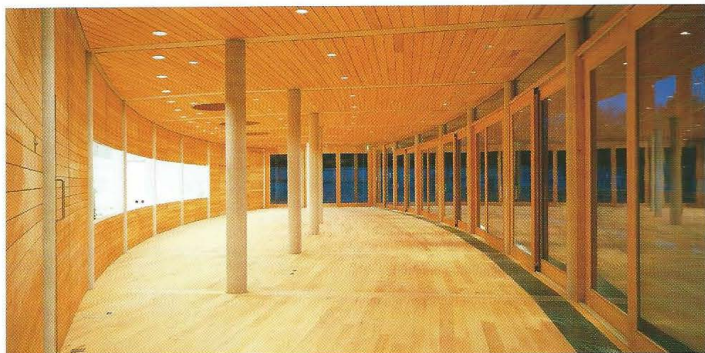


WOODfocus

ISSUE NO. 10 SPRING 2004

The magazine of the Institute of Wood Science

The National Conference 2004



The Cake House St James' Park London Photo by Robert Davis

The Institute's National Conference for 2004 will build on the success of recent conferences in Cardiff and Newcastle, attended by delegates from the architectural profession and the timber industry. The programme has been prepared to attract a maximum response from specifiers and designers as well as containing papers and case studies that directly address the issues of wood procurement and performance. The Conference will focus on procurement in the public and private sectors and will deal with codes and standards. Speakers have been invited from DEFRA, TRADA, and BRE, as well as specialists from the timber industry. Three architectural case studies will examine practical examples in which procurement or performance are key issues.

Birmingham, still the subject of extensive redevelopment, provides the central location for the 2004 Conference. CPD certificates will be issued to delegates on request.

The Institute and sponsors look forward to welcoming you to Birmingham.

CONFERENCE FEES

Day rate : £60.00 plus VAT

VENUE & ACCOMMODATION

Hyatt Regency Hotel, Birmingham

Updates: www.iwsc.org.uk

Wednesday 29th September

President's Reception, supported by TTJ, followed by President's Dinner

Thursday 30th September

- 8.00 Registration
- 9.00 Opening Address
- 9.15 Wood Procurement & Performance issues
- 9.30 Public Procurement
 - Current Practice
 - Proposed Legislation (DEFRA)
- 10.00 Private Sector Procurement
 - Eco-standards (BRE)
- 10.30 Questions
- 10.45 **Coffee**
- 11.15 Forest Product Certification update
- 11.35 European Codes and Standards (TRADA)
 - Questions
- 12.00 Sponsors' Exhibits
- 12.15 **Lunch**
- 12.30 The Wood Awards 2004 Shortlist
- 13.45 IWSc Presentations
- 14.05 **Case Study** – The Cake House, St. James' Park, London, SW1
- 14.10 **Case Study** – Sustainable Self-Build, Cheltenham, Glos.
- 14.50 **Case Study** – Award Winning Buildings by Hopkins Architects, London
- 15.30 Summary of lessons learned
- 16.10 Farewell

The Main Sponsors are



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British Columbia Timber - An Architect's Perspective

By Matthew Hoad RIBA AIWSC

In December last year I was asked to meet Mr Richard McRae (an Independent Forestry Consultant) at the Canadian High Commission to discuss UK architects' perceptions about using British Columbia (BC) timber. This article briefly outlines some of the key issues discussed.

The diverse landscape of BC makes it a place of extremes from frozen snow-capped mountains to lush temperate rainforest. Climatic conditions and geography have allowed some very special species to evolve. The principle export timbers to the UK are; -

Western red cedar (*Thuja plicata*) grows up to 60m tall western coastal hemlock (*Tsuga heterophylla*) up to 50m tall Douglas fir (*Pseudotsuga menziesii*) up to 85m tall lodge pole pine (*Pinus contorta* var. *latifolia*) tall and slender



Sunshine Coast temperate rainforest.
M. Hoad 2002.

Forests of British Columbia

I visited the Canadian forests with a British delegation in July 2002 as the RIBA representative and was able to see first hand the management of their forests. Over the last century some irresponsible logging practices have drawn attention to the sustainability of western red cedar (WRC). For an architect who wants to use this and other timbers this can present a dilemma.

During the visit different areas of forest which had been logged, replanted and regenerated were inspected. Exemplary forestry practice included selective logging, leaving wildlife trees, encouraging natural regeneration and undertaking remedial work to rectify older extraction damage. New trees could be seen covering hill sides from clear cut logging 30 or 40 years ago which modern 'natural' disturbance pattern forestry has now predominantly replaced balancing economics with environmental responsibility.



Sunshine Coast Forest District - Lighter hues of green indicate new tree growth; M. Hoad 2002.

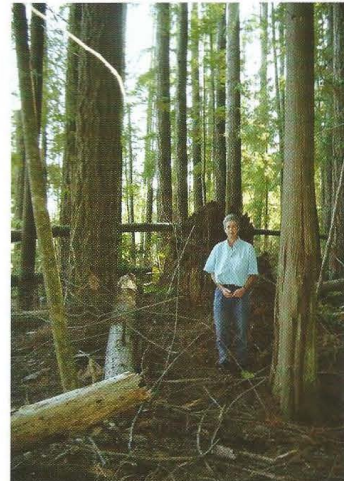


Sunshine Coast Forest District - Riparian management area; M. Hoad 2002.

A forester commented; -

"15 or 20 years ago there wasn't the understanding of the way nature works in the forest, or the damage being done by logging. Now we are working with nature instead of against it and forestry practice is generally very good".

This forester, who had spent his entire life in the forests was as sincere as any hardened environmentalist and with 94% of the forests in publicly ownership it was evident that huge advances have been in sustainable forestry. What amazed me about the landscape was the sheer scale of the operation which makes the UK's look like a Sunday afternoons gardening.



A member of the British delegation in front of an old stump from logging perhaps 80 to 100 years ago; M. Hoad 2002.

The opportunities for using BC timber is vast and by understanding what is growing in the forest an architect can maximise its construction potential, to help avoid waste both in factory and forest.

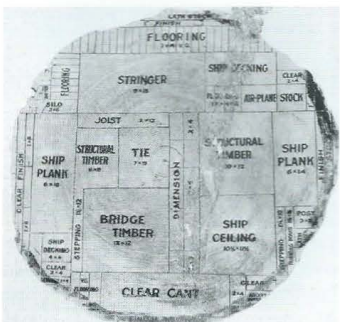


An unusual use of whole logs in BC;
M. Hoad 2002.

Clause 13

'No defects what-so-ever' - is a ridiculous specification clause which occurs all too often! While the very best quality timber comes from the older trees, it should be remembered that for most applications it is completely unnecessary. Clear grade WRC for example is often used for cladding high up on a building where knots cannot be seen and a lesser grade might be better employed. Whilst I support the use of WRC, the use of high-grade timber for lower-grade applications cannot be justified even if it is certified.

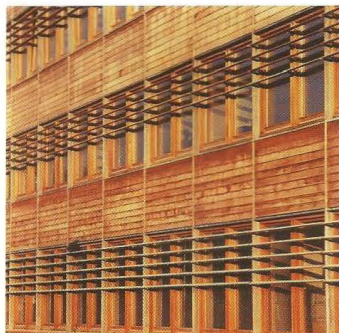
Standardised specifications with catch-all liability clauses may be useful for mechanical or moisture related issues but may be un-realistic for visual requirements. While the myriad clauses now fill volumes the timber is in many cases doing the job it always used to.



Maximum use was made of this huge log, today it should now only be used for high grade applications; Wood 1937

Performance specification identifying an 'intent' are replacing the traditional document and usually from the point of an architect this is 'visual' (colour, grain, finish and 'defects') and perhaps 'sustainability' and 'durability'. Reference samples are often referred to in these specifications and whilst useful can lead to unrealistic expectations as they are often small in area. A contractor under pressure from an unachievable specification will just get the timber from another source, or worse still could use another material in its place.

Innovation in timber design is all about transcending fashion and challenging preconceptions. An example is the New Jubilee Campus cladding where an integrated design team which included the joinery specialist was essential for the development of a high performance system.

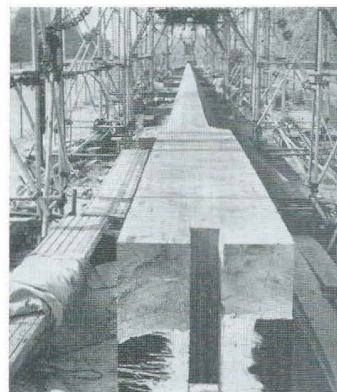


WRC cladding (now turned silver grey) for the New Jubilee Campus, Nottingham University (opened 1999) by Michael Hopkins and Partners; MHP 1999.

One of the finest examples of the use of Douglas fir in the UK is the flagpole at Kew gardens cut from a single tree 275 feet long and 270 years old in 1912. The tree was worked to a length of 225 feet from an original log weight of 37 tons. The natural strength and durability of Douglas fir is ideal for this function and is a good example to architects and engineers who could be using more of the raw tree without cutting it into small pieces!

Form Follows Forestry

The problem of specifying timber from BC is that you have a limited idea of how the forest are managed or certified. The main Canadian certification standards are:-
CSA – Canadian Standards Association
FSC – Forest Stewardship Council
SFI – Sustainable Forestry Initiative



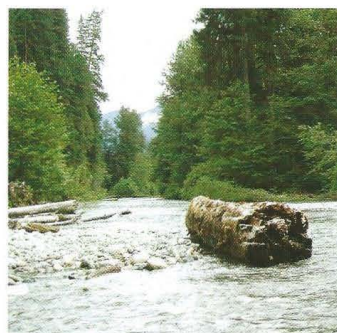
Flagstaff for Kew, Wood magazine, p.286, December 1959

BC timber will generally carry one or more of these certification standards but this may depend on species and grade required. Research is essential to identify potential importers and to check if a chain of custody certificate is available. By including this information in a specification the contractor will be obligated to get it right!

Conclusion

The role of the architect is central to ensuring that BC timber is used as an integrated part of the building fabric and is clearly expressed and not hidden where a lesser timber might suffice. The tree has a second chance to live and by utilising more of the tree and by avoiding over-processing it can be used to its very best advantage.

BC timber is I believe unique in quality and character and should be employed to its full potential whether structurally, aesthetically or for its durability depending on species. Intelligent design will help ensure that this superb eco-material is an indefinitely renewable resource.



Old growth Forest on the Skwawka River; M. Hoad 2002.

WoodHeart and ThermoWood

At the 2003 IWSc National Conference, held last October in Newcastle-upon-Tyne Duncan Mayes, Marketing Project Manager for Stora Enso Timber, presented a paper on WoodHeart and ThermoWood.

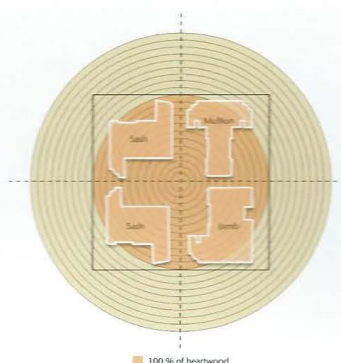
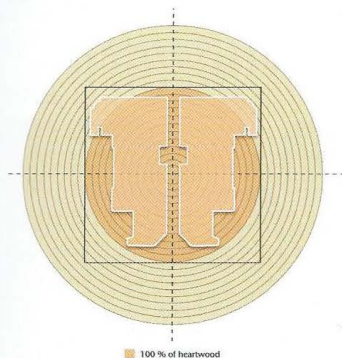
The following article relates to WoodHeart® and has been prepared by David Woodbridge from the material and illustrations given at the Conference by Duncan Mayes with additional technical literature supplied by Stora Enso Timber oy Ltd.

Stora Enso WoodHeart®

Introduction

The Stora Enso WoodHeart concept is based on the utilization of the heartwood of European redwood (*Pinus sylvestris*) on all the weather exposed surfaces of the windows and doors. The standard products provided will be continuous grain defect free finger-jointed components as described later in this article. The components are planed before finger jointing. With only a slight step (max.5mm) between the jointed sections, the timber produced is ready for manufacture to the final profiled sections with minimum waste.

Each component will have a pre-set heartwood content which has been converted and machined to allow for maximum coverage of heartwood on the exposed sections of the most used window and door joinery profiles. Guidance on the use of the WoodHeart® components is available to assist manufacturers to use the material to its best advantage.



When producing the finger joints the timber is repositioned once the defects have been cut out so that the grain runs continuously in both the jointed sections. The continuous grain structure secures the technical quality of finger-joints and overcomes the risk of differential movement between the jointed sections. Overall this method improves visual appearance of the product, this being an important consideration when the final profiles are painted, stained or finished with a translucent coating system. Furthermore each piece of timber is turned so that the grain direction and heartwood position is coordinated throughout the parcel.

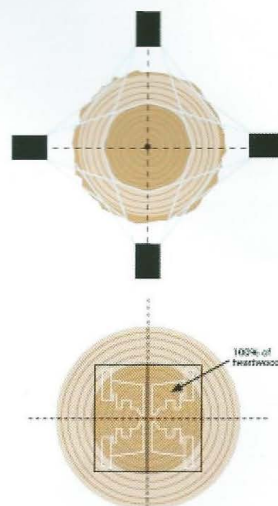
When window sections are profiled in such a way to ensure that all the weather-exposed surfaces up to the glass line (i.e. on the external face) are of 100% heartwood there is no need to chemically treat the component as the natural durability of the pine heartwood will provide sufficient resistance when combined with a suitable surface coating designed for external applications. It is recognized by BRE and SHR Timber Research (in Holland) that European redwood heartwood is suitable for applications within the scope of BS EN 335-1 Hazard Class 3 (HC3) (above ground, not covered).

The production process of WoodHeart® components

In the Selection of the raw material tomographic x-ray technology is used to select logs with a high content of heartwood and optimal growth ring

spacing. At the same time the location, size and type of knots can be identified. This helps to ensure that only the most suitable logs for the process are selected.

The selected stock is then sawn to the pre-determined dimensions and graded before kiln drying to a moisture content of 10-12%. The grading process at this stage includes the use of photographic



techniques to assist in the elimination of defects and the finger-jointing procedures.

The Scientific case for utilizing heartwood

Stora Enso Timber, in collaboration with several European research institutes, has investigated the possibilities of exploiting the natural durability of the heartwood of European redwood for certain end use applications.

Lack of durability has been cited as one of the main disadvantages of certain wood

species when used in external applications where the risks of decay (and occasionally insect attack) are common. Various methods for improving the service life of wood (especially softwoods) have been developed over the years. Most of these developments have involved some form of chemical impregnation treatment. The main problem for the environment occurs when the product comes to the end of its service life, and its subsequent disposal, which in some cases may be very difficult.

During ancient times Phoenician shipbuilders recognized the suitability of using wood with high heartwood content for certain applications where good durability was required. Today there is a strong case for returning to those proven principles and thus utilizing specially selected pine heartwood for end uses such as windows, doors and other exposed applications where good durability and stability is required, without the need for chemical treatments.

Wood extractives

The timber technologist will know that heartwood in many timbers is more durable than sapwood. This is due to the presence of extractives and is often associated with the resin content. However, extractives in wood cover a large number of different compounds such as terpenoids, fatty acids and phenolic compounds. During the formation of heartwood, the rate of metabolism in living cells in the inner sapwood increases and alters as their metabolic function ceases. These products migrate into the surrounding cell structure where they consolidate to form the extractives.

As a species *Pinus sylvestris* has the ability to produce large amounts of extractives (4-5% of dry weight) which become deposited in the heartwood. Such extractives are the principal source of the levels of natural durability (including decay resistance) that occur in many species of timber and this includes several of the individual species of pine.

The Finnish Forest Research Institute have used a method of test based on EN 113 to study the effects of wood destroying fungi on European redwood heartwood.

The results found that the mass loss of inner heartwood was 23% less, and the outer heartwood 60% less than the total mass loss of sapwood (Venäläinen, 2002). That the heartwood is acceptable for use in above ground situations pertaining to HC3 has already been stated above.

Moisture resistance

The ability of wood to absorb moisture has a major effect upon the potential service life of the wood substrate. In above ground contact situations the service life depends very much upon both the level of durability and permeability. A wood species that has a given durability level and which has low moisture absorption characteristics will, due to reduced water uptake, last longer than a species that has the same durability rating but higher moisture uptake. The low moisture absorption rate of European redwood heartwood is directly related to its permeability classification of resistant.

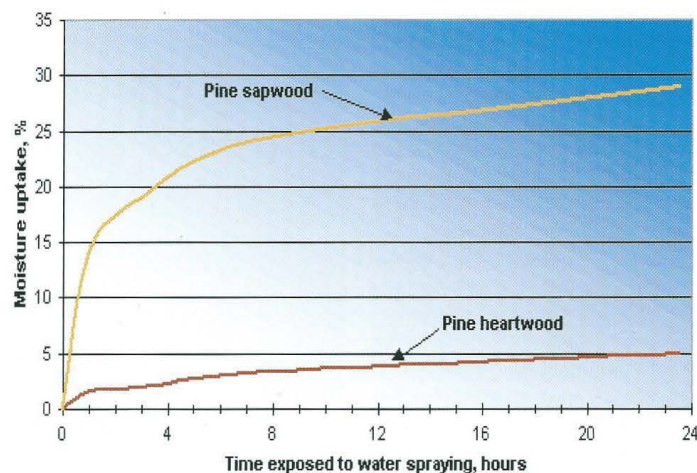
As a result of the low moisture absorption of the heartwood the associated moisture movement of the timber is greatly reduced. This improved dimensional stability is one of the key factors that makes WoodHeart® such a good material for end uses such as windows and doors along with other external joinery products that, by virtue of their situation, are exposed to the fluctuating climatic conditions and humidity levels.

Advantages for window and door products

By utilization of 100% heartwood to exposed surfaces, the likelihood timber decay is greatly reduced and the need for a recognized impregnation preservative treatment is removed in most cases. Using a raw material with a low moisture movement gives better stability for coatings.

And the defect-free finger-jointed timber profiles reduce significantly the need for surface repairs during the production and manufacturing phase. It was explained by Mr. Mayes that the production of high heartwood content components is not confined to his organization, but they are currently the only company combining x-ray technology heartwood selection and continuous grain finger jointing into the same product. What he did emphasize was that the description 'WoodHeart®' is licensed by copyright to Stora Enso Timber oy Ltd.

ThermoWood is a manufacturing process patented by the Finish ThermoWood Association. The process was explained in an article that appeared in Wood Focus in 2001. Since then the product has become much more widely recognized, developed and used. Because of this it is intended that this section of the Conference Paper will be developed into a full article and appear in next issue of Wood Focus.



Source: Träteknik Centrum, Svensson and Nussbaum, 1998

A decade of forest certification

By Rupert Oliver, Forest Industries Intelligence Limited

In 1993, the Forest Stewardship Council (FSC) was founded so forest certification has been around for a decade and significant progress has been made, but there are big obstacles to overcome if it is to realise its full potential. The world area of certified forest has expanded seven-fold in less than four years, from little more than 20 million ha at the start of 2000 to around 150 million ha today. The FSC lead expansion of certified forest area during the 1990s, but the recent more rapid growth has been due to the development of non-FSC schemes such as the Pan European Forest Certification (PEFC) scheme and American Sustainable Forestry Initiative (SFI) Program. The emergence of these schemes has brought a whole new constituency of forest owners, industry, government and other interests into the forest certification movement. Many people, who only four years ago were opposed to the concept of forest certification, are now ardent supporters. A new report released by the UNECE Timber Committee in Geneva estimates the potential supply of certified forest products to be almost 300 million m³ annually worldwide, which is close to the annual industrial roundwood consumption of Europe (excluding the Russian Federation).

Unrealised potential

The important phrase here is "potential supply", as only a tiny fraction of wood supplied from certified forests is traded as certified product. Indeed supplies are so limited that even the most committed

purchasing companies often struggle to obtain sufficient volume of certified product, because of several obstacles:

- the technical challenges and costs associated with chain of custody verification
- the mismatch between available supply and demand for labelled products. In particular, certified products mainly derive from temperate and boreal regions while market concern tends to focus on tropical hardwood products
- the demand for labelled products remaining highly concentrated within the retailing sectors of a limited number of western countries – notably the USA, UK, Germany, and the Netherlands.
- the resistance to the concept of mutual recognition of credible schemes, particularly amongst environmental groups

Overcoming the obstacles

Nevertheless efforts are being made to overcome these obstacles, with varying degrees of success. Chain of custody has often seemed the most intractable problem but recent developments suggest it may not be insurmountable.

At a meeting in May 2003, the FSC endorsed a new approach to chain of custody for solid wood products referred to as the input-output system. Under this system, companies may claim a proportion of their output in particular product lines as FSC certified where that proportion directly

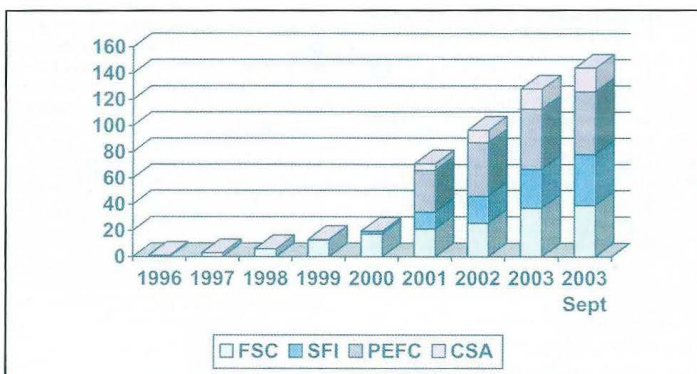
the mill, which has the potential to improve availability of FSC certified product.

Other innovative approaches to product labelling are being introduced by non-FSC schemes. The SFI Program started labelling products last year. Their approach goes beyond chain of custody verification of certified product. It involves an annual independent audit of the entire wood procurement management system of participating companies. Participants must show that a minimum percentage of wood derives specifically from SFI certified sources. In addition, they must account for all their wood supplies, whether or not certified. The procedures accommodate recognition for other acceptable forestry standards and methods of improving the environmental performance of suppliers, for example through logger training.

Phased approach for the tropics

There has also been progress in tackling the second obstacle. There is growing recognition of the potential for a "phased approach" to forest certification in the developing world which may increase access to certified tropical hardwoods.

The third obstacle to increased supply of certified product - lack of widespread demand - is an oversimplification of a more complex problem. There is great demand from most sections of the forest products industry for accurate and readily defensible information on forestry practices. But this has to be provided at reasonable cost. Existing certification services have failed to satisfy this demand. FSC's determination to keep environmental groups on board has meant that their forestry standards are often set at a level only achievable by large rich western producers and publicly subsidized forest estates. While these standards may be very "green", they have yet to prove economically sustainable. In contrast, schemes like PEFC and the SFI Program offer economic sustainability, but continue to be criticised by the large environmental groups for being insufficiently "green". This situation may be most effectively resolved by the certification schemes coming



Growth in global certified forest area, million hectares (in January unless stated otherwise).

together and talking about co-operation, which leads on to the fourth and perhaps most significant obstacle to increased supply of certified forest products.

There is no mutual recognition between the leading schemes: PEFC, FSC and SFI. Each scheme has devised its own procedures and standards not only for forest certification but also for chain of custody verification. Any timber trading company seeking chain of custody certification is faced with a dilemma. Should they undergo several audits and meet several different standards for chain of custody and then supply a variety of labels? This would be expensive and hugely complicated. Or should the company seek to comply with only one system in the hope that it will provide sufficient throughput to meet labelling requirements? This may well require the company to place unacceptable restrictions on timber sources, thereby increasing raw material costs.

Prospects for mutual recognition

Environmental groups have been firmly opposed to mutual recognition, arguing that it would involve a progressive erosion of forest certification standards to the "lowest common denominator". And mutual recognition between FSC and non-FSC schemes would involve a significant loss of environmentalist influence over access to the FSC label.

The prospects for FSC, PEFC and the SFI Program reaching agreement on mutual recognition are now very slim. At the FSC General Assembly last year, environmentalists pushed through a motion requiring the FSC Board to seek approval by formal vote of the FSC membership prior to engagement in any process designed to lead to mutual recognition. Without this it is probable that labelling of finished products for direct consumption by the general public will remain of only minor importance. Forest certification's main role would be for business-to-business communication. Large timber consuming companies and

specifiers would have to make their own assessments of the virtues of each scheme. To profit from their efforts to discriminate in favour of timber from certified forests, timber companies would have to rely heavily on market recognition for membership of WWF Buyers Groups, or of industry programs like the UK Timber Trade Federation's Environmental Timber Purchasing Policy. The larger retailer groups may also be encouraged to drop their support for a single forest certification brand, and instead market wood under their own corporate brand.

Only hope for a political settlement

This future seems likely, but there are some that have not yet given up all hope of the largest forest certification schemes working together as dialogue has been continuing between the various forest certification schemes. Efforts are now being made to build consensus around an alternative framework for co-operation between the schemes. Development of this framework, referred to as the Legitimacy Threshold Model (LTM), has been led by the World Business Council for Sustainable Development (WBCSD). It has the backing of some of the world's largest forest products companies and has been developed through contacts with a wide range of interests. WWF has already taken a positive interest.

In order to secure this interest, the LTM model includes elements which may make it more palatable to the environmental community. The LTM deals with their concern that FSC should not be considered on a par with other systems. Rather it allows all systems to compete on their perceived merits once they've qualified by crossing an appropriate legitimacy threshold. The LTM seeks acknowledgement from FSC and the green movement that other schemes meeting this threshold have a right to exist and are playing a legitimate role. The concept also accommodates developing countries by recognizing the need to take a phased approach to certification. While the underlying criteria used to determine legitimacy and the assessment process used are still unresolved, at present the LTM model provides the only hope for a political settlement.



Unloading SFI certified hardwood at Blumsom.

Company Profile-Hoppings Softwood Products PLC

There have been Hoppings in the Timber Trade for over a hundred years. The First Charles Reuben Hopping began selling Timber in the late 19th century and his son established yards in North and South London in the 1920s. Today the Company, chaired by the founder's great grandson, Charles Hopping, has grown impressively from its early beginnings. To do this it has changed beyond recognition from the early days and these changes reflect the changes which have taken place in the wider timber trade.

The company grew by supplying the requirements of the great housebuilding boom of the 1930s with wood being sourced from around the world – but mainly from Scandinavia and the British Empire. With the war came the need for more local sources of supply so two British sawmills were added to the group. The end of Timber Control in the 1950s led to the closure of those mills but opened up great possibilities in importing. Throughout the 1950s, 1960s, and early 1970s Hoppings concentrated on the importation of Polish redwood, becoming well established as service based suppliers in an important market niche. The same period marked a change from supplying all species to an almost exclusive concentration on softwood. Again things moved on and so did the Company, Poland was replaced as a source of supply by Canada, and instead of importing through the Port of London the main import point moved down the Thames to Tilbury. By the early 1990s two further developments were occurring, one was the waning of the Canadian market and the other was a change in the Company's emphasis away from buying and selling and much more towards processing the wood that it sold. Today, whilst it maintains a presence in the carcassing Softwood market, 90% of goods sold are processed in some way.



Quality selection on the new high speed production line, Lingfield depot



Quality storage facilities for planed and moulded products, Epping depot

The Company's location also reflects the way things move on. Its original sites were immediately outside the North / South circular ring, which was then the new ring road for London. Today sites have been purchased, this time just outside the M25. The intention remains the same – to be close enough to provide a top class service to the big city – but the move to large modern sites has enabled a much higher level of care, both for the product and the customer, and far more facilities for timber processing.

One thing that hasn't changed is the Company's customer base. It has always specialized in supplying the Timber and Builders Merchant and the same is true today. London is a special market that makes particular demands on suppliers and Hoppings has set itself to provide a first class backup service to those whose businesses operate in that area. To do that the two new sites are equipped with nearly 100,000 square feet of high quality undercover space. Each site has a high speed moulder line designed for maximum flexibility and control. As well as being fully

automated the lines feature advanced monitoring and sorting systems to ensure a consistently high output quality as well as computerized measuring and marking to make it easy for the customer to identify and sell the end product.




End-grain markings

With the increased use of wood in the garden the Company has continued its investment in treatment facilities. Having been one of the earliest companies to move to Tanalith® E Chrome & Arsenic free preservatives they can now offer not only standard green but also brown and water resistant alternatives.

Timber decking & pergolas

EXTENDING YOUR HOME INTO THE GARDEN



Q-DECK
Quality Decking Products

wood for good
for your garden with
timber products

Q-line
Quality Machined Timber

Registered from 18th 03/25

www.qualitydecking.co.uk

www.qualitypergolas.co.uk

New decking leaflet for 2004

With the current trend of adding value at source it's not always easy to justify high levels of investment in processing, especially in a high cost area like the South East. However in a service orientated market availability and consistent quality are always much easier to achieve when the company is located close to the market.

The Company's most recent developments have led the Company to look at a better way of drawing attention to the quality of what it does. This has led to the development of the Q-deck and Q-line brands.

The former is used for the Company's range of decking products and accessories, the latter for its range of Planed Softwood and Mouldings. Both are aimed at the buyer who wants a good quality product and doesn't just want to pay the lowest price. As well as good consistent products the Company offers a high level of backup with advertising support, enquiry forwarding and point of sale literature.

It's not possible to give high quality backup without high quality staff. Whilst the Company aims to recruit good people, its major focus is on developing the potential of all its staff. A large part of this is achieved through in house mentoring and a culture which encourages staff to develop themselves in their role. At the same time it uses external resources such as the Institute of Wood Science, particularly to give staff a good grounding in the underlying technology of timber. It is an interesting fact that the numbers employed are little different now to that of fifty years ago – but the volume of timber sold and the amount of work done to it has increased immeasurably.

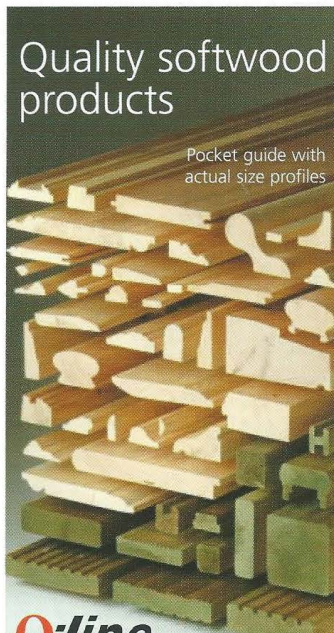
Since the turn of the last century the Timber Trade has changed beyond recognition. At the same time the pace of change has accelerated to the point where it can be said that "the only constant is change". To continue to survive and thrive the Company has to focus on the requirements of its customers. A critical function in all this is played by the Marketing Department whose job is not just to oversee promotion and merchandising – important as that may be – but to look at developing market opportunities, whether they be in Timber Frame, Garden Wood, Floorings and Claddings, or whatever, and decide how the Company should react to each opportunity.



Checking tooling tolerances in new tool room, Lingfield depot

Quality softwood products

Pocket guide with actual size profiles



Q-line
QUALITY MACHINED TIMBER

www.qualityline.co.uk

New planed & moulding leaflet for 2004

Of course customers like evidence and need to be reassured of their suppliers commitment to more than just profit, so the Company has now made two important advances in this area. Firstly, in order to demonstrate its commitment to the advancement of wood science it has become a Corporate Member of the Institute. Secondly, in order to provide reassurance to customers about its purchases of timber it has become registered under the Forest Stewardship Council's chain of custody scheme.

These days it's important for any company to have an answer to the question "what do you do?" Hoppings answer is short and simple "We're here to buy, process and distribute Softwood to merchants in London and the South East of England".



News and views from the Director

By Jim Lumsden MCIPD MIWSc



New Website Launched

The new website was launched in March replacing the original site. The new site includes a number of additional features including drop down menus making it easier to access pages of interest. The new password protected members only section provides the opportunity for members to access such areas as member information, containing minutes of meetings, business documents featured papers from the Journal, papers from the annual conference and a register of members skills in searchable database and training materials. These pages will be developed in the coming months and will gradually feature on the new site.

A number of members have already completed the special interest/skills form online and this has produced a searchable database from which members can retrieve the names and contact details of members' self declared competency in wood science/technology and trade expertise. If you haven't already registered, why not complete the online form and add your details to the database.

Another feature is the Help & Advice Forum, which enables members or visitors to post a request for advice or information for a response from members who have an interest or knowledge of the issue.

Remember, to access these pages, you need a unique user name/number and password. To obtain your individual user name and password call Christine Bradshaw who will provide you with your unique identifier.

The Wood Awards 2004

At a recent meeting of Council, it was agreed that the Institute would become a sponsor for the 2004 Wood Awards.

This prestigious event provides a unique opportunity and a remarkable collaboration for the eighteen generic sponsors to promote wood as the World's only truly renewable and sustainable material. Last years event attracted a high level of interest and a record number of entries.

Sponsors include American Hardwood Export Council, British Woodworking Federation, Timber Trade Federation, wood for good, English Heritage, Ghana Forestry Commission, Malaysian Timber Council, the Worshipful Company of Carpenters. Support is also given by 10 additional sponsors: American Forest & Paper Association, City & Guilds of London Institute, Faculty of Joinery Management, Historic Scotland, Institute of Carpenters, Timber Decking Association, TRADA Technology, UK Forest Products Association, UK Timber Frame Association and the Woodworking Machinery Suppliers Association.

For the first time, all the short-listed projects in the 2004 Wood Awards will be displayed at the Institutes conference to be held in Birmingham on 30th September.

This is a new venture for the institute and one that will provide the Institute with an opportunity to heighten the profile and encourage a better understanding of timber and wood based materials.

Introduce a Colleague

The Institute is preparing for a membership drive in an effort to swell the ranks of members. Through talking to senior managers in the industry, it would appear that there is a lack of understanding on the categories of membership and entry qualifications for election to appropriate grades of membership.

In addition to Certificate, Associate and Fellow grades where members qualify by examination, there are two further grades providing membership for those who did not have the opportunity to achieve formal qualifications:

Ordinary Member grade is open to any applicant and requires no formal qualifications for entry. All members receive the Journal and WoodFocus

magazine and are entitled to attend meetings and conferences of the Institute.

Member Grade is open to individuals employed in the Timber and Allied Industries with ten years or more experience with at least three years in a senior position. They may use the designatory letters MIWSc.

Do you know colleagues who qualify and would benefit from membership? Why not invite them to apply for the appropriate grade of membership and keep our membership numbers at a healthy level. If you would like the Institute to send a membership pack, contact Christine Bradshaw at head office who will be happy to write to any prospective candidates providing them with a membership pack.

Australia Bound

President Jim Coulson is soon to visit the newly re-formed Australian Branch based at the Co-operative Research Centre (CRC) at the University of Melbourne, developing new techniques in timber utilisation. The Centre is run by Professor Peter Vinden (ex Bangor University and Imperial College) who, as a forestry graduate, sees the CRC as a core for the new IWSc Branch.

The CRC has four meetings per year with a dinner and lecture programme and Peter sees this as the nucleus of an IWSc programme in Australia.

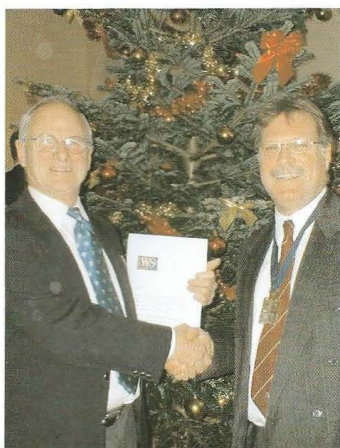
President Jim Coulson has been invited as guest speaker at the next meeting of the Branch to be held at the University of Melbourne at the end of April.

And Finally...

In the last edition, we invited members to write with their views on any matter relating to the Institute and membership. We particularly asked for your views on what you consider would add value to your membership.

The net result was a zero response! Very disappointing.

Are our members interested? Are they too busy? Don't they read Woodfocus? We want to encourage active participation at all levels. So let's hear from you - it's your Institute.



Photograph by Jim Lumsden

At the last AGM (in December) a presentation was made to David Woodbridge to mark his retirement from Director of the Institute earlier in the year. The presentation was made by the Institute's President, Jim Coulson.

The items presented were far too bulky to hand over at the meeting, since they included all the necessary equipment to update television and radio reception to receive the digital channels along with a

DVD player. All are most welcome in David's house as he and his wife, Carolyn, are lovers of music, especially opera, and with the increasing range of live relays and recordings available they are in for a musical feast!

We need your help!

With the launch of the New Certificate Course reported on page 12, we would like to hear from suitably qualified individuals who would be interested in becoming tutors on the new modular structured course. If you are retired or an Associate member who can offer your support to students on a remote basis, we would like to hear from you.

For further information contact the Director, Jim Lumsden on 01494 565374.

New Training Partners -Grwp Diwydiannau Coedwigoedd Cymreig (WFIG)

Report by Jim Lumsden, Director.

A unique venture to raise the knowledge and skills of businesses across rural Wales was agreed recently when representatives of the Welsh Forest Industries Group (WFIG) met with officials from the Institute.

Using some of the £1.2m funds awarded to the timber and wood products industry by the Welsh Assembly (WDA and the Forestry Commission) and the EU to increase training and qualifications, the consortium of senior organisations which form the Welsh Forest Industries Group has agreed to sponsor the development of the Institute's new Certificate Course Modules due to be launched later this year.

Working in partnership it is hoped to roll out the Institutes course modules to some 500 small to medium size enterprises in the timber and wood products industry in Wales.

INSTITUTE OF WOOD SCIENCE CORPORATE MEMBERSHIP

The benefits to Corporate Organisations

- They will be listed in the Institute Journal and the Wood Focus
- They will be listed in the Membership page of the Institute publications
- They will be entitled to use the Institute's logo on letterheads, etc
- They will be entitled to appoint a non-voting representative to attend all General Meetings
- They will receive a copy of each issue of the Journal
- They will receive multiple copies of each issue of the Wood Focus for circulation to staff
- They will be entitled to attend the annual Conference at membership rates
- They will be entitled to a 20% discount on all the workbooks for the IWSc Course
- They will receive a Certificate indicating Corporate Membership
- They can place their areas of technical expertise on the Institute's Web Site
- They can display their logo on the Institute's Web Site with a hyperlink to their own site

The benefits to the Institute include:

- A level of financial support that helps us to improve the course material and workbooks available
- To help us achieve a wider circulation of Institute publications, for example Wood Focus and Conference brochures
- To provide us with possible companies and organizations to profile in Wood Focus and in so doing, for the Company to contribute an extra, one off payment (negotiable) toward the printing costs of the magazine.

During the current financial year the minimum level of subscription
for Corporate Membership is £250.00 + VAT

The new Institute of Wood Science Certificate Course

Continuing to address the skills shortage

Over the last four years the IWSc Certificate Course has been tutored on a distance-learning basis with some substantial measure of success in certain cases: as three of the recent Timber Trade Federation Challenge Cup Award winners have been distance-learning students. Now the Council is launching a revision and re-write for a new Course. The Education Committee took on the task of deciding on a new structure for the Course to suit the present needs and the proven method of distance learning, with varying levels and frequency of tutorial support, as the prime method of delivery.

The Course approach is based on topic specific modules of which a Core Module on Wood Technology (equivalent in size to two of the topic specific modules) will be a compulsory component for those students seeking to gain the Institute's CMIWSc Qualification. Alongside the Core Module will be a series of Optional Modules. Each will be complete in itself and could be taken individually by students wishing to gain knowledge in a specific area of work but without the desire to undertake the full Certificate Award Course. This facility is intended to attract students from outside the timber industry and from the professions, for example architects and builders. Equally students can build credits within this system and, provided that along the way the Core Module and exam are undertaken, can achieve the full Award.

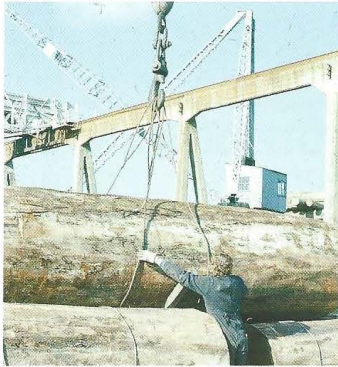
A team of writers with specialist knowledge in the subject areas have been commissioned to write the modules, which will be available for the launch of the New Course in September. The new modules will be in full colour with illustrations and diagrams selected to enhance the learning experience. Each will contain almost all the necessary information to complete the work but a good textbook is also expected to be procured by the student. However the Course as a whole can be completed without the need to source a lot of extra information, such as college library books. Many of the tasks set should relate to the practices applicable to, and information held by, the companies where students work.

The optional modules cover:

Technology for those concerned with timber drying; timber conversion and machining for both primary and secondary wood machining activities and timber durability, protection and preservation for those concerned with supplying timber for exterior work or use in hazardous situations.



Resource modules for those concerned specifically with softwoods, hardwoods or panel products or a combination of them.



End uses form another group and will cover carcassing and strength grading in one module and joinery and appearance grading in another module.



Commercial modules that offer timber trade practice will be of special relevance

to timber agents and importers, and yard and warehouse operations that will be especially appropriate for timber merchants.



Through time and depending on demand, further optional modules are expected to be added to this portfolio.

To gain the CMIWSc award a student must complete the Core Module and pass a formal three-hour exam. Then he/she must, from the list of titles, select five optional modules. These will contain assessed tasks and study projects, which the student will pursue under the guidance of an IWSc approved tutor. The arrangements for face-to-face tutorials will vary according to circumstances, but it is hoped that the notion of in-company groups will be developed further, maybe with some cross company groups studying at convenient regional centres.

After the resounding success of the IWSc Foundation Course the Institute is optimistic that the new Certificate Course will be taken up with enthusiasm by industry and professions. Already there are groups being nominated to commence as soon as the modules are ready, and taking a leaf from the success of the Foundation Course, the new course will recommend the appointment of a mentor for each student or student group.

For further information contact:
Institute of Wood Science
Stocking Lane
Hughenden valley
HIGH WYCOMBE
Bucks, HP14 4NU

Tel: 01494 565374
Fax: 01494 565395
Email: info@iwsc.org.uk
www.iwsc.org.uk

Michael Buckley FIWSc, of Turnstone Communications has been commissioned to provide PR and Marketing for the new Certificate Course.

Training News

Tutorial workshop for Institute's Foundation Course students



Foundation Course workshop

In February and March two workshops were run in-company for students from Travis Perkins PLC who are studying the Foundation Course. These events are part of an ongoing strategy by the Company in which the workshops are scheduled when students are at the halfway mark in the Course. The session picks up on work done in the first module and introduces sections of the second book, mainly in association with practical work related to the Course content. In this the participants have the opportunity to handle and examine both wood and panel products as seen in the picture. The sessions close with a briefing on the style of and the procedures for the final examination for the Course. The sessions at Travis Perkins were presented by David Woodbridge.

A Certificate Course Workshop



David Woodbridge oversees a bending test

The practical element is an important part of the Institute's Certificate Course, especially in the sections that require students to undertake project work of one kind or another. One such activity is to

investigate the strength properties of wood. In the session pictured David Woodbridge coaches students from James Latham and MDM Timber in a test to ascertain the stiffness of timber. The results using the relatively simple piece of apparatus (that is appropriate to use in such in-company locations) are then processed using the relevant formula to calculate Young's Modulus of Elasticity (the E value) and to demonstrate the proportional relationship between stress and strain. The results have a practical significance in relating strength to density and being able to compare the performance of the test samples to data printed in the British Standard Structural Code for Timber.



Recording deflection in the bending test

Foundation Course: IWSc/TFT/SCA collaboration...

IWSc President Jim Coulson is continuing his successful collaboration with SCA in tutoring the IWSc's Foundation Course, coupled with a trip to Sweden for candidates who are successful in the examination.

Jim's company - Technology For Timber Limited - has recently put forty delegates through the examination achieving a 90% pass rate - and with 55% of them gaining passes at Credit or Distinction level.

The Swedish visit - sponsored by SCA through its UK company, SCA Timber Supply Ltd - allows delegates to see a harvester in action in the forest and to visit one of the most modern sawmills that processes redwood for the world market. Delegates can also visit one of SCA's tree nurseries, to see how the company grows over 60 million new tree seedlings every year, to make their forest reserve ever larger for the future.

But it's not all work on this IWSc/TFT/SCA collaboration...one day of the trip is given over to leisure activities. On the recent course, which visited Sundsvall on 13th - 16th March this year, successful examination candidates from Buildbase went cross-country ski-ing and then ice-fishing on a frozen lake; with reindeer stew for lunch, before having an after-dinner sauna in a log cabin in the forest!

These courses have proved so popular that two more are currently ongoing - in Liverpool and Kegworth - and four more are already planned for this autumn. Anyone wanting details should contact Jim Coulson at www.woodexperts.com or Kay Barker at SCA Timber Supply Ltd on 01782 202122.



Ice fishing in Northern Sweden

What tree is that?

Foresters and primary sawmillers frequently have an uncanny ability to name a type of tree instantly from the recognition of the features of its bark. This skill is not usually so prominent amongst those engaged in the handling and selling sawn and processed timber, plywood and veneers—or is it? How many of the trees shown below can you identify from their bark? All these trees can be found growing near to the Institute's Head Office. Most of them represent commercially important species however some are valued more for their decorative features. Answers on page 16



1



5



9



2



6



10



3



7



11



4



8



12

Pictures by David Woodbridge

Branch News Australian Branch

It is with considerable pleasure that we can report that the Australian Branch of the Institute has been revitalised. It is equally encouraging that a high proportion of existing Australian members have indicated that they endorse the reshaping of the Branch and the formation of a new Executive Committee this being:

Peter Vinden Chairman

pvinde@unimelb.edu.au

Jeff Hann Secretary/Memberships Officer

jhann@unimelb.edu.au

Dawn Hong Financial Officer

dawngager@bigpond.com

Phil Blackwell Assistant Administrative

Office philipab@unimelb.edu.au

Karl Wild Student memberships Officer

k.wild@pgrad.unimelb.edu.au

Nola Wilkinson Communications Liason

n.wilkinson@optusnet.com.au

It is to begin this new era by providing publications and newsletters together with a new website. But perhaps even more encouraging is the report printed below by the new Branch Chairman, Professor Peter Vinden, FIWSc., CEO of CRC Wood Innovations on the Workshop held in November last year.

National workshop held in Melbourne on 25 November presented by the Institute of Wood Science (Australian Branch), the University of Melbourne and CRC Wood Innovations

Report by Professor Peter Vinden, CEO of CRC Wood Innovations.

'Simple measures can contain termite risks, say researchers'

Home owners remain largely unaware of the risks posed by termites and simple measures to prevent them, according to presenters at a national workshop on whole-of house termite protection held in Melbourne on 25 November by the Institute of Wood Science, the University of Melbourne and CRC Wood Innovations. Over 60 participants from the pest control industry, the wood preservation industry, Government authorities, researchers, timber pest educators and builders and developers attended the workshop.

"Houses built on concrete slabs are at higher risk of termite attack than houses on stumps, despite widespread perception to the contrary," said Dr John Thornton, a timber performance and pest control consultant. Homeowners don't appreciate the benefit of regular termite inspections on an ongoing basis, he said, a comment echoed by other industry presenters. Remediation of termite damage is often costly to the homeowner, said workshop organizer Dr Berhan Ahmed.

"Low public awareness of the advantages of treated timber framing offers the timber preservation industry a significant opportunity." Said keynote speaker, Dr Kunio Tsunoda of the Wood Research Institute at Kyoto University. He identified the need to increase awareness amongst the building industry and consumers (house-owners and builders) of the capacity of treated timber framing to prevent damage by termites and fungal decay. Education of building designers and architects about the high durability and robustness of hazard class 2 (H2) treated timber products in comparison with wood

substitutes is essential, said Mr. James Grandison of Cafler Holt Harvey.

Relaxation of building codes in New Zealand in the early 1990s, including use of untreated framing, resulted in significant numbers of "leaky buildings" which are now exhibiting structural damage from fungal decay, said Ms Jeannette Drysdale. As a result, she said, New Zealand will introduce a requirement for identification of treated timbers by colour-staining, to facilitate building structure inspection. Ms Drysdale, who chaired the workshop, is an independent consultant to the timber treatment industry in New Zealand.

At present, usage of H2 treated timber framing in Australia is still relatively low. However, industry presenters at the workshop predicted that following regulatory change, the use of treated framing timber is likely to increase significantly. Since the first termite workshop held in the early 1990s, cost effective timber treatment systems using preservatives with low toxicity have been developed by researchers and the wood preservation industry to meet this expected increase in demand, said Professor Peter Vinden, CEO of CRC Wood Innovations. Dr Masafumi Inoue, of the Wood Research Institute at Kyoto University, presented a novel roller pressing technology for impregnation and drying of treated timber at the workshop.

Professor Peter Vinden can be contacted at CEO CRC Wood Innovations Melbourne (Tel. 0407554113 or Email. pvinde@unimelb.edu.au)

Great Western Region

The Western Counties branch of the Institute is to be given a new lease of life, under the chairmanship of Jerry Wilson AIWSc the area will become known as the Great Western Region. The first events are scheduled to begin in September of this year, and Jerry would like to hear from any members, old and new, who would be interested in discussing speakers and future venues. He can be reached on 02920 762712 or by e-mail at

Sylvawood@aol.com.

Nigel Thompson AIWSc of UPM Kymmene has taken over the role of secretary and can be contacted on 07802 524688.

Further details will follow in the next edition of Wood focus.

Membership News and Regional Contacts

New Fellows

Since March 2003 for following people have been awarded the Membership Grade of FELLOW of the Institute

Dr. Paul N McFarlane

Ph.D Massey University New Zealand

Professor John N Saddler

BSc (Hons) Edinburgh University, Ph.D Glasgow

Dr. David H Cohen

Ph.D in Forest Products –Virginia

Professor Philip D Evans

Ph.D in wood Science – Bangor

All the above are members of the recently established Canadian Branch

Professor Todd F. Shupe

Ph.D. Forestry (Wood Science & Technology).

Professor Shupe is a member in the USA

Thomas Geoffrey Bagnall

Geoff Bagnall is the immediate past President of the Institute

Mr. Brian Norris

Brian Norris has been elected a Fellow for his outstanding contribution and services to the Institute. Brian has held various grades of membership since joining the Institute in 1958, 47 years ago. During this period Brian has held a number of positions including Chairman of the Membership Committee from 1996 until 2002 and Council member from 1996

Now retired after 39 years service in the timber industry, Brian is still very active as a Council Member and although he retired as Membership Committee Chairman in 2002, he is still an active and enthusiastic member of that committee. In addition to his Institute work, he is a magistrate and sits on the Central Buckinghamshire Bench.



Photograph by Jim Lumsden

The Institute's President features on BBC Radio 4

Jim Coulson, introduced to listeners as the President of the Institute of Wood Science, contributed to the programme Word and Mouth, presented by Michael Rosen and broadcast on Friday 16th of April at 16.00hrs.

The programme featured wood and woodworking expressions and frequently used idioms. Very much a subject that Jim's warms to and I wonder if any of our Members heard the programme?

What tree is that? Answers:

- 1 Sweet Chestnut
- 2 Oak
- 3 Beech
- 4 Larch
- 5 Cherry
- 6 Mountain Ash (rowan)
- 7 Ash
- 8 Scots pine
- 9 Sycamore
- 10 Yew
- 11 Walnut
- 12 Plane

REGIONAL CONTACTS

For information on branch and/or regional and overseas activities, the contacts are:

Great Western Region formerly Bath and the South West -
Jerry Wilson AIWSc 02920 762712

Chilterns and Thames Valley - Dr. Vic Kearley AIWSc (01494 563091)

Midlands - Tom Shaw FIWSc (01789 840605)

Ireland - Anne Jefferies ITTA (itta@indigo.ie)

Liverpool and the North West - Geoff Bagnall CMIWSc (0151 724 1206)

London - John Park AIWSc (01252 522545)

Scotland - Andrew Gibson AIWSc (01416 321299)

South Coast - Patrick Gilbert MIWSc (023 9259 2715)

North East - Jim Coulson AIWSc (01765 601010)

Yorkshire - Neil Ryan AIWSc (01302 802226)

Overseas

Australia - Prof. Peter Vinden (pvinden@unimelb.edu.au)

Canada - Prof. Philip D Evans (e-mail: phevans@interchg.ubc.ca)

For details of individual and corporate membership, contact the Institute direct.

Editor: David Woodbridge FIWSc
Designed and Printed by Fairprint (High Wycombe) Ltd
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