.

Forestry and Wood Update

November 2007 Volume 7 Number 11

## CONTENTS

[ForestEnergy 2007 seminar 1](#_Toc182105982)

[Wood biomass workshop extended to two days 2](#_Toc182105983)

[Foliage from Forests - a growing opportunity 3](#_Toc182105984)

[Irish squirrel survey 2007 3](#_Toc182105985)

[Conservation and potential of Ireland’s forest genetic resources highlighted in COFORD report 4](#_Toc182105986)

[Published papers 4](#_Toc182105987)

[InnovaWood news 5](#_Toc182105988)

[Carbon corner 6](#_Toc182105989)

[Post-graduate studentships: Improving the uniformity and quality of broadleaf planting stock 6](#_Toc182105990)

[Vacancy: national expert seconded to Eurostat's Forestry statistics 7](#_Toc182105991)

[Forest landscape and design courses to be take place in Athlone 7](#_Toc182105992)

[The Environmental Protection Agency - Climate Change Lecture Series 7](#_Toc182105993)

[Ash Dieback in Denmark 8](#_Toc182105994)

[All Island Conference on Loss of Biodiversity in Ireland 9](#_Toc182105995)

[Forest Technology Platform Conference to be held in Slovenia 10](#_Toc182105996)

COFORD

Arena House

Arena Road

Sandyford

Dublin 18

Ireland

Tel: +353 - 1 - 2130725

Fax: +353 - 1 - 2130611

Email: info@coford.ie

Web: [www.coford.ie](http://www.coford.ie)

COFORD’s activities are funded by the Irish Government under the National Development Plan, 2000-2006.

This newsletter was compiled and edited by Lauren MacLennan,
Technology Transfer Co-ordinator, COFORD

Email: lauren.maclennan@coford.ie

To unsubscribe to this newsletter, reply to info@coford.ie with the word 'unsubscribe' in the subject field.

# ForestEnergy 2007 seminar

COFORD will be hosting a seminar to present the findings of the ForestEnergy 2007 programme. Entitled ***Quality-based forest fuel supply chains – the ForestEnergy 2007 programme***, the event will take place on 12 December 2007 at the Mullingar Park Hotel, Co Westmeath.

COFORD’s ForestEnergy2006 programme, held in collaboration with Teagasc, focussed on first thinning for the production of wood chip fuel. Detailed results of all aspects of the programme are available in the COFORD report [*Harvesting and Processing Forest Biomass for Energy Production in Ireland. The ForestEnergy 2006 programme*](http://www.coford.ie/iopen24/pub/product_info.php?cPath=1175&products_id=966605).

ForestEnergy2007 builds on the 2006 programme and addresses how to harvest and store wood fuel of acceptable moisture content, for sale as wood chip and firewood. The programme encompasses wood chip and firewood harvesting, processing, stacking and storage trials, as well as research on moisture content variation in standing trees over the year.

Storage trials examining the length of time required to dry wood to acceptable moisture content are in place at forest sites and at a specialised experiment site where moisture loss is being determined by using large metal bins placed on weigh cells. Drying rate is being examined in relation to measured meteorological variables at the site. This will provide a better insight into the length of drying required to reach specified end use requirements, using different assortments and covering treatments. In the trial, the wood stored in bins is being compared with the same assortments stored in the forest in large stacks. This is ongoing research with preliminary results now becoming available. The seminar will showcase the main findings of the ForestEnergy 2007 programme, as well as the latest information from Sustainable Energy Ireland on new supports for bioenergy implementation in Ireland. The programme includes a visit to the wood storage trial site as well as the following presentations:

* Overview of the ForestEnergy 2007 programme - *Tom Kent, Waterford Institute of Technology*
* Harvesting and chipping systems - results from the 2007 trials - *Pieter D Kofman, Danish Forestry Extension*
* Moisture changes during on-site seasoning in 2007 - *Enda Coates, Waterford Institute of Technology*
* Preliminary results of physical and chemical analysis of wood fuel - *Sean Kelly and Sarah Cooley, Waterford Institute of Technology*
* Preliminary results of the effects of storage on the moisture content of roundwood - *Pieter D. Kofman, Danish Forestry Extension*
* New supports for bioenergy implementation in Ireland - *Pearse Buckley, Sustainable Energy Ireland*
* At 14:00 depart for wood storage trial at Rochfordbridge. Chipping of the contents of one bin by Musmax drum chipper from Clare Wood Chip Ltd into a Bord na Móna walking floor truck.

 [Back to List of Contents](#_CONTENTS)

# Wood biomass workshop extended to two days

Due to popular demand, and the level of interest in this important sector, COFORD's wood biomass harvesting and supply chain workshop has been extended to two days. Opportunities will also be provided for people who have already attended the one-day version, to attend day two only.

The programme for day 1 remains:

* Introduction to wood biomass
* Overview of supply chain
* Wood biomass harvesting, transport and storage
* The Ten Commandments of wood biomass usage
* Quantification (conversion factors such as tonnes, m3, kWhrs, GJ, etc.)
* Irish and Danish case studies
* Biomass supply contract preparation

The programme for day 2 is:

* Overview of other biofuels, such as willow short rotation coppice and miscanthus
* Silviculture of willow short rotation coppice
* Establishment and harvesting of willow short rotation coppice
* Production of wood pellets
* Quality requirements for wood pellets
* Delivery of wood pellets
* Boiler types
* Economic appraisal of wood boiler solutions

The first of these workshops will take place on 10-11 December at Mullingar, with the second day repeated on 13 December. If you would like to attend, please email: info@coford.ie or phone 01-2130725. The cost is €250 for the two-day option, and €100 for the day-2 only option. Please note that classes are restricted to 20 participants so it is essential to book as soon as possible.

 [Back to List of Contents](#_CONTENTS)

# Foliage from Forests - a growing opportunity

## Forest foliage business predicted to flourish

Speakers at the 2-day conference arranged by COFORD have shown that there are significant opportunities for new business in the forest foliage sector in Ireland. Research currently underway by Forest Produce Limited, a Kerry-based company, in collaboration with Galway Mayo Institute of Technology has shown that some commercial forests can produce sizable quantities of foliage, bringing a return to the grower at a far earlier stage in the crop cycle than would otherwise be the case. One of the speakers at the conference, Amy Costello of GMIT, estimated that incomes of €400/ha can be achieved over a period of 2 to 3 years in commercial tree crops such as western hemlock, larch and others. Interest is also growing in the use of native species such as birch and alder for foliage production.

John Fennessy of COFORD, who manages national research and development in forest foliage stated: The research that COFORD is funding and the work of companies such as West Coast Forestry, which is now supplying an annual export market of 400,000 stems of lodgepole pine to the UK market, shows the very significant potential that exists for forest foliage.

COFORD has produced a practical information note on forest foliage in its COFORD Connects series, as well as a report on Markets for non-wood forest products, both of which can be downloaded from www.coford.ie or ordered directly from COFORD (Tel: 01-2130725; email: info@coford.ie). For further information please contact John Fennessy (01-2130725 or 086 3811891 or email: john.fennessy@coford.ie).

 [Back to List of Contents](#_CONTENTS)

# Irish squirrel survey 2007

The Irish Squirrel Survey 2007, funded by COFORD, has revealed a worrying increase in the numbers of grey squirrels in Ireland, while our native red squirrel is now extinct in several counties.

Distribution maps based on the survey show that the red squirrel can still be found in the majority of counties and remains common in the western half of Ireland. Though it is also still found in many areas of the east and north, in many cases its habitat is now shared with the grey squirrel. Unfortunately, it is now probably extinct in Meath and Westmeath, and has become particularly rare in Kilkenny, Carlow and Louth.

Grey squirrels meanwhile now occupy over half the land area of Ireland, and have spread into 26 counties (the exceptions being Sligo, Mayo, Galway, Clare, Kerry and Cork). Most significant is its recent spread into the counties of Antrim, Wicklow and Wexford, which were predominantly devoid of greys only 10 years ago. Small colonies of grey squirrels have also been confirmed west of the River Shannon.

The survey lists a number of recommendations for red squirrel conservation and grey squirrel management in the future, including; selective management of coniferous forests which support good populations of red squirrels, targeted grey squirrel control at the frontiers of their distribution to minimise further spread, supplementary feeding of red squirrel populations where appropriate and translocations of reds into normally inaccessible woodlands. All of these options are currently being assessed as part of a range of projects, and hopefully an integrated plan for the protection of the Irish red squirrel and the management of the grey will be put into place in the near future.

*The results of the survey on the present distribution of red and grey squirrels on the island of Ireland were launched on 9 October in a report published by COFORD, by Minister Mary Wallace, T.D., Minister for Forestry, at the National Botanic Gardens Dublin. The report* ***The Irish Squirrel Survey 2007*** *- Michael Carey, Geoff Hamilton, Alan Poole and Colin Lawton can be ordered from COFORD.*

 [Back to List of Contents](#_CONTENTS)

# Conservation and potential of Ireland’s forest genetic resources highlighted in COFORD report

Minister of State Mary Wallace TD launched a COFORD report on the conservation and development of Ireland’s forest genetic resources at the National Botanic Gardens, Glasnevin, on 9 October. The report is entitled ***Sustaining and Developing Ireland’s Forest Genetic Resources - An Outline Strategy*** by Gerard Cahalane, Pat Doody, Gerry Douglas, John Fennessy, Conor O'Reilly, Alistair Pfeifer.

Speaking at the launch, Minister Wallace said “Forest genetic resources are fundamental to everything in commercial forestry in Ireland and in conserving our native trees and forests. Good quality genetic material is vital for the grower and landowner – it provides the right start for farmers and others getting involved in forestry – and will bring rewards in higher yields and better quality timber”.

John Fennessy, research manager COFORD, one of the report’s authors, outlined the objectives of the report and went on to say “The report presents a framework towards self sufficiency in reproductive material as well as a blueprint on how to develop well adapted, high quality forest reproductive material to meet current needs of the forestry and related sectors, taking into account future climate change scenarios”.

The report contains a number of recommendations including the establishment of a National Forest Genetic Resources Advisory Group, the targeting of a prioritised list of tree species for investment in improvement, and that a forest genetic resources national conservation strategy be developed to include both native and non-native species.

 [Back to List of Contents](#_CONTENTS)

# Published papers

## CO2 balance of boreal, temperate, and tropical forests derived from a global database

S. Luyssaert, I. Inglima, M. Jung, A. D. Richardson, M. Reichstein, D. Papale, S. L. Piao, E-D. Schulze, I. Wingate, G. Matteucci, L. Aragao, M. Aubinet, C. Beer , C. Bernhofer, **K. G. Black**, D. Bonal, J-M. Bonnefond, J. Chambers, P. Ciais, B. Cook, K . J . Davis, A. J. Dolman, B. Gielen, M. Goulden, J. Grace, A. Granier, A. Grelle, T. Griffis, T. Grunwald, G. Guidolott, P. J. Hanson, R. Harding, D. Y. Hollinger, L. R. Hutyra, P. Kolari, B. Kruijt, W. Kutsch, F. Lagergren, T. Laurila, B. E . Law, G. Le Maire, A. Lindroth, D. Loustau, Y. Malhi, J. Mateus, M. Migliavacca, L. Misson, L. Montagnani, J . Moncrieff, E. Moors, J. W. Munger, E. Nikinmaa, S. V. Ollinger, G. Pita, C. Rebmann, O. Roupsard, N. Saigusa, M. J. Sanz, G. Seufert, C. Sierra, M-L. Smith, J. Tang, R. Valentini, T. Vesala and I. A. Janssens.

*Global Change Biology (2007) 13, 1–29.*

**Abstract**: Terrestrial ecosystems sequester 2.1 Pg of atmospheric carbon annually. A large amount of the terrestrial sink is realized by forests. However, considerable uncertainties remain regarding the fate of this carbon over both short and long timescales. Relevant data to address these uncertainties are being collected at many sites around the world, but syntheses of these data are still sparse. To facilitate future synthesis activities, we have assembled a comprehensive global database for forest ecosystems, which includes carbon budget variables (fluxes and stocks), ecosystem traits (e.g. leaf area index, age), as well as ancillary site information such as management regime, climate, and soil characteristics. This publicly available database can be used to quantify global, regional or biome-specific carbon budgets; to re-examine established relationships; to test emerging hypotheses about ecosystem functioning [e.g. a constant net ecosystem production (NEP) to gross primary production (GPP) ratio]; and as benchmarks for model evaluations. In this paper, we present the first analysis of this database. We discuss the climatic influences on GPP, net primary production (NPP) and NEP and present the CO2 balances for boreal, temperate, and tropical forest biomes based on micrometeorological, ecophysiological, and biometric flux and inventory estimates. Globally, GPP of forests benefited from higher temperatures and precipitation whereas NPP saturated above either a threshold of 1500 mm precipitation or a mean annual temperature of 10°C. The global pattern in NEP was insensitive to climate and is hypothesized to be mainly determined by nonclimatic conditions such as successional stage, management, site history, and site disturbance. In all biomes, closing the CO2 balance required the introduction of substantial biome-specific closure terms. Nonclosure was taken as an indication that respiratory processes, advection, and non-CO2 carbon fluxes are not presently being adequately accounted for.

Keywords: carbon cycle, CO2, forest ecosystems, global database, gross primary productivity, net ecosystem productivity, net primary productivity

For further information, contact Dr Kevin Black – email: kevin.black@ucd.ie

## Early performance of native birch (Betula spp.) planted on cutaway peatlands: influence of species, stock types and seedlings size

**Florence Renou**, Una Scallan, Michael Keane and E.P. Farrell

*European Journal of Forest Research (2007) Vol. 124, No. 4, 545-554.*

**Abstract**: The poor reputation of birch in Ireland is gradually changing, and the interest shown in it by foresters is geowing, as is the recognition of the many advantages that this genus offers, especially from an afforestation and ecosystem development point of view. The potential of native birch species was investigated on indistrial cutaway peatlands in the Irish midlands. Field experiments were established to evaluate differences (in terms of survival, growth attributes and form) between *B. pendula* and *B. pubescens*, between bare-root and container planting, and between small and medium size seedlings. After five growing seasons, *B. pendula* was found to be the superior species especially on well drained and shallow peat sites. Bare-root *B. pendula* will grow faster with reasonable form but containerised birch may be favoured on more difficult sites (with deeper and wetter peat). Larger seedlings performed better, regardless of species. This study demonstrated good growth potential for planted birch on cutaway peatlands and that this species should be integrated in further planting programmes.

Keywords: Afforestation, cutaway peatland, *Betula pendula*, *Betula pubescen*s, bare-root, containerised, seedling size.

For further information, contact Florence Renou – email: florence.renou@ucd.ie

[Back to List of Contents](#_CONTENTS)

# InnovaWood news

The European Commission has launched a call for proposals under the 'Capacities' programme of the Seventh Framework Programme (FP7). The call refers to aims to provide support to the bottom up policy co-ordination initiatives undertaken by several countries and regions.

Proposals should address the following policy areas:

* developing an appropriate research and development (R&D) policy mix;
* creating appropriate framework conditions for stimulating private research and development (R&D) investment;
* improving the cooperation and transfer of technologies between public research institutes and private enterprises, including through developing public-private partnerships;
* developing and making better use of incentives to leverage private R&D;
* modernising the management of research institutions and universities;
* enhancing the career development and the European, international as well as inter-sectoral mobility of R&D personnel.

More about this and other initiatives across Europe relevant to the forestry-wood sector in the news supplement from InnovaWood. [Click here to read more](http://www.coford.ie/iopen24/pub/pub/newsletter/Volume7/IWNovember2007.pdf).

[Back to List of Contents](#_CONTENTS)

# Carbon corner

## The answer lies in the soil

So what is the question that the title poses? It could be any number of things – but in terms of climate change the question might be: besides forest growth, what is the most important factor in determining to the extent to which afforestation can contribute to climate change mitigation?

The question is also easily answered by comparing the global scale of carbon storage in soils and the biosphere (living plants and animals). Soils are by far the largest terrestrial carbon store, containing some 1,500 Gt carbon, compared with about 580 Gt in the biosphere (living plants and animals). In fact, the total amount of carbon stored in the soil is roughly equal to what is in the atmosphere, plus the amount in the biosphere. Soil carbon content varies hugely, however, depending on factors such as soil type, location and land use. For example, many peat soils are virtually all organic matter, of which carbon comprises more than half by weight. Organic matter content in intensively managed tillage soils can be as low as 1-2%, whereas in permanent pasture it can be from 10 to 15%.

Soil disturbance and drainage can lead to significant losses in organic mater through oxidation and release of carbon dioxide. As an aside, recent increases in grain prices are leading to more tillage – hence more release of carbon dioxide. Some of the increase in grain price is due to use of crops such as oil-seed rape and maize for biofuel production. Ironically, the result is that use of biofuels is driving increases in soil carbon emissions. Where the balance lies in terms of benefit is unclear, but in this case the answer very definitely lies in the soil.

Coming back to the original question and afforestation - evidence from national and international studies points to an initial loss of soil carbon following afforestation of mineral soils, followed by a gradual increase over time. Peats are likely to sustain greater losses of carbon dioxide, but here the available scientific evidence points to a net gain in carbon over time, when forest growth is entered into the equation. Work that is now underway at UCD and UCC, funded by COFORD (see projects at www.coford.ie), will further examine soil carbon dynamics on peat and mineral soils that have been afforested over the past 20 years. This work will provide in-depth, country-based factors for reporting on forest carbon stocks to the UN Framework Convention on Climate Change and other national and international bodies.

 [Back to List of Contents](#_CONTENTS)

# Post-graduate studentships: Improving the uniformity and quality of broadleaf planting stock

COFORD is funding a major research project on seed biology and early seedling growth in important broadleaf species. University College Dublin is carrying out this research, in partnership with Coillte (Irish Forestry Board). In the first phase of the research, new pretreatment and storage protocols were developed for alder, birch, ash and oak seeds. It is proposed that a similar approach would be used to improve seed germination and plant yields in rowan (*Sorbus aucuparia* L.) and spindle tree (*Euonymus europaeus* L.), both of which are part of the Native Woodland Scheme.

If you are interested in this position, please send a CV (including the names and addresses of two people willing to provide references) to the project leader, named below. The successful candidate(s) will be based in UCD, Belfield.

The duration of the project is November/ December 2007 – December 2008. It is envisaged that further funding will be secured to continue the research after 2008, but this is not guaranteed. Stipend will be €22,000 per year, tax free (inclusive of fees of ca €5,000). Requirements include an honours university degree in Forestry, Horticulture, Botany or related discipline. Closing date for receipt of applications is Friday, 14 December 2007 or as soon as suitable candidate(s) is(are) found. For further information contact Dr Conor O’Reilly, UCD School of Biology and Environmental Science, Agri & Food Science Centre. University College Dublin, Belfield, Dublin 4. Email: Conor.oreilly@ucd.ie. Phone: +353 1 716 7191.

 [Back to List of Contents](#_CONTENTS)

# Vacancy: national expert seconded to Eurostat's Forestry statistics

The main responsibilities for this position include working on the conceptual development of Community statistics on forestry, co-ordinating and maintaining close contacts with international partners (UNECE, FAO, ITTO, OECD), the Member States, professional bodies, Commission services (Directorates General for Agriculture, Enterprise, Environment, Joint Research Centre) and the European Environment Agency. duties will include collecting, compiling, validating and harmonising Eurostat’s forestry statistics (forests, wood and wood-based products) for the Member States and EFTA countries, producing and editing texts and tables for publications; organising Working Group meetings; representing the Forestry Statistics sector in various Working Groups; and further developing the Joint Forest Sector Questionnaire (JFSQ). The main qualifications sought include experience in all stages of the statistical production process, from data collection to dissemination of the results; a working knowledge of the concepts and definitions used internationally; familiarity with all the main IT applications (Word, Excel, etc.) and experience in working with databases.

 [Back to List of Contents](#_CONTENTS)

# Forest landscape and design courses to be take place in Athlone

These two day courses, organised by the Tree Council, will take place in the Hudson Bay Hotel in Athlone on 20-21 November 2007 and 22-23 November. They are designed to introduce the subject of forest landscape design covering the following areas:

* The concept of landscape and its importance, character, sensitivity and distinctiveness. It examines the role forests play in the Irish landscape of today and how to manage the change that afforestation and forest management bring.
* From this introduction some key design principles are explained and then these are applied to all aspects of forest layout and management. This exposition is supplemented by exercises.
* The process of integrated forest design for both afforestation and felling and replanting is explained.
* A group design exercise on afforestation of bare land is also part of these courses.

The courses are presented by Simon Bell, for many years the chief landscape architect with the Forestry Commission and now a consultant and academic. Participants will be provided with a copy of the publication “Forest Design Planning: a Guide to Good Practice”. For further information contact Isabelle Lemarié at the Tree Council, Tel: 01 493 1313 or email: trees@treecouncil.ie

 [Back to List of Contents](#_CONTENTS)

# The Environmental Protection Agency - Climate Change Lecture Series

The EPA is hosting a series of lectures on climate change over the coming six months. The seven-part series will explore key aspects of climate change ranging from predictions and impacts, to its economic and political consequences. Speakers are top international experts.

The series starts with two lectures to be given by lead authors of the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report on climate change. They will take place on Tuesday 20 and Tuesday 27 November in the Davenport Hotel, Merrion Square, Dublin 2. Programme commences with registration at 6:00 pm.

Topic 1: *The Science of Climate Change – Facing the facts.* This talk will be presented by Dr Martin Manning, university Corporation for Atmospheric Research, USA, Director of the Intergovernmental Panel on Climate Change (IPCC) Working Group 1 Support Unit and lead author of the IPCC 4th Assessment Report 2007. Date: Tuesday 20th November in the Davenport Hotel, Merrion Square, Dublin 2.

Topic 2: *Time for Action? Options to address climate change*. This talk will be presented by Dr Bert Metz, Environmental Assessment Agency, the Netherlands and Co-chair Intergovernmental Panel on Climate Change (IPCC) Working Group 3. Date: Tuesday 27th November in the Davenport Hotel, Merrion Square, Dublin 2.

Attendance is free, but advanced booking is essential. For further information and booking enquiries call 01-2898533 or email: info@claraclark.ie

 [Back to List of Contents](#_CONTENTS)

# Ash Dieback in Denmark

Recently a group from the British and Irish Hardwoods Improvement Programme visited Denmark to see Danish hardwood improvement programmes. Serious dieback was observed in some ash stands. Dieback in ash has been observed in Denmark since 2003 and it has also been observed in other European countries including Sweden, Austria and Poland. Ash is a major broadleaved species in Irish plantations, and the outbreak of such a dieback here could prove catastrophic for Irish broadleaved forestry. Reproduced below (with permission) is information from a report prepared by Danish scientists on the ash dieback problem in Denmark. Please bring any observations of similar dieback symptoms in Irish ash to the attention of the Forest Protection Section of the Forest Service – tel: 01 6072932.

Ash dieback*: The new disease on ash, assumed to be caused by a fungus, seems to be widespread in Denmark. We have observed symptoms since 2003, but for the first couple of years we thought they were caused by weather conditions. Based on the similarities between the disease in Denmark and Sweden, we have concluded that the cause is the same. Chalara fraxinea has been found on diseased ash trees in Sweden, and there are indications that this fungus may be the main cause of ash dieback. The* [*decline of ash*](http://www.metla.fi/org/pathcar/ash-decline.htm) *related to the symptoms described below is an important issue in the Nordic-Baltic Forest Pathology network PATHCAR.*

Ash dieback 2007: *Many tree species had early bud burst in Denmark due to a mild winter and warm spring. However, ash flushed at the normal time, which in Denmark is late May and early June. Dieback is widespread as expected, both in forests, in the landscape and in some nurseries. Many trees have dead shoots in the upper crown or partial dieback of the crown. Other trees look transparent or "patchy" because the leaves are not evenly distributed but sit in "lumps" at the end of branches. Fortunately, there are also healthy looking trees with few symptoms. Efforts are being made to evaluate the frequency of the problem, especially in young stands. Impact of the disease is high in ash stands of 6-10 m, because the dieback of the main stem will result in future timber having short length and lower quality.*

Symptoms of ash dieback*: The most visible symptom of the disease is top dying. The one and two year old shoots die either before flushing or during dry periods in summer. The problem is especially visible in ash with a height of 4-10 m, i.e. in cultures, young forest stands (afforestation) and on road trees. But even on older trees symptoms are clearly visible in the crown. The dead shoots are caused by desiccation because death of bark lower down prevents water transport, or are killed directly by the fungus. Similar damages have been recorded in Sweden, Poland, the Baltic countries and recently also Austria. The influence of frost or drought as secondary factors is debated.*

Possible pathogen ***- Chalara fraxinea****: This fungus was first described in 2006 based on ash dieback in Poland (*[*Kowalski 2006*](http://www.blackwell-synergy.com/doi/abs/10.1111/j.1439-0329.2006.00453.x)*). In Sweden the researchers at the Swedish Agricultural University have isolated many fungi from diseased ash trees. An unidentified fungus, which was among those fungi most commonly found in dead bark and other symptomatic tissue, also seemed particularly able to produce the same symptoms in tests of pathogenecity. By comparing their isolates of the unknown fungus with the Polish Chalara fraxinea isolates described by T. Kowalski, the Swedish researchers have concluded that it is the same fungus. However, results are still preliminary, and knowledge on infection biology is lacking. We have not yet proved that this fungus is present in Denmark.*

Ash dieback symptoms 2003-2006: *The first enquiry on problems in ash came in 2003 and was followed in 2004 by several reports on wilting of current year shoots on young trees and thin crowns on older trees. In most cases the dieback was caused by necrotic bark lower down on the stem. In trees with symptoms in 2004 the bark had been killed between the 2003 and 2004 growth season and in some cases after the cambium became active in 2004. This could be seen by the presence of a row of spring vessels just below the dead bark. However, the real extent of the problem became visible in the spring of 2005, where many young stands had widespread top dying. Ash dieback was now reported from all over Denmark and from forests as well as road trees and in the landscape. In all cases where damaged trees were inspected, the bark had died before the growth season of 2004. No cases were found, where only shoots from 2004 had died, so there seemed to be no expansion of the disease. But Chalara fraxinea may have spread during autumn 2004, either in the bark of already infected trees or via spores, although we have no certain knowledge of the infection biology of the fungus. In the spring of 2006 ash dieback occurred again in Danish forests, in urban and rural areas and was also recorded in nurseries which specialise in 3-4 meter tall ash for landscape purposes. This time the cambium had been killed in the autumn of 2005, and the necrotic part was usually at the base of the 2005 shoot or somewhere on the older part of the stem. On many of the damaged trees long necroses were centred around a young shoot. There could now be no doubt that the cause of the disease in Denmark was not climatic factors, but had to be something else. In Sweden, researchers had already reached the conclusion that a fungus was involved. But they still lacked a name and knowledge about infection biology. In the autumn of 2006 older stands shed their leaves early and there were brown areas on the leaves and the stalk indicating a possible entry point for the fungus. By early winter it was possible to see necroses and dead shoots on young ash trees. During the winter and spring 2006-07 we have received many reports on dieback in ash. We expect widespread damages to become visible after the ash trees have flushed.*

*Parts of this article are based on as yet unpublished results kindly given by Pia Barklund and Rimvis Vasaitis (*[*Department of Forest Mycology and Pathology, SLU*](http://www.mykopat.slu.se/)*) via the Nordic-Baltic* [*PATHCAR network*](http://www.metla.fi/org/pathcar/ash-decline.htm) *under the ash project supported by the* [*Danish Forest and Nature Agency*](http://www.skovognatur.dk/English/)*,* [*Danish data*](http://en.sl.life.ku.dk/Forskning/FagdatacenterSkov/SkovSundhed/AndreLoev/Ask.aspx) *from the* [*forest health monitoring*](http://www.icp-forests.org/)*collected by* [*senior adviser Iben M. Thomsen*](http://en.sl.life.ku.dk/OmSkovOgLandskab/Medarbejdere/imt.aspx)*, information from nursery plant adviser* [*Bent Leonhard*](http://deg-greenteam.dk/deg_greenteam/profil/alle_medarbejdere/bh/profil/) *(*[*DEG GreenTeam*](http://deg-greenteam.dk/)*) and reports from forest districts, landscape management staff and nurseries from all over Denmark.*[*Kowalski, T. 2006:*](http://www.blackwell-synergy.com/doi/abs/10.1111/j.1439-0329.2006.00453.x) *Chalara fraxinea sp. nov. associated with dieback of ash (Fraxinus excelsior) in Poland. Forest Pathology 36: 264-270.*

 [Back to List of Contents](#_CONTENTS)

# All Island Conference on Loss of Biodiversity in Ireland

The term biodiversity is used to describe the variety of all life on earth including all plants, animals and the ecosystems which sustain them. Biodiversity is vital to human health and well being and provides us with products such as food, water and raw materials and even the genetic material for most modern prescription drugs.

Scientific evidence suggests that global biodiversity is being lost at an unprecedented rate. The Convention on Biological Diversity is a global treaty which has brought together 188 countries to work for the conservation and sustainable use of our natural resources. The European Union is also a party to the Convention and in 2001, at a summit of the Heads of State and Government in Gotenburg, set a target to halt the loss of biodiversity by 2010. In May 2006 the European Union published an Action Plan – “*Halting the Loss of Biodiversity by 2010 – and Beyond*”, which elaborates a programme of work aimed at meeting the 2010 targets.

If we are to meet the target, increased and sustained efforts will be required by all sectors of society, including the public sector, the private sector and the general public. To address some of the issues relating to the targets in an Irish context an important conference on the subject was organised jointly by the Department of the Environment, Heritage and Local Government and the Department of the Environment and Heritage Service of Northern Ireland and was held recently in Athlone. The title of the conference was “*Halting the loss of Biodiversity by 2010 - Why it is important and the challenges for the island of Ireland”.*

Speaking at the opening of the day’s proceedings, Tony Killeen TD and Minister of State at the Department of the Environment, Heritage and Local Government and Arlene Foster, Northern Ireland Minister for the Environment welcomed participants and presented an overview of the issues.

The keynote address was presented by Dr Norman Myers, International Consultant in Environment and Development in a paper entitled “*Biodiversity – why does it matter? What can we do?”* This paper was followed by a presentation by Micheal O’Briain, DG Environment, European Commission on “*Biodiversity – Meeting the 2010 Target*”. Conor Kretsch, COHAB Initiative presented a paper on “*Biodiversity and Health – Why the Natural Environment is Important to Our Health and Well-being”*.

After lunch the proceedings were continued by Dr Craig Bullock with his paper entitled “*Biodiversity – The economic and social benefits of Ireland’s biodiversity*”. Dr Bullock’s paper was followed by a presentation by Professor Mike Jones of the Botany Department, Trinity College in a paper entitled “*Climate Change and Biodiversity*”. The concluding paper was presented jointly by Ciaran O’Keeffe, Director, National Parks and Wildlife Service and Graham Seymore, Director of Natural Heritage, Environment and Heritage Service of Northern Ireland and entitled “*Biodiversity on the island of Ireland – Meeting the 2010 target*”.

 [Back to List of Contents](#_CONTENTS)

# Forest Technology Platform Conference to be held in Slovenia

Preparations for the 4th FTP Conference in Slovenia are progressing rapidly. The event will be held in the Slovenian mountain town of Kranjska Gora during 20-21 May 2008. It will be part of the Slovenian Presidency of the European Union.Special attention will be given to the role of forestry industry in the promotion of a knowledge-based forest sector in Europe. The title of the conference reflects this: 'Growing towards the Future - Joint innovation for successful forest-based business in Europe'. The conference will look at topics such as the meaning of research and innovation to business and present success stories in business implementation of research findings. The event will be an excellent opportunity for industry representatives to meet new business contacts, as well as representatives of the research community. Special attention will also be given to the forest-based sector in countries of South-Eastern Europe.The European Commissioner for Science and Research Dr Janez Potočnik, has agreed to deliver a keynote address during the conference's final session. The full programme for the conference, which will only include plenary sessions, will be published during November; registration starts in December. For more information visit the FTP website at <http://www.cordis.lu/technology-platforms/>

 [Back to List of Contents](#_CONTENTS)