

WOODIRELAND

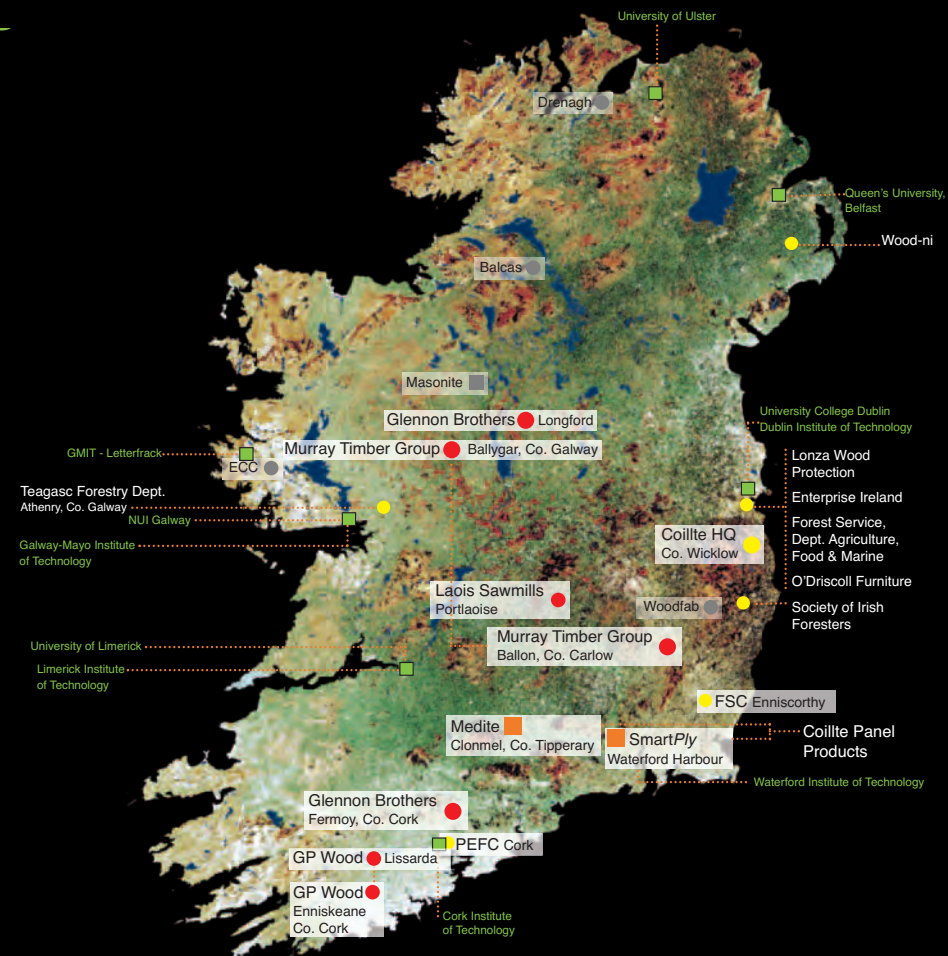
pride in the product

wood marketing federation

promoting wood as a renewable, sustainable
and versatile natural material



WOODIRELAND



Timber processors and key stakeholders in the Irish forestry and forest products industry

- Sawmills – members and supporters of WMF
- Board mills – members and supporters of WMF
- Sawmills
- Board mill
- Stakeholders – supporters of WMF
- 3rd Level Colleges – supporters of Student Wood Awards

WOODIRELAND
pride in the product

WOODIRELAND

Pride in the Product

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www.wood.ie

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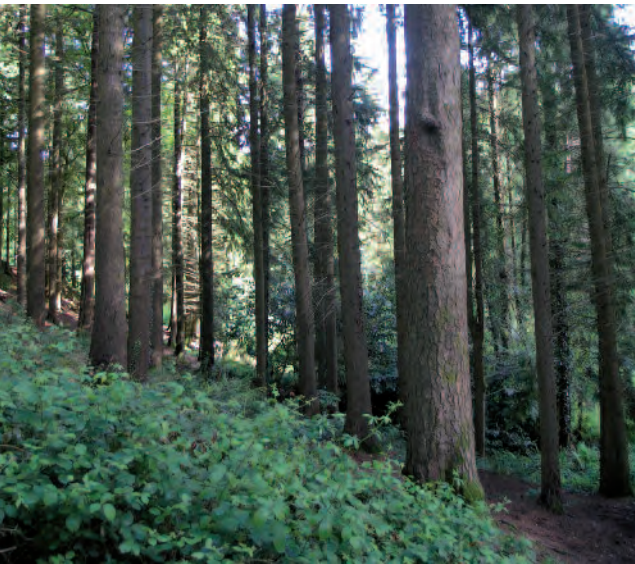
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Cover: *Vessel in Sitka spruce*, Venice Biennale 2012 by O' Donnell+Tuomey, Architects.

Woodspace in Sitka spruce, Electric Picnic, 2012, by Eugene Boyle, Woodcollective.

Wood is the greatest renewable resource in the world

RENEWABLE RESOURCE



The purpose of this publication is to promote wood and wood products to our customers and other stakeholders in Ireland and overseas. It highlights the increasing importance of the forestry and forest products industry to the Irish economy.

The sector has grown from a small domestic industry in a generation to become a vibrant wealth creator now valued at €2.2 billion per annum and with the potential to double this by 2030.

Wood is the greatest renewable resource in the world providing it is sourced from sustainably managed forests. We in the Wood Marketing Federation (WMF) support initiatives that ensure a sustainable timber industry throughout the growing and production cycle.

We place strong emphasis on environmental certification schemes and the EU Timber Regulation which effectively bans the placing of illegal timber and timber products on the EU market. Like certification, the regulation places an

obligation of due diligence on all who trade in wood and wood products. We welcome these initiatives as they ensure the sustainability of our forests and downstream industries which benefit all our people.

We are fortunate in the WMF to be in a position to draw on the support of leading companies and organisations to achieve our objectives. We appreciate the co-operation of stakeholders including timber processors and manufacturers, wood preservative companies, architects, engineers, designers

and other specifiers, third level colleges and state agencies. This partnership has major economic, social and environmental benefits for this and future generations.



Paul Harvey
Chairman
Wood Marketing Federation

A large pile of cut logs, showing the circular cross-sections of the wood, is stacked in a forest. The logs are surrounded by green foliage and trees in the background.

HOME GROWN

WOOD MARKETING FEDERATION

The Wood Marketing Federation was founded in 1989 to promote wood in all aspects including wood products, standards, design and usage. It recognised the need to promote wood especially to builders, architects, engineers, designers, specifiers, State agencies and educational bodies as there was a dearth of knowledge of wood and its potential as a sustainable construction and design medium.

WMF is a non-profit making organisation whose mission is to *promote wood as a renewable, sustainable and versatile natural material*.

Our members and other stakeholders in the forestry and forest products industry support a range of projects, which meet with the Federation's following objectives:

- Quality: to support the development of the highest standards.
- Education: to increase the knowledge and understanding of wood and wood products.
- Innovation: to promote and encourage new uses and applications for wood.
- Representation: to support member organisations in improving and developing their markets.

The WMF programme promotes wood to a wide public but most of our programmes

WMF supports sustainably managed forests of sufficient scale to sustain a viable forestry and forest products industry

- Technology has helped to bridge the gap between forest manager and end user.
- Mixed larch beech forest, Co. Wicklow.
- Coillte HQ, Douglas fir cladding and larch glulam in exterior.



are aimed at specialist audiences including traders, builders, timber processors, architects, engineers, designers, preservative companies along with government bodies and State agencies that interact with the forestry and forest products sector.

EDUCATION

WMF also has strong relationship with universities and other third level colleges which has grown in strength since the inauguration of the Third Level Student Wood Awards in 2006. All the major universities and institutes

of technology participate in the awards which we organise in association with Wood-ni.

WMF recognises the need for productive and sustainably managed forests of sufficient scale to sustain a viable forestry and forest products industry. In this regard, much progress has been made in Ireland and as a result the forestry and forest products sector has changed enormously over the past three decades.

Production from Irish forests – north

and south – has increased from 1.3 million cubic metres (m³) in 1985 to 3.2 million m³ and is forecast to increase to 4.5 million m³ by 2025.

POLICY

The Government's review of Irish forestry proposes to double annual afforestation to 15,000ha as part of its mission:

To develop an internationally competitive and sustainable forest sector that provides a full range of economic, environmental and social benefits to society.

This review has been influenced by the performance of the Irish sawmilling and panel board sector which has convinced Government that these mills are sufficiently innovative and competitive to process all the available timber in Ireland.

The ambitious afforestation programme along with continued investment and expansion by our timber processors will provide the economies of scale to develop forestry as a major wealth and job-creating sector in Ireland.

FOREST PRODUCT CERTIFICATION

- Logs ready to be processed at the Ballygar sawmill, Murray Timber Group.
- Beech woodland, Cloghleaigh, Co. Wicklow.



The timber processing sector has proved that it will continue to increase exports providing the raw material is available from our forests.

The role of the processing sector is crucial to the success of the Irish forestry and forest products sector. These make a major contribution to the economy especially in rural areas – it is estimated that for every one million euro in expenditure in the forest products sector a further €780,000 in expenditure is generated in the rest of the economy.

CERTIFICATION

The Irish forest industry fully supports forest product certification. All our major timber processors now have certification. Irish and European foresters have managed forests for generations based on the principle of sustained yield which ensures the regular continuous supply of the desired produce to the full capacity of the forest. Forest product certification takes the process a step further. Certification is a voluntary, market-driven initiative that provides greater access to international markets as it proves that timber and



timber products are sourced in sustainably managed forests. There are two processes involved in timber certification beginning in the forest where it ensures that management practices are sustainable from establishment to harvest. The second process begins after the timber leaves the forest and continues until it reaches the customer. In effect it means that timber production throughout the growing, harvesting, processing and manufacturing cycle is managed according to internationally accepted stewardship principles.



Donal Magner
Secretary
Wood Marketing Federation



FSC IRELAND

FSC is an independent, non-governmental, not-for-profit organisation established to promote the responsible management of the world's forests.

Established in 1993 as a response to concerns over global deforestation, FSC is a pioneer forum where the global consensus forest management convenes and through democratic process effects solutions to the pressures facing the world's forests and forest-dependent communities.

As a multi-stakeholder organisation, FSC applies the directive of its membership to develop forest management and chain of custody standards, deliver trademark assurance, provide accreditation services to a global network of committed businesses, organisations and communities.

FSC is nationally represented in over 50 countries around the world. In Ireland all the major timber processors have FSC chain of custody certification. This provides a credible link between responsible production and consumption of forest products, enabling consumers and businesses to make purchasing decisions that benefit people and the environment as well as providing ongoing business value.

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PEFC CERTIFICATION

- Ben Gunneberg, Secretary General, PEFC presents the PEFC certificate of endorsement to William Merivale, National Secretary PEFC Ireland. A PEFC forest management certificate proves that the timber leaving the forest has been produced according to best practice.



The PEFC Irish Forest Certification Standard was endorsed by PEFC International in December 2011, making it the first certification standard specifically designed for Irish forests to be endorsed by any scheme.

Woodland owners can now apply to have the management of their forests certified under the PEFC Scheme and thereby ensure continuing access to all the key markets. Individual private owners preparing to harvest timber should consider joining one of the forest producer groups that is preparing

a group certification scheme for its members. Group schemes involve the pooling of resources for the benefit of all the members, thus effecting cost savings and ensuring that knowledge is shared. There must be a legally binding structure in place with a central office or manager responsible for ensuring that every member is compliant with the terms of the scheme, and that acts as the focal point for communication between the members and the certification body. In addition to being essential for the marketing of timber, certification is a useful tool that helps

owners to manage their forest enterprises better and more efficiently. PEFC Ireland offers training courses to forest producer groups.

PEFC chain of custody certification

A PEFC forest management certificate proves that the timber leaving a forest has been produced in accordance with best practice. Thereafter, in order to ensure traceability from the finished product back to the forest of origin, every actor in the manufacturing supply chain must have a PEFC chain of custody certificate.

Many processors opt for dual (PEFC/FSC) certification, offered by most certification bodies at nominal extra cost, in order to allow them to process and market timber certified to either scheme.

Further details on www.pefc.ie, or contact the National Secretary, William Merivale PEFC (Ireland) Ltd
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Cork

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M: 087 2450241
william@pefc.ie



FEATURED COMPANIES

- Enterprise Ireland
- Coillte
- Murray Timber Group
- Glennon Brothers
- GP Wood
- Laois Sawmills
- Lonza Wood Protection
- O'Driscoll Furniture

TIMBER TEAM IRELAND

Irish sawmills and board mills process all the available logs on the island and export 80% of finished product. All mills have chain of custody certification.



Enterprise Ireland is committed to supporting innovation in the Irish forest products industry

- Niall Coulston, Enterprise Ireland (left) represented Enterprise Ireland at 2012 Timber Expo at the Wood Marketing Federation pavilion, Michael O'Regan, Grainger Sawmills, Joanna Smith, Coillte Panel Products, Aidan Curran, Glennon Brothers, Richard Lowe, Coillte at Timber Expo in Coventry. Enterprise Ireland is committed to supporting the Irish timber processing sector which now exports 80% of its production.



Enterprise Ireland's mission is to accelerate the development of world-class Irish companies to achieve strong positions in global markets resulting in national and regional prosperity. Our priority is helping companies develop innovative market-led products and grow and develop new export markets. We also provide assistance for international companies who are searching for world-class Irish partners.

Enterprise Ireland has a lead role in delivering a number of key objectives of the Government's Strategy for Science,

Technology and Innovation. Enterprise Ireland works closely with IDA Ireland and Science Foundation Ireland, and has developed a number of initiatives that focus on:

- the commercialisation of technology generated from publicly-funded research
- promoting interactions between industry and Irish academic researchers
- simplifying R&D grant support structures and increasing support measures for technology transfer in the Institutes of Technology.

Enterprise Ireland works with clients, including Irish timber processors, to maximise their impact by supporting them to:

- Develop and implement strategies
- Access new international markets
- Invest in R&D
- Compete through productivity
- Build strong management teams
- Finance growth and innovation

Enterprise Ireland is committed to supporting innovation in the Irish forest products industry.

ENTERPRISE IRELAND

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www.enterprise-ireland.com

Enriching lives through the innovative and sustainable management of natural resources

COILLTE

- Oriented strand board (OSB) produced by SmartPly, Coillte Panel Products.
- Faithlegg Forest, Co. Waterford, with view of River Suir and SmartPly mill. Coillte forests are sustainably managed and all products including OSB and medium density fibreboard (MDF) have chain of custody certification.
- OSB used for panelling in the reception area of the European Bank for Restoration and Development.



Coillte is a state-owned commercial company operating in forestry, land based businesses, renewable energy and panel products. Established in 1988, the company employs over 1,000 people to manage its businesses and 445,000-ha estate. It supplies 2.3 million m³ of logs annually to Irish sawmills and its own board mills Coillte Panel Products who produce:

Medite

The most recognised brand of MDF, available in Europe since 1976. Medite products are acknowledged as the

benchmark for quality, consistency and performance in the MDF market.

SmartPly

SmartPly Oriented Strand Board (OSB) is a quality, cost effective and environmentally friendly alternative to plywood other board products.

Medite Tricoya

Medite Tricoya is a fully sustainable MDF panel recognised for its durability and versatility. It represents one of the biggest advances in panel products since the 1980s.



www.coillte.ie



www.coilltepanelproducts.com

Murray Timber Group strives to provide ultimate product quality at the most competitive price

- Eased edged planed all over Sitka spruce.
- Paddy and Patrick Murray.
- Load of SNR sawn timber for export.

MURRAY TIMBER GROUP



Ballygar Forest where the demesne land of Aughrane Castle was bought in 1910, is one of the oldest Irish State forests and one where for a variety of reasons, second rotation plantations are fairly general. – H.M. Fitzpatrick, The Forests of Ireland, 1965.

Twelve years after *The Forests of Ireland* was published, Paddy Murray Managing Director founded the Murray Timber Group in nearby Ballygar. At the time the annual volume harvested in Irish forests was approximately 400,000m³, which is less than half the

total processing capacity of the Murray Timber Group today.

Since 1977, the two Murray Group sawmills in Ballygar, Co. Galway and Ballon, Co. Carlow have grown to become the largest, most progressive and flexible sawmills in Ireland.

The company is an indigenous family run business which processes over 500,000m³ of timber and has a capacity to produce over one million m³. It launched its SNR brand of eased edged construction timber in 2008 which



competes successfully against the best in the world. Kiln dried timber from Murray Timber Group is X-Ray graded according to the European EN14081 machine grading standard. The timber is planed after the drying process to ensure maximum uniformity of size and ease of handling for the end user.

Murray construction timber bears the CE mark to denote its conformity to the European directive. The Group supplies products to the construction, garden, fencing and packaging markets in Ireland, the UK and France.



Murray Timber Group Ltd

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MTG Forestry Department
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E: forestry@mtg.ie

 **MURRAY**
TIMBER GROUP
www.mtg.ie

- Mike and Pat Glennon at shipment of sawn timber for the French market.
- Construction of timber frame house by Dempsey Timber Engineering.
- Glennon Brothers, major supplier of construction timber.



Since 1913, Glennon Brothers has been manufacturing high-quality timber products and is now the premier name in the Irish and UK timber processing industry. Through Glennon Brothers plants in Longford and Fermoy in Ireland and Windymains Timber and Adam Wilsons in Scotland, the company supplies the Irish, UK and French markets with products for the construction, pallet wood and fencing industries.

Products include kiln dried strength graded carcassing, pallet and packing

case material, CLS for the timber frame manufacturing industry and machined whitewoods for the construction and garden shed industries. In addition, the company offers Glendeck timber decking and Glenfence fencing for outdoor use, as well as timber frame homes and engineered roof trusses.

The company supplies residual products such as wood chips, sawdust, bark, and shavings to various end use applications including panel board, horticulture and wood energy markets.

The company is also involved in timber frame construction in Ireland and the UK through its two subsidiaries:

- Alexanders Timber Design the leading provider of quality timber frames and engineered roof trusses for the UK timber frame home and commercial markets.
- Dempsey Timber Engineering in Ireland which specialises in the supply and installation of timber frame homes and engineered roof trusses to the construction industry and also to one off self builders.

Glennon Brothers Timber Ltd.
Dublin Road, Longford, Ireland
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E: info@glennonbrothers.ie

GP Wood is one of Ireland's largest and most diversified timber processing companies

- The merger between Graingers and Palfab combines the best of both mills in producing renewable energy, quality fencing, construction timber along with garden, pallet and packaging products.

GP WOOD



GP Wood combines the best of both founding companies, Graingers and Palfab. For example the Grainger Group operates one of Ireland's largest and most technologically advanced sawmills with state of the art facilities for kiln drying, machining and timber treatment.

In 2005, the Group constructed Ireland's first large scale commercial biomass CHP plant. The plant produces 2.5 MW of electricity which is sold to the national grid, and 6 MW of thermal energy.

In addition to producing its own wide range of sawn products, Palfab also imports part-processed timber from Scandinavia, Russia, the Baltic States and mainland Europe. The company has diversified into added value markets through its joint venture investment in Eirebloc and Palfab director's investment in Cygnum, one of Ireland's leading and innovative timber frame manufacturers.

GP Wood plans to invest €5 million in a range of initiatives including product enhancements. The merger between

Graingers and Palfab will maximise the company's benefits in the national and local economy where GP Wood employs some 151 staff with a further 242 indirect employees in their forestry operations.

The benefits of the merger include an enhanced product range, enhanced service to customers, improvements in capacity utilisation and more efficient use of logistics. Both businesses are complementary and compatible.

GP Wood
Enniskeane Co. Cork, Ireland
T: +353 (0)23 8822500



www.gpwood.com

- Laois Sawmills supplies a wide customer base including leisure and garden markets as well as providing quality sawn timber, fencing and wood energy.



Based on the outskirts of Portlaoise, Laois Sawmills is regarded by its customers in Ireland and the UK as one of the more innovative sawmills on these islands. The company diversifies and adds value to its product range to create a wide customer base. The company is divided into three sections:

- Sawmill, which processes the company's logs and creates a high quality finished product.
- Wood Pellet and Woodchip Plant – trading as 'Greenwood'. It produces quality wood pellets and dried woodchip from sawmill residue.
- Laois Garden World – the popular centre which sells the company's own products as well as a wide range of other products to retail customers.

The fencing line processes a wide range of panels, picket, trellis and stakes exclusively for Ground force who market and sell the company's products along with their own range throughout Ireland.

Laois Sawmills has a policy of diversification, which ensures that it max-

imises all its logs from the minute they arrive at the factory weighbridge until final packing in their state of the art sawmill and delivered throughout Ireland, England, Scotland and Wales.

The company continues to invest in technologically advanced sawmill equipment to ensure that it stays ahead of its competitors in delivering high quality products.

Laois Sawmills
Stradbally Road,
Portlaoise,
Co. Laois
T: 057 86 21075

*World leader in timber treatment,
protection and preservation*

- Board Walk, Connemara National Park, treated with TANALITH® E
- Roadside fencing, treated to IS435 standard.
- Lonza is a supplier of the incising machinery Excalibur and Sidewinder.

LONZA WOOD PROTECTION



Lonza Wood Protection, a business of Arch Timber Protection Ltd., is a Lonza company. Lonza is the leading name in Irish and global wood protection. The company is a leader in the research, development and supply of timber protection.

Lonza is the leading supplier of products and engineering services for the effective preservative treatment of fencing timbers, including Tanalith®E and incising machinery Excalibur and Sidewinder (further information Paul Harvey, Business Manager (IRL)).

Leading brand preservative products such as TANALITH® E and VACSOL® Aqua are used by a wide range of timber companies throughout the UK and Ireland to pressure treat timber and provide long term protection against decay and insect attack. The resulting treated timber can be used with confidence in every possible timber end use situation, from internal building timbers to timbers used in both ground and water contact applications.

DRICON® is the most renowned fire retardant protection available for timber.

Used around the world for over 25 years, DRICON® treated timber has a proven surface spread of flame protection for interior and weather protected external applications, which meets both British and European building standards. It is the only fire retardant treatment for timber that carries the prestigious BBA (British Board of Agrément) certificate. NON-COM® Exterior treatment also has a proven track record of fire protection for exterior timber applications.

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Lonza
Lonza Wood Protection
www.lonzawood.com

*O'Driscoll Furniture creates unique furniture
for business, hotel and domestic interiors*

- Dell Offices, Mahon Point, Cork – Tree in Oak with Henry J Lyons Architects.
- Cliffs of Moher Restaurant, Co. Claire.
- DC Stacking Chair in oak.

O'DRISCOLL FURNITURE



O'Driscoll Furniture is a dynamic Irish company, who have been designing high-quality original furniture since 1997. The company's designers work in partnership with manufacturers, to produce a wide range of furniture, lighting, and accessories for architects, interior designers, corporate, hospitality and domestic clients.

Designs are simple yet distinctive, combining the best of natural and man-made materials sourced from sustainably managed forests and where possible from Irish certified forests.

O'Driscoll Furniture creates unique furniture for business interiors including boardrooms, reception areas, stylish desks and workstations. While O'Driscoll Contract specialises in the design and fit-out for hotels, restaurants and office interiors, the company also has the flexibility to create original designs for private homes including kitchens, bedrooms, living and dining areas.

Tadhg and Simon O'Driscoll's signature range of high quality contemporary furniture can be viewed in their showroom in Lombard Street East, Dublin 2.



www.odfurniture.com
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O'DRISCOLL
FURNITURE
www.odfurniture.com

Maximising the resource

- Boardroom, Coillte Headquarters. Home grown timber was used throughout the building. The chairs and carved boardroom table are made from Irish grown sycamore and elm. These blend with the arched ceiling supported by spruce glulam beams.

THE WOOD AND THE TREES



TREE SPECIES

- Mature Norway spruce plantation, Rathdrum, Co. Wicklow. Both Sitka spruce and Norway spruce are widely used in Ireland for construction, fencing and pallet production.
- Ash at the first thinning stage, Co. Tipperary.
- Ash will be a major broadleaf species. It is used for wood energy and furniture. Its strength and elasticity makes it an ideal species for hurley manufacture.



Irish foresters began restoring the lost forest resource from 1904 when forest cover amounted to 1% of the land area of Ireland after centuries of exploitation and neglect.

The emphasis was on growing high yielding mainly exotic species from western North America for most of the last century.

During the past decade new plantation owners have been planting more broadleaves. In recent years, the average annual afforestation programme

comprised 62% introduced species and 38% native broadleaves mainly as a result of planting by farmers who made better quality land available for afforestation.

These species will take time to mature so Irish timber processors will rely on spruce, pine, larch and a number of minor conifer species for the foreseeable future. In time, broadleaves such as oak, ash and alder will be available to processors.

The following species grown in Ireland

are either native, naturalised or exotic. Most of the conifers are grown as fast rotation commercial crops while the

broadleaves are slow growing with wood and non-wood objectives.

CONIFERS

- Sitka spruce
- Norway spruce
- Larch
- Scots pine
- Lodgepole pine
- Douglas fir
- Western hemlock
- Western red cedar

BROADLEAVES

- Ash
- Oak
- Alder
- Beech
- Birch
- Sweet chestnut
- Wild cherry

SITKA SPRUCE

Picea sitchensis

Source

Native to British Columbia and the northwest United States; grown extensively in Ireland, where it is the highest yielding species.

Timber on the Irish market is home grown from sustainably managed forests, and competes successfully with other European white-woods.

Wood

Sapwood is creamy white to light yellow and merges gradually into the heartwood, which is light pinkish yellow to pale brown with some irregular darker pink streaks; straight even grain; even, medium texture; somewhat lustrous. Irish timber is fast grown, light in weight and coarse in texture; non-durable.

Uses

Construction; formwork; packaging; pulp and paper products; poles; fence rails.

NORWAY SPRUCE

Picea abies

Source

Grown successfully in Ireland especially in sites vulnerable to frost damage. North and central Europe, available from Scandinavia, Baltics and the Russian Federation.

Wood

Almost white to pale yellowish brown, with no discernible difference between sap and heartwood; straight grained; fine textured; growth rings visible, but less prominent than in European redwood; slight natural lustre; non-durable.

Uses

Construction; joinery and carpentry; plywood; particle board and pulpwood; veneers; packaging. Finishes better than Sitka but slower growing,

LARCH

European larch
Larix decidua

Japanese larch
Larix kaempferi

Source

Grown throughout Europe, including Ireland. European larch was introduced to England in 1620 and made its way to Ireland in the following century.

Japanese larch, a native of Honshu Island, Japan, is more popular than European larch. In recent years hybrid larch has gained in popularity and combines the best qualities of both parents.

Wood

Sapwood: narrow, pale yellow; heartwood: pale reddish-brown to brick red, sharply differentiated from sapwood; clearly defined growth rings; contains hard knots; straight grained; resinous; moderately durable.

Uses

Boat building; flooring; transmission poles; fencing; piling; cladding; exterior construction and joinery.

SCOTS PINE

Pinus sylvestris

Source

Scots pine is the only native Irish conifer that has commercial value as a forest tree. It has little opposition as there are only two other native conifers in Ireland: juniper and yew.

Was a major tree in Ireland's primeval forests but almost died out in early Christian times. Experienced a revival from the 18th century.

Wood

Scots pine – or red deal as it is known in the timber trade – is suitable for a wide range of high value end uses. It machines well and is used for joinery, furniture and flooring.

Uses

If treated with preservatives it has an extensive range of external uses including transmission poles, fencing stakes, posts, gates, railway sleepers and decking.

LODGEPOLE PINE

Pinus contorta

Source

Lodgepole pine available in Ireland is home grown; it is native to western America from Alaska to Mexico.

Introduced to Ireland in 1884 and was widely planted from 1950 to 1980 on poor land where it is an excellent pioneer species.

Wood

Pale yellow, sometimes with brownish tinge, with little differentiation between sap and heartwood; can have large knots; grain is straight; texture is fine and fairly even; growth rings distinct with darker latewood; resin canals show as faint streaks on side grain; non-durable.

Uses

Construction; joinery; pallet wood; panel products; pulp; fencing

DOUGLAS FIR

Pseudotsuga menziesii

Source

Native of western North America and grown in Ireland since 1865.

Wood

Sapwood: whitish to pale yellow, or reddish white; slow-grown material has a narrower band of sapwood than fast-grown stock. Heartwood: variable, generally a pale reddish brown, but can range from yellowish to deep red; growth rings distinct; grain straight, even or uneven; texture uniform in slow grown stock, often uneven in faster-grown material; moderately durable.

Uses

One of the few conifers from which clear timber of large dimension in long lengths can still be obtained. Uses include: heavy construction; flooring; interior trim; window joinery; veneer; plywood; poles; piles; paper pulp, cladding.

WESTERN HEMLOCK

Tsuga heterophylla

Source

Native to Alaska, British Columbia, and the north-west United States. Grown to some extent in Ireland where it performs well as a forest tree and naturally regenerates freely.

Wood

A non-resinous, whitish or pale yellow wood with little distinction between heartwood and sapwood. Straight even grain, stable. Heavy sections can be difficult to dry uniformly. Non-durable, and resistant to preservative treatment.

Uses

Construction; internal joinery; pallets.

WESTERN RED CEDAR

Thuja plicata

Source

British Columbia, and to some extent Washington, Oregon and southern Alaska. Grows well in Ireland and has been used in mixtures as it is an excellent 'nurse' species.

Wood

Sapwood: whitish; heartwood: dark chocolate brown. May be variegated; ages to reddish brown; on weathering assumes a silver grey colour; straight even grain; texture medium; cedar-like odour; very durable; wood acidic and corrodes most metals when damp (except stainless steel, silicon bronze or copper).

Uses

Naturally durable, it is an excellent wood for external trim and cladding; posts and poles; shakes and shingles; boat building; packaging and decking.

ASH

Fraxinus excelsior

Source

Throughout Europe, including Ireland. Grown widely in Ireland until recently when it was threatened by *Chalara* ash dieback.

Wood

White to light brown, usually no distinction between sap and heartwood; growth rings distinct with band of obvious pores which give attractive figure on flat sawn surfaces; may have irregular dark brown to black heartwood which is sound and can give an attractive feature. Attractive joinery timber. Typically straight grained, it is tough and flexible; perishable.

Uses

Hugely popular tree in Ireland for making hurleys. Ideal for manufacture of furniture and chairs; sports goods, agricultural implements and tool handles; gymnasium equipment; flooring; plywood and decorative veneer (panelling).

OAK

Sessile

Quercus petraea

Pedunculate

Quercus robur

Source

Both sessile and pedunculate are native to Ireland and much of Europe. Can get clear boles up to 15m long in some European forests.

Wood

There is no difference between the wood of the two European species of oak. Sapwood is pale cream, 25 – 50mm wide; heartwood ranges from yellowish brown, light tan to deep brown. Growth rings are obvious due to alternating bands of large pored early wood and dense late wood, and produce a flare pattern on flat sawn surfaces. Fast-grown oak is tough and hard, slow grown is easy to work; grain is normally straight, but may be irregular.

Uses

Furniture and cabinet making; joinery and panelling; flooring; construction; veneers; exterior trim and cladding; boat building; fencing and railway sleepers.

COMMON ALDER

Alnus glutinosa

Source

Common alder is native to Ireland and is available in small quantities.

Most alder sold in Ireland is likely to be American or red alder (*Alnus rubra*).

Wood

When freshly cut, alder is pale in colour but darkens in the light to a light reddish brown colour, resembling cherry. There is little differentiation between heartwood and sapwood. It is straight-grained with an even texture and of relatively low density. It takes a good finish and can readily be stained and polished. Non-durable although it can resist decay when submerged in water.

Uses

Furniture, especially kitchen cabinets, internal joinery, mouldings.

BEECH

Fagus sylvatica

Source

Mid to southern Europe, including Ireland, although we are near the northern limit of its range. It is a naturalised species in Ireland but not native.

Wood

No clear distinction between sap and heartwood; pale reddish brown (deep reddish brown after steaming); growth rings evident, ray tissue showing as small spindle-shaped marks on flat sawn surfaces to dark irregular flecks on quarter sawn; no distinct figure; perishable. High movement.

Uses

Furniture (solid and laminated) and interior joinery, construction and flooring; domestic woodware, tool handles, turnery and craft; plywood.

BIRCH

Betula spp.

SWEET CHESTNUT

Castanea sativa

WILD CHERRY

Prunus avium

Source

Limited supply of native birch available. Most commercial birch comes from North America. Tree improvement schemes currently being carried out on native birch.

Wood

Birch is normally pale or light brown, frequently with darker streaks or flecks. The wood is hard, of high density and with good wearing properties. Non-durable.

Uses

Widely used in Europe for the manufacture of plywood, both throughout and as a facing veneer. Also used as flooring, furniture and for turned items.

Source

The Romans introduced it to Britain but nobody is sure when it arrived in Ireland. It may have been introduced here by the Normans. We know that it was certainly growing in Ireland in the 17th century as the writings of O'Sullivan Beare show that it was well established as early as 1625. Also known as Spanish chestnut, it is a Mediterranean species.

Wood

Growth rings are obvious and the species has many similarities with oak.

Uses

In some countries it is valued as much for its edible nuts as its wood. The wood is excellent and is used for furniture, flooring and veneering. It makes excellent fencing posts and providing it is dried properly, it will last for 25 years without preservation.

Source

Wild cherry is native to Ireland and Europe. Not widely planted but valued for its aesthetic benefits. It is a strikingly beautiful tree when in full bloom. Most cherry sold in Ireland is American cherry.

Wood

Growth rings evident but not well marked. Heartwood is a pale pinkish brown when first cut, darkening on exposure even to a mahogany-like colour, with the sapwood noticeably lighter; generally straight grained; moderately durable. Supplies of sawn wood may contain a proportion of sapwood, giving a marked colour contrast.

Uses

The wood is durable and polishes extremely well. It is used for a wide range of high value end uses including furniture, panelling, joinery and veneer.

Board walk, Glendalough Forest. Correct treatment with modern wood protection systems preserves not only the timber but also the soil and flora in this important heritage woodland.



A photograph of a forest with many tall, slender trees covered in green moss. The ground is also covered in moss and fallen branches. The lighting is soft, suggesting a misty or overcast day.

PROMOTING WOOD

Most Wood Marketing Federation projects have a strong educational content, especially in relation to wood design in Ireland. Our programme is aimed at a number of audiences including wood users, designers and specifiers along with our future audience such as students currently studying engineering, architecture and design in third level colleges. Projects to date include:

- Publication of *Woodspec – A Guide to Designing, Detailing and Specifying Timber in Ireland*.
- Studies and seminars on wood design aimed at architects, engineers, designers, planners and other specialist groups.
- Third Level Student Wood Awards with entrants from colleges throughout Ireland.
- Shows and events including Plan Expo-Ecobuild, Timber Expo, Bloom Garden Festival, Electric Picnic and other exhibitions.
- Production of wood promotional and educational literature including posters, website wood.ie and the *Talking Timber* series on a range of subjects on wood products, wood treatment, design and usage.
- Collaboration with organisation such as Wood-ni, Tree Council of Ireland, RIAI, Woodcollective and a wide range of companies involved in wood processing and design.

- Visitors to the Wood Marketing Federation pavilion at 2012 Timber Expo. constructed in Sitka spruce supplied by the Murray Timber Group.
- Woodspace designed for PlanExpo, Dublin by Ciaran O'Connor combining Sitka spruce and American hardwoods red oak, tulip wood and maple.
- Pyramid in elm by Michael Warren.



The Irish timber processing sector has presented a partnership approach at a number of events in Ireland and the UK in recent years including PlanExpo and Timber Expo. The Wood Marketing Federation provides the pavilion *Woodspace* which is an ideal setting for Irish processors to market their products to a domestic and international audience.

Commissioned by WMF and designed by Ciaran O'Connor, *Woodspace* is now proving to be an excellent demonstration area. It was built mainly in eased

edged planed all over Sitka spruce, courtesy of the Murray Group while OSB was provided by Coillte Panel Products. The exhibition and the processing mills – all members of the WMF – were well received at the show as they tick all the right boxes including quality products all sourced from sustainably managed forests with FSC certification.

Hosted by Coillte, in partnership with Enterprise Ireland, the exhibition was situated in an ideal location in the premier timber trade show in the UK.

Over 150 timber and related companies exhibited and over 5,000 traders, architects, engineers, builders, contractors and designers visited the exhibition as well as representatives from State agencies and public bodies.

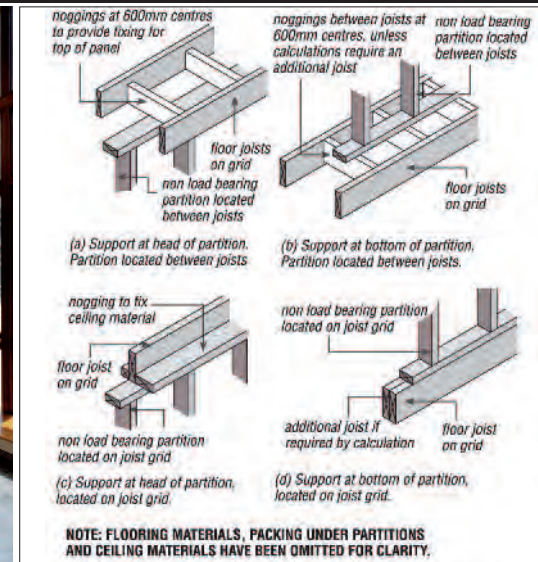
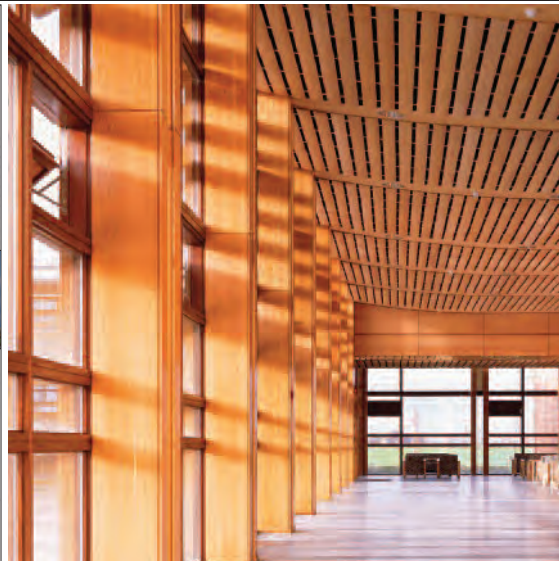
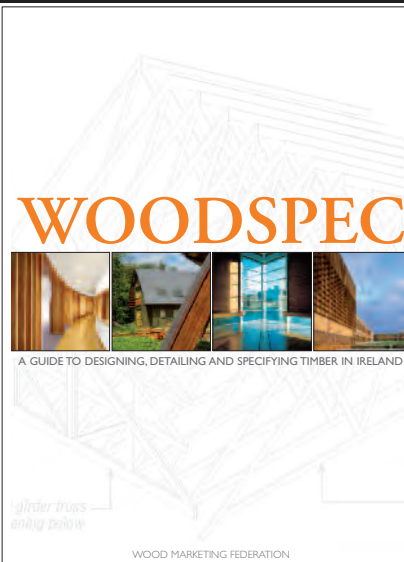
Timber Expo provided an important opportunity for the Irish timber sector to engage with customers and drive exports to the UK, a key strategic objective of Coillte, Irish sawmills, Enterprise Ireland and the Wood Marketing Federation.

Woodspace featured in a number of Irish shows including PlanExpo as a stand-alone Sitka spruce construction and combined with other species such as American hardwoods, which, like Sitka were sourced in sustainably managed forests.

Comprehensive timber guide for architects, engineers, designers and other specifiers

- *Woodspec – A Guide to Designing, Detailing and Specifying Timber in Ireland*, published by the WMF
- EU Food and Veterinary Office, Grange, Co. Meath and Marine Institute, Galway, both buildings designed by Ciaran O'Connor, OPW, and featured as case studies in *Woodspec*.
- Detail drawing from *Woodspec*.

WOODSPEC



Woodspec – A Guide to Designing, Detailing and Specifying Timber in Ireland was published in 2001 and modified in the intervening year to reflect changing standards and specifications in wood construction, design and preservation.

It is the first comprehensive guide to wood usage in Europe and its success reflects a growing confidence in wood usage and design in Ireland.

It includes principles of good practice, case studies and five comprehensive

technical sections covering design guidance, detailed drawings, timber specifications, building specifications and reference material. Although it is aimed primarily at architects, engineers, designers, builders, wood workers, specifiers and students, anybody with an interest in wood and wood-working will find it an indispensable guide. *Woodspec* is compatible with the mission of the Wood Marketing Federation 'to promote wood as a renewable, sustainable and versatile natural material'.

Wood is a versatile building and design material capable of producing a diverse range of products and finishes. It is an environmentally friendly and sustainable material. Those who design and build in timber, do so, safe in the knowledge that what they use will be replaced, given the renewable nature of wood. It has endless variations, but it requires knowledge and expertise, and a different creative and practical approach to other building materials. *Woodspec* provides the necessary information to use wood practically and innovatively.

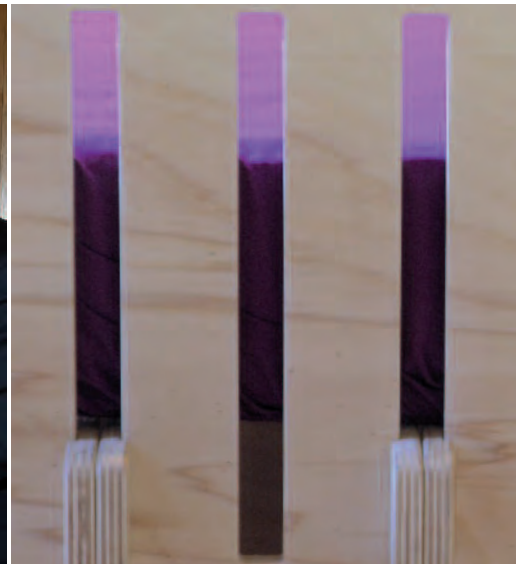
COFORD, Department of Agriculture, Food & the Marine host the *Woodspec* website and provide a technical advice backup service.

www.woods-spec.ie

Third Level Student Wood Awards

- Tom Hayes, Minister of State, Department of Agriculture, Food & Marine with winning architectural students Mark Pringle and Philip Ryan DIT, at the 2013 Wood Award with chairman of the adjudicating panel Duncan Stewart.
- Interlocking panels in 'Fixing Free Bed' designed by Jens Kosak, Letterfrack College, winner of 2011 Design Award.
- Andrew Murphy (right), Waterford Institute of Technology explaining his project with judging panel Des O'Toole, Coillte, Duncan Stewart, Earth Horizon and Simon O'Driscoll, O'Driscoll Furniture.

STUDENT WOOD AWARDS



Launched in 2006 the Third Level Student Wood Awards play a key role in the Wood Marketing Federation educational programme.

The annual awards organised in association with Wood-ni are now much sought after by third level students of architecture, engineering and design in Ireland. The awards are open to students who incorporate wood as an inherent element in their projects.

Award winners have gone on to pursue successful careers in wood and related

businesses and have exhibited at Irish and international shows. The objective of the awards is to encourage students to explore functional, aesthetic and design aspects of wood and wood products. The awards are judged by top professionals in the fields of architecture, engineering and design.

Coillte is the main sponsor and the awards are also supported by the Department of Agriculture, Food and the Marine, Wood-ni and the Society of Irish Foresters.



Making Space, Werburgh Street by Fergal Rainey, University of Ulster, winner of the architectural award 2012. Design of a house and workshop for a guitar luthier and his family in Werburgh Street, Dublin. Building materials included Irish grown spruce and Dublin calp limestone.

Vessel is not only a fine example of Irish creativity and craftsmanship but an excellent advertisement for Sitka spruce and the Irish forest industry

- Sitka spruce lengths being transported by barge to the Arsenale, Venice.
- Vessel was exhibited in the Central Pavilion, Corderie building.



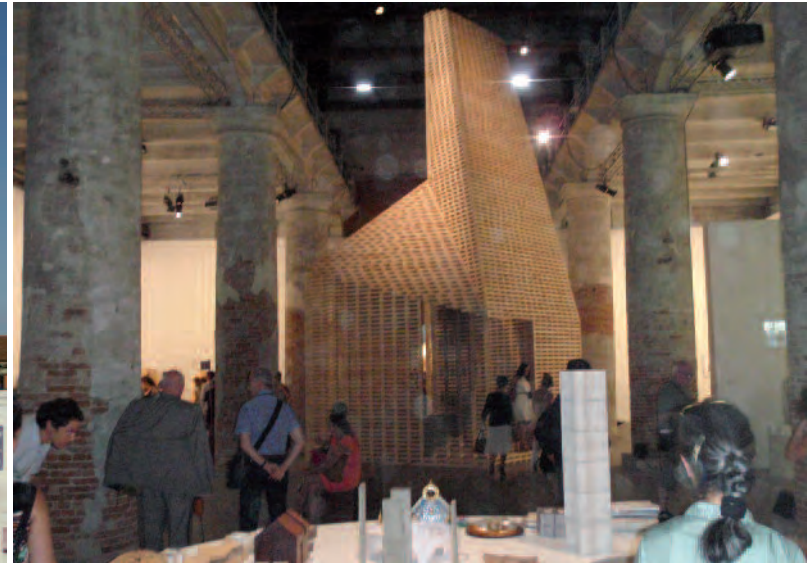
A large articulated truck being transported by barge along the canals of Venice is not a common sight, especially if it is laden down with 5,000 carefully sawn and planed Sitka spruce timber lengths. The cargo was bound for the 2012 Venice Biennale the most prestigious architectural event in the world.

The timber was sourced in Coillte forests, sawn and kiln dried by Glennon Brothers and finished by Gem Construction based on a brilliant design by O'Donnell + Tuomey, Architects, Dublin.

Entitled *Vessel*, the original design and model so impressed David Chipperfield, artistic director of the Biennale that O'Donnell + Tuomey were invited to install the work in the Central Pavilion.

The full production cycle took five months including harvesting, sawing, assembly, transport and reassembly in Venice along with other aspects of the exhibition, which included Irish designed furniture and craft and music as well as a poem by the Nobel Laureate Seamus Heaney who sadly died on 4th September 2013. Located in a

VESSEL IN VENICE



key location, Vessel had to compete against international architectural superstars such as Kazuo Sejima and Luigi Snozzi. For example it was within a few metres of the Norman Foster brash installation *Gateway*. Vessel acted as an ideal counterweight to Foster's visual extravaganza.

Standing over nine metres tall it is not only a fine example of Irish creativity and craftsmanship but an excellent advertisement for Sitka spruce and the Irish forest industry. The reaction from visitors including builders, architects,

engineers, urban planners and designers was extremely positive.

Funding was facilitated by the Wood Marketing Federation with generous sponsorship provided by Coillte, Glennon Brothers and the Murray Timber Group with support from the Department of Agriculture, Food and the Marine. The exhibition took place from August to mid November and was visited by close to 200,000 people.

- *Crashing Wave*, 2010.
- *Woodspace – Forest of Light*, 2012.
- *Sitka circle*, 2010.



The Wood Marketing Federation promotes timber not only to specialist interest groups but also the general public. Since 2009 it has collaborated with Woodcollective in creating innovative projects at the Electric Picnic in Stradbally in Co. Laois.

Sitka spruce and Douglas fir were the core species for the Woodspace projects enjoyed each year by over 30,000 visitors to this international music and arts event. Round timber was provided and transported by Coillte while a central exhibition and seating area was

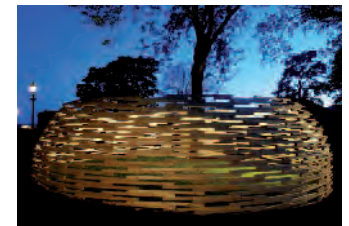
provided by Glennon Brothers. The whole project depended on voluntary co-operative work in the sourcing and installation of wood.

The audience at Electric Picnic is family and youth oriented. Designed by Eugene Boyle, it proved to be a popular and relaxing space away from the rock and roll party but with its own particular entertainment line up.

Glennon Brothers and Coillte supplied the round and sawn timber sourced in sustainably managed forests.

Exhibition space was formed by Douglas fir poles and sawn spruce timber with additional craftwork supplied by Pat Staunton, Glenealy, Co. Wicklow. The installation soared to the sky when it was dramatically lit by sustainable lighting courtesy Electric Ireland.

Visitors to the exhibition were provided with a free WMF booklet on the exhibition, which illustrated the material lifecycle of wood from forest through sawmill to form, function and space.



Garden of Plenty – Sustainable Living award winning exhibition at Bloom Garden Festival

- Garden of Plenty – Sustainable Living before the arrival of 110,000 visitors.
- Simon Coveney (second from left) who opened the exhibition with Eugene Boyle, exhibition designer, Donal Magner, project manager and Nick Marron, Coillte Panel Products.
- Padraig Shaughnessy, Aqua Landscapes who provided 50 varieties of herbs, vegetables and fruit trees.

SUSTAINABLE LIVING



Sitka spruce – sawn and engineered – was the mainstay at the Wood Marketing Federation exhibition at the 2013 Bloom Garden Festival. Winner of the Silver Gilt medal, it created huge interest, goodwill and publicity for Irish timber among the 110,000 visitors.

The combination of eased edged planed all over sawn timber from the Murray Timber Group and OSB provided by Coillte Panel Products provided a spectacular setting for the productive garden featuring over 50 different varieties of fruit, vegetables

and herbs. The exhibition was the first time that this combination – food and wood – was attempted at an Irish exhibition, which is surprising as both are compatible in many ways.

Wood has been used for centuries in the preparation of food as well as storage and transportation while wooden barrels or casks are still the preferred containers for whiskey, wine, sherry and brandy. Up until the 16th century, Ireland exported staves for barrel making to continental Europe, mainly France and Spain. After five centuries



sawn timber is being exported again to France by the Murray Timber Group and Glennon Brothers, while panel board products are exported around the world.

The Garden of Plenty – Sustainable Living was essentially an interpretative and productive garden using all home grown and home processed materials. It was collaboration between the Wood Marketing Federation and Wood collective.

The architect Eugene Boyle designed



the exhibition and WMF and its members provided the support in organising the exhibition in co-operation with 20 different organisations involved in horticulture, wood processing, woodworking and craft to create a garden modified for an Irish environment and audience.

FUTURE FORESTS

International architects, engineers and designers have been using wood as an inherent material in construction and other projects for generations. They specify wood for its strength, versatility and aesthetic qualities. The uptake of wood has been slower in Ireland mainly because we lost our forest resource centuries ago and with it our wood culture. This is now changing as Irish architects, engineers, designers and other specifiers are choosing wood because of its capability to produce a wide range of finishes and structures for small and large-scale projects.

The challenge now is produce wood in sufficient quantities to satisfy a growing domestic and export market. The current annual production of 3.2 million m³ is estimated to reach 4.5 million m³ by 2025. Demand is likely to continue to outstrip supply as the processing sector continues to utilise all the available timber on the island. Further demands will be made as the economy improves and as the wood energy market grows.

The short-term solution is to increase supply from private forests which are now reaching the production phase following high annual afforestation programmes since the late 1980s.

*Backweston Laboratory Campus, Celbridge, Co Kildare.
Architect: RKD Dublin.*



FOREST RESOURCE

- Annual production from Irish forests is estimated to increase from 3.2 to 4.5 million m³ by 2025.
- Wood Marketing Federation directs much of its wood promotion programme to third level college students of architecture, engineering and design.



The long-term solution is to increase afforestation from the current levels of less than 7,000 ha annually to at least 15,000 ha and higher to achieve 18% forest cover by 2050. This is still less than half the current EU forest cover. There are major benefits in expanding forest cover in Ireland. Irish forests produce yields three times higher than their northern European counterparts so early return on investment is achievable.

Our soils and climate support a wide range of species. These include fast

growing conifers to produce construction, fencing, pallet and fibre material along with broadleaves and minor conifer species that produce wood with higher value end uses including joinery, furniture and veneering. This mix has environmental, landscape and social benefits in tune with sustainable forest management.

Sitka spruce will continue to be the mainstay of Irish forestry followed by Norway spruce and a mix of pine, larch and Douglas fir. There has been a dramatic increase in native species in re-

cent years, mainly the broadleaves oak, ash and alder along with Scots pine our only native conifer with commercial potential.

Forest owners and timber processors need to assess the species required for likely future markets. The disconnect that existed in the past between growers and end users is being bridged. Both sectors also need to optimise the added value potential of species.

In recent years, Irish timber processors have made great strides in adding

value to homegrown timber. The panel board sector continues to develop new products to satisfy the increasing demand of customers for more sophisticated longer lasting weather resistant products. Likewise, sawmills have met demands for higher quality timber. There is room for further research into engineered wood products and composites.

However, growers can also add value. Wood processors require good quality logs to produce quality products. Sawmills in particular need straight,

- Auditorium Wexford Opera House in walnut by Klaus Unger + Ciarán McGahon, OPW, Keith Williams + Richard Browne, Keith Williams Architects.
- The Savill Garden in Windsor Great Park, Surrey by Glen Howells Architects in oak and larch. Presented as a case study at the 2012 Wood Marketing Federation seminar.
- WMF combined with the Royal Institute of Architects of Ireland (RIAI) Southern Region to organise a lecture by Dr. Christoph Dünser, Hermann Kaufmann Architects, Austria on sustainable multi-storey construction in wood.



clean logs with a low knot:timber ratio. These are essential timber qualities especially for high-end construction markets.

Forest owners can add value in the forest by ensuring good silvicultural practices including judicious thinning and pruning of some tree species. There are also major opportunities to produce high quality timber through vegetative production (VP) of Sitka spruce and other species leading to better stem form and quality logs.

Sawmills, growers and nurseries need to co-operate in R&D projects exploring VP and other tree improvement programmes.

The Federation looks beyond Ireland to see how countries with strong wood cultures utilise a wide range of hardwood and softwood species. We invite visiting lecturers to take part in workshops and seminars to discuss species diversity and its implications in wood design and construction. We also look to Irish architects in the private sector and in OPW to learn about the design

possibilities of wood, both home grown and imported, provided it is sourced from sustainably managed forests. Many of the species used in these projects can be grown successfully in Ireland.

We invite all stakeholders to join with us in our wood promotion and education programme. WMF encourages all players in the forestry and forest products sector to collaborate to maximise the social, economic and environmental benefits of wood, our greatest renewable resource.





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