



# WOOD SCIENCE NEWSLETTER

March 1996

## FROM THE PRESIDENT

The world of wood has seen many new developments in the last six months. I have recently been asked to comment on the Department of the Environment's Timber 2005 Research and Innovation Strategy for Timber in Construction, launched in London at the end of January. The most outstanding statistic that springs from this document is that the UK trade deficit in timber and timber products is over £4,200 million or approximately 25% of the total UK trade deficit. This is mind-boggling information which immediately poses the question of how we might redress this imbalance. One part of the UK which produces large quantities of timber and timber products is Scotland and here there is scope for further expansion in forest cover and in sawmilling and manufacturing operations. Of course, Scotland's production record is excellent and our 1996 Annual Conference, to be held in Edinburgh in April, will be a showcase for the Scottish timber trade and educational establishments as well as for organisations from all over the UK.

You will have enjoyed the warm glow from our 1996 conference prospectus by now, which was mailed out with the latest copy of the Journal, but it is worth highlighting a few points. Our principal sponsor is CSC Forest Products Ltd., newly created from the merger of Norbord and Glunz, who are based in Inverness and Cowie and elsewhere in the UK. Andrea McKay, CSC's Group Marketing Coordinator, is assisting me at the Edinburgh end of the operation along with Alasdair McGregor of James Donaldson and Sons who are also sponsoring the conference. Our other very generous sponsors are the City of Edinburgh District Council, the American Hardwood Export Council, the Timber Trades Journal, BPIB, Technology for Timber, COFI and the Leslie Boustead Memorial Fund. We have an impressive array of eleven papers lined up under the headings of forestry, timber in structures, preservation, coatings and fire retardants and the challenges of the future.

In early January I spent a night at the George-Intercontinental Hotel and enjoyed the relaxed surroundings and excellent service. Following the City Chambers reception on the evening of Friday 12th April our evening meal will be served at the Carver's Table restaurant which provides a delicious hot and cold buffet service under the graceful Adam ceiling. The hotel is a short walk from Princes Street, the major shopping street, where splendid views of the Castle, Scott Memorial and the Old Town appear before you. The train and bus station are close to the hotel and some domestic airlines are offering competitive rates for flights from London (see Side Lines). The conference offers excellent value in a delightful location. Don't miss it!

Our joint IWS/RIBA roadshow got off to a flying start at the very successful initial meeting organised by Dr Richard Murphy in London. Alastair Kerr of the Wood and Panel Products Federation and

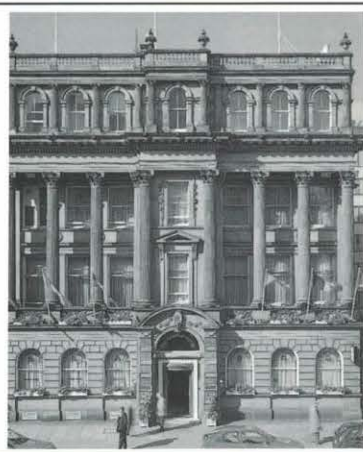
*Under stated elegance and a dedicated personal service are to be expected in an establishment like The George Inter-Continental Edinburgh.*

*The very fabric of the building breathes excellence and heritage. Its architecture and furnishings show exceptional attention to detail. And I am proud to say that its staff and facilities do the same.*

*Sought-after values indeed, echoing age-old traditions of hospitality which today are hard to find. Especially when matched by the latest in computerised business support systems.*

*You'll find all these qualities at The George Hotel. No matter what your requirement, I look forward to welcoming you.*

Campbell W Black General Manager

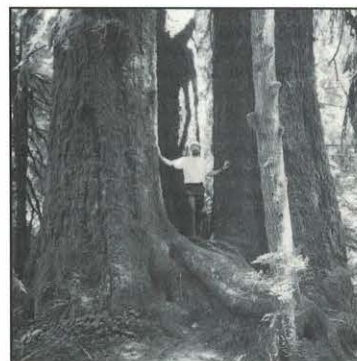


Malcolm Cowley of Medite gave presentations on OSB and MDF. Following the demise of the WPPF Alastair has moved on to the Wood Panel Industries Federation and Brian Robertson of CSC Forest Products has stepped in at short notice to take his place at the meetings in Bath and Solihull. The Institute aims to take the roadshow to other parts of the UK in 1996/97. My own Western Counties Branch has been treated to tours of the Bristol Port and the reconstruction of John Cabot's ship the Matthew, a presentation on total quality management and a lecture and demonstration on wood spraying techniques. Other Branches report lively and fascinating programmes.

Back at Hughenden Valley our Director has produced a new publicity leaflet and the restyled work books are well advanced. Maurice and Freda have been selecting new IWS merchandise in the form of a tie, lapel badge and cuff links and, together with our new personal organiser, these should be available at Edinburgh. This brings me to the Continuing Professional Development scheme, developed by David Woodbridge with input from Tony Hall, Dr John Brazier and others. Full details are printed in the organiser. The Institute now offers a mechanism for recording details of the professional activities which expand the horizons of our Membership. To date the scheme is part of one route to allow transition from the Certificated to the Associate membership grade. In future it may lead to a new grade of membership. During the next year I recommend that you record all details of your professional activity in the CPD record. At the end of that time the extent of your activities may surprise you. If the list is short you should reappraise your professional attitude to your career. If the list is long your company may not be giving you credit for your commitment.

I would like to end my remarks by referring to people within the Institute. Back in December at Head Office we were delighted to welcome Dr Harry

Greaves, Chairman of the Australian Branch, who called by on his way back to Australia. Harry has prepared a world wide web page (<http://www.chem.csiro.au/woodsci/woodinst.htm>) for the Institute and I am grateful to him for employing Richard Thompson, one of my postgraduate students. Travelling in the reverse direction I am delighted that Keith Purcell, our immediate Past President, is flying to Australia on behalf of the Institute to spread the gospel on UK softwood imports. In conclusion there is no doubt that the personal effort, often unpaid, of individuals such as Harry and Keith is the life blood of the IWS. Attendance at Branch meetings, Council and its related committees and Conference all require commitment and effort. These personal contributions bring immense rewards to the individual and the wood science community at large. Make sure that you are involved too.



*The President dwarfed by the Triplets in the Carmanah Valley, Vancouver Island, B.C. see "Forestry Tour of Canada"*



# MEMBERSHIP GRADES AND BENEFITS

## AN ADDITION TO IWSc. MEMBERSHIP GRADES - YOUR OPINION IS SOUGHT.

As well as its main task (in terms of time expended) of reviewing new membership applications or upgrades, the Membership Committee regularly reviews at its quarterly meetings the categories of membership to ensure that they continue to be in step with the developing interests of the Institute and its members.

Notwithstanding all this effort, only one new class of membership - that of 'Member' in 1990 - has been introduced since the IWSc was founded in 1955.

You may well ask whether what appears to be such a limited development justifies the effort expended by the Committee. My answer to this would be an unqualified 'yes'. At a time of rapid developments, particularly in technology, education and communications it is doubly important to ensure that the membership categories continue accurately to reflect the intent and aspirations of the Institute. But - and a very significant but - when considering changes the professional standing of the IWSc and the integrity of its membership levels must be maintained. Hence, much talk but no changes till fully evaluated.

You will not be surprised to learn that these observations stem from consideration of a new membership grade. In July of 1994 our (then) Senior Vice-President, Martin Ansell, prepared a note on Continuing Professional Development in relationship to the Institute; a matter at that time under discussion within the Education Committee. It included among its recommendations a new grade of membership between Associate and Fellowship which could be related to CPD performance. At the same time, quite coincidentally, the Membership Committee was looking at the viability of an exactly similar grade but from a different viewpoint. It had been observed in processing applications that relatively young Associates whose career development would not lead in the medium/long term to a successful Fellowship application faced a developmental desert so far as progress within their chosen professional institute was concerned.

The establishment of an intermediate grade for those making a good contribution to Wood Science in time and endeavour would acknowledge this effort. The value of a CPD link for the grade was also recognised by the Membership Committee.

After considerable discussion and investigation (including a study of membership categories within Associations and Institutes similar to IWSc) and consultation with the Education Committee, the Membership Committee put its recommendations to the Council at its September 1995 meeting for the creation of a new membership grade, provisionally entitled 'Senior Associate' and with the following qualification requirements:

Application is open to IWSc members who are, and have been for seven consecutive years, Associate Members. They will also have been employed for not less than 10 years in activities connected with timber.

In addition, the applicant will be required to demonstrate a career record including at least one of the following:

- (a) Five years service to the Institute as, e.g. Officer of Branch Committee, Council or other major IWSc Committee member.
- (b) Five years experience in education and training, teaching timber technology to Institute or higher qualifications.
- (c) Five years service to the Timber Industry, e.g. in promotional activities, technology, as officer of a trade association, or on appropriate BS/CEN committees.
- (d) A substantial record of publication in relative professional journals.
- (e) A record of 30 hours per year of CPD for a period of not less than two years (reading to account for no more than 20% of this total).

The view of Council expressed at this meeting was that it wants the opportunity of full consultation with the Membership both in the UK and abroad before reaching its final decision. You are therefore invited to comment on any aspect of the new grade, pro or con. In particular your help is sought with respect to the naming of the proposed new category. To date this has provoked the widest divergence of opinions.

Tony Hall FIWSc Chairman, IWSc Membership Committee

Enclosed with this Newsletter is a glossy leaflet saying a little about the IWSc and its membership grades and on the back a cut off slip requesting an application form for membership. If each one of us could persuade a colleague to join, it would mean instead of 1300 UK members we would have 2600! What a happy thought.

To be a member of the IWSc is sufficient in itself and of which we can all be proud. But there are benefits of a material kind which have been specially arranged for IWSc members.

## BENEFITS TO IWSc MEMBERS

"Members Select" offer an independent and professional insurance service covering Household - Motor - Personal Accident - Legal and Travel, and could show a saving of up to 30%. Phone 01233 661234 direct or contact the office for a quotation form.

Hospital and Medical Care Association give up to a 40% discount to IWSc members covering

*Medical Plus Plan* which provides private health care with the freedom to choose the hospital, the specialist and the time which suits you best.

*Hospital Sickness & Injury Cash Plan* provides you with a daily tax-free benefit when you are in hospital because of sickness or injury.

*Personal Accident Protection Plan* provides up to £150,000 all year cover whether at home or abroad on holiday or business.

Phone HMCA direct 01423 866985 or the office for further details and application form.

## EURO DM Car Rental Discount Benefit

Up to 20% discount on Avis Europe or Euro Dollar rent-a-car by using your IWSc membership I.D. card as enclosed with this Newsletter.

## And "Identity Wear"

IWSc (old logo) Ties - £6.00

IWSc (new logo) Ties - £8.00

Enamelled Lapel Pins (or tie pins) with new logo - £5.50

Enamelled Cuff Links (with new logo) - £13.50

Enamelled Letter openers (with new logo) - £5.50

## Personal Organiser

Filofax - £23.00

All available at the Edinburgh Conference or from the Office.

## THE IWSc PERSONAL ORGANISER

This NOTICE concerns all those who:

1. Have NOT succumbed to an electronic diary
2. Have got bored with an electronic system or have lost it
3. Have got fed up with transferring essential information into a new diary each year
4. Already have a personal organiser but it's falling to pieces through use
5. Do not keep any regular personal or business records but have made a New Year's resolution to do so

For all of you rescue is at hand in the form of the specially commissioned and styled black leather organiser with protected corners and handsomely inscribed with the Institute's initials.

Supplies are however limited so do not delay in ordering.

Cost including postage and VAT £23.00.

Phone or fax the Institute NOW!



# TIMBER & FIRE PROTECTION

## An Overview of UK Fire Retardant Processes

Despite the fact that wood is a combustible material and, for many world wide, a source of fuel, the natural fire performance of timber is extremely good. It has a very low thermal conductivity and burns at a predictable rate. In a fire wood will char and, when used in structural situations, may well retain its load bearing properties long after concrete, brick and stone have disintegrated and steel has failed through loss of strength and distortion.

At temperatures below 300°C timber requires a continuous heat source to make it burn, but above this temperature sufficient heat is released for burning to be self generating. About 70% of the heat released by burning timber is produced by flammable gases and resins and about 30% by the glowing combustion of charcoal.

When timber is treated with fire retardants, the fire retardant chemicals decompose at lower temperatures than timber, releases gases which inhibit flaming, absorb heat when decomposing and form a protective glaze over the surface of the timber. This has the effect of reducing the supply of oxygen and heat to the timber surface, reduces the escape of flammable gases and assists in the production of an insulating layer of charcoal. By influencing the thermal degradation of timber in this way the natural fire performance is greatly improved.

While timber in large sections is usually used for load bearing elements in construction, there are many instances where smaller sizes are used, for example wall and ceiling linings. Here too it may be necessary to enhance timber's natural fire performance, especially in respect of surface spread of flame, by using fire retardants.

Three methods of fire retardants are available for timber and timber products

1. By vacuum pressure impregnation in which water borne fire retardant chemicals are impregnated, in solution, into the timber. This is followed by kiln drying and the whole process is strictly controlled to suit the treatment of a wide range of timber and plywood.
2. By the application of surface coatings by brush, spray or roller to all wood based substrates.
3. By the inclusion of fire retardant chemicals during the manufacturing process. This applies to sheet materials such as MDF and chipboard which, due to their characteristics, are not suited to pressure impregnation.

Vacuum pressure impregnation processes offer distinct advantages in terms of controlled application, up-take of chemicals, service life, end use diversity and traceability. These processes are suited to third party accreditation and are available in three categories. These are designated by the British Wood Preserving and Damp-proofing Association (BWPDA) as Types A, B and C.

Type A processes have been available for many years and are widely used for interior applications. Materials treated by Type A processes are very hygroscopic and humidity sensitive. For this reason they are only suited for use in dry interior conditions where the relative humidity will not exceed 75%. If Type A treated timber is subject to higher humidity the crystalline chemicals will migrate

outwards to the surface forming a white powdery film and with this there is a progressive loss of fire protection. There is also, in such conditions, a risk of corrosion to ferrous metal fixings. Nevertheless when Type A treated timber is used under correct service conditions, long term protection will be provided.

Type B processes have been available for at least twenty years and were developed to overcome the limitations of the Type A process. These processes are based on semi complex chemical systems which are far less humidity sensitive and for this reason are particularly suitable for timber which is used in conditions of high humidity or dampness such as swimming pools, underground railway networks or sheltered external conditions. Timber treated in this way can provide long term service protection without deterioration to the surface appearance of the material.

Type C processes are based on polymer resin systems and are leach resistant. They will therefore provide protection to material used under all service conditions whether it be dry internal or high humidity external situations. In fully exposed external situations long term exposure will eventually lead to some reduction in protection, nevertheless, for such conditions, they are far more effective than any other type of process available.

Because of the differences in performance under certain conditions between the process types it is absolutely essential the correct type is chosen and clearly specified. If this is done correctly fire retardant impregnation treatments will provide long term protection to Class 1 surface spread of flame as defined in BS 476 part 7. Some materials can be treated to Class 0 and thus comply with the Building Regulations Approved Document B. Class 0 requires the material to be tested for fire propagation in accordance with BS 476 parts 6 and 7. In addition to surface spread of flame performance this provides for a reduced rate of heat release which is measured to meet an index of performance when the specimen is tested in a combustion chamber.

Most fire retardant processing companies in the UK are members of the BWPDA and must comply with the disciplines of third party quality assurance schemes administered by recognized bodies such as BSI and BBA.

Architects and specifiers are increasingly recognizing the benefits of using timber treated with fire retardants. The ability to improve the surface spread of flame properties of timber to Class 1 and, if necessary, Class 0 makes it possible to meet the often stringent fire regulations and use timber in many situations that might otherwise prove impossible.



The new opera house at Glyndebourne is a case in point. Here pitch pine reclaimed from 150 year old warehouses has been re-crafted for the linings of the auditorium. The timber has all been treated by the Pyrolith process (Type B).

Another building that has attracted much public attention is the new Globe Theatre in London. In 1613 the original Globe was burnt down. The Elizabethan timber structure did not have the refinement of fire protection! The new structure will however benefit from the Non-com Exterior process (Type C) and in so doing will meet the regulations for a fully timber structure that is both public and in a city environment.



Glyndebourne and the Globe are examples of prestigious one off projects. Timber however has many more everyday applications, many of which are in situations where fire protection is required. A scene that many of us take for granted is the architecture of the supermarket. The covered walkways from the car parks to the store are frequently lined on the underside of the roof with tgv softwood boarding. These will almost certainly have been treated to Class 1 surface spread of flame.



One way and another, with the benefits of research, intelligent specification of timber species, good design and the application of appropriate treatments, there are few situations where timber, a renewable resource, cannot play its part in the design of the modern world.

Alan J Ball AIWSc Local Director Palgrave Brown Timber and Fireproofing and Chairman Fire Retardants Panel BWPDA.

Palgrave Brown Timber & Fireproofing,  
Market Bosworth, Nuneaton, Warwickshire  
is a member company of  
Meyer International PLC



# SIDE LINES

## CORPORATE MEMBERS

The Council of Management wish to record its thanks to those listed below for their support as Corporate Members.

Anglo-Norden Ltd  
Austin Timber Co Ltd  
BPIB  
BSW Timber plc  
John Boddy Timber Ltd  
Boulton & Paul Ltd  
Buckinghamshire College  
Richard Burbidge Ltd  
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Crosby Ltd  
Cuprinol Ltd  
James Donaldson & Sons Ltd  
Fairlight Preservation  
Forbairt  
Forest Service N. Ireland  
Hickson Timber Products Ltd  
Howarth Timber Group Ltd  
Hunter Timber Ltd  
James Jones & Sons Ltd  
T.P. Jorleson & Co Ltd  
James Latham plc  
Kotka College  
Kronospan plc  
Marlow & Co Ltd  
F.W. Mason & Sons Ltd  
MBM Forest Products Ltd  
Meyer International plc  
Price & Pierce Ltd  
Protim Solignum Ltd  
Rentokil Ltd  
John Robertson Ltd  
Tech-Board Ltd  
Timber Trade Federation  
Timber Trades Journal  
Timbmet Ltd  
TRADA  
Travis Perkins plc  
Henry Venables Ltd

## FOREST EDUCATION INITIATIVE

Steve Orley reports that the launch of the Bristol and West Cluster Group took place on 18th October 1995 with Birdwell Primary School from Long Ashton in Bristol.



As can be seen in the photograph, Snobs Timber in Glastonbury generously supported this initiative with a display of softwood, hardwood and panel products. The launch was also supported by the local County Council, The Forestry Authority, The Forest of Avon and local traders.

This is one of many Cluster Groups launched and support from IWSc members is much needed throughout the UK.

## THE VERSATILITY OF WOOD

Throughout history there has been an interchange of materials coupled with the passing down of traditional skills. No material illustrates this better than wood.

When, in 1781, the Iron Bridge was built over the River Severn at Coalbrookdale, Shropshire, it was a landmark in the use of cast iron. The overall design reflected the tradition of stone bridges but the iron framework was modelled on traditional and proven methods of carpentry, joints and all.



This is a clear example of an alternative material gaining acceptance on the back of traditional wood craftsmanship. In our time dozens of examples can be cited not the least being PVCu windows, moulded glass fibre clinker design boats, carbon fibre fishing rods and steel raised panel doors.

The wood trades seem to be too reluctant, for what ever reason, to show their true colours. Where are the present day examples of wood capturing a use from one of the other materials?

It can happen as Dr Hew Reid mentions in his book on The Furniture Makers (1)

"Carving has always had a place in furniture decoration from the earliest times --- indeed foreign influences encouraged a new and dramatic approach to the art. Oak carving had had its roots in ecclesiastical stone carving"



The accompanying photograph could be just one of those foreign influences. It shows medieval oak carving in the door surrounds on the west facade of Todi cathedral in central Italy. The panels by 'Maestro Antonio', dating from 1513, illustrate how convincingly the detailing follows traditional stone carving. And what is more the oak has stood the test of time in a quite remarkable way. The detailing, even after the passage of several centuries, has a crispness that matches, and in places surpasses, the condition of the surrounding stone work.

Would that we could demonstrate some similar triumphs for wood in the present day!

(1) Hew Reid, A History of Trade Unions in the Furniture Trade 1868-1972 Malthouse press 1986.

David Woodbridge FIWSc

## IWSc MEETINGS - 1996

### COUNCIL

Venue: Timber Trade Federation, Clareville House, 26/27 Oxendon St., London.

Thursday, 28 March, commencing at 2.00 pm

Tuesday, 2 July, commencing at 2.00 pm

Tuesday, 24 September, commencing at 2.30 pm (approx.)

Tuesday, 17 December, commencing at 2.00 pm

Note: The Annual General Meeting will be held prior to Council on 24 September commencing at 2.00 pm

### FINANCE & GENERAL PURPOSES COMMITTEE

Venue: Timber Trade Federation, commencing at 10.45 am

Thursday, 28 March

Tuesday, 2 July

Tuesday, 24 September

Tuesday, 17 December

### MEMBERSHIP COMMITTEE

Venue: Hughenden Valley, High Wycombe, commencing at 2.00 pm

Wednesday, 5 June

Wednesday, 28 August

Wednesday, 6 November

### EDUCATION COMMITTEE

Venue: Hughenden Valley, High Wycombe, commencing at 10.00 am

Wednesday, 5 June

Wednesday, 28 August

Wednesday, 6 November

### PAST PRESIDENTS' MEETING

Venue: Timber Trade Federation

Thursday, 28 March, commencing at 12 noon (buffet lunch provided)

### BRANCH CHAIRMEN'S MEETING

Venue: Timber Trade Federation

Tuesday, 7 December, commencing at 12 noon (buffet lunch provided)

## WE'RE ALL GOING TO EDINBURGH!

Air fares on a number of services to Edinburgh have been drastically reduced following competition from new carriers.

Easyjet (01582 - 445566) offer services between Luton and Edinburgh one way fares for £29 but on a first-come basis.

British Midland (0345-554 554) from Heathrow offer £58 return.

British Airways (0181-759 5511) has a World Offer fare of £68 return.

All these offers look good compared to the normal level of around £170.

Editor: Maurice Holloway.  
Institute of Wood Science, Hughenden Valley,  
High Wycombe, Bucks.

# FORESTRY TOUR OF CANADA

## Part 2. Ontario, Alberta and British Columbia.

Our group emerged from the backwoods of Nova Scotia into the cosmopolitan atmosphere of Ottawa, the capital of Canada, attractively sited at the confluence of the Ottawa and Rideau rivers. A short journey across the river took us to Hull, Quebec where we were briefed on Canadian forestry policies at Place Vincent Massey, headquarters of the Canadian Forest Service. With nearly 10% of the world's temperate and boreal forests and approximately 25% of world trade in forest products Canada's forest practices are under increasing international scrutiny. Environmental issues, including sustainability, are very important to the Canadian public but Canada is the world's largest exporter of forest products and 800,000 jobs depend on forestry with an international trade of \$25 billion per annum. Following the 1992 UNCED conference in Rio de Janeiro, Canada is committed to a global forest agenda which will define and promote sustainable forest management and accommodate differing national priorities and circumstances.

Heading relentlessly westwards across time zones we flew on to Calgary, south-west Alberta, where we drove across open plains to the Rocky Mountains and our base at the Kananaskis Field Station owned by the University of Calgary. The station Director, Dr Ed Johnson, took us on a tour of various forest sites where we viewed species such as lodgepole pine and Engelmann spruce, where the long-term population dynamics depend on the frequency of fire. The Galatea Creek fire of 1936, started by lightning, was used as a case study. At its height it is estimated that the average fire spread rate was 130 metres per minute with an extraordinary frontal-fire intensity of greater than 30,000 kW per metre. Although Engelmann spruce has regeneration problems under these severe circumstances, lodgepole pine is able to contribute seeds from the cones of fire-killed trees. Fires tend to be restricted to specific geographical basins and weather has the most important influence on fire spread and intensity.

We went on to view clear cut forests, the site of a failed ski resort, closed due to the lack of snow caused by climatic change, and the site of a major snow avalanche. Small trees of less than 6 cm at the base are able to bend in the path of an avalanche avoiding breakage. Despite a bear alert and the provision of bear-proof garbage containers we were thwarted in our quest for the sight of a grizzly! We drove north to visit Banff, Lake Louise and the Great Divide where a creek splits on the boundary between Alberta and British Columbia with each fork reaching a separate ocean, 4,500 km apart. The Rockies are relatively new mountains formed by glacial action with glacier remnants still evident and the visual high point was the turquoise waters of Moraine Lake, dominated by a shield of jagged, snow-clad peaks.

The next hop via Vancouver took us to Prince George, British Columbia, previously a frontier forestry community to the west of the Rockies. The visit was hosted by the McGregor Model Forest Association at one of the ten Model Forest sites located across Canada which are an essential element of the Partners in Sustainable Development of Forests programme, a component of Canada's Green Plan. The objectives of the Model Forest network (including others in Mexico and Russia) are to accelerate the implementation of sustainable development in the practice of forestry, to develop and apply innovative techniques in the management of forests and to test and demonstrate the best sustainable forestry practices available. More than 88% of the McGregor Forest site covering nearly 181,000 hectares of land is productive, commercially valuable forest land which is a major source of softwood lumber and pulp. Timber production drives the economy of the surrounding region but land is also accessible for recreational activities.

Our tour split to view a local pulpmill and sawmill belonging to Northwood Pulp and Timber Ltd. but David Pryke and I had espied a plywood plant on the way in from the airport and we are indebted to Eunice Ryder for taking us to North Central Plywoods for an unofficial visit. Following debarking and conditioning with hot water sprays, logs are peeled into veneers in a high-speed lathe line. The sight of a large diameter log being reduced to a continuous ribbon of veneer in a matter of seconds made utterly compulsive viewing. We followed through the complete sequence of clipping, stacking, drying, lay up, pressing and finishing before the product, effectively laminated veneer lumber boards, is shipped out by rail and road.

Following the flight back to Vancouver and a lightning taxi dash across the city we took a leisurely ferry trip across to Vancouver Island in warm evening sunshine. We were there to view the mighty temperate rain forests and forestry activities in the most contentious region for Canadian forestry. Back in Ottawa on the hotel television I had seen part of a documentary labelling British Columbia the Brazil of the North in connection with forestry activities at Clayoquot Sound and elsewhere. What could I expect to conclude from my own visit? Leaving Victoria we headed north-west along the coastline with our host, Dr Michael Heit, visiting several forest sites managed by Western Forest Products.

The high point of the day was a helicopter flight from a river bed out across second and third growth forest to a band of old growth temperate rainforest and the Pacific coastline. Reforested areas of differing ages presented an untidy patchwork quilt appearance from the air with forest road scars zig-zagging across the jagged hills clothed in their various shades of green. These roads are now being repaired and replanted and greater care is being taken in selecting gradients and routes which prevent erosion. Reaching the untouched old growth forest we flew above the Carmanah giant, a Sitka spruce which is the tallest tree in Canada at 95 meters, and landed beside the Carmanah Creek further upstream. A short walk through this majestic forest of vast mossy trunks took us to the Triplets, a cluster of three remarkable spruces. Returning to the dusty forest roads, local foresters pointed out areas where mistakes had been made in harvesting, resulting in wind blow and erosion. Their view is that environmentalists have highlighted deficiencies and the outcome has been positive.

We were made very welcome at the Cowichan lake Research Station and I spent a delightful hour or so in the company of Doug Eastman identifying the lakeside trees. In the morning we inspected a forest site clear-felled except for individual seed trees left to ensure natural regeneration and a riparian zone by a river. We called in to MacMillan Bloedel's sawmill at Chemainus and were exposed to an impressive array of technology for maximising the volume output from each log. Individual pieces of lumber can be worth several thousand dollars on the Japanese market. Logs are floated in and manoeuvred by small tugs onto an inclined lift for debarking. As the cut logs are brought through the mill a computerized laser scanning system determines the exact length of each log and gives the operator three cutting solutions for best utilization. The rest of the highly impressive process involves sorting and trimming to standard grades and sizes via extensive production lines before packaging and despatch.

Following a flight from Nanaimo to Vancouver we enjoyed a wind up tour dinner at a salmon restaurant, with stunning views of the city and sunset from the north, which coincided with my birthday! Our last day in Canada began with a fascinating walking tour, led by Dr Susan Watts and Dr John Worrall of the UBC Forest Sciences Department, through an impressive second growth forest near the centre of Vancouver. The new Western Laboratory of Forintek Canada Corp. was our final destination and Dr Jim Dangerfield briefed us on the functions of the laboratory and the development of life cycle analysis software for timber buildings. We were impressed by the wide range of engineered timber products used in the construction of the energy-efficient laboratory, including Parallam "trees" in the library, and the teaching aids developed to demonstrate that wood is environmentally friendly and renewable.

Returning to the UK I reflected on my impressions of the vastness of the Canadian forest resource, its vulnerability to fire and disease and its ability to naturally regenerate. Whilst there is widescale evidence of the implementation of good forest practices across Canada there is undoubtedly a need to protect substantial zones of old growth temperate rainforests for spiritual and heritage reasons. I am indebted to Michael Clark of the Canadian High Commission in London for his good-humoured and informed leadership and to his colleagues in the Canadian Forestry Service who gave us so much of their time and imparted so much knowledge.

Martin Ansell President, IWS



# BRANCH LINES

## THAMES VALLEY & CHILTERN BRANCH

The 1995/6 programme of events started off with a lively debate on the supply and forest management of temperate and tropical hardwoods. Nick Goodwin and Stuart MacBride described their experiences in trading with tropical hardwoods from Bolivia and West Africa. The discussion inevitably moved on to environmental issues and many aspects were covered. A lot of questions were answered in the discussion but many more continue to arise.

The programme continued with a talk by Nick Webber on Nash's tent roof at the Brighton Pavilion. The talk went through the history of the pavilion, and the way that one building was built over the top of another to eventually arrive at the building which we know today. Discovering the structure of the building has been a major investigative task for Nick as few drawings exist, even from relatively modern works. The talk went on to explain the problems the building is having with dry rot and the way it is being monitored.

We finished 1995 discussing the maturation of whisky, with a few "tastes and smells" presented by Mike Hale. This meeting and the "tastes and smells" were kindly sponsored by the Buckinghamshire College and proved to be a great success even though the weather tried to put a damper on the evening. Those present were to be found in the Off Licence the next day asking for a "smooth, sweet, peaty, smoky, fruity, soft and gentle" whisky.

1996 sees us spreading the word by having several joint meetings with other organisations. The first with the Oil and Colour Chemists Association where Roy Miller will be talking on developments in paints and finishes, then on 5th March, the branch has a joint meeting with the London Branch at the Globe Theatre, being guided around by Peter McCurdy. There will be a presentation, a tour of the site and some refreshments afterwards. Judging from the fascinating presentation given last year by Peter it should be a very enjoyable trip. The last of the joint meetings is on the 18th April with the Institute of Biology, where the Branch is holding a timber species identification and quiz night. Come and try out your skills.

Glynn Davis AIWSc (Branch Secretary)

## LIVERPOOL BRANCH

I had hoped to be reporting in this issue on a very interesting meeting we were holding in early February with Bangor University, when Roger Williams-Ellis, owner of the Glasfryn Estate and Sawmill in North Wales was due to speak about "Timber Growing in Isolation". Unfortunately, eighteen inches of snow on the very day of the talk meant that the speaker and the audience were all unable to attend. Since this would have meant a very subdued meeting indeed, we elected to postpone. The presentation will now, (weather permitting) take place in May, and Mr. Williams-Ellis has kindly offered to host a conducted tour of the Estate the day after the talk. The Branch did this tour about four years ago, (but without the formal talk) and it was one of the best outside visits we've ever done. Keep a lookout for an announcement of the new date!

In the last newsletter, I went on a bit about the need for improved communication between the branches and their members, and how modern electronic communication methods must sooner or later start to play an important part in this. I'm pleased to say it's going to be sooner for the Liverpool Branch, because we now have *E-Mail* access, and are fully *Internet* and *World Wide Web* enabled. Despite all the hype, this whole thing is still in its infancy and many people are still questioning its relevance to everyday life at home and in business. Some of the material available is quite mind-boggling, however, within a couple of days of "going live" my thirteen year-old son was on line to the American Space Agency, to the National Defence Archive in Washington, and getting live satellite pictures of Eastern Siberia. On a slightly more mundane note, I took a look at the "web sites" of the few timber companies presently connected. It's not exactly a thriving trade yet, but it soon will be. Incidentally, the negative sides of the Internet, namely the supposed high availability of questionable material, have been much exaggerated by the press. You have to work quite hard to get even a sniff of anything suspect, and it's easy to put babysitting mechanisms in place to stop the juniors going where they shouldn't while you're not there.

Coming back to earth for a moment, can I draw members' attention to our half day Management and Training Seminar on 24th April? This is being organised jointly by the Liverpool Branch and The North West Timber Trade Association and takes place at the Post House Hotel, Haydock. A panel of top class speakers is lined up, and this event will be well worth attending for anyone and everyone with an interest in timber and timber use. Full details will be circulated in due course, or contact me on 0161 872 0724 (daytime) or 01352 759681 (evenings).

Finally, we are very busy compiling our Branch database so that we can ensure that we stay in regular contact with all our members. We send out mailshots for every meeting and event, and if you feel that you're not getting yours, (or if you're not officially within the Liverpool Branch area, but would like to be kept informed) please let me know straight away.

Paul G Davies AIWSc (Branch Chairman)

## YORKSHIRE BRANCH

Some people may have been duped into thinking that the Yorkshire Branch has ceased to exist or, at best, has been very quiet over the last nine months or so. However, in reality, we have just been undergoing a transitional period.

A small but enthusiastic group met for an AGM last September and a further committee meeting in January 1996, both held in a welcoming hostelry just off the M1, and decided on the short term future of the Institute in Yorkshire.

The AGM elected Neil Ryan (Hickson Timber Products Ltd) as Chairman and Alun Watkins (TRADA Technology Ltd) as Secretary. Mike Fenna (Frank Gresham & Co) agreed to continue as Treasurer.

Many thanks should be given to the outgoing post-holders, namely Andy Newton and Dave Carney for their hard work within the branch over several years and it is hoped that both will remain closely involved at committee level, especially while the two new incumbents find their feet.

To encourage members to attend branch meetings and ensure good attendance levels such as were enjoyed at meetings held at the end of 1994 and beginning of 1995, the committee realises that topics of meetings and visits should be of interest to a larger cross-section of the membership, whilst also providing necessary and much needed training for the younger (and sometimes older) members of companies in the region.

At the last meeting, a provisional calendar of events was decided upon, including three meetings and one site visit to be held during 1996. As soon as dates and speakers are finalised, it is envisaged that a newsletter will be issued to all branch members.

We look forward to seeing and meeting many of the Yorkshire Branch members in 1996.

Alun Watkins AIWSc (Branch Secretary)