

THE WORK OF THE SCOTTISH HARDWOOD TIMBER MARKET DEVELOPMENT GROUP (September 1996 – March 2003)

Summary

The Group existed for just over six years and, in conjunction with members of the hardwood processing trade in Scotland, were very active in raising the level of understanding about hardwoods amongst a wide range of sectors from foresters through to architects. To achieve this required the delivery of a range of seminars, training events, research contracts and publications, very often as partnership events.

Over this period there has been considerable activity and investment by the trade to address the market need for provision of products and/or raw material that exactly meets customer requirements. This has resulted in improved turnover and profitability.

There is a hunger for information on specification, sourcing and the use of hardwoods, which must now be addressed by the industry, though two current projects will help further address this need.

Introduction

The Scottish Hardwood Timber Market Development Group (SHTMDG) was launched in September 1996 in response to a commitment in the Rural White Paper “People, Prosperity and Partnership”. Twelve members represented the full range of interests in the hardwood trade in Scotland, from growers through to primary processors.

The initial three year term of office was extended till 31 March 2003 because of the ongoing nature of many of its areas of activity, and the support for it from members and the trade. Latterly it was chaired by Guy Watt of John Clegg Consulting.

An interim report of the outputs was included in a paper published in Scottish Forestry, Vol 53 (2), June 1999.

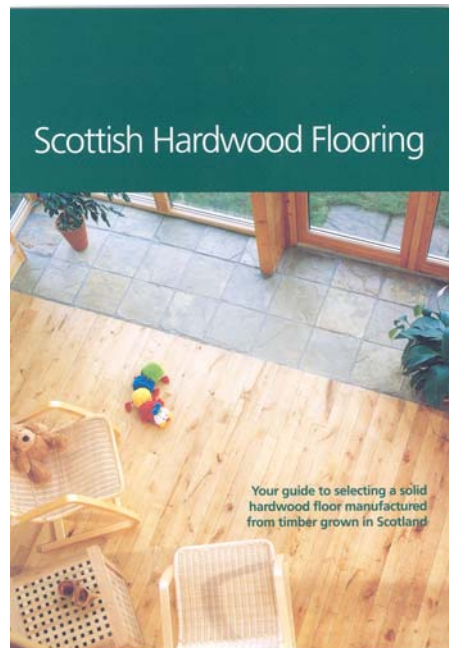
The aim of the Group was to:

“Identify, encourage and facilitate the development of markets for timber from broadleaved woodlands in Scotland”.

The overall thrust of its work was to:

- encourage management of broadleaved woodlands by making people better aware of timber grades and values;
- find better markets for the lower grade Scottish timber;
- ascertain how Scottish based, predominantly small, processors can access these markets;

- find out what information is needed to help maximise the "value addition" in Scotland.



Information about different aspects of the Group's work has been widely reported in the relevant trade press eg, *ICF News*, *Timber and Wood Products* and *F&BT*. Details of specific activities and outcomes have been reported in other relevant media eg. the architectural journal "ARCA", newsletters and/or the magazines of the Royal Incorporation of Architects in Scotland and Royal Institute of Chartered Surveyors, the *Forest Machinery Journal* as well as a variety of newspapers and even TV.

Initial estimates produced by the Group in Dec 1997 and 1998 indicated that about 40,000 cubic metres of hardwood timber was felled in Scotland each year, and that some 85% of the log material, totaling roughly 30,000 cubic metres, was being "exported" to England or the continent for processing. This consisted mostly of the higher quality veneer, planking and beam logs. A second assessment carried out in December 2002 showed that the volume of material being harvested each year had dropped to just some 25,500 cubic meters. This was due to reductions in the demand for chockwood quality logs as well as hardwood chipwood for the panelboard industry. Of the 25,100 cubic metres of better quality logs now being felled, the proportion being processed in Scotland had risen from 15% to nearly 22%. In addition, the firewood market is felt to have grown considerably, although no firm data has been collected on this sector.

Almost all of the primary processing of hardwoods in Scotland is carried out by small to medium sized sawmills. Many of these are mobile mills, with a hardwood throughput of less than (often much less than) 1500 cubic metres per annum (most will also mill softwood).

These small to medium sized enterprises (SME's), many of which could be classified as *microbusinesses*, are the “front line troops” in making supply meet demand if we are to retain and expand the value added processing jobs in Scotland.

An assessment of the growth in Scottish hardwood sector businesses carried out in January 2003, and subsequently reported in the Sunday Herald, concluded that whilst the sector is small, the overall picture “is one in which most of the businesses have grown significantly in turnover and profitability since 1996, and have invested capital, due in large part to the increasing and widening demand for their products and services”.

Achievements, outputs and spheres of influence

These include:

a. Skills development

- i. *Hardwood grading, valuing and marketing days.* Since the winter of 1996 a total of twenty days of training have now been provided by the Group and attended by 636 delegates. These events have been run throughout Scotland, either by the Group itself or by organisations with similar aims and following a similar format, such as Argyll Broadleaves, the Grampian Woodlands Project and Central Scotland Forest Trust. This training will now be offered by the Forestry Commissions' Forestry Training Services.

b. Market research

- i. *The market for standard dimension blanks.* This jointly funded study looked for potential markets for semi processed hardwood blanks made from Scottish timber. Markets were sought throughout Scotland and England. It was clear that the opportunities for competing with imported stock on price, volume required and quality are extremely rare. There was no price premium for home grown where the timber was viewed as a commodity product. It was therefore considered essential to look at lower volume, higher value, niche markets where timber with more "character" is sought.
- ii. *Flooring.* A small study into the most likely markets for short lengths of mid to low grade timber identified “character grade solid hardwood flooring” as a good growth market. A further detailed market research study confirmed this view. The findings of this work, and of other studies undertaken simultaneously eg. on the market for standard dimension blanks (see (i) above), and an investigation into options for, and cost implications of, various manufacturing processes, were published in November 2001 by Highland Birchwoods as a booklet entitled "The Production and Marketing of Scottish Hardwood Flooring".

There are now a number of sources from whom solid Scottish hardwood flooring can be obtained. Despite this growth in production capacity, the market continues to grow faster than the ability to supply from within the Scottish trade. Further efforts are being made to increase the processing capacity. Timber supply is not considered to be a constraint at the current rate of growth.

To support this, two publications were produced through a project run in conjunction with Robert Gordon University (see iv below) - a full colour, glossy marketing leaflet on "Scottish Hardwood Flooring" and a technical leaflet providing guidance to architects, specifiers and flooring contractors entitled "A guide to the installation and maintenance of solid hardwood flooring".

NB: two Scottish SME's worked together and supplied some 700 square metres of solid Scottish hardwood flooring for the new National Trust visitor centre at Glencoe. Another example of this product open to the public is the David Douglas pavilion at the Scottish Plant Collectors Garden in Pitlochry.

- iii. *EU Article 10 project "Adding value to low quality timber" (1999 - 2001).* Ivor Davies, then of Highland Birchwoods, led an international project to develop and expand markets for products from mid to low grade timber, and to find new products. Through the Group, Forestry Commission Scotland provided finance and in-kind support.

The project delivered a number of valuable outcomes eg. market research studies, supporting a presence by SME's at relevant trade fairs, supporting the production of a marketing leaflet for the Association of Scottish Hardwood Sawmillers (ASHS), supporting a conference for architects and contributing to the publication of "Designing with Timber". Other outcomes included:

- the participation of a group of Scottish hardwood millers and craftsmen in a tour of Norway and Sweden to look at small scale processing and product marketing; and

- the development of a product portfolio by Woodschool aimed at the garden/landscape sectors under the title "Partners in the making".

- iv. *Engineering and Physical Sciences Research Council funded study.* This two year project (2000 – 2002), run through Robert Gordon University and Highland Birchwoods, managed by Una Lee and supported by the Group, looked at “Best Practice in the Specification and Procurement of Sustainable Hardwood Construction Products”.

A survey of the construction sector was carried out to identify the major pathways and challenges for increasing the use of Scottish hardwoods. The findings were presented to the trade and can be found in Forestry Commission Information Note 43 (available online via our Publications section).

SUMMARY

Based on a study of the homegrown hardwood supply chain, this Information Note presents key findings on the supply of timber products to the mainstream building industry in Scotland. It identifies the core customers for timber products in this market and describes the processes and procedures that influence their purchase decisions. It also presents the key characteristics of a successful timber product supplier to the building industry.

INTRODUCTION

The building industry is an important market for timber products in the UK. Although manufacturers of homegrown timber products face tough international competition in this sector, there is scope for import substitution and significant opportunity to add value to homegrown timber. Based on the results of recent research, this Information Note presents seven key characteristics of a successful timber product supplier to the mainstream building industry, and discusses their implications for the timber processing industry in the UK. 'Mainstream' refers to architect or engineer-led building projects carried out using standard forms of building contract. This sector of the building industry undertakes a significant proportion of all UK construction work. The Note also describes the roles and responsibilities of key players within a mainstream building project and the conventional procurement process for timber products in this sector.

This research was funded by the Engineering and Physical Sciences Research Council (EPSRC) and carried out by the Scott Sutherland School at the Robert Gordon University, Aberdeen. The project began in September 2000 and lasted 18 months. Its aim was to investigate whether hardwood products, produced by small sawmills and manufacturers in Scotland, could be fed into the mainstream building industry supply-chain. However, the research findings do not relate exclusively to the supply of hardwood products. They highlight a range of characteristics that distinguish all successful suppliers to mainstream building work. These characteristics are equally relevant to the successful supply of wood-based panel products and softwood products and can be used for benchmarking in the timber processing industry.

As part of the research, a survey was carried out by scheduled interview across a random group of 32 specifiers, purchasers and suppliers in the building industry timber supply-chain. These interviewees were engaged in a critical examination of their specification and procurement practice for timber products. The survey only sampled the mainstream industry. It did not investigate other routes into building construction – for example, the self-build sector – which are also served by small hardwood mills and manufacturers in Scotland.

THE SUPPLY OF TIMBER PRODUCTS TO A BUILDING PROJECT

In order to sell effectively into the mainstream building industry a manufacturer must consider the following questions:

- Who are the customers for timber products?
- What drives a building contractor's purchase decisions?

Who are the customers for timber products?

The customer-supplier relationships in a typical construction project are illustrated in Figure 1. At the centre is the client (person or organisation commissioning the work), who typically employs an architect, engineer and quantity surveyor to prepare a design, produce the building contract and administer the project. The client enters into a contract with a building contractor, usually by competitive tender, to have the construction work

The additional outputs of the flooring marketing material and technical leaflet were referred to above.

- v. *Market research into the self build, home improvement and renovation sector.* With support from the Scottish Forest Industries Cluster, research was carried out in spring 2002 to identify perceptions of , to quantify markets for and ideally identify potential new products from, Scottish hardwood timber. This information was fed back through a workshop which also enabled companies attending to take forward the development of their own marketing plans.
- c. **Business support**
 - i. *Training needs analysis (TNA).* A joint pilot TNA was carried out in the Borders to assess the needs of small timber processing businesses. This work enabled Scottish Enterprise Borders to offer some specific training courses. However, the range of needs was found to be so variable that this was not taken further.
 - ii. *Association of Scottish Hardwood Sawmillers (ASHS).* A number of operators of small and mobile mills met under the auspices of the SHTMDG and have formed an Association to enable them to carry out joint promotion, marketing and

(potentially) the collective supply of timber to larger new markets. Achievements include:

- creating a form of website based e-sales facility;
- operating a "one-contact" telephone sales facility for members;
- organising and manning joint stands at self build trade fairs;
- assisting with the preparation of a business plan, where the generic elements of benefit to many businesses were made available to others to help in trying to increase production capacity in Scotland;
- presenting a range of proposals to Scottish Enterprise which would help small businesses continue to develop their skills base.

iii. *Business Development.* Seminars supported by the Scottish Forest Industries Cluster (SFIC), and promoted through ASHS, Tayside Native Woodlands and the Cluster team gave guidance on marketing, e-commerce, sources of advice and finance and relevant Health and Safety issues. The two initial events were run in early 2002, with further technical support visits taking place in summer and autumn 2003. Further activity designed to facilitate the development and promotion of these SME's will take place over the period 2003-2005 as part of an EU Objective 2 (East of Scotland) co-financed project.

d. Promotion

- i. *Scottish timber for the Scottish parliament.* Much effort went into informing and advising the architects and builders of the parliament in an attempt to influence them to enable use of Scottish hardwood in this prestigious new building. Technical and supply advice was also given for softwoods. The published design concept uses considerable quantities of timber, and an order for a quantity of sawn Scottish oak has been placed with the Scottish hardwood sawmilling trade.
- ii. *Trade shows .* Generic stands have been supported at "ScotBuild" (Nov 1998 and Nov 2000) the Scottish self build shows "Selfbuild" and "BuildIt", (Oct 1999, Mar 2000, Oct 2000, April 2001 and Oct 2002) and at the annual convention of the Royal Incorporation of Architects in Scotland (RIAS) (June 2001 and June 2002). It is clear that the self build market has great potential for smaller scale processors who can more readily meet the volumes and timescales involved. Clients value the local supply aspect and the personal touch. The stands were created, built and manned by a wide range of primary and secondary hardwood processors from throughout Scotland.
- iii. *Public shows.* The Group, and others, provided product (flooring, furniture, timber cladding, windows and worktops) to create an attractive presence within the FC, then joint FC/Forest Industries, pavilion at the 1999, 2000 and 2002 Royal Highland Shows. Members also manned the stand during these shows. In

addition a number took stands at the Scottish Woodfair held Perth in May 2002 and May 2003, both of which were supported by the Group.



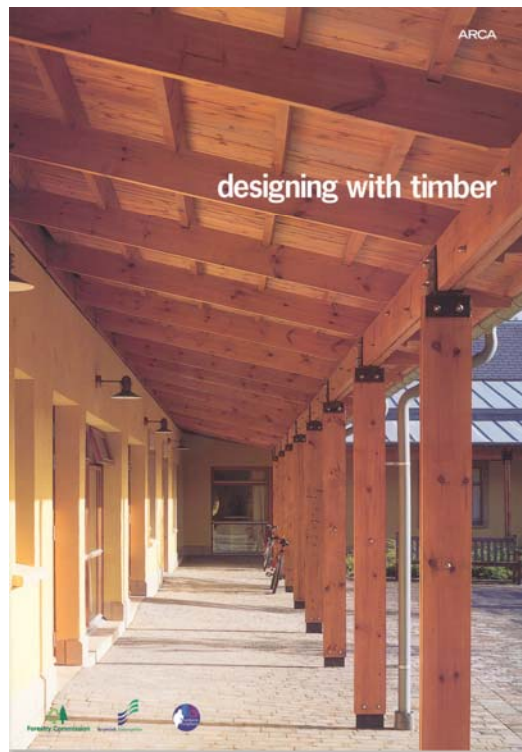
- iv. *Design competition – “Using Scottish hardwoods”*. The Group ran an innovative design competition for final year students in Architecture, Design and Engineering at Scotland’s leading universities. The aim was to try to influence and inform the next generation of architects and specifiers. The challenge that they were set was to define, then solve by innovative design, a problem which currently prevents the large scale use of hardwood timber grown in Scotland in either a structure, shelter or product.

The winning students took part in a residential workshop weekend at Borders Woodschool in early March 2000. During the weekend they worked with the judges and the resident designer/makers to develop their ideas, and their skills, further. Five sponsors supported the event at which the Deputy Minister for Rural Affairs presented the awards.

- v. *Conferences for architects*.
- a. *“Using Scottish Hardwoods” (March 2000)*. This one day conference and trade fair, run in conjunction with the RIAS attracted around 180 attendees, two thirds of whom were architects. The aim was to provide architects, engineers, builders, planners and specifiers with information on the appropriate selection, specification and availability of Scottish hardwood timber.

The conference highlighted examples of innovative use of timber in design and gave information on supplies of timber from sustainable sources in Scotland. The Deputy Minister for Rural Affairs gave the opening address and a message of support was received from HRH The Prince of Wales. Some of the papers presented were subsequently incorporated into the publication "Designing with timber" (see vii below).

- b. *“Timber and the Built Environment”* (Oct 2002). This two day event, with international speakers, offered guidance, aimed to engender confidence and positively demonstrate the benefits of sourcing and adopting sustainably produced timbers in construction. Run in conjunction with Historic Scotland, RIAS and the Scottish Executive, it attracted some 205 delegates. One of the three follow on field visits looked at sustainable forestry and the use of green oak in construction.
- vi. *Exhibition in RIAS gallery, Edinburgh.* An exhibition entitled “Using Scottish wood and wood products in construction” ran for three weeks between 12 and 30 March 2001. An opening address from the then Deputy Minister for Rural Development was read out to an invited audience of senior representatives of the forestry industry and architecture profession.
- vii. *Designing with timber.* This full colour, glossy magazine was released in October 2001, having drawn on some of the presentations given at the March 2000 conference (see (v) above) and from the content of short presentations given at the RIAS gallery exhibition.



This jointly funded publication aims to excite and inform architects and specifiers about using wood in construction. It can be found on the FC web site at “www.forestry.gov.uk/timber”. It proved extremely popular and copies were sent to architects and chartered surveyors throughout Scotland and in the north of England.

- viii. *Furniture exhibitions.* Assistance was given to develop links between producers of fine furniture made in Scotland and/or made from Scottish wood, and the organisers of two public exhibitions running over the summer of 2002, one in Inverary Castle, Argyll and the other at Duff House, Banff.

e. **Information**

- i. *Small scale Kiln drying.* The sourcing of kiln dried hardwood timber is recognised as a barrier to reaching existing (or developing new) markets. A study looked at the information needed to improve the unit cost, quality and ease of kiln drying the main hardwood species growing in Scotland. The results of the work carried out by TRADA were published as FC Information Note 24 (available through “Publications” on the FC web site), and as an article in *Forestry and British Timber*.
- ii. *Continuing Professional Development (CPD).* The need for the provision of technical information to architects, surveyors and planners was identified at the March 2000 conference. Excluding conferences, the Group has since run 13 CPD seminars throughout Scotland, often in conjunction with the local groups of the RIAS or the Royal Institute of Chartered Surveyors (RICS). Nearly 800 architects and specifiers have received information on sourcing and using Scottish wood and wood products in construction. The biggest single event attracted 200 delegates. In addition, three follow up visits were have been run to start to meet the demand from specifiers to see how we deliver sustainable forest management and process timber in our, often world class, wood processing industries.

The experience of the Group was drawn on by Wood.for Good as they developed a programme of seminars for architects throughout GB.

- iii. *External cladding in Scotland.* Following a proposal from the Group, the Scottish Executive awarded a contract in spring 2001 to a team led by Highland Birchwoods to investigate the “Historical precedent and innovative future use of external timber cladding in Scotland.” The report, by Ivor Davies, James Pendlebury (both then of Highland Birchwoods) and Dr Bruce Walker (then of Dundee University) was published by the Scottish Executive in March 2002 and can be seen on their website at “[www.scotland.gov.uk.library5.environment.tcis.pdf](http://www.scotland.gov.uk/library5/environment/tcis.pdf)”. The main findings are also available in FC Information Note 42 (available through “Publications” on the FC web site).

NB: A number of operators of small mills in Scotland now offer external timber cladding, either hardwood (oak) or softwood (predominantly European larch).

- iv. **[Ongoing]** *Hardwood plank appearance grading scheme.* A study is underway to devise and develop a visual appearance based scheme which will enable inter-

- trade transfer of stock amongst small sawmillers, promote the specific qualities of the timber they can provide and to assist purchasers and specifiers to accurately identify the timber they need. This work involves mills and specifiers throughout the UK and Ireland, and is expected to be finalised and published in early 2004.
- v. **[Ongoing]** Use of Green oak in construction. TRADA, in conjunction with Ove Arup and Partners Ltd and the Green Oak Carpentry Company have been contracted to produce a well illustrated guide covering the technical, engineering and design aspects relating to the use of green oak in construction. The intended audience is architects, specifiers and the construction industry, with publication anticipated in summer 2004.
- f. **Pure research.**
- i. *Tree Breeding.* The Group, through the Secretary, has advised the Forestry Commission's Policy and Practice Division, as purchasers of research, on the merits and relative importance of broadleaved tree breeding proposals. One member was invited to join the new sycamore group recently set up by the British and Irish Hardwood Improvement Programme (BIHIP) to provide advice and a timber trade perspective.
- ii. *The qualities of birch timber.* The Group was represented on the steering group of a project looking into the timber qualities of birch. This study was led by TRADA and funded by the FC, the Scottish Forestry Trust and Highlands and Islands Enterprise and the results have been published as a TRADA woodINFORMATION note (Section2/3 Sheet 55, Dec 2001) and in Scottish Forestry (Vol 55, 4, 2001).

Conclusion

A good relationship has been developed with the RIAS, practicing architects, surveyors and others throughout Scotland. The Group contributed to, and benefited from, the work of the Scottish Forest Industries Cluster, with the Cluster giving financial support to a number of areas of its work.

The SHTMDG is grateful for all the support, both financial and time, which has been given by a great many contributors, particularly the members of the small scale processing sector, to support the development and delivery of this wide range of activities.

There does appear to be a growing interest in the use of British grown hardwoods in furniture, in contemporary architecture and in refurbishment work. There is an ongoing demand from architects and specifiers, amongst others, for good technical and market information about the specification, sourcing and use of hardwoods. The industry is now

in a better position to address these needs and must be proactive if the momentum gained since 1996 is to be retained.

Derek G Nelson
Market Development Adviser
(formerly: Secretary of the SHTMDG)
Forestry Commission Scotland

August 2003

Members of the Scottish Hardwood Timber Market Development Group

1996 – 2000

Initial members:

David Craven, Scottish Greenbelt Co.

Guy Watt, John Clegg Consulting.

Archie McConnel, Timber Merchant and hardwood sawmiller.

Gavin Munro, Timber buyer, valuer and grader.

Frank Gamwell, Small sawmiller and manufacturer.

Julian Pace, Manager – Policy research and marketing, Scottish Borders Enterprise.

Charles Taylor, Cabinetmaker.

Alister Jones, Forestry Commission Scotland, Development Officer.

Derek Nelson, Forestry Commission Scotland, Market Development Officer.

Chris Piper, AEGIS (independent small forestry agents) and TGA.

Ivor Davies, Highland Birchwoods, Manager for Forest Products Technology.

George Webb, CSC Forest Products, Timber Buyer.

Subsequent Invitee's:

- Eoin Cox, Director, Borders Woodschool
- Mike Alexander, TGA, Director Scotland.

2000 – 2003

Guy Watt

Archie McConnel

Gavin Munro

Frank Gamwell

Derek Nelson

Ivor Davies

Eoin Cox

Mike Alexander

Forest Industries Cluster Group representative

Subsequent Invitee

Mark Williams, Hurd Rolland Partnership (Architects)