Contents

COFORD Council 2015-2018 ...................................................................................................................................... iv

Statement from the Chairman ......................................................................................................................... v

Working Groups .............................................................................................................................................. 1


2. Working Group on Forest Genetic Resources (FGRG) ................................................................................. 4

3. Working Group on Land Availability and The Promotion Of Afforestation (FLAIG) ................................. 6

4. Working Group on the Forest Sector and the Bioeconomy (FSBG) ........................................................... 8

5. Working Group on Wood Mobilisation and Roundwood Production Forecasting (WMPFG) ............... 10

6. Working Group on the Management of Mixed Forests (MFG) ............................................................... 12

7. Long Term Forest Research Issues ......................................................................................................... 14

National Forest Research Programme ......................................................................................................... 16

COFORD publications issued in 2016 ........................................................................................................... 20
COFORD Council 2015-2018

The COFORD Council was appointed in August 2015 for a 3-year term by Minister of State for Forestry, Tom Hayes TD.

Membership as of 31/12/2016

<table>
<thead>
<tr>
<th>Name</th>
<th>Organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Michael Lynn</td>
<td>Chairman</td>
</tr>
<tr>
<td>Matthew Clancy</td>
<td>Sustainable Energy Authority of Ireland*</td>
</tr>
<tr>
<td>Pat Collins</td>
<td>Irish Farmers Association*</td>
</tr>
<tr>
<td>Seamus Dunne</td>
<td>Forest Service</td>
</tr>
<tr>
<td>Mike Glennon</td>
<td>Glennon Brothers Ltd</td>
</tr>
<tr>
<td>Eugene Hendrick</td>
<td>Forest Service (Council secretariat)</td>
</tr>
<tr>
<td>Neil Kerrigan</td>
<td>Enterprise Ireland*</td>
</tr>
<tr>
<td>Daragh Little</td>
<td>Irish Forestry and Forest Products Association</td>
</tr>
<tr>
<td>John McCarthy</td>
<td>None-so-Hardy (Forestry) Ltd</td>
</tr>
<tr>
<td>Tom McDonald</td>
<td>Research, Food &amp; CODEX Co-ordination Department of Agriculture, Food and Marine</td>
</tr>
<tr>
<td>Gerard Murphy</td>
<td>Coillte</td>
</tr>
<tr>
<td>John Joe O’Boyle</td>
<td>Northern Ireland Forest Service</td>
</tr>
<tr>
<td>Nuala Ni Fhlatharta</td>
<td>Teagasc</td>
</tr>
<tr>
<td>John Phelan</td>
<td>Woodland Managers Limited</td>
</tr>
<tr>
<td>Donal Whelan</td>
<td>Irish Timber Growers Association</td>
</tr>
</tbody>
</table>

Council appointments and resignations

*Appointed by Minister of State for Forestry, Andrew Doyle TD in 2016. Mike Fleming (Irish Farmers Association) and Fred Tottenham (Irish Bioenergy Association) resigned from the Council during 2016, having reached the end of their terms in their respective organisations.

Council secretariat

The COFORD secretariat is housed in Forest Sector Development/COFORD Division, Department of Agriculture, Food and the Marine. The council secretary is Orla Cashen, Forest Sector Development/COFORD Division (orla.cashen@agriculture.gov.ie).

Meetings

The council met on four occasions during 2016:
12th February – Mullingar
20th May - Enniskillen
6th October - Wicklow
16th December - Clonmel

The Council expresses its thanks to the Forest Service, Northern Ireland for hosting its meeting in Enniskillen in May 2016, and to Coillte for arranging a visit by the Council to the Medite plant in Clonmel, following its meeting in December.
Statement from the Chairman

I am pleased to issue this report of the Council’s activities in 2016.

COFORD is the one group that brings together all facets of the forest sector on the island of Ireland to work in partnership with government and public bodies to support the development of the sector and the ecosystem services it provides. In line with increasing levels of harvest and wood processing the sector continues to grow and increase in its importance in the economy and in its contribution to wider society. Its value to the economy is estimated to be over €2.3 bn per annum. Forests also provide valuable recreation space for a growing number of urban dwellers, and of course, they and the products they provide play an important role in tackling climate change.

Shortly after the appointment of the new COFORD Council in August 2015, we established seven working groups to progress specific areas of development in the sector. An update on each of these initiatives is provided in this report.

An important aspect of the Council’s work is the input it provides to the national forest research programme, as a follow-on from the Forest Research Ireland report, which was developed in partnership with the Department of Agriculture, Food and the Marine.

Another element of COFORD is its publications, including the well-known COFORD Connects Notes, among which is the annual Woodflow, which has become the standard reference on forest harvest and trade in Ireland.

I would like to thank the COFORD council who have all made a significant time commitment to progressing our work during 2016 and continue to do so.

In conclusion I wish to acknowledge the essential secretariat and support functions provided to the Council by the Department of Agriculture, Food and the Marine and its officials, and those in other departments and agencies who have provided continuing input to our work and deliberations.

Michael Lynn
June 2017
The COFORD Council with Minister of State for Forestry Andrew Doyle TD, who attended the Council meeting at the Glenview Hotel, Co Wicklow on the 16 October, 2016.

**Back row:** Gerard Murphy, Nuala Ní Fhlatharta, Donal Whelan, Mike Glennon, Orla Cashen (Council Secretariat)

**Second row:** Pat Collins, Matthew Clancy

**Third row:** John Phelan, Eugene Hendrick, Daragh Little, John McCarthy

**Front row:** Michael Lynn (Chairman), Minister Doyle, Seamus Dunne

Council members not in photograph: Neil Kerrigan, Tom McDonald, John Joe O’Boyle
Working Groups

Seven Working Groups have been established under the current Council, with progress reports on their work provided in this report. In addition the Council has been appraised of progress in the national forest research programme and has input its views on research priorities to the Department.

**Membership**
Donal Whelan (Irish Timber Growers Association - chair). Karl Coggins (Forest Service), Pat Collins (Irish Farmers Association), Seamus Dunne (Forestry Inspectorate, DAFM), Mike Glennon (Glennon Brothers), Eugene Hendrick (Forest Sector Development/COFORD), Neil Kerrigan (Enterprise Ireland), Daragh Little (Irish Forestry and Forest Products Association), Gerard Murphy (Coillte), Nuala Ni Fhlatharta (Teagasc), John Phelan (Woodland Managers Limited)

**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.

**Work undertaken and planned**
During 2016, a document was drafted highlighting progress and developments to date for each of the 107 Strategic Actions contained in *Forests, products and people*. This document also highlights research and development which support the various Strategic Actions in forest policy.

The Group met a number of times during 2016 and has reviewed the progress document, and has provided feedback and comments. The document, together with background information on the process, will assist with the CFPRG stakeholder process which is due to commence in February 2017. As part of this stakeholder consultation process, the Department of Agriculture, Food and the Marine has invited written submissions from stakeholders requesting interested parties to consider the following questions in relation to the Forest Policy:

- What changes are required to existing Strategic Actions so that current and future potential needs of the sector can be addressed?
- What new policies are needed to deal with current and future opportunities and/or threats to the sector?
- What new policy instruments or changes to existing instruments should be considered in order to ensure the future sustainable development of the sector?

Following this process, it is intended to hold a number of meetings with stakeholders on different policy areas which will address related policy headings and issues. A background and summary of the Strategic Action implementation information under the relevant policy headings will be presented at each meeting for consideration by participants, and to facilitate discussion and feedback. The meetings will also be used to update Strategic Actions/Forest Policy recommendations as the FPRG initiative progresses.

When the stakeholder meetings are concluded, an interim report will be produced by the Group based on stakeholder feedback and other input. This report will then be forwarded to DAFM for consideration.
Forests, products and people
Ireland’s forest policy – a renewed vision
2. Working Group on Forest Genetic Resources (FGRG)

**Membership**
Seamus Dunne (Forest Service - chair), Gerard Cahalane (Forest Service), Brian Clifford (Forest Service – secretary), Gerry Douglas (Teagasc), Niall Farrelly (Teagasc), Eugene Hendrick (Forest Service), John Kavanagh (None-so-Hardy (Forestry) Ltd), Colin Kelleher (Botanic Gardens, Office of Public Works), Stuart Kennedy (Coillte), Declan Little (Woodlands of Ireland), Jim McNamara (Irish Timber Council), Niall O’Neill (Green Belt Ltd), Conor O’Reilly (University College Dublin), Cathal Ryan (Forest Service), Richard Schaible (Forest Service, Northern Ireland)

**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 Ireland’s 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.
7. Outline a strategy for breeding for tolerance to ash dieback (*Hymenoscyphus fraxineus*).
8. Advise on FGR research needs including recommendations that arise from objectives 1-7.

**Work undertaken and planned**
The Group met four times in 2016, the outputs of which include, 1) signed off Terms of Reference, 2) a series of presentations on FGR in Ireland, and relevant active research projects, 3) a review of *Sustaining and Developing Ireland’s Forest Genetic Resources* (Cahalane et al., 2007). The group is now focused on its principal task, that of producing a strategy framework document.

In order to progress this task as efficiently as possible, a workplan has been developed. Group members have been associated with particular objectives that may be of the most relevance to their own work area. The output of each subgroup will form the basis of the draft framework strategy document.
Improved downy birch indoor seed orchard. None So Hardy (Forestry) Ltd. Co. Wexford
3. Working Group on Land Availability and the Promotion of Afforestation (FLAIG)

**Membership**
Nuala Ni Filatharta (Teagasc, chair), Martyn Byrne (NewERA), Miriam Cadwell (Department of Agriculture, Food and Marine), Michael Carey (Irish Timber Growers Association), Karl Coggins (Forest Service), Pat Collins (Irish Farmers Association), Marina Conway (Irish Forestry and Forest Products Association and Western Forestry Co-op), John Paul Corkery (NewERA), Nicholas Cotter (Midwestern Forestry Services Ltd), Niall Farrelly (Teagasc), Michael Fleming (replaced by Geraldine O’Sullivan (Irish Farmers Association)), Richard Gregg, (Forest Service), Liam Kelly (Teagasc), Tom Kirley (RDS), Enda Monaghan (Irish Farmers Association), Fergus Moore (Forest Service), Cathal O’Donoghue (National University of Ireland, Galway), Tony Quinn (Forest Service), Mary Ryan (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).

**Work undertaken and planned**
This working group was established by the COFORD Council to progress the implementation of recommendations of the COFORD Land Availability Working Group (CLAWG). Some of the report recommendations have already been progressed and/or implemented. The focus of this current group is to address the recommendations that have not been progressed and devise an action plan.

The first meeting was held in April 2016 with subsequent meetings in June and November. Much of the Group’s work was done outside of meetings and mostly online. The CLAWG report was considered under five headings:

- Site classification for Irish forestry (Recommendations 1-4)
- Research and innovation (Recommendations 5-12)
- Socio-economic and taxation (Recommendations 13-18)
- Administration of the afforestation scheme (Recommendations 19-26)
- Promotion of the afforestation programme (Recommendations 27-28).

As work is ongoing on issues related to the first two bullet points (Recommendations 1-12) the focus of the Group has been on Recommendations 13-28.

Progress is being made on the preparation of an action plan to address socio economic issues that impact on afforestation. By addressing these issues it is hoped that a more positive environment for making the decision to plant can be created and that this will translate into increased/continued afforestation.

Actions are wide-ranging and, following a meeting in November and subsequent inputs and contributions, these are currently being refined and scoped out by a number of members of the Group. Each action is identified as either for adoption or requiring further analysis and study. The timeframe for implementation is also identified. It is anticipated that the final version (subject to agreement) will be submitted to the COFORD Council in 2017.
Sitka spruce plantation alongside grazing land
4. Working Group on the Forest Sector and the Bioeconomy (FSBG)

**Membership**
Gerard Murphy (Coillte, chair), Ciaran Fallon (Coillte), Donal Manger (Wood Marketing Federation), Mark McAuley (IBEC), Tom McDonald (Forest Service), Jim McNamara (Irish Timber Council), Nuala Ní Fhlatharta (Teagasc), Tony Quinn (Forest Service – secretary), Vincent Upton (Forest Service)

**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.

Work has focused on producing draft text and researching developments in land use, land-use change and forestry (LULUCF) and the national bioeconomy strategy. An introduction and a draft text on climate change has been produced and are currently being reviewed by working group members.

A meeting with senior officials from DG Agriculture and DG Climate Action in Brussels under the auspices of the European State Forest Association (EUSTAFOR) is planned for early 2017 on the LULUCF legislative proposal. The core of the proposal is the so called “no debit rule”. The proposal sets a binding commitment for each Member State to ensure that the total carbon emissions from land use categories are a net sink, or are otherwise compensated for by emission allowances or purchases.

The proposal introduces the concept of a forest reference level, which describes the “business as usual” carbon sequestration profile for managed forest land. If a Member State exceeds the bau reference level it can gain credits to balance any land use carbon debits.

Ireland has relatively low forest cover compared with other Member States and therefore has the potential for significant expansion through afforestation. The current EC Proposal allows flexibility for LULUCF credits from afforestation and other defined land use categories to be used for compliance with emission reduction targets, up to a limit defined for each Member State.

Further meetings of the working group are scheduled for February and March 2017, with a focus on issuing the final report, conclusions and recommendations in the second half of 2017.
Timber stack containing Douglas fir and Scots pine
5. Working Group on Wood Mobilisation and Roundwood Production Forecasting (WMPFG)

Membership
Mike Glennon (Glennon Brothers – chair), Karl Coggins (Forest Service), Patrick Collins (Irish Farmers Association), Owen Cooney (Irish Timber Growers Association), Des Byrne (Department of Communications, Climate Action and the Environment), Denis Dineen (SEAI), Michael Fairgrieve (Northern Ireland Forest Service), Eugene Hendrick (Forest Service), Noel Kennedy (Teagasc), Richard Latimer (Irish Timber Council), Daragh Little (Irish Forestry and Forest Products Association), Liam Malone (Coillte), Eoin O’Driscoll (drima marketing), Geraldine O’ Sullivan (Irish Farmers Association), John Redmond (Forest Service), Mark Twomey (Forest Service – secretary to the Group)

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.

Work undertaken and planned
The Group met four times in 2016.

The Group is mainly focusing its work on tracking the level of implementation of Mobilising Ireland’s Forest Resource, but is also considering new issues related to roundwood and fibre mobilisation and how they may be best addressed at national and industry levels.

The work programme is based on clustering the mobilisation report recommendations as follows:

Cluster 1: Impacts of felling practices and rotation lengths on future assortment availability, resource optimisation and forecasting, provision of harvest information,
Cluster 2: Renewables policies and measures, mobilisation and potential competition for fibre, Cluster 3: Felling licences, planning permission for forest entrances and forest road,
Cluster 4: Coillte resource, road haulage and transport technology,
Cluster 5: Information and advice relevant to private woodland owners and others on wood mobilisation, taxation,
Cluster 6: Training and research,
Cluster 7: Voluntary forest certification and chain of custody, environmental designations and procedures.

In addition to tracking the recommendations in the mobilisation report, the Group is updating the roundwood supply/demand balance for 2020 and 2025, largely based on the methodology in Annex 1 of the mobilisation report.

The Group plans to address the recommendations in the remaining Clusters 4-7 over the course of 2017, and report its findings towards the end of 2017.
Sawn boards ready for delivery. Photo courtesy of Glennon Brothers Ltd.

Membership
Daragh Little (Irish Forestry and Forest Products Association – chair), Niall Farrelly (Teagasc), Gerard Dunne (Green Belt Ltd), Padraig O’Tuama (Coillte), John Redmond (Forest Service), Ian Short (Teagasc)

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 established 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.

Work undertaken and planned
Management of mixtures is a concern for forestry professionals. There is limited knowledge of their composition or of best practice in their management. National Forest Inventory data suggest that some 102,100 ha of the forest estate comprises mixtures. Overall it is an area that will need considerable work over the coming years to provide sound management guidance to practitioners and policy makers.

The Terms of Reference of the Group were agreed in 2016, with discussion then focussing on the extent and type of mixtures in use in Ireland. The Group has also discussed the state of the art in the establishment and management of mixtures, including Forest Development Types as formulated by the Forestry Commission (GB).

At the end of 2016, a document for a study to outline initial recommendations on the management of mixtures was agreed. It is anticipated that this work will begin in Q3 2017.
7. Long Term Forest Research Issues

John Phelan (Woodland Managers Limited) is chairing a process to provide recommendations to address in more detail issues related to long term forest research (LTFR) and related resources raised in the content of Section 2.5 of the Forest Research Ireland (FORI) report.

A number of meetings and discussions were held by the Chairman with stakeholders in forestry and related research facilities as well as discussions with DAFM staff and at COFORD Council meetings.

Matters arising to date include:

1. Most funding resources for forest research are now channelled through competitive research calls organised through the Research and Codex Division of the Department of Agriculture, Food and the Marine.

2. There has been a loss of capacity for various reasons with little or no LTFR structure remaining in place in Ireland. There is a significant legacy of excellent research data and research resources that are already under threat.

3. Evolving policy (national and European), markets for public goods and services, markets for timber based product and evolving environmental science are creating significant demands for science based sectoral responses that go well beyond silvicultural practice.

4. Research and innovation solutions are evolving and there needs to be consideration of whether the traditional model employed in Ireland through Forest Service when it owned State forests and for some years after is the model best suited to current and future policy and market needs.

5. Funding for future research may be directed by Government and European agencies towards Open Innovation processes that embrace the Quadruple Helix Model where Government, industry, academia and civil participants work together to co-create the future and drive structural changes far beyond the scope of what any one organisation or person, or perhaps even sector, could do alone. This Open Innovation process will include key elements such as:
   - Networking;
   - Collaboration: involving partners, competitors, universities, and users;
   - Corporate Entrepreneurship: enhancing corporate venturing, start-ups and spin-offs;
   - Proactive Intellectual Property Management: creating new markets for technology;
   - Research and Development (R&D): achieving competitive advantages in the market.

6. The multi-faceted and cross cutting aspects of forestry with various elements of society - economic, social and environmental bring particular challenges. There are major strategic issues for Ireland and Europe as well as specific mission and business led issues where robust science, data capture, retention and accessibility are crucial to optimal resource utilisation and where the competitive research model does not provide all of the solutions.

A seminar is planned for September 2017 at which it is intended to address these issues with input from forestry and other sectoral players.

It is anticipated that a report with recommendations will be presented to the COFORD Council before the end of 2017.
First thinning of a Sitka spruce plantation
National Forest Research Programme

The national forest research programme has the following overall objectives:

- Determine the nature of forest research needed to maintain the international competitiveness of the forestry sector, provide sustainable employment, encourage innovation and enhance environmental harmony;
- Contribute to building and maintaining a knowledge economy and a scientific research capability in the forest sector;
- Establish and strengthen inter-institutional links and foster links between public research institutes and industry;
- Evaluate progress on and disseminate the outputs of funded research to ensure maximum benefit;
- Build capability and capacity among Irish based forest researchers so as to enable them to compete for non-Exchequer funding such as under the EU Framework Programme.

Grant awards are made for projects undertaken collaboratively by DAFM approved Research Performing Organisations. The programme expenditure arises on foot of successful applications to DAFM’s National Calls for proposals that are held periodically. The programme is also used to fund Irish researchers who have been successful in competitive transnational research calls, including European Research Area Networks (ERA-Nets).

Currently the seven thematic areas of FORI help guide the Programme. The purpose of the FOrest Research Ireland (FORI) Report is to capture specific policy, knowledge and production focused research topics and ideas relevant to the needs of forest stakeholders. This process was initiated by the COFORD Council in 2012 and has been facilitated by the Department of Agriculture, Food and the Marine’s Research & Codex Division, with wide stakeholder involvement including public consultation. FORI identifies seven thematic areas within which the Strategic Research Agenda is set out:

1. Expansion of the Forest Resource – sustainable increase in productive area
2. Productivity – sustainable improvements in crop productivity and quality
3. Resource Utilisation – stand modelling, recovery, supply chain, utilisation and optimisation
4. Adding Value – wood processing and product development
5. Forest Resource Protection – protecting the resource from biotic and abiotic threats
6. Ecosystem Services – the benefits people obtain from forest ecosystems
7. Climate Change – impact, adaptation and mitigation – responding to a changing climate

For further information please contact:
Tony Quinn Tony.Quinn@agriculture.gov.ie
Niamh Hennessy NiamhM.Hennessy@agriculture.gov.ie

Research & CODEX Division
Department of Agriculture, Food and the Marine
CForRep: A UCD led multidisciplinary project focusing on improving the national estimates of forest carbon sequestration. Photo Brian Tobin, UCD
**National Forest Research Programme** (administered by Research and Codex Division, Department of Agriculture, Food and the Marine)

Table 1: Projects underway as of end 2016

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Title</th>
<th>Project No</th>
<th>Project co-ordinator</th>
<th>Lead institute</th>
<th>Start date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SHINE</strong></td>
<td>Supporting Hen Harrier In Novel Environments</td>
<td>15 C 638</td>
<td>Prof John O Halloran</td>
<td>UCC</td>
<td>01/05/2016</td>
</tr>
<tr>
<td><strong>IRISHLANDUSES</strong></td>
<td>Irish Land Use Emission and Sequestration Support Tool</td>
<td>15 S 650</td>
<td>Dr Trevor Donnellan</td>
<td>Teagasc</td>
<td>01/04/2016</td>
</tr>
<tr>
<td><strong>EARTH</strong></td>
<td>Exploitation And Realisation of Thinnings from Hardwoods</td>
<td>15 C 666</td>
<td>Dr Annette Harte</td>
<td>NUIG</td>
<td>01/11/2016</td>
</tr>
<tr>
<td><strong>FOROWN</strong></td>
<td>Irish private forest owners: The role of knowledge transfer and social networks</td>
<td>15 C 684</td>
<td>Dr Aine Ni Dhubhain</td>
<td>UCD</td>
<td>01/05/2016</td>
</tr>
<tr>
<td><strong>CICLT</strong></td>
<td>Commercialisation of Irish Cross-Laminated Timber</td>
<td>15 C 694</td>
<td>Dr Annette Harte</td>
<td>NUIG</td>
<td>01/11/2016</td>
</tr>
<tr>
<td><strong>FORM</strong></td>
<td>Forest Management Research</td>
<td>14/C/889</td>
<td>Dr Conor O Reilly</td>
<td>UCD</td>
<td>01/07/2016</td>
</tr>
<tr>
<td><strong>MASAD</strong></td>
<td>Assessing Ireland’s risk to airborne spread of ash dieback disease with Lagrangian stochastic models</td>
<td>14/C/809</td>
<td>Dr Jon Yearsley</td>
<td>UCD</td>
<td>18/03/2015</td>
</tr>
<tr>
<td><strong>FORECASTMODEL</strong></td>
<td>Forecast Model</td>
<td>14/C/824</td>
<td>Dr Niall Farrelly</td>
<td>Teagasc</td>
<td>01/06/2015</td>
</tr>
<tr>
<td><strong>CASWOOD</strong></td>
<td>Economic and Environmental Mapping of Cascade Use of Wood</td>
<td>14/C/887</td>
<td>Dr Ken Byrne</td>
<td>UL</td>
<td>01/03/2015</td>
</tr>
<tr>
<td><strong>WINDRISK</strong></td>
<td>Windthrow risk modelling</td>
<td>14/C/810</td>
<td>Dr Aine Ni Dhubhain</td>
<td>UCD</td>
<td>01/01/2015</td>
</tr>
<tr>
<td><strong>SHORTFOR</strong></td>
<td>Biomass and renewable energy from Short Rotation Forestry</td>
<td>13/C/498</td>
<td>Dr Conor O Reilly</td>
<td>UCD</td>
<td>01/12/2013</td>
</tr>
<tr>
<td><strong>BETTERFOR</strong></td>
<td>Evaluation and refinement of timber forecasting tools using national forest inventory</td>
<td>13/C/451</td>
<td>Prof Maarten Nieuwenhuis</td>
<td>UCD</td>
<td>01/03/2014</td>
</tr>
<tr>
<td>Acronym</td>
<td>Title</td>
<td>Project No</td>
<td>Project co-ordinator</td>
<td>Lead institute</td>
<td>Start date</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------------------------------------</td>
<td>------------</td>
<td>------------------------------</td>
<td>----------------</td>
<td>--------------</td>
</tr>
<tr>
<td>MARTT</td>
<td>Developing a GIS based Agreed Routes Map for Sustainable Timber Transport in Ireland and Mobile App “RouteTagger”</td>
<td>13/C/487</td>
<td>Prof Maarten Nieuwenhuis</td>
<td>UCD</td>
<td>02/01/2014</td>
</tr>
<tr>
<td>ADAPT</td>
<td>Avian Diversity and Afforestation Planning Tools</td>
<td>13/C/452</td>
<td>Prof John O Halloran</td>
<td>UCC</td>
<td>01/12/2013</td>
</tr>
<tr>
<td>GEOFOREST</td>
<td>Impacts of forest clearing on Kerry Slug (<em>Geomalacus maculosus</em>) populations with the development of mitigation measures based on preferred diet of species</td>
<td>13/C/474</td>
<td>Prof Mike Gormally</td>
<td>NUIG</td>
<td>01/02/2014</td>
</tr>
<tr>
<td>IITU</td>
<td>Innovation in Irish Timber Usage</td>
<td>11/C/207</td>
<td>Dr Annette Harte</td>
<td>NUIG</td>
<td>01/01/2012</td>
</tr>
<tr>
<td>CFOREP</td>
<td>Additions and refinements to the Irish forest carbon accounting and reporting tool</td>
<td>11/C/205</td>
<td>Prof Maarten Nieuwenhuis</td>
<td>UCD</td>
<td>01/01/2012</td>
</tr>
<tr>
<td>FORSITE</td>
<td>Monitoring and Assessment of critical biomass removal in Irish forests</td>
<td>11/C/208</td>
<td>Dr Thomas Cummins</td>
<td>UCD</td>
<td>01/01/2012</td>
</tr>
<tr>
<td>ECOVALUE</td>
<td>Valuing the Ecosystem Services of Forests in Ireland</td>
<td>11/C/204</td>
<td>Dr Aine Ni Dhubhain</td>
<td>UCD</td>
<td>01/03/2013</td>
</tr>
<tr>
<td>MCOP</td>
<td>Multi-agent control options for pine weevil</td>
<td>10/C/720</td>
<td>Dr Christine Griffin</td>
<td>NUIM</td>
<td>01/02/2012</td>
</tr>
<tr>
<td>PHYTOFOR</td>
<td>Detection, Epidemiology and Control of <em>P. ramorum</em> and <em>P. kernoviae</em> in Irish Forests (PHYTOFOR)</td>
<td>10/C/721</td>
<td>Dr James Choiseul DAFM</td>
<td>Teagasc</td>
<td>01/05/2012</td>
</tr>
<tr>
<td>FORDEER</td>
<td>The use of forests by deer in Ireland (FORDEER)</td>
<td>10/C/718</td>
<td>Prof John O Halloran</td>
<td>UCC</td>
<td>01/03/2012</td>
</tr>
<tr>
<td>GNAW-Control</td>
<td>‘Green’ Novel Approach for Weevil Control</td>
<td>10/C/722</td>
<td>Dr Olaf Schmidt</td>
<td>UCD</td>
<td>01/12/2011</td>
</tr>
<tr>
<td>FORGEN</td>
<td>Forest Genetics Resources Research Programme</td>
<td>10/C/717</td>
<td>Dr Conor O Reilly</td>
<td>UCD</td>
<td>01/01/2012</td>
</tr>
<tr>
<td>WIGS</td>
<td>The spread of grey squirrels to the west of Ireland</td>
<td>10/C/719</td>
<td>Dr Colin Lawton</td>
<td>NUIG</td>
<td>01/11/2011</td>
</tr>
</tbody>
</table>
**COFORD publications issued in 2016**

<table>
<thead>
<tr>
<th>Title</th>
<th>Authors</th>
<th>Type</th>
<th>ISBN</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Land Availability for Afforestation: Exploring opportunities for expanding Ireland forest resource</em></td>
<td>COFORD Land Availability Working Group</td>
<td>Report</td>
<td>978-902696-75-1</td>
</tr>
<tr>
<td><em>All Ireland Roundwood Production Forecast 2016-2035</em></td>
<td>Henry Philips, Edwin Corrigan, Myles McDonagh, Michael Fairgrieve, Niall Farrelly, John Redmond, Frank Barrett and Mark Twomey</td>
<td>Report</td>
<td>978-1-902696-76-8</td>
</tr>
<tr>
<td><em>Broadleaf Forestry in Ireland</em></td>
<td>Juergen Huss, Padraic Joyce, Richard MacCarthy and John Fennessy</td>
<td>Book</td>
<td>978-1-902696-77-5</td>
</tr>
<tr>
<td><em>An overview of 2013 meeting of the United Nations Economic Commission for Europe (UNECE) Committee on forests and the forest industry</em></td>
<td>Eoin O’Driscoll</td>
<td>COFORD Connects Note</td>
<td>NA</td>
</tr>
<tr>
<td><em>An overview of 2014 meeting of the United Nations Economic Commission for Europe (UNECE) Committee on forests and the forest industry</em></td>
<td>Eoin O’Driscoll</td>
<td>COFORD Connects Note</td>
<td>NA</td>
</tr>
<tr>
<td><em>An overview of 2015 meeting of the United Nations Economic Commission for Europe (UNECE) Committee on forests and the forest industry</em></td>
<td>Eoin O’Driscoll</td>
<td>COFORD Connects Note</td>
<td>NA</td>
</tr>
<tr>
<td><em>Review of worldwide standards for solid biofuels</em></td>
<td>Pieter D. Kofman</td>
<td>COFORD Connects Note</td>
<td>NA</td>
</tr>
<tr>
<td><em>New fuels: Thermally treated biomass</em></td>
<td>Pieter D. Kofman</td>
<td>COFORD Connects Note</td>
<td>NA</td>
</tr>
<tr>
<td><em>Health and safety aspects of using wood chips as a fuel</em></td>
<td>Pieter D. Kofman</td>
<td>COFORD Connects Note</td>
<td>NA</td>
</tr>
<tr>
<td><em>Health and safety in the handling storage and use of wood pellets</em></td>
<td>Pieter D. Kofman</td>
<td>COFORD Connects Note</td>
<td>NA</td>
</tr>
<tr>
<td><em>Wood ash</em></td>
<td>Pieter D. Kofman</td>
<td>COFORD Connects Note</td>
<td>NA</td>
</tr>
<tr>
<td><em>Heat treatment of softwoods to improve stability and durability</em></td>
<td>Seamus Dolan and Colin Birkinshaw</td>
<td>COFORD Connects Note</td>
<td>NA</td>
</tr>
<tr>
<td><em>Woodflow and forest-based biomass energy use on the island of Ireland (2015)</em></td>
<td>Eoin O’Driscoll</td>
<td>COFORD Connects Note</td>
<td>NA</td>
</tr>
<tr>
<td><em>Felling Decision Tool – Conifers</em></td>
<td>Henry Phillips</td>
<td>COFORD Connects Note</td>
<td>NA</td>
</tr>
</tbody>
</table>