



# WOOD SCIENCE NEWSLETTER

October 1997

## ANNUAL GENERAL MEETING

At the Annual General Meeting held at the Timber Trade Federation office in Clareville House on Tuesday, 23 September, the President and Vice Presidents along with the Honorary Treasurer were, as is the custom, re-elected for a further year. It will be at the 1998 AGM that the present President will resign and the Senior Vice President should be voted into office, leaving a vacancy for the election of a further Vice President.

Several members resigned from Council on completion of their three year term in office and the President, Mr. Peter Latham, in his address to the meeting, paid tribute to the service they have given over the years, and in particular to Professor Eric Gibson who was first elected to Council in 1972. He said it is so easy to take for granted the time and effort members give to the IWS, and he wanted them to know that the input and guidance they had given was appreciated, and on behalf of all members he warmly thanked them. He also thanked the Chairmen and members of sub-committees and those of Branch Committees who, through their efforts, ensured that the IWS continued to flourish.

During the past year he said the Work Books for the Certificate Course have been re-written and are now presented in a clearer and more attractive format, and it is now up to all of us to encourage the Trade to recognise the value of the course as without new students our membership will suffer dramatically, and the Trade the worse for it. He was pleased to report to the AGM that production of both the Associate level optional modules, Yard Operations and Management and Timber Trade Practice, were nearing completion and he thanked Dr. John Brazier and his working committee for their invaluable input.

He went on to stress how important it was for the Institute to promote and market itself. He said he recognised the need to raise the profile of the IWS and to sell it to both employees and employers. In view of this, he was chairing a sub-committee which has been formed to address the problem, which would first report to the F&GP and then to Council.

He was pleased to report to the AGM the success of the National Conference held at Windsor in April and that the 1998 Conference is scheduled to be held in Dublin. Outline plans are now well advanced with the Irish Branch under the Chairmanship of Jos Evertsen taking an active and positive role. Medite of Europe has agreed to be its principal sponsor, with further support coming from both Irish and UK businesses.

The President concluded his address having referred to the satisfactory state of the financial accounts and to the surplus made at the Edinburgh Conference by warmly thanking all the Corporate Members for their most generous support.

## CORPORATE MEMBERS

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

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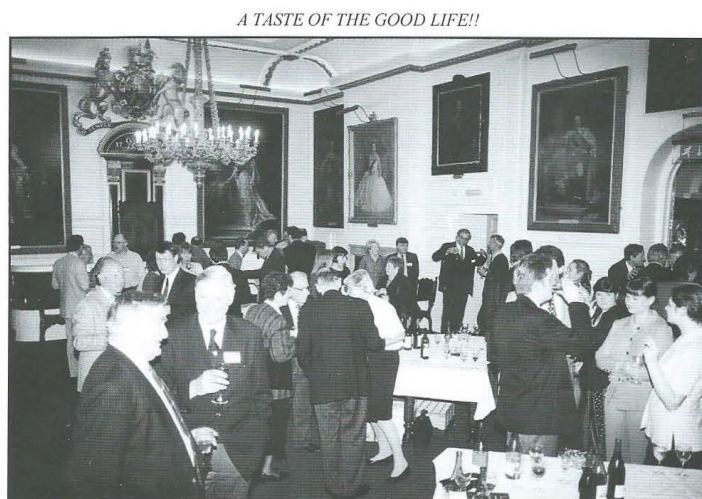
## THE 1997 NATIONAL CONFERENCE

The IWSc National Conference is the major event of the year providing a meeting place for members and for those with specific interests in wood, thus creating an opportunity to hear papers presented by acknowledged experts and to debate their content. For a conference to be successful, the selection of a suitable venue is paramount, and the Castle Hotel in Windsor offered facilities and service *par excellence* satisfying the many tastes of 120 delegates and partners.

At the Edinburgh Conference last year Michael Buckley of AHEC offered support for this year's Conference and, true to his word, the American Hardwood Export Council were the main sponsors at Windsor, and to them and to the other sponsors we are greatly indebted. The Timber Trades Journal treated delegates to pre-dinner drinks whilst Protim Solignum, CSC Forest Products, COFI and Technology for Timber each sponsored specific items. TRADA Technology collated, copied and bound the complete set of Conference papers creating a permanent record of a successful event.

The 1997 Conference was planned around three themes, each of which upheld the Institute's *raison d'être*, namely, to extend the frontiers of wood science and technology. The themes were: the timber resource, research and development in timber durability and preservation and the utilization of timber in today's world.

The Conference opened with a paper presented by Jameson French, President of Northland Forest Products Inc. of New Hampshire, USA, in which he gave a revealing insight into the American public's perception of woodland ownership, forestry, the economics of harvesting, sawmilling and the uses for hardwoods. In his talk he stressed the ecological gains and

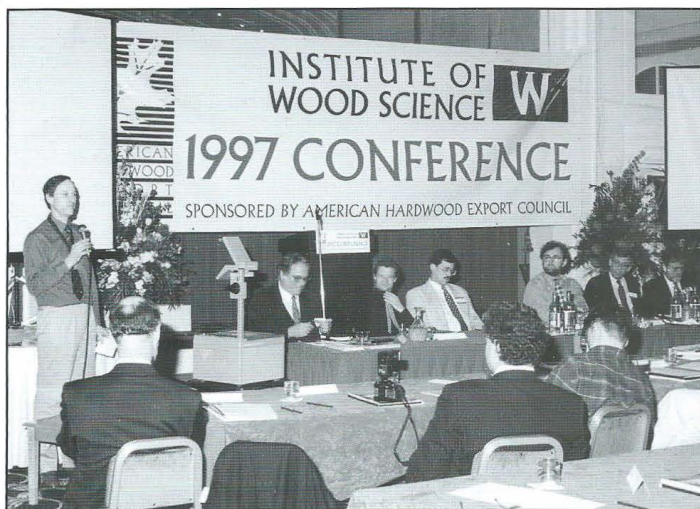


*The President's Reception in the magnificent Windsor Guild Hall*

economic advantages of sound forestry practices. Charles Hopping, Chairman, Hopping Softwood Products Plc, then gave an equally perceptive account of the softwood industry, together with some well considered forecasts of future sources of supply and species mix. (*reproduced in this issue*)

The timber preservation theme was shared between two acknowledged experts. Dr. Richard Murphy provided a fascinating account of the ultrastructure of wood in the light of advances in the understanding of the mechanisms of the growth of wood rotting fungi. He also commented upon the types of research projects currently undertaken at the Department of

Biology, Imperial College. Following this Dr. Chris Coggins brought delegates up to date on timber treatments and the widening role of the BWPDA, not the least of which being that of education, professional qualifications and the qualifying examinations administered by the IWSc. After a splendid buffet lunch, the theme of timber utilization was explored and whether it was related to the use of mahogany or larch in boat building, a theatre designed and constructed in green oak or large scale laminated structures. Dick Phillips, Professor Peter Clegg and Professor Julius Natterer made certain that no one undervalued the versatility of wood and its boundless potential, both now and in the future.



*The President brings the 1997 Conference to a close*

The Windsor Conference was an enormous success and, like previous conferences, a good deal of thought and careful planning at committee stage was needed and our sincere thanks must go to the committee. The idea of a wine tasting in the most elegant and stately Guildhall ensured that the weekend started on the happiest of notes. Whilst the Californian Wine Institute, who sponsored the event, remarked that it seemed more a party than a tasting, no harm was done other than the odd sore head. The ladies were happy too with a private visit to the stately Dorney Court opened specially for their viewing. A most memorable experience as no doubt were the leisurely Sunday visits by many to the Castle itself, who perhaps still had the sound of laughter in their ears lingering from Jack Furlado's after dinner speech.

And now after Windsor, will we be singing 'cockles and mussels alive, alive oh!?' Will we soon discover how pretty those girls really are? No doubt all will be revealed soon, and the dates for your diary are 2/4 April 1998 and it's Dublin's fair city where next we shall meet.



## UK SOFTWOOD SUPPLY TRENDS - The next Ten Years

This paper was presented by Charles Hopping (Chairman of Hopping Softwood Products plc) to the National Conference at Windsor on 5th April 1997

### Introduction

Softwood supply has always been dynamic - depending on a variety of technical economic and political factors. This has been amply illustrated in the recent past and I see no reason for this to change in the future. This paper represents a best guess - but could easily be thrown off course by any one of a variety of developments.

In broad terms the main questions to ask appear to be:

- Will there be enough?
- Where will it come from?
- Who will supply it?
- What will it be like?
- What might the alternatives be?

In addition we need to recognise that we are not dealing with a homogeneous product in terms of use. Broadly speaking use and supply of structural material may show a different pattern to that for material where appearance is the main consideration.

### Taking the main points in order

#### Will there be enough?

Opinions on global supply seem divided. In part the answer given seems to depend on the stage of the supply / demand cycle at which the question is asked. The exact answer depends on assumptions concerning both supply and demand. The supply side issues include; Annual allowable cuts, growth rates, pressures to protect existing forests from logging, the growth of plantations and the political situation in major supply areas. This is all complicated by a lack of data and difficulties in its interpretation.

Demand will depend on population and per capita consumption. The main feature appears to be the inevitable increase in adult population which will be experienced throughout Asia Africa and South America. Unless there is a big decline in their per capita consumption the demand for wood from these regions is likely to increase strongly. There is no guarantee however that this demand will be for softwood sawngoods rather than, say, reconstituted material.

Ultimately the answer is that there must be a balance between supply and demand for wood and that this will be brought about by the price the market is prepared to pay. Given that two thirds of the wood cut annually is used as firewood the scope for increases in industrial

use is considerable. My guess is that in broad terms supply and demand will be in balance. At the same time there may well be a change in the balance between demand for sawlogs and pulplogs. We will not see a return to the situation where forests were seen as areas from which an infinite amount of wood could be extracted without the trees being replaced. As a result the base price for raw material is likely to rise somewhat. This will tend to impact most heavily on areas of sale where the main selling weapon is price and where little value is added in the production process.

#### Where will it come from?

Ultimately the significance of any supply source depends on its forest base. The main underlying reason for the switch from North American to European supply in the past five years has been a re-appraisal of the raw material supply available from each area. At the same time as North America was forced to re-think its raw material position Europe was able to reap the benefit of many years work on forest management and expand production based on increased amounts of suitable material becoming available. Although currency factors may produce short term fluctuations in supply sources forest availability will continue to be the main long term determinant of softwood supply. **If you do not have the raw material you cannot manufacture the finished product.**

The main feature of supply to the UK market will continue to be the increase in supply from the UK forests. From a situation immediately after the second war where very little softwood came from British forests we are approaching a situation where UK producers can satisfy a majority of the softwood demand in some use areas. In addition penetration of the Structural timber market is likely to increase sharply in the next few years. UK softwood will not penetrate the higher grade market to any great extent.

Since the EU admitted Sweden and Finland it has become the largest overseas source of supply to the UK. This will remain true especially if the Baltic States become members. A large proportion of this will be in higher grades for appearance uses.

North America will remain a limited supply source. There will be a steady flow of speciality items but commodity supply will be below the

levels experienced in the 1980's. With a restricted supply base and an active Pacific rim market (not to mention possible European moves to favour their own producers) there will be little incentive for North American producers to attempt to return to their former sales levels. Whilst there may be short term incursions due to currency factors I do not expect there to be a long term North American presence in the UK market.

Southern Hemisphere plantations will play an increasing role in the world market but not directly in the UK. They are too close to growth markets in the Pacific rim and will also be needed to provide supply to North America. There will be business particularly in specialities but generally the attractions of other markets will outweigh those of Europe as a whole.

The USSR is by far the most difficult area to predict. Potentially the region features the most important asset in the production of Softwood - a vast raw material base. There are however major obstacles to the exploitation of that base. There is already a lot of attention being paid to the environmental questions surrounding exploitation of the Russian forest and this could lead to restriction on the areas which it is possible to harvest. More important are the politico-economic questions surrounding Russia itself. Whilst a forest base is a necessary condition for a forest industry it is not a sufficient one. Until there is a stable political framework the investment to utilise the resource will not be forthcoming. It is not possible for me to make a sensible prediction concerning when such conditions may occur. The best that can be said is that it is unlikely that Russia will be able to regain its production/export levels of the 1980's within ten years. Even if it does there is no guarantee that those exports will be in higher grade materials or will even come to the European market.

In summary the UK supply will come mainly from Europe. Lower qualities will tend to be increasingly supplied from UK forests. Higher grades will come from Scandinavia, with the Baltic States tending to move from suppliers of lower to higher grade material as the period progresses. The continuing reduction in the cost of communication will lead to a globalised world market in terms of prices for commodity grades. Nonetheless the fact that timber is a High bulk low value commodity will tend to

## SUPPLY TRENDS *Continued....*

limit the extent to which supply sources change to reflect price changes.

### What about the Species?

In world terms the switch to plantation forestry will have a significant impact on species availability. The growth of Southern pine plantations in the US, radiata and Elliotis pine plantations in the southern hemisphere and Sitka Spruce plantations in the UK illustrate this change perfectly. On the other hand the impact of this trend on the UK will be limited by its continued reliance on a European supply source. Apart from the increasing use of UK Sitka Spruce and some Lodgepole and Corsican pine the mix of species imported

increasingly market direct to end users.

### What will it be like ?

There will be a further refinement of the grading system. This will be made possible by increasingly sophisticated machine grading technology at both the bracking stage and particularly the log grading stage. Increasingly logs will be graded precisely in terms of suitability for a particular end use grade. This in turn will give producers the ability to meet customers' specifications for finished goods in a way which has not previously been possible. As a result a larger number of very precise grades will become available. The development of existing end use grades such

If UK companies see themselves as marketing to users who have traditionally used softwood products then new products doing the job of softwood represent both a threat and an opportunity. The Joinery/Appearance market will see threats coming mainly from MDF and plastics. The general/structural market will see its threat coming from plastics, metals and re-constituted wood. A major potential threat to sawn softwood appears likely to be from the various forms of re-constituted wood. MDF, OSB and LVL are produced by companies who know the timber market and its potential relatively well. In addition those companies may also be in a position where they see those products as a more profitable outlet for raw material which may otherwise have gone into pulp. If the current trend towards post consumer waste re-cycling, packaging waste reduction and increased electronic data transmission reduce demand for pulpwood below companies' predictions then there will be pressure on those companies to increase their involvement in this area. Alternatively if an overall shortage of raw material leads to a narrowing of the price differential between sawlogs and pulplogs we may see sawlog capacity being diverted to reconstituted materials. The alternatives are likely to result in the use of less raw material but their overall value is likely to be more than the softwood which they replace.

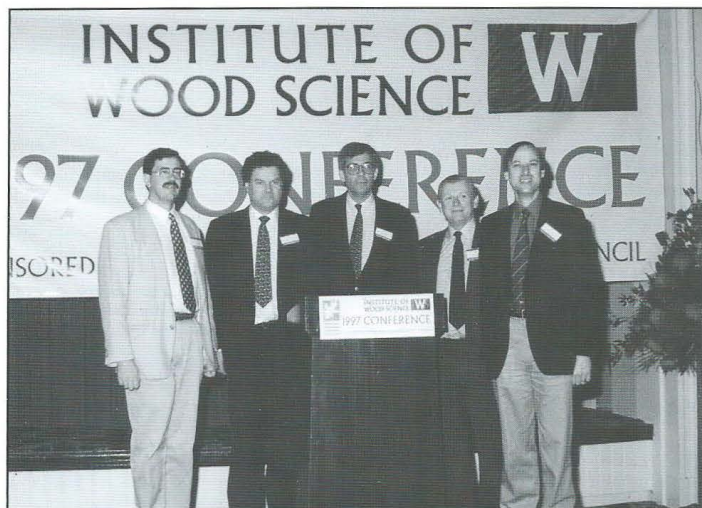
### Summarising the Future

There probably will be enough softwood to prevent an explosion in price. The UK supply will increasingly come from UK sources with the balance sourced mainly within an expanded EU.

Producers will continue to expand and will seek to get closer to the ultimate user. Goods will be increasingly tailored to end use requirements. Alternative materials will continue to have an impact on markets for Softwood.

### In a few words

Softwood supply to the UK will be driven by the raw material supply base. This is increasingly concentrated within Britain and the EU. The big feature of the UK market over the next ten years will be the continued progress of British products coming from British forests.



*Photo call at the Conference — from left to right  
Charles Hopping (Speaker), Michael Buckley (AHEC- main sponsor), Jameson French (Speaker),  
Ian Townsend (President TTF & Session Chairman), Peter Latham (President IWSc).*

from the EU is likely to remain dominated by European Redwood and Whitewood. It is possible that clear lumber from Southern pine and Radiata pine plantations will replace clear old growth material.

### Who will supply it?

The supply chain to all markets will undergo further refinement with traditional timber trade companies becoming progressively less important. The trend for major producers to deal direct with consumers will continue. Either producers will take a stake in overseas companies or there will be an increased tendency to deal direct with major players without any intermediary. UK producers will

as centre free, monolit and möbel will continue to be refined. In the same way moisture content will continue to be more tightly controlled according to the end use. This will both drive and be driven by producers' need to get close to end users as outlined above.

A corollary to the development of special grades is that the character of existing grades will change. Even without a change in nominal grades the removal of either a certain type of log or a certain type of piece will result in changes to the type of defects typically found in conventionally graded material.

### What About Alternatives ?

This is probably the most important question.



## SIDE LINES

### OBITUARY - FRANCIS EDWARD JOHN BLETCHLY 1956 -1997

It is with much sadness that I have to announce the death of Francis Blethchly, Secretary of the London Branch on 17 June 1997 at the age of 41. Francis was an active and valued member and officer of the London Branch for many years, attended meetings of the Thames Valley and Chiltern Branch near his home in Aylesbury and, from 1978-1983, had been joint Secretary of the Yorkshire Branch.

Francis had a diverse experience in wood science after graduating from University College of North Wales with a BSc in Wood Science in 1977. He undertook research at the University of Sheffield on thermal degradation and flame retardant treatment of wood, researched on smoke, fire and toxic gas suppression for furniture foams and cable insulation at the Warrington Research Centre, became head of fire resistance testing of building elements at Warrington and, in the last few years worked as an Assessment Engineer at WIMLAS Limited/Wimpey Environmental Ltd. where he had a special interest in wastage and utilization of building materials. In addition to his work accomplishments, Francis was a keen churchman, collector of cacti and a member of MENSAs.

His cheerful presence and contribution to the IWSc at branch level will be greatly missed. At London Branch, we have not only lost a Secretary who always managed to keep the show on the road but a friend and colleague of great charm and character. For many of us, the loss of Francis means that those discussions in our meetings and over a pint of beer will never be quite the same again.

Richard Murphy FIWSc

### WWW ADDRESSES

Put these www addresses to your memory:-

IWSc Business Card  
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or Australian Branch  
<http://www.wark.csiro.au/woodsci/woodinst.htm>

then E.mail us  
IWScience@aol.com

### WPIF

Wood Panel Industries Federation will supply IWSc members with copies of their "Wood Based Panels — Transition from British Standards to European Standards" free of charge.

When ordering direct from WPIF ensure you state "member of IWSc".

### "DELIGHT"

Harry Jones sent this extract which appears in a book called "Delight" in which J.B. PRIESTLY penned the following:-

"I am not so clumsy with my hands as many bookish men, but I have never had any training or practice in handicrafts, and apart from sawing and splitting logs and knocking a nail in here and there, I have had little to do with wood.

Yet I never go near a joiner, carpenter or cabinet maker without feeling at least a tinkle of delight. To handle newly-planed wood, even to look at it or smell it, is to receive a message that life can still be in good heart. The very shavings are a crisp confirmation. There is a mystery here. Atavism will not explain it. Our remoter ancestors, winding back into the mists, were chippers of stone. I have seen their flints, inside and outside museums, and have never yet felt a quiver of sympathy. Woodwork as we know it, needing sharp metal tools, must be one of man's newer activities. Is this perhaps the secret? Is this stuff still excitingly new? But light alloys and plastics are newer still, the discoveries of today, and yet no message comes from them. Is it because wood, no matter how chopped and trimmed and planed, remains alive? I put my hand on the desk on which I am writing now, and it is almost as if my palm fell on the shoulder of a brother. Into this patient material have passed rain and sun, steely mornings in March and the glow of October: it has lived as some secret part of us still lives. And notice how few men who work with wood seem unhappy, defeated. When we write a book about a Carpenter we call it the New Testament."

### 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.

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

### And "Identity Wear"

IWSc (old logo) Ties - £6.00

IWSc (new logo) Ties - £8.50

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

Enamelled Cuff Links (with logo) - £13.50

Enamelled Letter openers (with logo) - £5.50

### Personal Organiser

Filofax - £23.00

### AMERICAN HARDWOOD PHOTO DISK

The American Hardwood Export Council in London has produced a CD-ROM entitled "The American Hardwood Photo Disk" which features a wide variety of AHEC activities, US hardwood resources and products, American hardwood species and applications. The Disk is user-friendly and provides viewing by category in low-resolution for selection purposes, and has the ability to download selected photos in high-resolution for printing purposes.



Marc Baxter receiving the Institute of Wood Science Prize from the Director

The above photograph shows the Director presenting Marc Baxter with the IWSc prize for his dissertation "Defining sustainable development for forestry and testing of newly proposed forestry standards for the UK" as part of his BSc (Hons) degree. The award was made on graduation day at the Buckinghamshire University College. In his dissertation Marc Baxter addressed the widespread confusion over the whole ideology of certification and showed that the numerous initiatives which have commenced since the UNCED, Rio summit have been far from harmonised and various standards for sustainable forestry have subsequently been produced. He has produced a workable checklist directly from the FSC's newly proposed and yet untested standards for the UK (June 1996) and applied it to two ancient woodlands in Southern England. Statistical analysis of the results obtained, along with comparison to the Canadian (CSA) standards, were used to critically evaluate the FSC's work so far. Marc Baxter in his dissertation concluded that his checklist proved to be an effective tool in the assessment of Sustainable Forest Management in the two tested woodlots.

A copy of the checklist, for assessing compliance to the FSC's forestry standards for the UK, is available through the IWSc Office.

### FOR YOUR DIARY

#### Conference 1998

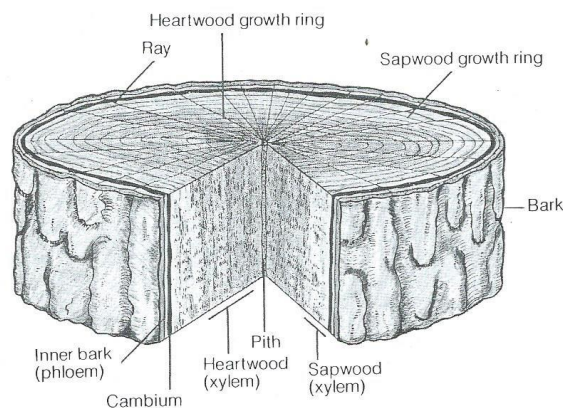
Dublin — Thurs/Sat 2/4 April

Sadly if you look like your passport photo you are too ill to travel.  
Happily passports are not needed for Dublin

See you at the Conference



## IT'S NOT A PIECE OF CAKE



## BUT IT'S WELL WORTH THE STUDY

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