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COFORD Forestry and Wood Update

October, 2001 Volume 1 Issue 7

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# Overview of COFORD Activities

During September we had another Council meeting at which some sixteen research proposals were discussed. The council has short listed five of these proposals and approved a number of new desk studies. Details of the five short listed proposals will be brought to readers in a later edition of this newsletter, following contract signing.

The first tranch of the COFORD forest research programme for 2000-2006 is now almost complete. Early in the new year we will carry out a gap analysis and begin to develop further scoping documents to outline further priority areas.

On September 12th Mr Hugh Byrne, TD, Minister of State at the Dept. of the Marine and Natural Resources, launched *A review of relevant studies concerning farm forestry trends and farmers’ attitudes to forestry* which was written by Mr Brendan Kearney. The launch of this latest COFORD publication took place at the beginning of the IFA’s Farm Forestry Seminar in Mullingar.

Then, on September 28th Mr David Nevins, Chairman of COFORD, launched our latest publication *Carbon Credits in Ireland: Issues and Potentials.* This report was written by Conor Barry, Peter Clinch and Prof Frank Convery of UCD. Both of these publications are available from our website or from our office. Details of all COFORD publications are available at our website [www.coford.ie](http://www.coford.ie)

We continue to receive feedback on the contents and layout of this newsletter. Comments are always welcome by dropping a note to [info@coford.ie](mailto:info@coford.ie). Anyone wishing to be added to the circulation list should visit <http://www.coford.ie/frames/newsletter.html> and enter their details. Back issues of the newsletter are available to download at: <http://www.coford.ie/newsletter/issues.html>

## Coillte Receive FSC Certificate

On September 11th, Coillte was awarded the FSC (Forest Stewardship Council) certificate by Tobin Gordon of SGS-Qualifor. This certification verifies that the state forestry company’s forests are managed in line with stringent criteria covering social, environmental and economic aspects of forest management. This development is a huge vote of confidence in Coillte and the Irish forest industry by an internationally recognised certification body. Our congratulations go to all staff in Coillte, and also to the many stakeholders who participated in the process.

Wood products made from logs harvested from Coillte’s forests can now carry the FSC logo, which will assure final consumers of the sustainability of the raw material used for this produce.

## COFORD Vacancies

The closing date for receipt of applications for the two new COFORD positions has been extended. COFORD is currently seeking applications from suitable candidates to fill the following positions within the organisation.

### 1) Technology Transfer Co-ordinator

**The role:**

The work of the Technology Transfer Co-ordinator will be varied and challenging. It will involve the following:

* Assist with the transfer of research results into practice,
* updating the COFORD website,
* work with our website hosting company to develop the site to its fullest potential,
* assist in the preparation of publications,
* liase with publishers/printers to ensure cost effective and on-time delivery of publications,
* organise workshops, seminars, research user groups and other methods of technology transfer,
* other tasks as instructed by the Director/Research Manager.

The person:

Applicants should have previous experience of working to tight deadlines in a busy office environment. The following qualities are essential:

* excellent interpersonal and communication skills,
* excellent telephone manner,
* excellent organisation skills,
* working knowledge of the MS Office suite (Access, Word, Excel),
* ability to maintain a website.

In addition, the successful candidate will be a dedicated, self-starter and also willing to work as part of a team. Ideally, applicants should be educated to degree level. Previous knowledge of the forest industry is not a prerequisite.

These appointments are being dealt with jointly by COFORD and the Department of the Marine and Natural Resources and will be on a contract basis.

### 2) Co-ordinator for national broadleaf tree improvement,

gene conservation and non-wood forest products

**The role:**

The work of the co-ordinator will involve the following:

* Compilation and updating of the national register of seed stands (in association with the Forest Service),
* Coordinating national broadleaf tree improvement research,
* Liaison with the British and Irish Hardwoods Improvement Programme and with EUFORGEN (in association with the Forest Service),
* Coordination of research and development on non-wood forest products, including foliage and Christmas trees.
* Assist in the preparation of publications,
* Other tasks as instructed by the Director/Research Manager.

The person:

Applicants should have previous experience of working to tight deadlines in a busy office environment. The following qualities are essential:

* skills and knowledge of issues in broadleaf tree improvement and gene conservation in Ireland,
* knowledge of the Christmas tree sector in Ireland and its development needs,
* knowledge of the competitive and environmental issues facing the forestry sector in Ireland,
* excellent interpersonal and communication skills,
* excellent organisation skills,
* working knowledge of the MS Office suite (Access, Word, Excel).
* In addition, the successful candidate will be a dedicated, self-starter and also willing to work as part of a team. Ideally, applicants should be educated to degree level. A full clean driving licence is required.

For further information telephone 01 6199513.

These appointments are being dealt with jointly by COFORD and the Department of the Marine and Natural Resources and will be on a contract basis. Applications, in writing and enclosing full CVs should be made to:

**Personnel Officer**

**Department of the Marine and Natural Resources**

**Leeson Lane**

**Dublin 2**

## Tenders for Desk Studies Sought

As stated above, the COFORD Council has recommended that the following desk studies be commissioned:

### Identification of Costs Associated with Forest Certification:

Recent developments in the industry include: the Irish Forest Standard, the Code of Best Forest Practice, Suite of five FS Guidelines on Forest Operations, FSC Forest Management Standards, Forest Certification and indeed SFM in general. While all of these initiatives have been of great importance, there are costs associated with their implementation. The costs must be considered in the context of the benefits that may accrue to certified products. The study will also determine the current market for certified wood in Ireland and the UK and identify likely trends in this market.

### Factors influencing farmer participation in forestry:

Following from the COFORD publication launched at the IFA Farm Forestry Seminar, a study is needed to make clear recommendations on how the factors identified can be redressed. The study would recommend a strategy to address and remove barriers to entry to forestry, over and above grant related issues.

Strategies to enable economically viable wood-biomass energy generation:

Much technical information is available on the suitability of wood-biomass as a source of renewable energy. However, for this to become a reality government policy must be changed. A study is needed to quantify the penalties that Ireland will face if it does not address its commitments to renewable energy production and greenhouse gas emissions reductions. The study would identify the primary fiscal policies which the Government could use and would conduct a cost-benefit analysis of each of the potential policies.

Quantification of recycled wood waste that could be made available for energy production and other uses:

Compared to other building materials, timber is top of all indices used to measure environmental friendliness. The one exception is on the solid waste index. For timber to improve its performance under this index, the industry must endeavour to recycle all wood from building sites and renovations. It can either be recycled into panel board products or used as a fuel source. It may also be resawn for high value products. The optimisation of the logistics of collecting this material is essential to the economic viability of further processing. However, landfill taxes will help to ensure that there is an incentive to recycle this material. Before any plan can be put in place to use this material, volumes and quality must be assessed and documented. This is the aim of this desk study.

### Review of market opportunities for non-wood forest products:

Anecdotal evidence suggests that high value added markets exist for products such as aromatic oils extracted from commercial tree species such as Douglas fir and noble fir. Other markets exist for foliage and berries. These non-wood forest products could potential generate an income for timber growers and could enhance the socio-economic value of forests. Before considering research in these areas it is prudent to assess the markets for and marketability of these products. This study would identify these and assess the feasibility of supplying the market and generating a positive return on investment. It would also outline the research needs of this sector.

Scoping documents and application forms for these desk studies will be available on the COFORD website from October 8th, with a closing date for receipt of applications of November 2nd.

## New COFORD Projects Commenced

Continuing with our aim to keep all stakeholders of the forest industry updated on research activities, we are pleased to bring you the following details of new projects, contracts for which we have recently signed.

Pine Yield – Development of dynamic yield models for coastal lodgepole pine and Scot’s pine grown under Irish conditions

This project follows on the work already carried out on developing dynamic yield models for Sitka spruce, Norway spruce and Douglas fir. This initial project has been completed and a user-friendly software package is currently being developed. The *PineYield* project will see lodgepole pine and Scot’s pine added to this package.

Coillte will carry out the work with the assistance of Dr Lance Broad. Growth models are vital tools for management and planning of forest operations, by providing guidelines on predicted tree sizes and volumes, as well as product assortments, over the life of the crop. They are also important at a national level, so that sample inventory data can be used to predict regional and national production potential.

This project will take 15 months to complete.

SomaticEmbryo – Accelerated production of genetically improved Sitka spruce through the process of somatic embryogenesis

The primary objective of this project is to demonstrate to nurserymen and foresters the ability to multiply genetically improved Sitka spruce via the process of somatic embryogenesis. This will ultimately be achieved through the establishment of field trials to compare the development of somatic emblings from improved material to conventional cuttings and seedlings from the same material.

The project will run for four years and will be led by Ms Fiona Harrington of Coillte Research. Earlier research indicates that the production gains of using improved material can be as much as two yield class.

RoadMan – Compilation of a forest roading manual

This desk study was awarded to a team consisting of Mr Henry Phillips, Forestry Consultant and Mr Tom Ryan, Coillte Engineer. The study will run for six months and will lead to the production of a comprehensive guide to designing and constructing forest roads, lay-bys and loading areas. The guide will include information on the following aspects of forest roading:

* Planning
* Road density and economics
* Road location
* Construction methods
* Materials
* Drainage
* Access to roads from the plantation
* Embankment slopes
* Stream crossing
* Curves, junctions, passing and turning places
* Exit to county roads
* Loading bays
* Maintenance
* Upgrading
* Repair

The guide will give full cognisance to all environmental guidelines and legislation in use. Potentially, this guide will become a national forest roading standard. Stakeholder workshops will be held during the six-month period to allow full consultation with all interested parties.

# MarCo – Developing effective, market-led, grower co-operatives

COFORD sought a desk study on this topic as a result of the forecasted rapid increase in the production potential of the private forest estate in Ireland. The successful tenderers for this contract consisted of a team that included Dr Philip Blackstock, Mr Ray Gallagher (Western Forestry Co-op), Dr Erhun Kula, Mr Seamus O’Donohoe (ICOS) and Ms Sarah Wall (GMIT).

The study will involve identifying the existing co-operative structures in Ireland. Similar forestry structures will be identified in other countries around the world and a benchmarking exercise will be conducted to identify the most effective systems, which could be adopted in Ireland.

Once the most effective co-operative structure is organised, it is envisaged that a COFORD study tour will be organised to expose the private forestry sector to a market-led, effective, workable co-op.

Updates on all of these projects will follow in later issues of this *Forestry & Wood Update* newsletter.

## ITGA/COFORD Seminar

The Irish Timber Growers’ Association hold an annual seminar in Dublin every November. This year the seminar title is ‘Utilisation of thinnings from Private Woodlands’. This timely seminar is an important step in the development of a strategy to establish markets for roundwood from thinnings. To facilitate a greater number of foreign expert speakers COFORD will co-host this year’s seminar. A provisional line up of speakers has been put together. Once finalised, a separate notification email will be circulated to all recipients of this newsletter. The seminar will be held in the Industry Centre, UCD, Belfield, Dublin 4 on Thursday, November 8th.

Papers to be presented will include:

* Planning markets for future roundwood supply from the Private Sector
* Potential Roundwood supply from the private sector – quantification and issues to be addressed
* Developing sales and harvesting systems to accommodate the increasing roundwood supply from the Private Grower
* The Development of markets for thinnings in Denmark

## RDS Irish Forestry & Wood Awards 2001

These awards are sponsored by The Forest Service of the Department of the Marine & Natural Resources under the National Development Plan 2000-2006. This year the award scheme has seen a re-evaluation and re-modelling of its structure to better reflect its original focus; namely promoting excellence in forestry and wood production and its commercial usage. This award scheme now features four categories, which continue to promote excellence in the primary areas of; Farm Forestry, Urban/Recreational Forestry, Commercial Timber and Craft Enterprise, and Bio-Diverse Forests/Woodlands.

### Category One - Farm Forestry

This category has been long established to promote better forestry on farms. While sound silvicultural management will form the basis for selection, further consideration will be given to measures undertaken to maximise additional benefits such as environmental improvement, wildlife conservation, and the integration of additional enterprises.

Eligibility Criteria

Areas entered must be owned by farmers or co-operatives**\***

Total woodland ownership must not exceed 50 hectares

Minimum area of entry 2 hectares and maximum 25 hectares

Entry must be established at least 5 years

**\***Farmers are defined as those who are in receipt of the farmers’ rate of premium from the Forest Service

### Category Two - Urban/Recreational Forestry

Category Two has been established to reflect the growing recognition of the environmental, social and economic benefits of trees and woodlands in the environment, and the increased application of urban and recreational forestry in Ireland. Eligible entrants include: individual forest owners, local authorities, environmental NGOs, community groups, and other organisations.

Eligibility Criteria

No age limit

No size limit

### Category Three - Commercial Timber & Craft Enterprise

This category is intended to promote the use of Irish grown timber and materials as a resource for commercial activity as their end-use. The award encourages and rewards companies or individuals that have made a commercial success of producing timber or craft products, particularly with native timber.

While the business will be considered on its profitability, innovation, and the environmental sensitivity of the operation the judges will pay particular attention to the following:

* Market penetration
* Current and future viability of the business
* Current employment and employment potential
* Import substitution potential
* Export potential

Eligibility Criteria

Entries must have been in production for at least two years.

There must be at least one person employed full time in the business

The use of Irish grown timber must be maximised in the products

### Category Four - Bio-Diverse Forests or Woodlands

Category Four, the newest category, is intended to encourage the expansion/development of existing and new forest habitats through natural/environmentally sensitive methods. Particular attention will be paid to the methods employed to this effect, such as natural regeneration, replanting and recopsing, as well as measures to create a greater diversity of flora and fauna within the forest or woodland. Private owners, Public and local authorities, state and state-sponsored bodies and co-operatives are eligible to enter in this category.

Marks will be warded for the following aspects:

Planning/Management

Ecological Awareness

Methods, i.e. Natural regeneration/recopsing

Control of grazers

Control of invasive species

Sensitive felling and thinning

*Eligibility Criteria*

Minimum area of entry 0.5 hectares with no maximum limit

CONDITIONS OF ENTRY

The competition is an all-Ireland event and is open to entries from all 32 counties

Entries must be made on an official entry form. (A specific entry form is required for each separate category).

An entry can be made in one category only.

A map showing the location of the entry should be included with each entry form in Categories 1, 2, and 4.

Entries must be accompanied by a sketch of the area to be assessed in Categories 1, 2, & 4

Category winners in any year may not enter the competition again in the succeeding 3 years. After that period, previous winners cannot submit the same entry again.

AWARDS & PRIZES

The winner in each category will receive a cash prize of **£1,000**, a silver RDS medal, and a perpetual trophy.

In addition, where sufficient merit is shown, certificates of merit will be presented in each category.

JUDGING

Entries will be evaluated and shortlisted.

Judges will visit and assess all shortlisted entries.

Results will be announced in November.

Entry forms available from

*RDS Irish Forestry and Wood Awards, RDS, Ballsbridge, Dublin 4*

*Tel* 01-2407215/6680866, *Fax* 01-6604014

***Entries must be made on an official entry form before Friday, 2nd November 2001.***

## Timber Quality of Sitka spruce seminar

Our colleagues across the Irish Sea have brought an interesting seminar to our attention. On October 10th, the Forestry Commission will hold a seminar on *Timber Quality of Sitka spruce*. The seminar will be held in Perth, Scotland and runs from 9:30 to 15:30. The seminar is free but pre-registration is essential. Forms are available from COFORD. It is possible to get an early morning flight to Edinburgh and return on the same day (Perth is about 45 minutes from Edinburgh). The seminar is timely indeed, given the forecasted increase in the production of Sitka spruce roundwood from the forests of Ireland over the next decade and the increasing competitiveness of the traditional end markets. Forest Research, the UK research agency of the Forestry Commission, has developed a method for assessing the quality of standing timber. The purpose of the seminar is described by the hosts as:

* Explain the timber quality assessment method
* Summarise the findings of the recent survey in Scotland and North East England
* Demonstrate the stem straightness assessment method in the field.

It promises to be a most interesting event and a presence from Ireland is assured.

The seminar programme includes the following:

* Introduction by *Prof Barry Gardiner*
* Straightness Scoring Protocol by *Shaun Mochan*
* Results of survey by *Jason Hubert and Tom Connolly*
* Practical application of the protocol by *Jason Hubert*

These presentations will be followed by open discussion and a field visit.

## BRE demonstrate potential of Timber Frame Construction

BRE, the Building Research Establishment, have been hosting the TF2000 project in their Cardington, Bedfordshire facility. The following summary is provided for those of you who are unfamiliar with the TF2000 project.

The Timber Frame 2000 project is a collaborative project between the UK Government, BRE and TRADA Technology Ltd. It also involved many industry partners from the timber and related industries.

The TF2000 project involved the construction of a six-storey timber frame building consisting of 24 apartments. The building was erected as an experiment to assess the performance and economic viability of medium-rise timber frame buildings constructed to UK building regulations. The objectives of the project was to benchmark timber frame construction of medium-rise building against other methods using lead-time, construction cost and speed of construction as the benchmark criteria.

The building was constructed in an old airship hangar in Bedfordshire. It is a remarkable sight and took just 17 days to erect the complete six-storey building. TF2000 performed favourably under each of the benchmark criteria.

The next step was to test the fire safety of the building. Again, the results were most favourable. The project proved that timber frame building performed within the building regulations for the UK. In addition the project demonstrated how the damage could be repaired without any effect on the remainder of the building.

Certainly TF2000 has been responsible for the renewed interest in Timber Frame Construction throughout the UK and Ireland. The project is an excellent example of what can be achieved through cooperation between Government, research providers, in the form of TTL and BRE and the relevant industry sector, in this case the UK timber frame industry. All parties must be congratulated on the foresight shown and the professionalism with which the project was managed.

Further information may be accessed at http://www.bre.co.uk

## Carbon Corner

The ratification of the Kyoto Protocol moved significantly closer following the successful outcome of the Bonn climate conference last July. Further progress is anticipated at the next conference in Marrakech in November. The target is have the protocol ratified by all Member States of the EU by the end of 2002. The role of forests as carbon sinks is set out in the protocol but this is just one of the ways that forests and forest products help to reduce the emission of harmful greenhouse gases to the atmosphere.

In the Kyoto protocol forests are recognised as sinks that can take up atmospheric carbon and store it in wood, branches and foliage. They also store carbon in their roots and, over time, build up a considerable ‘pool’ or store of carbon in the soil organic matter. In fact the soil is by far the largest ‘pool’ of carbon in many forest ecosystems, particularly in temperate and northern boreal forests. Well over half the total carbon is stored the soil, though the build-up of soil carbon is, as Bert Bolin (a former chairman of the International Panel on Climate Change - IPCC) has pointed out, a very slow process, taking place over time scales of decades and even hundreds of years at northern latitudes.

Bolin, in the IPCC Special Report on Land Use, Land-Use Change and Forestry <http://www.grida.no/climate/ipcc/land_use/index.htm>, has also summarised the size and nature of the main global carbon pools. He sets out five main pools and their size:

Pool………………………………Carbon content*G tonnes carbon[[1]](#footnote-1)1*

(a) Atmosphere780

(b) Oceans – surface layers4000

(c) Oceans deep layers 34000

(d) Terrestrial (including forests) 700

(e) Soils2000

Clearly the largest pool by far is the deep ocean layer. Soils are also a significant pool, far larger than the terrestrial component, though he points out that forest management and extensions of forest area, if well practised, can also reduce the atmospheric stock. In the long term however, Bolin argues that the rate at which carbon is transferred from pool (b) to (c) and from pool (d) to (e), is the crucial factor in determining levels of carbon in the atmosphere. The best current estimate of the transfer rate to pools (c) and (e) combined is 1.0 to 1.5 G tonnes of carbon per year while the rate of emissions from fossil fuels is 6.5 G tonnes of carbon. In the long-term the main answer to reducing global warming is to reduce emissions. Reduction can be tackled in a number of ways, including switching to renewable energy sources. Wood energy is renewable, provided forests are regenerated. It is a significant source of energy production globally and its use is growing. In Finland, for example, close on 30% of all energy generation comes from wood. In the Irish context there is great scope for wood energy production. There are large increases in wood production forecast over the coming decade. Wood waste currently goes to landfill, though much of it is suitable for energy generation. Energy consumption and consequent greenhouse gas emissions can also be reduced by increased use of wood in construction. This works in two ways. First wood can replace concrete and steel which have higher embodied energies than wood. Embodied energy is the energy taken to covert limestone to cement and iron ore to steel. Converting roundwood to sawn timber takes little energy by comparison. The second way wood can make a contribution to reducing energy consumption is through timber frame construction. Timber frame offers the opportunity to very significantly reduce home heating requirements though improved insulation. The use of timber frame is growing all time. At present it holds about 15% of the housing market in Ireland. In the US almost 90% of housing starts are timber frame.

## Pending Publications

The next three publications to be launched will be:

1. A Review of Legislation that Impacts on Irish Forestry
2. Vegetative Propagation Techniques for Oak, Ash, Sycamore and Spruce
3. Forest Mammal Management

All three publications will be launched at the ITGA/COFORD Seminar on November 8th. Copies will be available to purchase at a reduced price at the seminar. Alternatively, they may be ordered at our website or our office after the launch date.

To unsubscribe to this newsletter, reply to [info@coford.ie](mailto:info@coford.ie) with the word 'unsubscribe' in the subject field.

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

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1. 1 G tonnes: Giga tonnes of carbon, one giga tonne is one billion (one thousand million) tonnes [↑](#footnote-ref-1)