in natural areas (e.g. knowledge, signs and interpretation)? Some results will be presented.

*Mariella Marzano, Forest Research*

**1500-1515** (tea/coffee available)

**1515-1545** **ESC evidence for FC Scotland's climate change risk assessment of the national forest estate**

Ecological Site Classification (ESC) is a decision support system (DSS) helping planners to select ecologically-suited species to sites, and can be used to assess changes to this suitability into the future (using UKCIP climate data). This ESC output can then be used to help provide evidence for changes to the national forest estate and Forestry Commission Scotland's climate change risk assessment.

*Phil Taylor, Forest Research*

**1545-1615** **Quantifying species growth responses to climate change.**

Trees increase or decrease their diameter growth annually, reflecting variations in growing conditions due to alterations in, for example, climate or management. These changes in growth are retained within the tree as an annual ring pattern; which can be measured using the technique of dendrochronology. This talk will explore the role of this technique in providing growth information for commercial species that could be used to suggest future responses in light of projected future climate trends.

*Colin Edwards/Bruce Nicoll, Forest Research*

**1615** **Closing remarks and depart**

## REGISTRATION FORM

**Name:**

**Organisation:**

**Address:**

**Telephone:**

**E-mail:**

**Dietary requirements (if any):**

**COSTINGS: £40 per person**

**Payment by Cheque Please**

**[FC Staff can give details of the cost centre, job code and account number to jv the costs.]**

**Cost Centre:**

**Job No.:**

**Account No.:**

Please return this form by e-mail, fax or post, by Thursday 10<sup>th</sup> November 2011, to:

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