Forestry and Wood Update

Forest Sector Development/COFORD Division

Department of Agriculture, Food and the Marine

Volume 16 Number 2, 2016

CONTENTS

Forest Sector Development/COFORD Division
Department of Agriculture, Food and the Marine
Agriculture House
Kildare Street
Dublin 2
Ireland
Tel: +353 - 1 - 6072487
Email: fsd@agriculture.gov.ie
Web: www.coford.ie

PLEASE CIRCULATE THIS NEWSLETTER TO YOUR COLLEAGUES AND OTHER INTERESTED PARTIES

TO SUBSCRIBE TO THE NEWSLETTER, CLICK HERE

Newsletter compiled and edited by Orla Cashen, Brian Clifford Eugene Hendrick and Tony Quinn, Forest Sector Development/COFORD Division

For further information, please contact orla.cashen@agriculture.gov.ie

COFORD Council News

Appointments

Three new appointments have been made to the COFORD Council for the period 2016-2018 by Minister for Forestry Andrew Doyle TD:

Neil Kerrigan, Head – Sectoral Manager Timber, Print and Packaging

Pat Collins, Chairman Farm Forestry Section, IFA and

Matthew Clancy, Bioenergy and CHP Programme Manager, SEAI.

Mike Fleming (Farm Forestry, Irish Farmers Association) and Fred Tottenham (Irish BioEenergy Association (IrBEA)) have stepped down following completion of their terms as chairpersons of their respective organisations.

Statement from the COFORD Chairman Michael Lynn

As we reach the end of 2016 I would like to inform you about recent COFORD developments. We have three new Council members as listed and appointed by Minster Doyle. Mike Fleming and Fred Tottenham left the Council during the year having made signifcant inputs to our work. We welcome the new members and look forward to their involvement in the work of Council.

The final reports of working groups convened under the 2011-2014 Council and the updated *Forestry 2030* papers are available at www.coford.ie.

Seven Working Groups have been established under the current Council, and are advancing their work. They bring together groups of officials and stakeholders to discuss and provide policy advice to the Department of Agriculture Food and the Marine in the following areas:

Forest policy review – chaired by Donal Whelan, Technical Director, Irish Timber Growers Association

Objective

To track the implementation of the recommendations in Forests, products and people - Ireland's forest policy – a renewed vision (Department of Agriculture Food and the Marine, 2014) and monitor and report on progress in implementing the stated Strategic Actions required to achieve the Policy Statements.

Terms of reference

1. Monitor the progress on implementation of the recommendations in Forests, products and people - Ireland's forest policy – a renewed vision

2. From information and data to be provided by bodies charged with progressing individual Strategic Actions (employing indicators and criteria referenced in the policy document), report to the COFORD Council, the Minister with responsibility for Forestry, the Department of Agriculture Food and the Marine and the Forest Sector on progress in achieving the stated Strategic Actions, with observations and / or recommendations as considered appropriate by the FPRG

3. With stakeholder input provide feedback and recommendations on an approach to updating of Forest Policy/Strategic Actions to the COFORD Council, Minister with responsibility for Forestry, Department of Agriculture Food and the Marine (DAFM) and the Forest Sector.

Forest genetic resources - chaired by Seamus Dunne, Senior Forestry Inspector, DAFM

Objective

To outline a strategy for the development, conservation, and deployment of forest genetic resource material.

Terms of reference

1. Carry out a review of the recommendations listed in "Sustaining and Developing Irelands Forest Genetic Resources" (Cahalane, et al. 2007) and develop a new outline strategy for Forest Genetic Resources

2. Carry out a review of the performance of Sitka spruce provenances, including improved material, building on national research

3. Outline a strategy for securing supply of Sitka spruce reproductive material, including tree improvement programmes

4. Outline a strategy for securing supply of reproductive material for key species to Irish forestry, including the need for indigenous provision, seed stands and improvement programmes, where appropriate

5. Carry out a review, building on national research, including the possible impact of climate change and the potential threat from pests and diseases, of the survival, growth, and wood quality of key species to Irish forestry

6. Examine opportunities to assist in the delivery of actions listed in "Developing a National Forest Tree Gene Conservation Strategy" (Kelleher, 2016)

7. Outline a strategy for breeding for tolerance to ash dieback (*Hymenoscyphus fraxineus*)

8. Advice on FGR research needs including recommendations that arise from objectives 1-7.

Land availability and the promotion of afforestation, chaired by Dr Nuala Ni Fhlatharta, Head of Forestry Development Department, Teagasc

Objective

To progress the recommendations made in the COFORD Land Availability report towards ensuring a more positive environment for forest expansion and a greater uptake of afforestation.

Terms of reference

1. Consider the recommendations of the COFORD Land Availability report and to assess progress on implementation of these recommendations

2. Prioritise the recommendations that can be implemented in the short/medium term

3. Propose actions on how these recommendations can be progressed /implemented (and assess progress).

The forest sector and the bioeconomy, chaired by Gerard Murphy, Managing Director Coillte Forest

Objective

To produce a report that will outline the potential of the Forest Sector in the emerging Irish bioeconomy and provide guidance on research and policy measures needed in realising this potential.

Terms of reference

1. Develop a common understanding of the concept of 'bioeconomy' from a forestry sector perspective

2. Understand the potential of the forestry sector within the context of a future Irish bioeconomy

3. Develop a bioeconomy vision and a road map for the forestry sector in Ireland

4. Understand the enablers necessary to realise this bioeconomy vision

5. Develop and implement a communications plan.

Wood mobilisation and roundwood production forecasting, chaired by Mike Glennon, Joint Managing Director, Glennon Brothers

Objective

To stimulate wood mobilisation to meet or exceed production forecasts, taking into account national renewables policy

Terms of reference

1. Review and report on recommendations contained in Mobilising Ireland's Forest resource, published on the 4 March 2015, including rotation length practices

2. Review and report on roundwood forecasting systems and outcomes, including actual and forecasted harvest levels. Promotion of the national forecasting system and the associated spatial tool

3. Review and input to national renewables policy and the development of measures such as the Renewable Heat Incentive – and the need for a balanced approach between energy provision and raw material for board and sawnwood manufacture.

The management of mixed forests, chaired by Daragh Little, Chairman, Irish Forestry and Forest Products Association

Objective
To determine the extent and type of mixed plantation forests and make preliminary recommendations regarding their management for wood production.

Terms of reference

1. Outline the extent and rationale of the main species mixtures used in commercial Irish and British forestry, taking into account relevant forestry literature and policy objectives
2. Review the main species mixture types over the past 20 years in relation to their subsequent performance and ease of management
3. Make recommendations on the potential use of mixtures, and on research work that may be needed to review existing trials and mixtures in more detail with a view to updating recommendations on future afforestation and management, and
4. Taking into account the findings from 1, 2 and 3, review the potential of specific mixtures types to address disease risk.

Long term forest research issues identified in the Forest Research Ireland (FORI) report Section 2.5.

Work on a COFORD paper is proceeding under the auspices of John Phelan, Managing Director Woodland Managers Limited.

The work being carried out by the groups would not be possible without the support of FSD/COFORD Division and other Forest Service staff. I would also like to acknowledge these resources being made available and as well, the inputs of many stakeholders who give of their time to COFORD work. Further Information on the work of the groups is available through the COFORD Secretariat – orla.cashen@agriculture.gov.ie.

It only remains for me to wish all in the forest sector a Happy Christmas and a Prosperous New Year.

Michael Lynn
Chairman

Information and support services

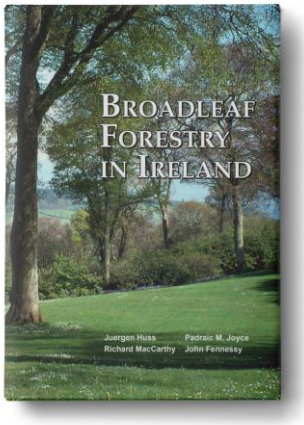
Felling Decision Tool - Conifers

Until now the majority of clearfelling in Ireland has been concentrated in the public estate. Significant portions of the private forest estate, particularly conifers that were afforested in the 1980s and the early 1990s are now approaching a stage where forest owners may be considering the timing of felling operations. The choice of rotation length i.e. the decision when to clearfell, is an important decision with the potential to either maximise returns to the owner or result in significantly reduced revenues. Against this background and the recommendation of the *COFORD Wood Mobilisation Group*, the Forest Service commissioned a report on the assessment of the impact of forest felling age on overall financial return to forest owners. This report resulted in a web-based tool to assist owners in deciding when to fell. The tool together with a COFORD Connect note on its application will shortly be available at www.coford.ie

COFORD Publications

Broadleaf Forestry in Ireland by Juergen Huss, Padraic Joyce, Richard MacCarthy and John Fennessy

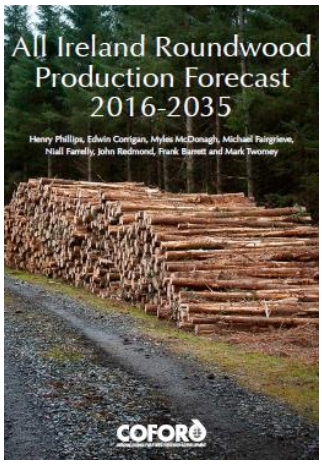
Broadleaf Forestry in Ireland provides owners and managers with a comprehensive suite of silvicultural and management guidelines to grow high quality trees to meet market demands. The material is presented in an accessible, easily-understood and well-illustrated format.



The authors begin with the policy background and the development of forests and forestry practice in Ireland. The book goes on to deal with soils and sites suitable for broadleaves, ecological and social values of broadleaf forests, as well as an extensive review of silvicultural strategies and procedures. Other aspects addressed include an examination of the future role of broadleaves, together with a detailed discourse on individual species. The book concludes with a brief description of some lesser known broadleaves, which may increase in use in the light of climate change.

This well received COFORD publication costs €55 (including p&p), and can be ordered directly from orla.cashen@agriculture.gov.ie01 6072487 or 6072085.

Roundwood and wood energy production forecast 2016-2035 and GIS-based tool

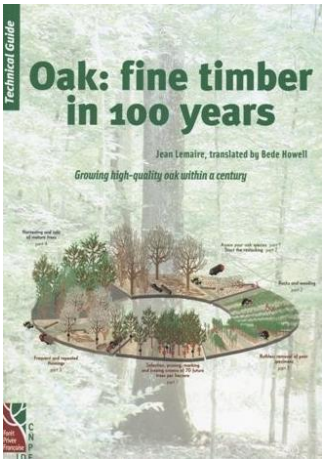


The All Ireland Roundwood Production Forecast 2016-2035 is available to download at www.coford.ie. In addition to the publication itself there are accompanying tables and spreadsheets available, with the forecast broken down by assortment, species group, source and by county for a number of categories. Queries on the forecast should be sent to fsd@agriculture.gov.ie.

GIS-based tool to generate bespoke forecasts

A new GIS-based tool has also been developed to generate bespoke forecasts for different assortments and species, and for query-specific centre points. The tool is at http://www.agriculture.gov.ie/rpfms/

Future Trees Trust publication – Oak: fine timber in 100 years



The Future Trees Trust publication - *Oak: fine timber in 100 years* was originally published as *Le chene autrement*, by Jean Lamaire and has been translated by FTT Oak Group member Bede Howell.

The book is the outcome of 30 years of research in France, and shows that high quality, timber-yielding oak can be grown over a much shorter time than was previously the case. Copies are available at €35 (including p&p) from orla.cashen@agriculture.gov.ie.

Ordering COFORD publications

Orders for **COFORD project reports and books** listed here and on www.coford.ie should be sent to orla.cashen@agriculture.gov.ie. Payment procedures will be provided on receipt of orders.

Events

Wood Marketing Federation - Wood Awards Winners 2016

The Wood Marketing Federation with grant aid from the Department of Agriculture, Food and Marine, and support from a number of other organisations, held the 2016 Wood Awards at Farmleigh House, on the 17 November. Minister of State Andrew Doyle, presented the awards.

This year's awards had over forty entries, of which seventeen were shortlisted. The shortlist included large and small-scale buildings, conservation projects, furniture, innovative wood design, international structures and exhibitions – all demonstrating excellence in wood construction, design and craftsmanship.

Award winners

CATEGORY	PROJECT	DESIGNER/ARCHITECT
Overall winner	Samuel Beckett Civic Campus Ballyogan Rd., Dublin	Bucholz McEvoy Architects
Large scale buildings Joint winner	Samuel Beckett Civic Campus Ballyogan Rd., Dublin	Bucholz McEvoy Architects
Joint winner	Model School, National School, Inchicore, Dublin	Donaghy + Dimond Architects
Furniture	Range of furniture at OPTICA, Dawson Street, Dublin	Ryan Connolly, Connolly & Company
Innovation	Magnus Celestii, a temporary installation in Sculpture Park, Salisbury, England	Joseph Walsh Studio
International project	Wind and Rain Bridge, Peitian Village, Liancheng, Fujian Province, China	Donn Holohan, lecturer at the University of Hong Kong with local woodworkers and architecture students,
Judges' special award	Carmelite Prayer Room, St. Teresa's Church, Clarendon Street, Dublin	Niall McLoughlin Architects

For further information contact Donal Magner at info@wood.ieor 086 2607883.

EFI International Summer School on Forest Planning and Management

Registration is now open for the This international summer school organised by EFIATLANTIC and hosted by Waterford Institute of Technology (WIT) will be held in Waterford from 19–23 June 2017. The summer school forms part of the EFIATLANTIC Capacity Building Programme.

The focus of the summer school will be on providing background information, demonstrations and training in the use of the latest tools and techniques for assisting modern forestry professionals. The overall aim is to provide the very latest information and training in the wide the range of systems already available or coming on-stream that can help in making informed forestry management decisions at the tree, stand and property level.

The course will include fieldwork training with the latest field tools and techniques for assessing tree size and form, timber quality, stand quality and site suitability, and systems for mapping stands and forest properties over large areas using drones, aircraft and satellites.

Hands-on laboratory sessions will follow to learn how these measurements can be used in conjunction with growth models, decision support systems on economics, risk and site quality, and information from National Forest Inventories and other publically available datasets.

The workshop is primarily aimed at professional foresters, forest consultants, managers and owners, forestry policy makers, and postgraduate-level students.

Accommodation will be on the campus of Waterford Institute of Technology and a coach service to and from Dublin Airport will be provided.

Go to the Summer School web page to download the full programme and to register

Wood Matters

COFORD Woodflow

The 2015 COFORD WOODFLOW is available at www.coford.ie. Some of the main highlights of 2015 were:

- There was strong demand for wood fibre across all assortments
- Roundwood harvest (including firewood) in the Republic of Ireland in 2015 was 3.25 million m^3, the highest level since records began
- Softwood available for processing in 2015 was 3.07 million m^3
- Product output in 2015 comprised 929,000 m^3 of sawn softwood, 769,000 m^3 of wood-based panels and 154,000 m^3 of round stakes
- Exports of wood products reached €355 million, €190 million of wood-panels, €121 million of sawn timber and paper and €44 million of paper & paper-board products
- Due to increased domestic demand, sawn timber exports declined by 2.4% in volume terms over 2014
- Output of the forest-based biomass energy sector increased by 3% over 2014
- In 2015, 35% of the roundwood available for use in the Republic of Ireland was used for energy purposes.

Eoin O'Driscoll, drima

New COFORD software for the wood energy supply chain

Several years ago, COFORD introduced two software packages for the wood energy market and supply chain.

The first module calculates the price of delivered wood chips, while it accounts for the changes in moisture content from the moment the wood is bought until the chips are delivered. Many variables can be entered or changed, such as tree species, moisture content at different stages in the delivery process, ash content, transport distance etc. The other module compares the price of different fuels, based on the present fuel and fuel consumption. It then calculates the simple payback period of the new installation based on the eventual fuel savings.

Now two new modules are being introduced:

- A firewood module
- Quick and comprehensive unit converters

The firewood module calculates the cost of delivered firewood, again based on a number of variables. It also calculates the drying or seasoning time based on the difference between the initial and final moisture content. For drying, it includes the cost of fuel to reduce the moisture content, for seasoning it calculates the duration of the seasoning based on the start month of the seasoning. In addition, it includes a choice between delivery methods, such as firewood loose, firewood in big bags, firewood in small bags or pallets with small firewood bags.

The quick converter solves one of the main problems in the wood fuel business: it converts between tonnes, cubic metres solid, cubic metres loose, Giga Joules (GJ) and kilowatt hours (kWh), based on the basic density of the wood and a given moisture content, which can be input by the user. From the quick converter one can click on to the comprehensive converter, where for each of the three main wood fuels (chips, firewood, wood pellets) it converts to other units. In the comprehensive converter, one can also enter the price of the wood fuels and alternate fuels (such as oil, gas, peat to name but a few). Once one enters an amount in one of the wood fuels, than the module calculates the fuel cost for all the fuels where a price has been entered.

All modules, also the previous existing ones, have been equipped with “mouse over” help and explanations. This means that you can point at a clause on the screen and information on that clause will appear on the screen. This mouse over help can be turned on and off as wished.

COFORD will shortly publish a COFORD Connects Note on the entire package, when it is published, the package will became available for purchase. COFORD plans to hold a series of courses to introduce the new software in more detail.

Pieter D. Kofman, wood energy consultant to DAFM

European Commission’s new Clean Energy package launched

The European Commission issued a package of measures on the 30 November ‘to keep the European Union competitive as the clean energy transition is changing global energy markets’.

The accompanying press release continues: ‘The Commission wants the EU to lead the clean energy transition, not only adapt to it. For this reason the EU has committed to cut CO2 emissions by at least 40% by 2030 while modernising the EU's economy and delivering on jobs and growth for all European citizens. Today's proposals have three main goals: putting energy efficiency first, achieving global leadership in renewable energies and providing a fair deal for consumers’.

The package includes initiatives on renewable energy, energy efficiency and the design of the electricity market. It is designed to ensure policy coherence, investment certainty, improved coordination between Member States and reduced administrative burden. The proposal also builds on and integrates existing requirements for planning, reporting and monitoring in the energy and climate

fields.

Also included is a Proposal for a Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources (recast) – see link .

The proposal includes:

- A new sustainability criterion on forest biomass, in order to ensure that the production of woodfuel continues to be sustainable and that any LULUCF emissions are accounted for (in the country of biomass production).
- The EU sustainability criteria are extended to cover solid biomass and biogas used in large heat and power plants (above 20 MW fuel capacity). This means, for instance, that electricity and heat from biomass have to produce at least 80% fewer GHG emissions compared to fossil fuels by 2021and 85% less by 2026.
- Large-scale biomass electricity plants (above 20 MW) will need to use high efficient combined heat and power technology (reaching efficiencies above 80%). This requirement does not apply to power plants that are already in operation and that receive state aid already approved by the Commission. In addition, this criterion does not apply in case of risks to the security of electricity supply, which need to be duly notified to and approved by the Commission.

National and international news

New forest research projects approved by DAFM

Five new research grant awards approaching €2 million for collaborative inter-institutional forest research projects under the forest research funding programme (CoFoRD) have been announced by DAFM.

The newly funded research projects tackle important issues for the forest sector:

- addressing the needs of private forest owners with a view to greater mobilisation of privately owned timber;
- developing knowledge on the wood quality of Irish hardwood thinnings and identifying possible end-use applications;
- assessing the commercial potential of using Irish Sitka spruce to manufacture a cross-laminated timber modular flooring system;
- assessing how forest planning and management activities can contribute to the effective conservation of Hen Harriers; and
- developing modelling capacity to examine future scenarios for agricultural greenhouse gas emissions and carbon sequestration by forestry in Ireland.

The content of call under which the projects have been funded was heavily influenced by FORI, the strategic research and innovation agenda for forestry developed under the auspices of the sector-led COFORD Council Forest Research Working Group and coordinated by Research Division of the Department.

Forest Management Research (FORM)

The FORM research project, funded by DAFM and led by University College Dublin, aims *to enhance productivity and pest and disease resistance in key forest species*. This project includes three interlinked workpackages:

(i) tree improvement;

The direct effect of using genetically more appropriate material and improved stock is an increase in productivity, while at same time improving the ability of the material to cope with adverse conditions (e.g. climate change, diseases and pests). This work package will investigate the physiological basis of variation and develop rapid phenotyping tools to aid selection programmes.

(ii) breeding for resistance to *Hymenoscyphus fraxineus* (dieback) disease in ash;

The research has the potential to safeguard the future of Irish ash (long-term impact) through selection and propagation of potentially tolerant ash trees to Hymenoscyphus fraxineus for deployment in forest plantations, hedgerows and for other uses. Methods for the large-scale propagation of resistant material will also be investigated.

(iii) identifying potential pest threats to Sitka spruce.

Sitka spruce is the most economically important species in Irish forestry and any new disease or pest could have a devastating effect on the forest industry in Ireland. The ability to predict and pre-empt future threats is essential to protecting Ireland's forest estate. This work will develop expertise within the country of pest risk analysis to identify potential threats and help Ireland establish strategies to prevent the degeneration of Irish forests.

This research will build a critical mass of expertise which will be beneficial in helping to focus the future research agenda in tree improvement and plant health in Ireland.

The ShortFor project - short rotation forestry

The aim of short rotation forestry (SRF) is to produce single-stemmed biomass or commercial roundwood over a shorter rotation than conventional forest rotations. The DAFM-funded project, ShortFor, is currently investigating the potential of this system under Irish conditions. It is seen by the project team as a complementary system that would not necessarily compete for the same areas as conventional afforestation, but rather provide alternatives for maximizing productivity on a range of site types not currently catered for. The project is led by University College Dublin and includes partners in University of Limerick, Trinity College Dublin and Waterford Institute of Technology. The project has established three field trials to investigate the productivity of targeted species under specific silvicultural systems. The project work also includes a review of the current SRF forestry resource in Ireland and the potential effects of silvicultural treatments on productivity. The economic sustainability of SRF is also being investigated and compared with other forest management systems. The environmental impact of SRF is being reviewed, including an investigation of the impact of harvesting operations on nutrient release dynamics as well as methods that might be employed to help mitigate any potential adverse effects of harvesting. A life cycle analysis is being carried out to investigate the environmental sustainability of the system. The project is due to end in December 2017.

EUFORGEN website update

The European Forest Genetic Resources Programme (EUFORGEN) – is an international cooperation programme that promotes the conservation and sustainable use of forest genetic resources in Europe as an integral part of sustainable forest management. They have recently updated their website, www.euforgen.org which includes detail on the programmes objectives, the work currently being carried out, including involvement from Irish researchers, the EUFGIS database, a system which provides information on where forest genetic resources are conserved, and species information fact sheets, depicting distribution ranges and technical guidelines for 45 European tree species. For more information please contact brian.clifford@agriculture.gov.ie

Research and Innovation Staff Exchange (RISE) under Horizon 2020

From 1st December 2016, the Research and Innovation Staff Exchange (RISE) call in the frame of H2020 was opened. Main objective of this call is to promote the collaboration (international and inter–sector) through staff exchange (research and innovation staff) by involving academic and non-academic sectors (in particular SMEs), based in Europe (EU Member States and Associated Countries) and outside Europe (third countries).

The provided support aims on the development of international and/or inter–sectoral partnership which will result in creating a joint collaboration through joint research project and/or innovation and sharing of knowledge, by hosting of staff member(s).

This RISE call is open for early–stage as well as for experienced researchers. It is also intended for administrative, managerial and technical staff directly involved in the research and innovation activities of the proposal.

A RISE partnership must be composed of at least three organisations (legal entities independent of each other) established in three different countries from which at least two must be established in different EU member states and/or associated countries.

Deadline for submission is April 5th 2017. More information about the call can be found on: https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/h2020/topics/msca-rise-2017.html

This RISE call offers opportunities to strengthen your existing collaborations with other institutes, to be a support tool for further elaborating your international projects, to develop specific initiatives in the IW network, to expand activities in the scope of COST, to get closer involved with your industrial partners.

Invitation to set up and join RISE proposal(s)

InnovaWood Thematic Group Education and Training will facilitate and support proposal preparations for this call. The topics of the proposals will be decided by the members.

In case you are interested in using this call's opportunities and join the initiative please let us know via **email to the** InnovaWood Secretariat. Describe in your email the topic(s) of interest.

You can send us your input **until Tuesday 10 January 2017**. Shortly after this date we will inform which topics will be further elaborated under the InnovaWood umbrella and the next steps.

UN Climate Change Conference November 2016 - Marrakech, Morocco

The follow on meeting form the Paris agreement took place under UN Climate Change Conference convened from 7-19 November 2016, in Marrakech, Morocco.

The meeting started on an optimistic note due to the Paris Agreement's unexpectedly rapid entry into force, which took place on 4 November 2016, 30 days after the dual entry into force requirement of ratification by at least 55 countries representing at least 55% of global GHG emissions was met. As of 19 December 2016, 118 countries have ratified the agreement; more information can be found here. Ireland being one of the early adopters helped the agreement enter into force by signing the ratification process on 22 April 2016 with acceptance and approval on 4 November 2016.

METHODOLOGICAL ISSUES UNDER THE KYOTO PROTOCOL: Land use, land-use change and forestry (LULUCF) under Protocol Articles 3.3 and 3.4, and under the CDM: The Subsidiary Body for Scientific and Technological Advice (SBSTA) first considered this item (FCCC/SBSTA/2016/INF.7).

The negotiations formed around informal consultations and parties distributed a non-paper with substantive conclusions, inter alia, acknowledging that there are possibilities to expand on the technical parameters of Clean Development Mechanism to include revegetation activities in addition to afforestation and reforestation. Although it was noted that implementation of revegetation project activities in the remaining time of the Protocol's second commitment period would be difficult.

Parties were unable to reach consensus and the SBSTA agreed to continue consideration of this issue at SBSTA 46.

Forests within the Paris Agreement

It is still early stages in the Paris agreement and much discussion and negotiations have yet to take place, it is in these discussions that Parties may find appropriate modalities to accommodate forest and other land sector mechanisms.

Squirrels and broadleaf trees

Although grey squirrels are still present in different parts of the country, particularly in the Dublin area, numbers and frequency of sightings are far less compared to the situation a decade ago. The most recent survey on the distribution of grey and red squirrels, and on pine martens, was carried out in 2012 as part of the COFORD- funded WIGS project. This showed a significant reduction in grey squirrels, and an increase in reds compared with an earlier survey in 2007. Red squirrels had also returned to a number of counties from which they had disappeared. The results also confirmed grey squirrels had not crossed the River Shannon and showed a large increase in the distribution of pine martens countrywide. This was in line with earlier studies at NUIG which showed a relationship between the absence of grey squirrels and the presence of pine martens. Although the latter live mainly on a mainly plant-based diet, they are also known to predate grey squirrels. Their presence alone may also result in grey squirrels leaving an area. The WIGS project also showed far less damage due to bark stripping on trees compared with the situation some ten to fifteen years ago.

Pine marten

The Irish experience is of much interest in England where grey squirrels continue to cause serious damage to broadleaf trees. However, there is a strong reluctance to explore pine martens as a solution because of the game shooting lobby. Concern has also been expressed in parts of Ireland about negative impacts of pine martens, some of which may be attributed to wild mink. Pine martens are a protected species and, as such, should not be interfered with. Meanwhile, ongoing vigilance is needed to ensure trees are not exposed to bark stripping by grey squirrels, the numbers of which can increase quickly. Details on how this can be done are included in the report on CRISIS, which is on the Department's website.

Michael Carey - Forestry consultant