Western Red Cedar
Market Potential in Europe

FRDA Working Paper

CANADA-BRITISH COLUMBIA PARTNERSHIP AGREEMENT ON FOREST RESOURCE DEVELOPMENT: FRDA II

Canada

BC

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Market Potential in Europe

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Market development likely slow and local trade commitment vital.

The potential markets will take some time to develop and will need the committed support of the trade in each country. This support will only be forthcoming if the trade is confident that the BC producers are also committed and will deliver what is promised. At present, there may be a lack of this confidence and the trade will need reassurance about the BC producers' long term commitment and capability.

Levels of environmental concern vary.

Of the three main countries, it is only in Germany that there is any indication of a significant concern about the chemicals used for treating lumber. CCA is already banned and, even though more acceptable chemicals have been developed and officially approved for use, there is some indication that there will be a move to avoid their use - led by the retailers in response to their understanding of consumer concerns. Similar directions may be adopted in some other smaller markets, specifically Denmark and perhaps Holland.

There is much less concern in the other countries. In the UK market, the predominant preoccupation is with price even though there is recognition that some of the chemicals are not environmentally friendly. In France, there is relatively little concern about this type of environmental issue, added to a belief that if the timber is not coloured green it won't be durable. At the European Community level there is no apparent pressure at present towards taking any action proscribing currently used treating chemicals.

There are, however, strong regulations already in effect (and being strengthened) controlling the activity of treating wood and also the disposal of waste where treated wood is a raw material used in the manufacturing process.

Outgoing trade mission premature - Incoming mission preferable.

There is some doubt about the specifications of the appearance grade to be promoted under a joint BC producer programme. It will need to be the right balance between market needs, production capability and price. It would not be appropriate, therefore, to mount an outgoing mission until this question is resolved. It is recommended that the trade in each country should be contacted, companies interested in committing to a long term programme identified and invited to BC to work with the producers to define the grade requirements.

Travelling exhibit the recommended approach.

WRC will have to compete on its physical appearance since it will be aimed at a market willing to pay more than for treated softwood. Consequently, the emphasis of any promotion must be to show how it looks in use. There are a number of major outdoor leisure product trade shows in each country held every year. Though COFI is often represented, a very specific focus on WRC is needed. Taking part in these shows will not be enough and it is also recommended that an exhibit which can be taken to many population centres, as is currently occurring in Japan, would prove effective. The exhibit could be designed in such a way that it would serve both purposes i.e. portable for travelling and, perhaps with some additions, suitable for the major shows. It would be essential that the exhibit includes strong technical literature with information on potential uses together with methods of application.

Budget and funding must be agreed.

If this recommendation is accepted, the first step will be to evaluate the costs which will be incurred and how they are to be funded.

INTRODUCTION

The following study on the European market potential for western red cedar (WRC) was commissioned under the FRDA agreement between the Federal Government and the Government of British Columbia. The work was undertaken by H.A. Simons during August and September of 1992.

H.A. Simons would like to acknowledge the strong support of the steering committee in the course of the study and, in particular, the commitment of time and expertise by the FRDA Opportunity Identification Program Working Group and Bob Holm, Manager of the BC Wood Specialties Group.

There were two main reasons for the study. First, the BC western red cedar producers wish to diversify their markets for the appearance grades (i.e. other than the clear grades) and short lengths of clear. Second, there is an increasing concern in some countries in Europe about the chemicals being used for the treatment of softwoods for increased durability. Since WRC has natural durability, this trend could create new opportunities for BC producers.

The specific objectives of the study were as follows:

* to identify market opportunities for WRC in the main European countries;

* to evaluate alternative market promotional strategies and to recommend an approach;

* to consider whether a mission by the BC WRC producers to Europe would be appropriate and, if so, the suggested itinerary.

The following report provides the conclusions and recommendations developed as a result of the work done, together with a summary of the findings for each of the principal markets. The full reports from each of the European consultants are in Appendices I and II. Appendix III gives a list of the people contacted in the course of the study.

In the course of the study there were a number of brochures obtained describing the products manufactured for the outdoor market. These brochures provide a good indication of the range of applications in the different countries. Since they are not suitable for photocopying they have been placed in the library at COFI and are available for anyone interested.

Study Method

Though WRC in a variety of grades is widely used in North America in many outdoor uses, the European markets have tended to focus on the clear grades and use the products mainly for decorative purposes. It was necessary, therefore, to develop an educational brief for use in the course of the interviews in each country. The text of this brief is provided in Appendix IV.

The field market research work plan was discussed and approved by the steering committee and undertaken by David Rice and Jean Lemut. David Rice is an experienced market consultant located in the UK and Jean Lemut used to be the Seaboard Lumber Sales representative in France. The focus of their interviews was on end users and distributors/retailers. The traditional trade channels for WRC were avoided as far as possible.

Once the field research had been completed Bob Holm and Peter Drake visited Germany, UK, Belgium and France. The European consultants were debriefed in order to clarify and expand their written reports. In addition, a number of further interviews were undertaken to obtain firsthand input and to cover any aspects which required greater detail. The results of the market research were also discussed with the European staff of COFI in order to obtain their knowledgeable input.

CONCLUSIONS

Market Potential

* There is potential for a grade of WRC below the clear/shop grades which are typically sold to Europe. In the opinion of the local COFI staff there could be a market for 5-10 times current volumes.

* Potential markets include the many items in the garden accessory sector - trellises, pergolas, gazebos, fence panels and garden sheds. At this time it is unlikely that it would be regarded as suitable for decking and this use would need a great deal of promotion to overcome traditional views. Other potential uses include the large shutter market in France.

* The market outlook for traditional clear grades is, at best, static and, in Germany in particular, probably in decline.

* A "garden grade" with no holes would attract a slightly up-market buyer at about 10-30% above the treated pine price.

* The precise nature of this grade will vary by country and may even vary by region within countries.

* It appears that the standard mill sizes are suitable for the markets, however no major interest was identified, in the course of the study, in the opportunity for clear shorts .

Market Development

* The development of any marketing programme (including a mission) must depend on clarification of the grades required and a rationalization of these specifications against what the mills would wish to pursue.

* The current image of WRC in Europe is that it is expensive and usually is in clear grades. A change to an appearance grade with knots but no holes or rot will need considerable buyer education.

* The potential markets will need time to develop. They will also need the committed support of the trade in each market.

* The producers must make a decision on the level of the trade which will be involved. Either the producers deal with the traditional importer/remanner who then resells to the retailers or the producers sell product directly to the retailers and manufacturers. Both approaches are probably possible but it is necessary to choose one or the other, at least for any one country. The indication from the traditional German trade was that unless BC producers stopped by-passing them they would not support WRC sales.

* Once the decision is made the BC industry can canvass the applicable companies to develop a group in each appropriate market who will commit to a long term program for the agreed grades of WRC.

The Impact of Environmental Issues

* The future impact of any Eurocodes legislating against the use of certain chemicals in the treating of wood is uncertain. At this time there is no indication that there will be any such codes. Individual countries have adopted their own national codes (for example an outright ban on CCA for wood treated in Germany) but there are no official moves apparent which would suggest that these are to be standardized across the Community.

* National attitudes to environmental issues - particularly in regard to treated wood- vary radically.

  - In Germany, there is a very strong concern regarding the chemicals used and there will also soon be a ban on the use of all chrome based chemicals. Four retailers in the Dortmund area have decided that, by 1994, they will not carry chemically treated lumber.
  - In the UK there is some concern but the consumer is more interested in price.
  - In France there is little public concern and the wood industry is not much interested.

* There are also different attitudes to the broader environmental issues. Again, it is in Germany that there is a major concern about the tropical hardwood forests and thus a strong move against the use of products from these forests. This same concern is also extended to the temperate rain forests and there are many people in the German timber trade who believe that criticism of forest management practices in BC could easily lead to problems in the market. Similar concerns are evident in Holland and UK but less so in Belgium and negligible in France.

* There are some potential advantages to WRC for the industrial user. The disposal of waste wood that contains treating chemicals is already a problem in Germany and could become a problem in other countries. There are also potential advantages relative to worker safety. These possible advantages are conceptual and have not been specifically identified by any of the industries contacted (with the exception of one German company which quoted a cost of DM 3,000 per month to dispose of treated wood offcuts).

* The natural aging - silvering - of WRC is not regarded as desirable. The European market wants it to retain the original fresh colour. Consequently some stain or treatment is needed either before sale or after installation. If it is the former, BC producers can no longer claim that it is free of chemicals and totally natural.

* At the consumer level, there is little concern being shown about treating chemicals, apart from in Germany. In fact, treaters using other chemicals are including dyes to simulate the green of CCA so that the buyer can be sure that the product is treated. There is even an inherent distrust of timber that has not been treated.

* All the above conclusions relate to what was discovered regarding the attitudes to environmental issues as of today. It must be recognized, however, that public attitudes can change very fast and need to be monitored closely. These future changes could be for or against the development of WRC potential.

RECOMMENDATIONS

A. Mission

It is recommended that a mission to the market should not be scheduled for the near future. There are a number of other activities and decisions which must be completed and made before a mission would be able to achieve worthwhile results.

B. Customer Base

If the industry is to take a joint approach to developing the market some decisions must be taken on the nature of the companies to which the producers intend to sell. It is recommended that the mills interested in pursuing the development of an appearance or garden grade WRC market in Europe should make some decision on the joint marketing and promotional strategies to be adopted.

Comment: Initial reactions from the steering committee were that the retail level in Germany had proved very supportive and must be included. It would be up to the importers to decide how they wished to participate.

C. Grades

It will be important to identify the range of grades which best provides the compromise between what the different markets want and what the producer can manufacture competitively. It is recommended that knowledgeable buyers who are prepared to commit to supporting the development of the programme should be invited to BC to work with mills to define the appropriate grades.

D. Market Exposure

The physical appearance of WRC and how it will look in use is a critical element in promotion to the retailers who will be handling the products and to the potential industrial buyer. It is recommended that an approach somewhat similar to the current Japanese travelling "show and tell" exhibit is developed for WRC in Europe. It would, of course, be considerably more focused in terms of product but would need to be flexible enough to meet the needs of the different geographic markets. In the development of the exhibit the following aspects need consideration:

- exhibit design so that it can be used in the appropriate annual Trade Fairs in each country as well as for local use at retailers;
- strong technical literature with information on how to use WRC - staining, finishing, nailing etc.;
- multi-lingual approach;
- a carefully prepared environmental case addressing WRC specifically;
- the use of a photo-journalist to develop appropriate support publicity.

The timing and format of the mission by the WRC producers would be related to the exhibit. The participants would clearly be required to take part in the presentation of the exhibit but there will also be a need for follow up to service enquiries and arrange sales.

E. Further Action

If these recommendations are accepted the next step will be to evaluate the costs of the approach proposed and to determine how these costs can be funded. This action will be needed even before pursuing the concept of an incoming mission.

MARKET SUMMARIES

Background

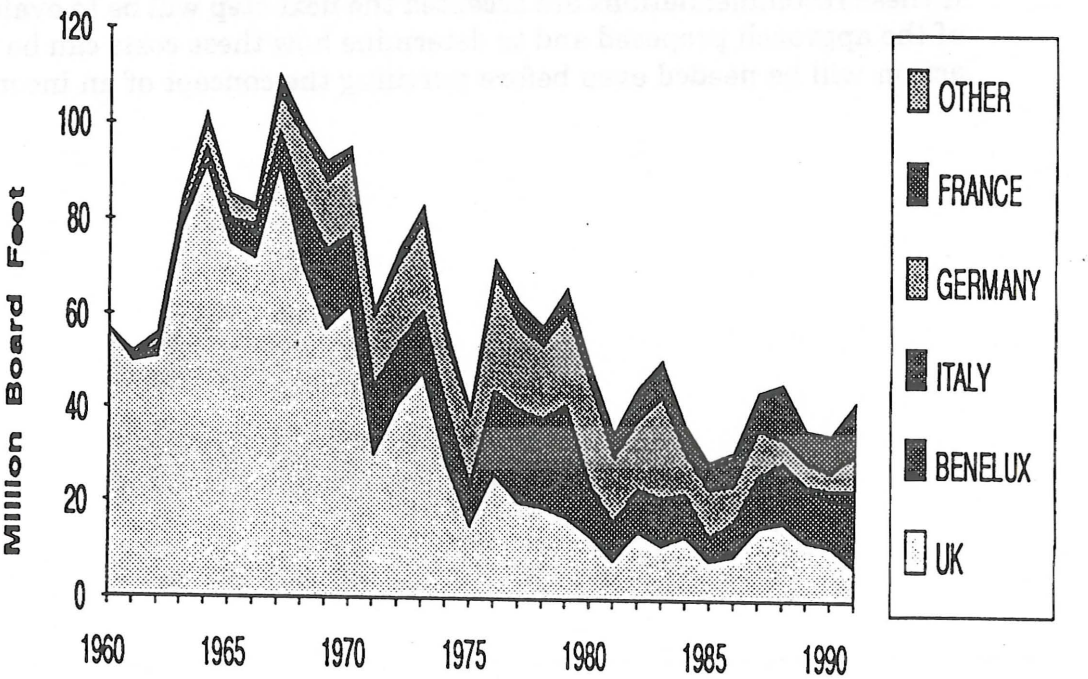
The European market has been consistently supplied by the BC industry for many years. In the 1960s the volume was close to 100 million board feet but fell to 60/70 million board feet in the 1970s and in the last five years has averaged no more than 40 million board feet. The history of shipments is shown in the following Figure 1.

The major market over the period has usually been the UK but in the late 1970s/early 1980s the German market grew significantly. It is important to recognize that a significant part of the volume shown as "Benelux" was actually destined for Germany or, in recent years, for France. Unfortunately, the official statistics are unable to identify the amount of the shipments which first arrive at Antwerp or Rotterdam and are then forwarded to other countries. Consequently, the size of the German market in the earlier years and the French market are both understated and the Belgian and Dutch markets correspondingly overstated.

The principal grades to all markets have traditionally been clear and shop with relatively minor amounts of the "merch" grades or siding/panelling. Much of the material imported has been further processed prior to use, either by the industrial user or by the importer/planer producing decorative products such as panelling.

Figure 1

Exports of WRC to Europe 1960-1991



THE UK MARKET

General

The UK market is currently very depressed and has been in this state for the past few years. There is a strong focus on price while quality is secondary. WRC is used for its stability, grain, texture and colour. Natural durability is not a big feature. UK consumers are not very environmentally conscious if it affects price. There is virtually no concern about the use of treated lumber or the type of chemicals used for the treatment.

WRC Potential

The most promising market sector is in the garden and leisure industry. Institutional consumption sectors such as playground equipment tend to focus on other types of material - metal and plastic. In recent years the outdoor living concept has been growing. The garden has become an extension of the living space in the house. As a result the sales value of Outdoor Products has grown and is now at close to $1 billion per year.

The principal competition, where wood is used, is with Teak, Meranti, Iroko and treated softwood. A common theme with many of those contacted is that WRC is too expensive.

Fencing

In total, the fencing market consumes around 1 million m3 of lumber. However, it is divided into three discrete parts - Agricultural and Highway fencing, each with 35-40% market share and Domestic fencing. It is only the domestic market which is of potential interest to WRC. The other two sectors utilize domestic timber or substitute materials.

The domestic sector is dominated by treated softwood from local sources and pine from Portugal. WRC is mainly used for trellis work and is resawn in the UK from clear and shop grades. It is possible that this use may offer the opportunity for shorter lengths of clear. Other specialty uses account for a very small part of the market.

There could be a promising market for a knotty WRC product with no holes if the product can be made available at a price no more than 20-30% above treated domestic softwood. It would be suitable for a variety of uses, such as arbours, pergolas and pagodas, in addition to up-market fence panels.

Furniture

Garden furniture sales grew rapidly in the late 1980s but, though the growth in wood furniture was substantial, it represents only 15% of the total. The balance is resin, tubular metal and aluminum.

Teak is the dominant species being used but there are also some volumes of Iroko, Beech and Ash. There is significant public pressure against teak and other tropical hardwoods due to concerns over global warming and furniture manufacturers go to considerable lengths to state that their product is only produced from managed plantations. Treated and untreated softwoods are used mainly for the low end of the market (with the exception of some very good quality Scandinavian designs). WRC has a very small share of the market though there are some companies trying to develop a range of products including picnic tables, benches and so on. The grade required is mainly clear and there appears little interest in any lower grades in this market sector.

Conservatories

The development of the conservatory market in the past five years has been very rapid. There is more money being spent on this product than any of the other outdoor products. Plastic (PVC) and aluminum account for well over 80% of the material used and wood is less than 15%. The main species are WRC, Douglas fir and oak. The wood conservatories are at the high end of the market and clear grades are needed. There is little chance of developing extensive sales of a grade with knots into this market sector.

Garden Sheds

There are currently around 25,000 garden sheds sold per year and 95% of them are made from wood. Almost all the timber used is from Scandinavia or from local UK sources. Little of the material is pressure treated though there is some volume which is dipped. The bulk of the market is at the low end where price is the main factor. For this reason there is not much opportunity for WRC in any significant volume given the nature of the market at present. There appears to be some indication, however, that there could be a demand for a higher quality product for which the market would pay more. WRC could provide the suitable appearance.

Greenhouses

The greenhouse market has not been part of the rapid expansion of the outdoor product industry. Some years ago this sector used considerable volumes of WRC for the higher value greenhouses. Now, these high value greenhouses have largely been replaced by the conservatories and, as a result, aluminum is the main material used.

Other

The UK is still in the early stages of development for outdoor living and the products that are required. Furthermore the UK does not have the wood culture which is apparent in many other countries. Consequently there has been relatively little development, so far, in the use of decks and all the related accessories. Several of the conservatory manufacturers visited felt that there could be a promising growth in these end uses once the economy recovers. A lower grade of WRC could well be quite suitable.

Market Concerns

In the course of the market research there were some negative statements made regarding the potential for WRC from BC.

- The species is generally overpriced for what it is worth to the consumer. In this respect there could be some real interest in a lower priced appearance grade but there was some uncertainty about the exact characteristics of this lower grade.

- The pricing and delivery strategies of BC producers are not market friendly. The main concern was the practice of not quoting sufficiently far ahead, not holding prices firm for long periods and offering shipment on a two month time basis. Thus the buyer does not know whether product is going to arrive in, for example, September or October.

- Doubt regarding the commitment of BC producers to Europe versus US. As soon as the US market becomes strong, prices will go up and volumes will decrease without any regard to the market conditions in the UK.

- Scepticism regarding the ability of BC producers to provide dimensional accuracy needed if they try to sell market ready sizes.

Though many of these statements may be unfair or biased, BC producers should be aware of the type of comments made to independent researchers.

Summary

The market is very depressed at present and therefore the views of the potential buyers are somewhat jaundiced about the future. However, there are clearly a number of potential options for an appearance grade but the specification of this grade has yet to be defined. It may even be different depending on the final end-use, i.e. the manufacturer of arbours will want something different from what is needed by the garden shed producer wanting to introduce a high line product in addition to the standard softwood currently on the market.

There is no sign of any concern with the use of treated lumber. Therefore, even if the market was educated regarding the natural durability of WRC this characteristic will not prove a major selling point. Nor is there any indication of a change in codes or regulations which would favour the use of WRC by the consumer. There are, however, strong regulations regarding the disposal of waste and the handling of hazardous chemicals which could provide some advantages at the manufacturer level.

There appear to be some image problems which BC producers must address before the UK trade can be persuaded to join in any major promotional campaign for WRC.

GERMANY

General

Germany consumes a substantial volume of lumber, around 7 billion board feet per year. The majority is produced locally in large and efficient sawmills. The imports of WRC, at less than 10 million board feet represent a very tiny part of the market. Traditionally, the most significant use has been for decorative interior panelling. Clear grades have been the principal import.

In recent years fashions have changed and the market wants light colours. More acceptable products are available from Eastern Europe, Scandinavia and domestically at lower prices than BC WRC producers expect. Consequently the volumes for this use have been declining and the main importers are considering dropping this product line.

End Uses for WRC

Apart from the main but declining panelling market there is a limited volume of WRC being used for external cladding.

The more promising sector, however, is the recent growth in outdoor products. In the last three years there has been a rapid expansion in the sale of "garden wood" through retail yards, D-I-Y stores and garden centres. The great majority, over 70%, of the wood is treated pine and spruce. The balance is hardwoods and some WRC together with a number of other species with which the retailers have been experimenting - such as eastern Canadian larch.

The treatment chemicals being used for the pine and spruce exclude arsenic which was banned some years ago but still include chrome. There is some limited concern at the consumer level about these chemicals but it is mainly the dealers who are concerned. Several of those met stated that there would probably be further limiting legislation in the next few years. The manufacturers of products using treated wood have a particular problem since they incur a special disposal cost. One company quoted DM 3,000 per month.

At present the WRC in this market sector is sold only to the upper end of the market since it tends to be 50% or more above the price for treated pine or spruce. However, the grade being sold is relatively high and relates to Scandinavian V,s.

Market Concerns

The German trade echoes many of the concerns about BC producers which were described earlier in the section on the UK. In addition, however, there is considerable annoyance expressed by the traditional importers about BC producers selling direct to retailers.

There is also some concern about the aging of WRC. The German market wants the lumber to retain the fresh bright appearance of newly sawn wood. The silver-grey which appeals to the West Coast taste is not considered attractive. BC producers and the German trade will have to resolve how to promote WRC and educate the public concerning its applications and uses.

Future Potential

There is a strong belief that an appearance grade with no holes, wane or rot would fit into the market very well. The incipient concern over chemicals and the already present strong pressure against tropical timber both result in conditions which should favour WRC.

There is, however, some uncertainty about the exact nature of the grade which would be suited to the market (similar to the problem in the UK). There will, therefore, be the need to get a strong commitment from the German trade and work closely with the companies involved. This need leads to another imperative. If BC producers are to develop a joint promotional and marketing programme and given that this programme must include participation in the market, the BC producers have to make a decision about the level of the trade to which the sales are to be made. It will be extremely difficult to obtain the cooperation of all levels if some are to be bypassed.

Local COFI staff is strongly supportive of the potential for development of a substantially larger WRC market in Germany and pointed out that a major initiative had been proposed by the German trade some years ago. This proposal is discussed later.

FRANCE

General

The majority of the 4 billion board feet market for lumber in France is satisfied by domestic production and imports from Scandinavia. The shipments of WRC have been reasonably steady at 7-10 million board feet for the past several years. Though this volume is a very small part of the market, WRC appears quite well known as a result of strong promotional work by COFI and the producers. Colour, grain, texture, and natural durability all appear to be qualities which are understood and appreciated. In fact, it is suggested that the reputation for durability has been oversold and not warranted by the official code classification i.e. Class 3 for exterior use not in ground contact.

In the past, the market has been mainly for the high grades with a limited amount of siding. Recently, however, the trend has shifted to a greater diversity of uses with a variety of grades. Select knotty and large timbers in appearance grades appear to be a growth sector of the market while the high grade clear market is static at best.

The French market is not particularly concerned about environmental issues. Treated lumber is regarded as very acceptable and the green colour is often demanded as proof that it will be durable.

There is also a general lack of concern regarding tropical timbers.

Market Sectors

The most promising market sectors in France appear to be in shutters, exterior siding and in appearance grade timbers. Fencing, decking, garden sheds, playground equipment and garden furniture do not seem to offer much potential for growth.

The shutter market is a particularly French phenomenon and though vinyl takes much of the market there is a strong interest in wood. The main species used are pine, spruce, domestic larch and Douglas fir and various tropical timbers. One major producer advised that about 10% of his raw material was WRC in clear and factory flitch grades. The WRC product line sells at 15-45% above the same model in spruce. He was interested in a lower grade with sound knots.

Channel siding in a select knotty grade with small tight knots has become one of the most significant uses of WRC and the potential for growth is promising. There is a need, however, for a different grading approach if this market is to be developed. The French user applies the siding with the smooth side visible.

Generally speaking, the outdoor product market does not appear to be as well developed in France as in other European countries - as yet. Treated softwoods have most of the market and there is no concern at all about chemicals. If a grade can be developed that allows WRC to compete with a quality product but at no more than 30% above treated whitewood the potential for growth could be quite significant.

Market Concerns

There is a general lack of WRC at the local lumber yard level and there are few distributors who hold any inventory on a regular basis. Any promotional effort to develop sales of a lower grade of WRC will need to be in close cooperation with the distribution and retail trade.

Future Potential

The sale of an appearance grade of WRC at a price that can compete at close to that for treated softwoods can be expanded. The markets would be at the industrial level and for the direct end user. In the opinion of local COFI staff and the consultant in France, it would be possible to increase volumes by five to ten times if the right grade can be established and a joint promotional programme developed.

ENVIRONMENTAL ISSUES

As commented in the introduction, a significant reason for this study is the potential opportunity developing as a result of environmental concerns. It was known that there were strong pressures against certain treating chemicals in Germany and there was some indication that these concerns could also be present in other countries. In addition, it is known that there is considerable apprehension about the deforestation of tropical forests.

The environmental issues can be broken down into two main areas. The issues concerning treating chemicals and those related to the forests.

Treating Chemicals

The European Community is moving towards common standards for virtually all activity - at least theoretically. CEN TC 38 (Comite European Normalisation Technical Committee) is charged with the responsibility of developing standards regarding the durability of wood and treating processes. Within this committee there are a dozen working groups, each addressing specific standards for example WG2 which is developing Part II of EN350 which defines the natural durability of all relevant species. WRC has been classified as Group 2 out of five, where Group 1 is reserved for timbers which can be used in ground contact with no treatment.

The bureaucratic procedures which govern all these committees and the tasks which they are given are highly structured and there are meant to be no surprises. All aspects are discussed in endless detail with all involved parties having the chance for input. Both COFI and the Canadian Government office in Brussels are fully aware of the status of these different new Eurocodes and they advise that there is no current indication that there is to be an early ban, under any new Eurocode, on treating chemicals such as CCA. This information was confirmed by a visit to TRADA, the UK scientific authority on timber. Though it is generally believed that there will be some controls in the future, no committee has, as yet, been given this task.

It should be emphasized, however, that there is nothing to stop individual countries adopting more stringent regulations - in spite of the theoretical desire to develop Pan-Europe standardization. Consequently, it will be necessary to continue to monitor the regulations of each country in order to find out where WRC may have some advantage.

It is not just the treated wood product and the nature of the chemical used which is of significance. There is also an industrial dimension to the chemicals and how they are used in the process of treating the lumber. In the UK there are strong regulations concerning the Control of Substances Hazardous to Health (COSHH). Similar regulations exist in Germany and it is understood that there are some CEN groups developing Eurocodes in this area. Manufacturers are responsible for all residues and waste including disposal. They must also protect workers involved in handling any toxic chemicals. It is in this context that there could be some advantages to be gained for WRC.

BC producers should focus on this advantage specifically relative to sales to industrial users. Otherwise, there do not appear to be any major changes under way, at a Eurocode level, which will prove beneficial to WRC.

The Forests

There is considerable pressure in Europe from environmentalists with a variety of agenda related to the harvesting of timber worldwide. Some of these issues have a direct impact on the opportunities for WRC. Traditionally there has been a substantial volume of hardwoods used in outdoor applications because of their durability. For example, much of the garden furniture is from teak and there are a variety of African and Asian hardwoods used for different garden structures and playground equipment. The intense publicity regarding global warming and deforestation of the tropics has led to public awareness.

The impact of this awareness varies. In Germany the use of tropical timber, particularly from SE Asia has declined dramatically. The reduction is less dramatic in the UK but most manufacturers using these woods now include some statement to the effect that their raw material comes from forests that are managed for sustained yield (approved by The Friends Of The Earth etc.). In France, however, there does not appear to be too much concern at the level of the public.

At first sight this public attitude to tropical hardwoods in some countries should be favorable to WRC. However, there is also considerable concern about how BC is managing the forests. The pictures of clear cuts (Canada - the Brazil of the North) and the threats of the loss of one of the few remaining temperate rainforests have already had some limited effect on pulp/paper sales. There is a serious disquiet, on the part of the German retailers in particular, that BC producers of WRC are vulnerable to attack relative to the harvesting of WRC in old growth forests and questionable sustainability. It will be essential to develop strong arguments to show that the appearance grades being promoted are from forests which are managed on a sustainable basis.

STRATEGIES FOR PROMOTION

The market research has shown that the principal market sector of interest common to all countries is the garden and leisure market for outdoor wood. There is also a strong potential for the use of WRC in the manufacture of shutters in France.

Before proceeding with direct promotional efforts there is a significant amount of initial work which is needed in order to develop the programme which is to be promoted. Important elements of this work are:

- securing the support of key members of the local trade who will support a programme to increase volumes of WRC;
- identifying, with their help, the grade of product to be promoted.

There were two principal approaches considered to achieve these goals.

Outgoing Mission

At the outset of this study it had been thought that an initial step in a promotional strategy could be a mission by the WRC producers to the markets. As a result of the market research and the subsequent visit by Holm and Drake, it has been concluded that such a mission would not be appropriate at this time.

* The mission would only reach a small number of decision makers and most of these are already aware of WRC but are not aware of the potential for an appearance or outdoor grade. Nor is there any definition, as yet, of the characteristics of that grade.

* BC producers need to work with the trade in each country to define the grade which will provide the best fit between market requirements, price and production capabilities.

Incoming Mission

It is clear that the trade in each country is excited by the growing potential for the use of lumber in the outdoor market. It is these members of the trade - importers, retailers and manufacturers - who have the best knowledge of what can sell in their markets. They have not, however, had a comprehensive exposure to the variety of grades which could be produced from the WRC resource. Nor have they a thorough knowledge of the many outdoor applications of WRC in the North American market.

The educational value of an incoming mission of a group of decision makers from the trade in the countries with promising potential would be substantial. Furthermore, it would be two way. Not only would the potential buyers benefit but also the BC producers could develop a better indication of the specifications which would be appropriate.

In addition, an incoming mission is an excellent way of cementing a relationship upon which to base a joint promotional programme.

Promotion Options

Though in all cases it is the final consumer who has to be persuaded to buy WRC, there are two main intermediate levels which have to be convinced first. Where the product sold is manufactured prior to being offered to the consumer i.e. fencing panels, trellises, pergolas, garden sheds and conservatories, the emphasis of promotion is first on the manufacturer. Where the product to be sold is still in the form of lumber, it is the retailer who must be convinced. In both cases, however, there is a need for some "point of sale" support required to encourage the final buyer.

Unfortunately, the cost of a direct promotional effort to create demand at the consumer level is very high. The following summary of a specific programme to develop consumer demand serves to demonstrate this cost.

German Proposal

In 1987, the German trade could see that the sales of WRC were declining and proposed the development of a promotional effort. A public relations firm in Germany was instructed to prepare and cost a promotional programme to increase the sale of WRC in Germany. Five major companies, importers and agents, funded the proposal (later shared by COFI).

The publicity firm proposed a campaign aimed at doubling sales. The approach was largely based on advertising to the consumers through a number of consumer magazines and included competitions where the prizes were free trips to BC. An important element was the involvement of the retailers with "Cedar Days", inserts in local papers and displays. Stocks of WRC products would be needed at all participating dealers and there would be a list of the retailers involved.

The costs of the campaign were $500,000 in the first year and $250,000 for each of the subsequent two years. This cost did not include the expenses to be incurred by the dealers.

The proposal was rejected at the time for a variety of reasons, namely:

* Only three of the BC producers were prepared to consider getting involved.

* The campaign would cost about $50/mfbm of additional product sold.

* The emphasis was too heavily on the clear grades for panelling and decorative applications and it was not these grades which needed additional markets.

* There was insufficient evidence of dealer commitment to the programme.

It does not appear that a broadly based advertising programme directed at the consumer level is the best approach. It is very costly and is not sufficiently focused on the point of purchase.

Trade Shows

There are a number of high profile exhibitions held in Europe where the public and trade are exposed to products for the outdoor market. Some are more general, such as Interbuild and Batibouw, which cover the whole spectrum of construction while others are specifically related to garden and leisure activities, such as GLEE. COFI and the Canadian Government are frequently represented at some of these shows but WRC is often not a major feature.

Some of these exhibitions offer an excellent opportunity to expose WRC in a variety of applications to show how well a garden grade can provide a desirable product.

Travelling Shows

The current success of the travelling show in Japan gives an idea of what can be achieved. With this approach, the promotional effort moves closer to the point of sale and has a more direct impact on the consumer decision to buy at the time. Furthermore, the promotion is directly linked to the immediate availability of the product.

This type of show allows for a very focused promotional effort and gives the retailer and the manufacturer the support needed at the consumer level. It also demands commitment from the trade at all levels. This commitment will only be developed if the trade believes that the BC producers are also committed to support the longterm supply of product to the market. The development of such a travelling show would be evidence of such a commitment.

A critical element of the effort required will be comprehensive technical literature. The consumer must not only be sold on the virtues of the product but also shown how to use it properly. For example, unless the user is aware that ordinary nails must not be used, it will not be long before unsightly staining ruins the appearance of the pergola. Also, of course, the literature must be in the appropriate languages.

Summary

There should be no outgoing mission scheduled for the immediate future. Instead, key members of the trade should be identified and invited to BC.

Once suitable grades have been identified and the support of the trade developed, a list of the suitable exhibitions should be prepared and the primary locations for the travelling show chosen. The design of the exhibit should be such that it can be easily assembled and is suitable for both the large exhibitions and for use at the various retail locations.

Finally, if the BC producers agree, in principle, to the approach outlined, it will be necessary to analyze costs, develop a budget and obtain agreement, from all those involved, on how the costs will be funded. Until this agreement is reached, at least in principle, it would be a mistake to proceed with the incoming mission. There is the possibility that the BC producers would be unable to agree to fund the programme required. If this should occur after the trade in Europe has already spent time, effort and money on deciding to support the programme and coming to BC, a great deal of goodwill will have been lost.

APPENDIX I

THE MARKET POTENTIAL FOR WESTERN RED CEDAR IN THE UK, GERMANY, DENMARK AND HOLLAND

By

David Rice

1.0 UNITED KINGDOM

1.1 Consumption

The UK market for WRC is relatively small and has been in decline since the mid to late 1980s when imports peaked at around 16,000 mfbm in 1988, and have thereafter declined to just over 7,000 mfbm in 1991.

UK Imports of WRC 1985-1991
(mfbm)

Year	Volume
1985	7,677
1986	9,425
1987	14,665
1988	15,783
1989	11,670
1990	10,997
1991	7,102

Note: Small volume of US Cedar imported by UK but not included in above averaged around 0.7 mfbm for the period.

It is unlikely that 1992 will show much in the way of an increase due to the severely depressed nature of the UK economy. Arguably, it can be said that demand for WRC in the UK was exhibiting an upward trend immediately prior to the onset of the current recession. However care should be taken in drawing too definite a conclusion regarding the mid to late 1980s as a sign of the rehabilitation of WRC as a species with significant demand. It is interesting to note that in the previous three decades the average annual consumption of WRC was as follows:

Decade	Average Consumption (mfbm)
1960-1969	69,830
1970-1979	30,563
1980-1989	11,900
1990-1992	9,013

The above depicts the decline in consumption of WRC with the level of consumption falling by some 87% over the above period. Therefore it could be somewhat optimistic to expect that the corner was turned in the mid to late 1980s given the extent of the decline shown above. Nevertheless, based upon the results of the field investigation which covered not only users of cedar but current non-users, there are grounds for optimism that, given an upturn in the level of economic activity in the UK, the market could be receptive to WRC to a greater extent than was previously the case.

This relatively optimistic note has to be tempered with several caveats of a general nature not specifically linked to the properties and characteristics of the lumber.

During the course of the fieldwork it was frequently mentioned, in fact, it was always mentioned, that WRC was over- priced, that price was the sole determinant of its marketability in the UK and it could not compete with Iroko, Teak, Lauan, Meranti and treated softwood, all of which had sizable market shares in what could be considered traditional or potential markets for WRC.

Furthermore, considerable criticism from existing users regarding delivery inconsistency was a feature of general comment in that they found the practice of quoting e.g. delivered UK., Sept./Oct. a practice which made it hard for them to control inventories, plan production etc. It was mentioned that WRC suppliers were alone in following this practice and that competitors were either endeavouring to give firm delivery dates at the least for a specific month or, in the case of softwood producers in the UK and Scandinavia, were providing what was virtually a "just-in-time" distribution service. Obviously, in the case of the latter, geographical constraints were recognized but they could not understand why delivery dates had to be quite so imprecise as they were. It was felt that an active attempt to alter this practice would be a major step in the right direction.

Some criticism of the availability of sizes was evident, not in terms of the general range but in terms of the availability of some standard sizes, e.g. several expressed difficulty in purchasing 7/4" x 4", 6", 8", etc. and would be supplied with 2" instead. Comments of this nature were invariably linked to a residual doubt as to the commitment to the UK market by WRC suppliers when faced with strong demand in the USA.

Comments were also made regarding the propensity of WRC producers to offer the service of semi-finished or cut-to-size stock but either not respond to firm enquiries or not to be able to provide cut-to-size to the dimensional accuracy required; i.e. there was a certain amount of scepticism evident regarding further processing capability.

On a more positive note, companies felt that usage of WRC as opposed to other species enhanced their product's marketability and found that whilst price was high they could generally pass it on. This apparent contradiction in terms of price levels applied largely because companies having this opinion tended to supply high quality products to small market segments. Where volume production was the norm but the product was still targeted at the upper end of its market, then price was frequently cited as a constraint on market development. However, in light of the effects of the current recession, particularly in the areas traditionally relatively immune from the vagaries of business cycles e.g. London and SE England, it is felt that price levels of WRC, whilst partly a problem, were not the whole reason for the reduction in margins for finished products suffered by several of the companies visited.

For several companies using WRC, factors such as changes to the building regulations allowing low overhead competitors to enter what had been traditionally a market with relatively high barriers to entry, allied with, in some instances, the undisciplined pricing policies of some overseas and domestic lumber producers have combined to squeeze margins on what business there is. By the very nature of these factors it was felt that in the medium to long term that the reduced quality of the product and service of many of these new entrants to the market would not be acceptable as the general economy improved and final consumers became less price conscious.

On the basis of the fieldwork, it would appear that the bottom has largely been reached. Consumption of WRC by long standing consumers appears stable subject only to the vicissitudes of the economy and, it is felt, a fresh look at distribution policies by producers. In the following sections of this report some particular areas of potential opportunity are analyzed.

1.2 End Use Markets

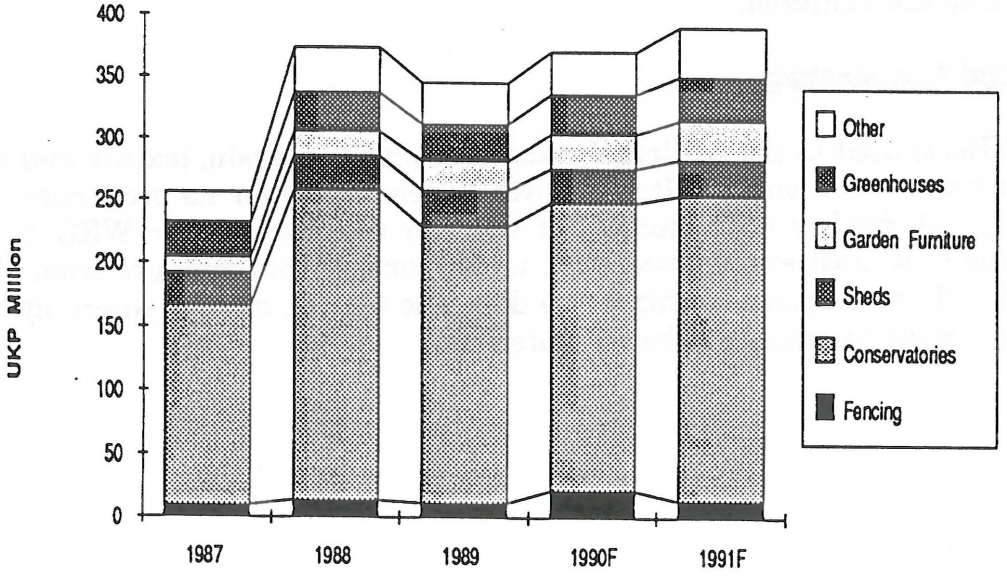
WRC is used in the UK largely where its stability, grain, texture and to a lesser extent, its colour are valued. It is not widely used solely for its properties of natural durability. A further characteristic of the end use markets for WRC or potential markets is that most are, or have been under considerable pressure from alternative materials. The exception to this is the domestic fencing market where little inroads have been made by non-wood based materials.

A problem in quantifying usage of lumber in the sectors of interest to this study is that products can be classified under several sectors. An example of this is outdoor furniture where, because of the fragmentation of the industry, usage of lumber to manufacture products such as garden benches could be incorporated within usage of lumber by the furniture industry or, within the fencing industry where there are a number of companies manufacturing not only fencing but also benches, sheds, pergolas, trellises and planters as part of a complete outdoor range of products. Likewise, usage of lumber in the manufacture of conservatories, sheds and greenhouses for example can be included in the figures relating to joinery. It follows therefore that where markets are quantified care must be taken in placing too great a reliance on the accuracy of the data and should be viewed as indicative only.

The magazine D-I-Y Week provided some information on the growth of total sales in the outdoor market. The information provided is shown in Figure 1. Though the market has not been growing very rapidly in recent years, the fact that there has not been a decline indicates that this sector is significantly better than any other in the construction industry. As commented earlier, the market divisions are very blurred and it will be seen, later in the report, that different sales value estimates are made relative to some of these sectors.

Figure 1

Total Outdoor Products
Market Value - 1989



Fencing

Usage of lumber in the fencing market was estimated at around 1 million m^3 in 1990 but declined considerably to around 850,000 m^3 in 1991 due to the recession. In terms of value, the market is around 15 million having declined from a peak of 22 million.

This market is characterized by having just a few large scale suppliers and a multitude of small enterprises supplying predominantly local needs. As a result, it is difficult to access accurate statistics regarding consumption. However various end use studies in recent years indicate that lumber consumption averages around the level estimated above.

The fencing market is not homogeneous and is made up of three distinct sectors all of roughly the same size, though the domestic sector is currently the smallest. Where they differ is that the market for fencing products in the domestic/garden sector is seen as the major growth area, whereas the other two - agricultural and motorway fencing, are seen as either a declining market in the case of the former, or static depending on the road building policies of the government. Growth in the use of fencing products such as panels, sheds, trellises and other outdoor products has underpinned this market sector in recent years.

Segment	Main Type of Product	Estimated Market Share
Agriculture	posts, rails, round timber	40%
Motorway	posts, rails, some panels	35%
Domestic	panels, posts, rails, boards, basic furniture	25%

The domestic fencing market is the only segment which is of interest to WRC producers. The other two are the domain of treated softwood and low quality domestic hardwood although use of the latter is declining.

The domestic fencing sector is dominated by treated pine from Portugal and treated British softwoods. Products in ground contact are pressure treated and non-ground contact products are dipped. There is, however, a growing trend for UK sawmills to produce components for panels and very often these are pressure treated as well. Usage of WRC in this sector is not large and it is mainly used in the production of trellis type products. There are a few small specialist companies producing garden products targeted at the upper end of the market but it is not a significant area at present relative to the overall market.

In all cases, manufacturers using WRC are using No. 1 and No. 2 clears in standard mill sizes. Producers who also manufacture furniture tend to look for planed lumber but have the facility for final surfacing, hence a skim dressing suffices. The requirement for kiln drying is a function of the use to which WRC is being put - if for an outdoor fence type product, green lumber is sufficient. If there is to be considerable machining, then KD is generally the norm. Although WRC will be one of the species exempted from the pine nematode heat pasteurization requirement, the arguably separate issue of the UK market becoming a totally dry lumber market with adoption of the "Dry Timber Charter", is one which may have ramifications in the near future.

There is a current trend towards looking for supply of cut-to-size stock, a factor that has been recognized by UK and Portuguese sawmills and is providing them with reasonable business at a time when this sector of the market is severely depressed. A major producer of outdoor products indicated that they were extremely keen to proceed further down this road in respect to their WRC requirements and had plans to take the matter further with WRC producers.

It is generally accepted that the volume market for fence panels will always tend to be very cost competitive and there will only be a small high value niche. There is, however, an interest evidenced by some of the manufacturers towards a knotty grade of WRC with the proviso that it would have to be competitive with treated pine or be within a price range that would enable manufacturers to further segment the market.

Furniture

In general, the quality requirements of the UK market for wood-based garden products are polarized between a high quality and a low quality product. There does not appear to be many products on the market filling the middle ground. Portuguese and UK softwood provide what is basically a cheap, utilitarian product. There is also some Eastern Canadian lumber/finished products serving this end of the market. It is also served by producers of self assembly products in countries such as Swaziland, Poland and Indonesia. The species most in evidence in this end of the market is pine, reflecting the current UK fashion for pine and lighter coloured woods. One major manufacturer has been developing the market in garden furniture using Chilean Ulmo and Rauli which is a relatively cheap hardwood but would fit generally into the middle market category.

At the other end of the market spectrum, hardwoods both tropical and temperate are the dominant species. Species such as Teak, Iroko, Ramin, Beech and Ash predominate particularly in furniture. It is worthy to note that furniture classified as garden furniture need not necessarily be designed for outdoor use in that it is aimed as furnishing for inside conservatories and other such garden linked buildings. WRC usage came under pressure in the upper end of the market due largely to price competition and also because species such as Iroko were seen as harder wearing and more durable. There is a definite movement away from Teak at present which is being met often by temperate hardwoods and to a lesser extent by less well known secondary tropical hardwood species. A further and more significant reason for the decline in WRC usage is the inroads made by aluminum, resin, tubular metal and to some extent, cane.

Whilst many of the products using, or potentially a market for, WRC are covered by the fencing market analysis, a further measurement of the market can be evidenced by looking at sales statistics for garden furniture.

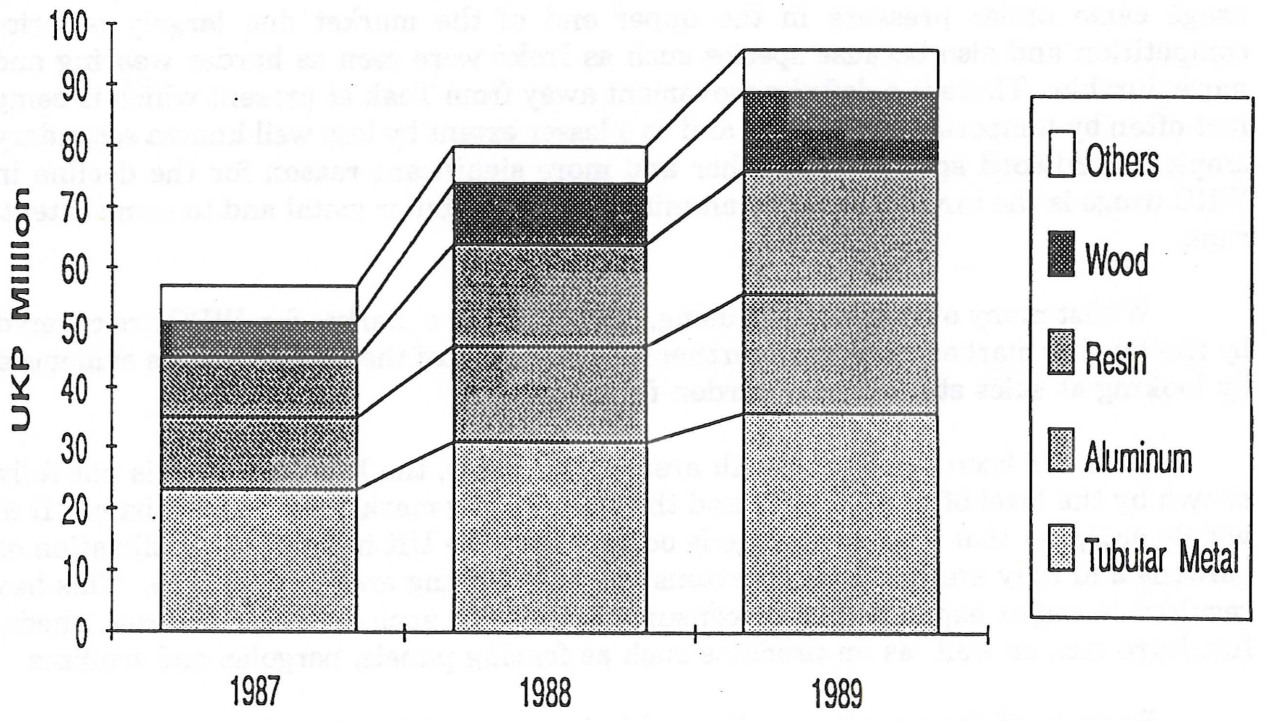
This has been a major growth area in the 1980s, the level of which is not fully shown by the level of growth indicated through fencing market volume statistics. It is widely accepted that a major change is occurring in the UK in respect to utilization of gardens and they are now seen as extensions to the living area of the home. This has resulted in major expenditures by consumers on items such as conservatories, sheds, furniture etc., as well as on products such as fencing panels, pergolas and trellises.

Because of the squeeze on disposable incomes arising from high interest rates and the general lack of consumer confidence, 1990, 1991 and 1992 to date have not been good for this industry. Each of these years has seen a progressive worsening of overall demand. Nevertheless confidence is high that this is only a temporary decline and that the market will resume growth from 1993 onward.

Figure 2 shows the steady growth of sales of wooden garden furniture in the late 1980s, although the actual value is relatively low. The figure also shows the substantial growth evident during that period. Manufacturers of garden furniture saw a continuance of this trend mainly at the expense of tubular steel furniture. As with volume statistics for timber usage, sales value statistics probably under value the market due to the many small rural craft-type operations. One company estimated that the total garden furniture market in 1989 was actually closer to £159 million than to the above figure and also that the timber furniture share was around 22% giving a total value for the sector of £35 million.

Figure 2

Garden Furniture Sales 1987-1989



A more recent article in the same publication quoted market research figures indicating that the total market in 1991 would range from £230 million-260 million depending on the weather. Whichever figure is correct the trend is much the same since wooden furniture is increasing in popularity. Concern is, however, growing regarding usage of tropical timber or timber from perceived non-sustainable sources and manufacturers report a significant increase in awareness by consumers of this issue and as affecting their purchase-making decisions.

There is not a great awareness or usage of WRC in this particular sector; however there are a few specialist companies working to develop WRC garden furniture sales in the UK offering a range of picnic tables, benches, chairs, occasional tables, etc. Again, the WRC grades required are the clear grades and there is not a lot of demand for semi-finished lumber due, it was stated, to a feeling that the quality of the semi-finished product would not meet the standard required.

Garden Structures

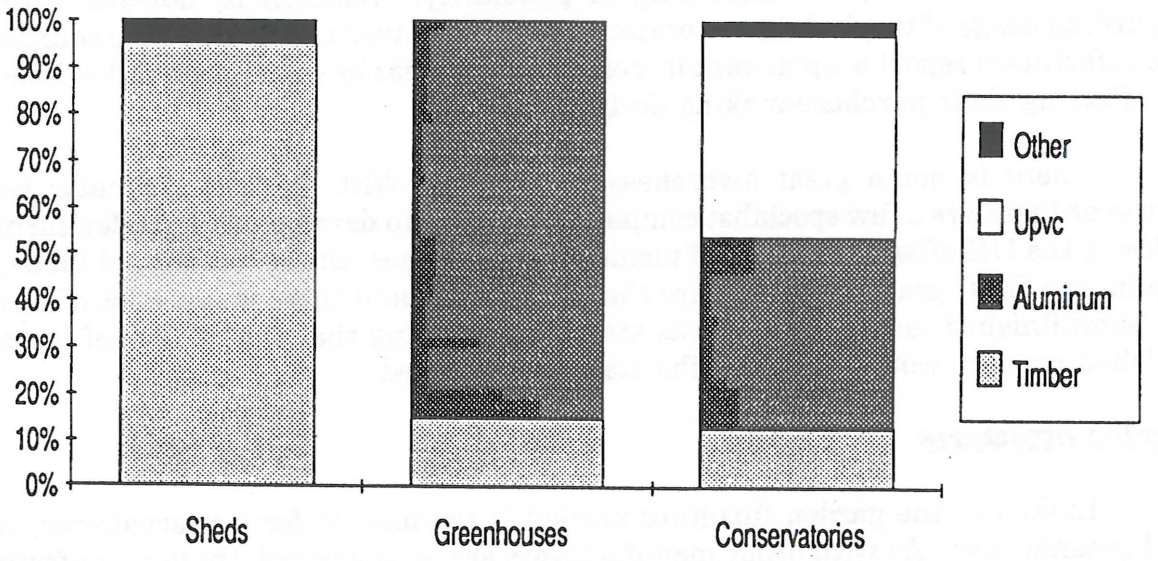
Linked to the garden furniture market is the market for conservatories, sheds and greenhouses. As with other manufacturers across the board, these manufacturers have been hit by the recession, high interest rates and, in the case of garden shed manufacturers, a reduction in the average size of garden and a change of prime use from being a potting area to becoming primarily a storage area.

For conservatories the market has fallen from around £235 million in 1990 to an estimated £200 million last year and conditions, according to those visited during the field investigations, were worse in 1992. Usage of timber in the manufacture of conservatories accounted for about 13% of material usage relative to 43% for Upvc and 41% for aluminium.

The following Figure 3 provides an estimate by a UK market research group of the materials used for construction of garden structures.

Figure 3

Material usage in 1989 in Conservatories, Sheds and Greenhouses



It is evident that timber based conservatories are very much targeting the upper end of this market and usage of timber is confined to the generally high quality species such as Oak, WRC and Douglas fir. This has come about largely through the advent of Upvc which has changed the conservatory market from being the province of the higher income earners to a wider potential market. Also facilitating this development has been the entry of the DIY superstores to the conservatory market with a range of budget price Upvc and aluminum based products.

No interest in grades other than No. 2 and better was identified but there is however a measure of interest in door stock and other components which is an area of potential development.

The sizes predominantly utilized were mainly 2x4, 2x6, 4x6, 4xl2 but there were also a wide range of other sizes used in lesser quantities.

The UK market for garden sheds is currently valued at around £25 million and has sales of around 25,000 units per annum.

Timber accounts for around 95% of all material used in the manufacture of sheds, aluminum accounts for the balance. Scandinavian and British softwood is the source of virtually all of the material used, with Scandinavian lumber providing the bulk of the lumber utilized. A trend in recent years has been the replacement of solid wood floors and roofs with OSB.

The slowdown in the garden shed market is not solely attributed to the economic climate. Apparently, according to some sources, there is a distinct trend towards smaller gardens which is affecting sales. While there is this trend, it is said to be affecting the size and type of shed now sold rather than the number of sheds. Whichever viewpoint is correct the end result is that volumes of timber used are less.

WRC is not a significant species in this market and was felt not to have too much potential for reasons of cost. Both Scandinavian and British lumber are very cheap and there are several alternative sources of material equally as cheap. Prices would typically fall into a range of between £I00 and £135 per m^3. Usage of treated timber was minimal and was usually dipped rather than pressure treated, the exception being the floor bearers. The rationale behind this being that garden sheds were generally erected on a concrete base rather than directly on bare ground.

Softwood garden sheds are placed at the very lowest end of the market and as such are very inexpensive. This is also mirrored by the retail distribution pattern in that they tend to be sold mainly through the large DIY superstores or, at the other end of the scale ex-yard at small local sawmills and woodworking enterprises. There has been in recent times a move towards supplying sheds in kit form for self-assembly and also smaller sheds as children's playhouses. The latter have proved to be reasonably successful according to manufacturers. There is no doubt however, that this sector of the market is in a deeper recession than others already discussed.

As Figure 3 shows, timber is not widely used in the manufacture of greenhouses with aluminum being the main material used in the UK. In a market reportedly worth around £2O million per annum at present, timber has lost a lot of ground over the years and is not expected to recover. The greenhouse market has itself declined somewhat due to pressures from the growth in demand for conservatories. There is some usage of WRC in the manufacture of greenhouses and grades required are No. 2 and better clear stock.

Other Outdoor Products

With respect to other outdoor products, the UK is in many ways an embryonic outdoor market as it is only in the last 5-10 years that the change in attitude towards outdoor living has been occurring and is still taking place. The UK does not have the same level of wood culture as many countries and as a result the usage of timber for products such as decking, verandas, shutters is, to a degree, esoteric.

There is some usage of products such as these but they tend to be ad hoc specialties and are not available as volume products in major retail outlets. One conservatory manufacturer visited felt that decking had good potential as an extension to his product range and felt that as the market regained volume he would proceed further to develop sales of decking.

The general lack of wood culture in the UK also manifests itself in potential markets such as playground equipment where metal and plastic are the main materials used. Nevertheless in recent years there has been a movement towards timber based items and several companies specialize in the manufacture of such items. These companies will also provide a range of products from play equipment such as climbing frames, slides and children's playhouses to garden sheds and signs and it is impossible to get a reflection of the actual volumes used in this market segment.

A feature of this sector is that a lot of round timber is used in order to provide a "rustic" effect. Species used vary, however domestic species such as pine, Douglas fir and larch are popular. Where lumber is used, it is generally supplied green, rough sawn and in mill standard sizes as most have capability to "size" their raw material. The range of sizes varies according to product range but sizes such as 200 x 50; 100 x 100 are much in evidence. Some difficulty is experienced in acquiring 150 x 100, however volumes used are not huge. Because much of the timber used tends to be in large section and/or is merchanted by the companies themselves, grades are not felt to be of particular importance other than to stipulate tight knots and no wane which in some cases for the latter a proportion of wane at the end of the piece can be acceptable.

Two factors are at play in determining species usage; firstly, that often part of the rationale behind the setting up of these businesses is to utilize locally grown timber and very often it has been a condition of Government assistance that this is the case. Secondly, that invariably the species is stipulated by the purchaser; this is particularly the case with public sector sales.

Because of cut-backs in Government expenditure and the recession the current market for playground equipment is depressed. According to most producers, 1993 would herald the beginning of the recovery as the level of enquiries had shown some signs of an upturn.

2.0 GERMANY

2.1 Consumption

The German market for WRC is smaller than that of the UK and similarly shows a distinct declining trend. Imports of WRC by Germany reached their peak in the late 1970s and early 1980s but have thereafter generally declined. Only in 1987 and in 1991 have they shown an increase over the previous year.

German Imports of WRC 1985-1991
(mfbm)

Year	Volume
1985	9,852
1986	7,572
1987	10,465
1988	5,300
1989	4,656
1990	3,966
1991	7,785

Note: Small volume of US Cedar imported by Germany. US has only recently come back into the market. In 1991 1.1 mfbm was imported.

A degree of care must be taken when interpreting these statistics since they do not represent all imports of WRC by Germany. Reportedly, significant volumes of WRC enter Germany through Antwerp and Rotterdam and are not recorded in the above statistics.

Comments received during the fieldwork indicate that 1992 consumption of WRC may be down on the previous year due in part to the slowing down of economic activity and also a change in consumer taste regarding usage of paneling which is the main use of WRC in Germany. All manufacturers and retailers visited commented upon the movement away from dark wood paneling in favour of light, often painted surfaces and were decidedly less than optimistic regarding the continued demand for WRC in this type of product. Price was also quoted as a factor as other softwood species from domestic mills, Scandinavia, Canada and former Eastern Bloc countries were very price competitive.

The domestic sawmilling industry has expanded considerably in the last few years and now has, by European standards, many large scale mills with capacities in excess of 350,000 m^3/a. The industry has more than adequate log supply utilizing the storm- felled volumes. This factor plus the ability of countries such as Poland to export inexpensive pine and spruce to Germany has had a dampening effect on price levels.

The expected boost to demand arising from re-unification had yet to happen to any great extent due to legal ownership difficulties and general lack of finance. It is however, considered only a matter of time and the building industry in the former East Germany is expected to increase production by up to 15% in the next year.

As with the UK, there was a distinct tendency for those interviewed to allow the current trading conditions to colour their outlook regarding the future. Nevertheless, there is an underlying optimism regarding the potential for WRC in areas other than interior paneling. It was virtually unanimous that the short-medium term outlook for paneling was not good due to the aforementioned change in consumer taste and it would be some time before the pendulum swung round to favour darker coloured species again.

Interestingly, the general criticisms received regarding everyday trading relationships with WRC producers mirrored those of the UK. They covered areas such as the non-availability of some standard sizes; non-even length distribution; price fluctuations causing difficulties in maintaining stable price policy to customers; delivery times; and availability of kiln dried material. It has to be said however, that responses to this latter point with regard to likely premiums were guarded.

A feature which elicited considerable criticism was the perceived current policy of some BC companies to bypass the traditional distribution network in favour of direct sales. Some respondents remarked that they were so concerned about this, and, allied to some of the other difficulties, were causing them to re-think their future involvement with WRC.

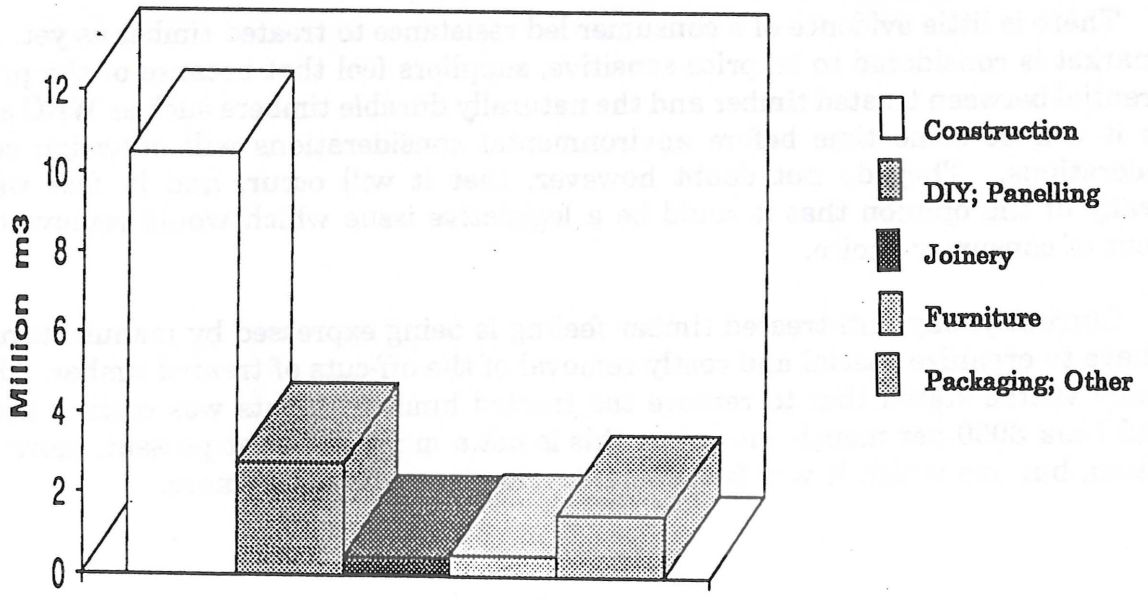
At the same time however, companies visited were generally optimistic about developing other markets for WRC but did feel that they should get more support from producers since they did not feel that they could promote a species effectively on their own. They saw their role as being to promote specific products.

2.2 End Use Markets

WRC has been used in Germany largely on its appearance and workability characteristics. This has led to the main end use being in paneling where demand is for a high quality clear grade of lumber.

As is usual with end use statistics there is a blurring of categories, e.g. when are some products joinery and when are they construction? Figure 4 highlights the indicative consumption of softwood across broad categories of end usage in Germany. The predominant requirement is for Spruce and Pine with smaller volumes of species such as Douglas fir, Larch, Hemlock, and of course, WRC is also used.

Figure 4
Softwood Lumber Usage in Germany
(million m³)



The end use markets for WRC in Germany are included in the DIY, Paneling and "other" categories. The usage of WRC in paneling has already been discussed to some extent and is not seen as an increasing source of sales for some time to come.

There has been a small but steady increase in usage of WRC as an exterior cladding somewhat akin to shiplap but vertical. This product is rough sawn and can be in the form of a T&G or bevel profile but is often square-edged and is a basic board and batten application. The main centre of demand for this product is in the southern part of Germany. This is due in part, to differences in housebuilding style and hence, materials usage between Northern and Southern Germany and also to the housebuilding activity being stronger in the South during this and last year. Sizes used are standard mill sizes of 1" nominal thickness.

The last two-three years has seen a growth in demand for what the Germans call "Garden Wood" and DIY retailers, distributors and garden centres are carrying a range of products for use in outdoor situations. Products ranging from fencing, sheds, pergolas, decking through to furniture and planters are readily available.

These products are manufactured utilizing a variety of species. Most prominent are Scots pine, Norway spruce, WRC, Iroko and Teak with species such as Canadian Larch, Yellow Cedar, Ramin and Meranti also utilized in some products.

The volume market is dominated by lumber and products manufactured using Scots pine and Norway spruce both emanating from domestic and Scandinavian sources. Both pine and spruce are pressure preservative treated using a CC based compound since the use of arsenic in treatment is now banned. Estimates of relative market shares indicate that the spruce and pine based products account for in excess of 70% of the outdoor products market.

There is little evidence of a consumer led resistance to treated timber as yet. As the market is considered to be price sensitive, suppliers feel that because of the price differential between treated timber and the naturally durable timbers such as WRC and Iroko it will be some time before environmental considerations will outweigh cost considerations. They do not doubt however, that it will occur, and in fact were generally of the opinion that it could be a legislative issue which would remove the element of consumer choice.

Currently, any anti-treated timber feeling is being expressed by manufacturers who have to organize special and costly removal of the off-cuts of treated timber. One company visited stated that to remove the treated lumber off-cuts was costing them around Dmk 3000 per month. However, this is not a major factor at present, more an irritation, but one which it was felt, could develop into something more.

WRC products are targeted at the middle to upper end of the market as the price differential between it and pine or spruce garden products can be as much as 75% at the retail outlet but more often the differential is around 40%-50%. An example of this is that for a standard pergola measuring 2.5m x 4.27m the total retail cost for it in pine is around Dmk 224 compared to Dmk 346 for a similar product in WRC. To emphasize the price consciousness of the market, attempts have been made to introduce Canadian Larch, which is sold for less than treated pine; however this has not been entirely successful due to quality problems.

This scale of price differential exists mainly because very often the so-called WRC garden wood is a very high almost clear wood grade which is being sold in competition with the equivalent of Scandinavian 5ths and, judging by the appearance of some products seen, on occasions the equivalent of 6ths.

Therefore relating this to the stated price consciousness of the market means that WRC garden products are currently targeted at what could almost be termed a niche market. Importers and distributors felt that there was a place in the market for WRC in a lower grade to fit between pine and spruce and the upper end of the market.

To some extent, this is what they were trying to do with the introduction of Eastern Canadian Larch but appear to have reservations regarding its quality and its workability. Certainly they expressed concern over the incidence of dead knots. It is felt that an appearance grade WRC with tight knots, no holes, no wane etc. with a price differential in the region of 20-30% could be of considerable interest to the German market. The products available in Germany from MacMillan Bloedel are designated "Garden Grade" and the lumber appears to be of this sort of quality.

There appeared to be little enthusiasm for investigating the use of tropical hardwoods either with the species utilized by some manufacturers or with secondary species which could potentially also provide a lower cost raw material. The main reason advanced for this attitude was that environmental pressure regarding usage of tropical timber species was high and increasing and was more of an issue in the public eye than that of chemically treated timber.

With an appearance grade the sizes and lengths would be standard mill sizes although there is interest in exploring cut-to-size and semi-finished goods. Several retailers had components for articles such as pergolas delivered with chamfered ends ready for use as support ties in the construction of the product.

The general consensus is that the outdoor market has considerable growth potential over the coming decade and although some retailers are servicing the market with nothing but a higher grade WRC at present they feel that a WRC product with a cost structure which widened its appeal could result in a significant increase in market share.

3.0 GENERAL ASSESSMENT

3.1 Legislative Issues

The enactment of the Single European Act in 1987 now means that health safety and environmental objectives are set European- wide rather than individually by member states. This is not to say that at present each member state has common legislation; in fact, the opposite is true, although through the ongoing work of CEN TC 38 (Comite European Normalization) on durability of wood, progress is being made towards the development of common standards in terms of processes, chemicals and species.

Within CEM TC 38 there are 12 different working groups (WG), however in terms of commercial interest, it is WG1-4 which are seen as the most significant. Briefly, the main features are:

* WGl - sets out the basic philosophy of the definition of treated timber and has defined five biological hazard classes.
* WG2 - defines the natural resistance and durability of different timber species. This has been a highly contentious group particularly in terms of disagreements between the UK, and Germany/France. Basically the UK as an import dominated market has tended to look after and be more cognizant of the interests of its suppliers, whereas Germany/France tend to look after their own domestic interests given their lesser reliance on imports as a source of supply. The German/French position is basically that they were content to list species which were deemed to have significance for them against the UK's position of wanting a more comprehensive array of species covered by the common standard.
* WG3 - Probably the most significant in that it is charged with developing a common standard for solid treated timber.
* WG4 - is concerned with defining specific preservatives which will be acceptable under the performance parameters laid down in the standards.

The WGs are at varying stages but WG1 has essentially completed its work programme. WG2 is still at the drafting stage with several issues still to be resolved. However, the UK position on broadening the range of species covered by the standard has been adopted and test methods adopted are largely those of the UK. WG3 standards are due for formal voting now, but it looks as if there will be further discussions before they are formally adopted. In WG4 there is still a substantial amount of work to be done.

In addition to the development of European-wide standards affecting usage of timber in outdoor situations there have been developments emanating from individual Governments which have affected the treated timber suppliers and end users. The UK Government employs a stringent approval process regarding chemicals used in treating timber. This situation does not occur in Germany and France for example. However, the CEN work will rectify this situation eventually.

The major plank of legislation in the UK regarding treated timber is the Environmental Protection Act which lays emphasis on the control of potential pollution hazards at the process end of the spectrum. Currently a code of practice for the safe design and operation of treatment plants is being prepared, and by 1995 all treaters will have to be authorized which will only be granted if they meet the control regulations. The major effect of this is that currently the larger companies are making significant investments in new treatment plants and rationalizing smaller plants and plants which do not meet the requirements in favour of large scale plants.

In Germany the focus has very much been on the chemicals used in the preservative treatment of timber with the banning of treatment using CCA. Treatment is now carried out using CC or Copper-HDO; the use of PCP's and arsenic based salts are proscribed. Interestingly, several treaters are adding colouring to the preservative used so that the treated timber is coloured green as consumers equate the colour with the fact that the timber has been treated. It is the medium term aim not only in Germany but also in other European countries to eventually ban the usage of chrome in the compound, however it was felt by several people talked to that this might be some time away yet.

Legislation in Germany bans the disposal of treated timber at public landfill sites and also by burning. As a result, companies treating or resawing treated timber have to make special arrangements for the disposal of offcuts etc. which was stated to be a costly exercise.

In both the UK and Germany environmental concern regarding either the usage of treated timber or the treatment of timber is very much Government led and according to the fieldwork plus observation there is not a high degree of consumer awareness of the environmental issues surrounding treated timber similar to that which exists in the USA for example. In fact, in the UK particularly, the treatment of timber tends to be viewed as an added beneficial feature by the consumer.

3.2 UK and Germany

The UK and Germany both offer potential to increase sales of WRC as a material for outdoor products. However the degree of potential is seen to be different. In the case of the UK, it is a larger market currently for WRC than that of Germany, but it differs in that there appears not to be the same appreciation of the qualities of WRC that exists in Germany. Whilst historically WRC was imported by the UK in reasonably significant quantities, the product knowledge seems to have waned over time.

This is not to say that there are no developmental and promotional activities but there does seem to exist within the UK timber trade a degree of buyer inertia which makes change slow. Hence development will likely be slower and in all probability, more expensive. Furthermore, Germany has a much stronger wood culture than that of the UK and, whereas for some outdoor products it is almost a sine qua non to utilize a timber based product, the same is not true for the UK.

What the two markets have in common is that the outdoor products market in both countries are seen to be growth markets, both are currently in varying degrees of recession, but the medium term prognosis is that of continued growth across the range of garden and outdoor products.

Similarly products serving these markets can generally be categorized as being designed to meet the low cost end of the market and the high cost end with little serving the middle. Players in both markets feel that with the right species and cost structure there is mileage to be gained from attacking this segment of the market with what could be termed an Appearance grade of WRC. Certainly in both countries, attempts have, and are being made to find alternative species e.g. a major outdoor products manufacturer in the UK has tested Eastern White Cedar to replace the relatively small volume of WRC they use at present; the introduction of Eastern Larch in Germany is another example.

It would therefore appear propitious to introduce a grade of WRC into these markets which whilst not competing head-on with the pine and spruce products would, with a narrower price differential attract a proportion of sales away from that sector due to the self evident physical attributes of WRC, particularly over spruce.

As current literature and attitudes promote WRC mainly as a clear and hence high price species industry, to some extent public perception demands a quality product. Therefore, the introduction of STK grades should be accompanied by literature which clearly spells out the characteristics of the grade.

As the previous section discussed, the development of a mass anti-treated timber movement has not been realized yet in the UK and Germany. In fact, it could be argued that the treatment of timber chemically is viewed as a plus factor by the end consumer. This is particularly true in the UK where there is an inherent distrust of the longevity of timber by a sizable section of the population. Similarly, in Germany manufacturers were adding dye to the chemical when treating so that the finished product could have the normal green tinge associated with CCA treatment. Thus whilst the high durability of WRC can be considered a marketing plus point it should not be considered its "unique selling point" at present. That it is not to say that a long term strategy cannot be developed around this as in both countries, opinions are virtually unanimous that an increase in environmental pressure against the use of treated timber would happen eventually.

The issue of timber treatment is not yet resolved and future developments are as yet unclear. It is interesting to note that a recently developed wood preservative Tanalith 3485 has been approved for use in Germany by the Health and Safety authorities and is based on copper and additional biocides rather than chrome and arsenic. It is being marketed on its environmental qualities as well as its performance qualities and both in the UK and Germany, companies visited were open to testing this type of product.

In both countries it was commented that there was a willingness to explore further the concept of components and semi-finished products for use in the manufacture of outdoor products. It is also true to say that some of the companies visited felt that previous attempts to develop this type of business with WRC suppliers had been less than successful for a variety of reasons, most of which have been commented upon elsewhere in the report.

Whether the reason(s) for this apparent lack of success can be attributed to the supplier or the purchaser is in many ways of little account, however, the perception remains that the producers were not professional in their approach. Nevertheless, as there is still an inherent desire to proceed some way down this road there is still a residual goodwill which should be developed.

In the German market there is a concern regarding the apparent tendency for the traditional channel of distribution to be by-passed by certain suppliers of WRC and this has led to quite a high degree of antipathy existing at some companies. It is not the purpose of this study to comment upon the rights or wrongs of this situation, however, if the objective is to increase volumes of WRC appearance grades into a wider market than exists at present then it will be necessary to redress this situation.

It appears that the standard sizes produced by WRC sawmillers are not a constraint to developing the market further, what may be more significant is that there should be full availability of sizes and lengths, given some of the comments received during the course of this study.

These issues and the more general issues discussed at the beginning of this analysis need to be dealt with in order to develop the market for the STK grades and also components. Given that this is done and that the European economy starts to recover momentum, then the potential to widen usage of WRC through marketing a lower grade for outdoor products as well as in the more traditional areas will be significant. This is not to say that the market is sitting there ready to be "tapped". It will take time to develop, particularly in the UK. However, if sales of appearance grades can be made to one or more of the major outdoor products manufacturers, then awareness of the species at the consumer end of the market will be greatly enhanced.

4.0 DENMARK

Consumption of WRC in Denmark is very small and what consumption there has been has been intermittent. Over the past ten years the highest level of consumption was only 346 mfbm.

In the period from 1985 imports of WRC have been as follows:

1985	nil
1986	30 mfbm
1987	nil
1988	nil
1989	nil
1990	346 mfbm
1991	37 mfbm

As the above figures show there is no sustained market in Denmark for WRC and any usage would appear to have been strictly on an ad hoc basis. The total market for softwood lumber in Denmark is not large, generally totaling around 1.5 million m^3/a. For tropical and temperate lumber the total consumption is in the region of 120,000 m^3/a. The recent growth in international acceptability of Danish furniture design has turned the consumption of hardwoods from steady decline to growth and has also stabilized the softwood sector since building activity has reduced.

Whilst Denmark is not a major consumer of lumber it does consume significant volumes of softwood in various end uses. In the last two years there has developed quite stringent legislation regarding the chemicals used to treat timber. These new regulations could have potential implications for the traditional use of treated timber. It is reported that up to 15% of all softwood in Denmark is treated, but CCA has now been totally banned and replaced primarily with CCP (Copper, Chrome, Phosphorous). At present it is estimated that 80% of all treated timber is treated using this compound.

Following these developments, there is now a strong movement to proscribe the use of chrome and it is expected that this will occur in the near future. The pressure to remove chrome is coming from several sources; consumer, labour unions and government.

It follows to some extent that the Danish market could be receptive to WRC because of its properties of durability. However, the extent to which this could be the case is very much dependant upon the level of consumer rejection of the treated product as against concern regarding the safety aspects arising during treatment.

Whilst there are possibilities regarding WRC sales in Denmark it is not a major lumber market and resources for developing the market in Denmark should be allocated accordingly.

5.0 HOLLAND

The market for WRC in Holland has averaged around 3,340 mfbm in the period 1985 to 1991 and reached its peak in 1988 when imports totaled around 15.8 million board feet. Although volumes imported during this time have fluctuated considerably, the underlying trend over the period shows a small upward movement.

Dutch Imports of WRC 1985-1991
(mfbm)

Year	Volume
1985	3,351
1986	9,294
1987	14,665
1988	15,774
1989	11,595
1990	3,029
1991	7,076

Note: There is a small volume of US Cedar imported by the Netherlands.

Discussions with companies in Holland indicated that there was in fact slightly greater interest in WRC in recent times but it was felt that the market would not show much more growth as it was for existing end products, a mature market. With existing grades it was felt to be too expensive to develop other markets in areas such as doors and windows relative to the price of comparative hardwoods.

Currently, WRC is utilized mainly as paneling and bevel siding of which there is a small amount imported. However, manufacturers tend to prefer to manufacture these products themselves. All want No. 2 Clear and better, and take sizes 3", 4" and 6" x 6" and wider, with the preference being for 4x8, 10 and 12" in 12' lengths. There is also some usage of 7/4 x 6" which is resawn for vertical siding.

There is currently some volumes of a garden wood grade being imported with the most common sizes being l"x6" and 7"x7". The market for garden products has been growing and is served mainly by Scandinavian softwood and tropical hardwood species.

Usage of WRC is constrained largely due to its lack of price competitiveness against tropical lumber. The Dutch are the highest per capita users of tropical hardwood after Japan. However, pressure from environmental groups is having a significant effect and there are now, at national and municipal government levels, restrictions aimed at reducing consumption of tropical hardwood.

As these restrictions gather momentum and the large inventories that have been built up in anticipation of the legislation are utilized it is felt that there will be increasing opportunities for alternative species and WRC would fit the bill in many cases.

There is little in the way of overt concern regarding the usage of treated timber, nor particularly over the process other than what could be termed normal health and safety considerations. The Dutch, it is expected, will follow the line set by the EC with regard to TC38 standards and will conform to what is generally happening elsewhere in Europe. However, with little in the way of consumer concern there is little to be gained from marketing WRC on its natural durability classification against the cheaper treated timber.

There is an ambivalent attitude towards the potential for an appearance grade of WRC in that it was recognized that for most outdoor products a product with sound knots etc. would not present a problem and the possible price advantage could be seen but it was felt that the Dutch market was so accustomed to clear grades that unless there was a shortage of the higher quality lumber, it is felt that the time was not right to market other grades in Holland.

APPENDIX II

REPORT ON FRANCE AND BELGIUM

By

Jean Lemut

Consumption of WRC in France

The volumes for WRC imports over the last few years are shown in the following table. These figures look encouraging, but it must be pointed out that prior to 1985 the volumes were around 12 million board feet in certain years. At that time the market was nearly all clear and near clear, with one major end-use in interior siding. Now the trend has shifted and the uses for WRC are more diversified, requiring a wider range of sizes and grades.

The market is still strong for clears though, but select knotty grades with some quality have gained acceptance, as well as large size timbers in standard appearance grades. This portion of the market seems to be growing, whilst the clear and near clear market is probably stable.

Note: The volumes indicated in the statistics for the consumption in France, do not take into account the volumes imported through the Belgium Port of Antwerp so the actual French consumption is higher.

Import Statistics

	MM FBM
1985	5,064
1986	5,848
1987	6,673
1988	11,081
1989	7,201
1990	7,775
1991	10,704

The target before three years time is 15 MM FBM.

Durability Classification

European codes classify different species of wood in four classes related to their exposure in end-uses. Classes 1 and 2 are interior uses. Class 3 is exterior use for wood not in contact with the ground. Class 4 is exterior use when wood is in contact with the ground.

Species Classification

Only one French grown species is in Class 4. It is Acacia (Robinia pseudoacacia, origin Southeast USA). The tree never grows very big. The wood is used exclusively, in split form, for agricultural fence posts and vineyard stakes.

Other species in Class 4 are exotic tropical hardwoods such as Azobé-Beté-green heart-Iroko-Doussié-Makoré and Teak.

WRC is in Class 3.

Market Research Conclusions

The research was made by visiting and interviewing a dozen manufacturers/ distributors of playground equipment, fencing, decking, garden sheds, appearance timbers, shutters and various other exterior end-uses. In addition a number of other people with knowledge of the timber industry were contacted.

WRC is appreciated in the market, mostly for its aspect; colour, grain, texture as well as for its natural durability.

Its price is high compared to other softwoods; but it remains slightly cheaper than most tropical hardwoods used in the same applications.

End-uses

Panelling

The largest market for WRC in France, used to be for interior panelling. These were manufactured locally from WRC 2 clear and better - 4"x4 and wider. Since the 1980s the fashion has faded and the demand is much less. At the same time the raw material became scarcer and the price much higher. Now one of the largest markets for WRC is exterior panelling.

The most popular profile is the channel siding in 1x6 and 1x8 nominal. The grade is much more liberal than the one required for interior panels, but it is a more restrictive grade than the one generally accepted in North America where the panel is often finished with a coloured stain. In Europe the finish is always a clear finish. The grade required is a select knotty with as little as possible of quality knotty. No holes and limited number of small tight knots.

Some of this material is exported from Canada in the finished form, shipped in containers. The main difficulty encountered in this traffic is breakage of the tongues and grooves, which are very fragile and difficult to protect.

Another difficulty is due to the fact that in North America the application is made rough side out, and the material is graded from the rough face. In France the application is usually made smooth face out, so that creates problem of grading.

Also the standard North American thickness is 1" nominal, finishing 3/4" - 19mm. This thickness is considered insufficient for the fire rating, which requires a minimum of 7/8 - 22 mm.

Therefore a greater part of the demand is fulfilled by importing boards 1-7/8" (and 7/4") thick x 6 and 8, which are machined locally. 2" thick boards would probably be well accepted also but it seems it is not available to importers. The panel is always finished with a clear finish.

The market is growing and seems to carry a lot of potential.

Shutters

This is another large market, created only in recent years.

Shutters are very popular in France for reasons of insulation, aspect, and protection against intruders.

Cedar competes with all other softwoods; pines and spruce as well as home grown Douglas fir and larch.

The shutters requires a 5/4x4 board stk with limits to the size of knots - no holes. The market is growing and shows a lot of potential.

One of the manufacturers visited was impressed with a piece of 5/4x4 I presented him and which had been sawn from a very small log less than 6" diameter.

Playground Equipment

* WRC is practically non-existent in the field of playground equipment.
* Steel is preferred for the light equipment for use in the family playground.
* Pressure treated round softwood is preferred for the heavier equipment in public grounds and schools.
* The roundwood is sometimes only pine which takes the treatment better, because of its open pores but sometimes spruce is used because it is more straight. Both are cheap and strong enough for the job.

Fencing

The fencing market is not as developed in France as it is in other European countries. But WRC appears to be used in the high line of fencing panels.

Decking

For decking WRC is considered too soft. For a slightly higher price tropical hardwoods are preferred.

Garden Sheds

Garden sheds are a cheap market; with many small builders competing to the last penny and the consumers are generally found in low income families. I have not seen any shed made of WRC, but I suppose a few high price pieces must use the wood.

Verandas

Verandas, which are literally additions to the home, use a lot of WRC in the better grades; clears and near clears. This sector is very active, actors are small firms operating locally. WRC seems to stand well competition against tropical hardwood and aluminum.

Appearance Timbers

Appearance timbers in homes (as beams) are often more decorative than structural; they are usually both, are very popular as well as posts on the entry porch. It is extensively used in new single family houses. Competition is European softwoods; pine or spruce, but WRC is much appreciated for its aspect and durability.

The sizes required are 4x8, 6x6, 8x8, 10x10, 12x12.

The grade is an improved standard and better excluding rot, heart decay and holes. It must be pointed out that the beams are visible inside the house on three faces and the posts on four faces and they are part of the decoration. Moreover, these timbers are usually finished with a clear finish, which shows up not only the nice grain of the wood but also emphasizes the slightest defect, which then sticks out like a sore thumb on the ceiling of the family living room... This market represents a good part of the volume of WRC consumed in France.

Garden Furniture

In garden furniture WRC is used in the cheaper type of furniture, such as picnic tables, assembled with bolts and nails.

For the more expensive range of outdoor furniture, with traditional assembly methods, beech or tropical hardwoods are preferred; the top line using teak.

Sizes Required

Most of the sizes required are those regularly imported. It seems there has been a good job of adaptation from both sides, producers and importers.

In Clear and Near Clear Grades
4" x random widths
preference for fixed widths x6 and x8
one width per package

Also 1-7/8 x6 and 8
7/4 x6 and 8
5/4 x4

In Stk Grades - select and btr (or quality)
1-7/8 x6 and 8
7/4 x6
5/4 x4

Price approximately 25% under clear.

Standard grades for Appearance Timbers
4x8, 6x6, 8x8, 10x10, 12x12

* I have not heard of any demand for 1".
* There could be a demand for 2" but it seems not available.
* CLS sizes, nominal 2x4 mainly, used to be popular for picnic tables but seems not available presently. This item could probably be revived.

Opportunities for Components

Except for channel siding (which is a finished product) I have not heard of any demand for finished or semi-finished products. On the contrary, most of the end-users who could absorb boards in 7/8x4 or 1"x4, 5/4x4 etc... still prefer to rip 4"x random width stock, in clear and near clear.

The situation is different in the stk grades for reman but still no demand for components in this category.

Attitude Toward the Threat of European Restrictions on Treated Wood

The French seem to know very little about this threat; even among responsible entrepreneurs who have their capital invested in businesses based on pressure treatments of the most endangered category: CCA, CCB, who know about the threat, seem to ignore it for the moment.

Promotional Strategies

COFI has been doing very good promotional work in the past years. They have adequate literature; they participate in all the major building exhibitions and emphasize the promotion of WRC on every occasion.

Specifiers, regulators, architects are well informed about WRC and its properties, both in France and in Belgium.

The public also knows about WRC. In fact I would say that the durability of cedar is generally overrated in the public's mind, as it is known as being "imputrescible", which literally means it will never rot, and we know it is not true.

WRC is a high priced wood compared to all other softwoods. In fact its price is near the level of certain hardwoods and competes directly with some.

This induces the market to be very demanding in quality. The largest share of the market is for clear and near clear grades. However, in the past few years stk grades have been introduced and promoted successfully. But here again the market wants improved grades with limits on the size and number of tight knots. It could be a good idea to develop a brochure specifically meant to promote stk grades, where there seems to be a great deal of potential.

Durability: It is a fact that WRC is rated only Class 3, which allows exterior uses but does not allow the wood to be in contact with the ground. It might be a good idea to develop and produce a brochure to show how to isolate the cedar from the ground with felt, tar, etc. as it is done in North America. This would overcome partly the handicap of not being rated Class 4. This brochure should possibly include lab tests.

Distribution: The weakness encountered to develop the use of WRC in France and in Belgium is the absence of inventory in local lumber yards, where the wood should be available in small quantities. There are very few distributors in France who carry regular stock of WRC. Action should be envisaged to improve this situation, because this deficiency is a major drawback for the many potential small land users.

Perhaps, press advertisement should give periodically a list of stock holders. Consumption is in progress but there is room for a lot more in a market like France and Belgium.

A Brief Description of Principal Interviews

1. Cras, S.A. at Waregem, Belgium

* This firm is probably one of the largest manufacturers in Europe for all the items that are investigated in this study. Photos and Brochures attached.
* They have recently taken over a large Danish manufacturer called Collstrop. They have a good network of distributors throughout Europe.
* The company Cras also controls a large Belgium lumber importer, Van Reeth, who has been importing WRC for many years. Its inventory in WRC is around 2,000 m^3 in sizes ranging from 5/4 to timbers 12x12. Grade is heavy to clear.
* Cras manufactures mainly garden structures and playground equipment.
* It has its own pressure treating facility using CCA.
* It also acts as distributor for a part of its line, furniture and some other special items.
* Its trade mark is Garden Wood. It operates in the higher range, higher priced type of line.
* It uses WRC and pressure treated softwoods (pine) - also tropical hardwood.

* Mr. Cras is aware that some of the chemicals he is using now may have to be replaced. It is already a problem for him when exporting to certain countries such as Germany, but it does not seem to be his immediate worry at the present time.

* Although the manufacturing operation is not spectacular, a visit to this firm by mission members would certainly be very valuable - 1 hour drive from Bruxelles - 3 hours from Paris.

2. Sertis at Bergues 59380

* This firm specializes in aluminum construction. Its main activity is related with the construction of the Euro tunnel from Calais to Dover. As a side-line it has developed a secondary activity - erecting verandas (equivalent to conservatories in the UK), custom-made to single demand for private home owners.

* The structure is made of a WRC frame fitted with aluminum profiles and aluminum windows and doors. Photo in Brochure.

* There is a lot of competition in this activity. A lot of tropical hardwood is used but Sertis feels that WRC is superior and preferred by the home owners. So it uses only WRC which it buys from a Belgium timber merchant, Van de Castle (German owned). The supply is cut-to-size components - rafters in 90 x 190 mm and square posts 130 x 130 mm made of two, three and four pieces edge glued.

* Sertis is a fair size company but WRC is secondary to its activity. Its consumption of aluminum is 70 tonnes/year. Its consumption of WRC is 20 m^3. They employ 40 people.

* It was an interesting and useful visit but it would be of secondary interest for the Vancouver mission.

3. Saphibois at Goe Belgium - Trade Mark Durlang

* Its main activity is the manufacture of fencing, gates, garden structures, garden furniture, decking, sheds and general playground equipment. Brochure attached.

* Most of the material used is CCA treated roundwood softwood. Some parts are treated after machining and even after assembly. See photos in Brochure attached.

* For the higher part of its line they use some tropical hardwood, Azobe and Iroko.

* They know about WRC and its properties for outside uses, but they do not use it. They are aware of the danger threatening the CCA treatment, but they don't seem too much concerned at the present time, in spite of the fact that it concerns 90% of its output; their line is on the cheap range of the market.

4. **Gilet Sport at Chateau Chinon 58120**

* The main characteristic of this firm is that they aim at public markets; they sell only to communities, cities, school, etc..... They offer a complete line of public playground equipment and public garden furniture. Photos in Brochure attached.

* They do not use WRC and will not consider it for political and chauvinistic reasons.

* Its market, spending only public money, is largely influenced by politics and it wants to have the proper image for the circumstance, that is, use local resources, local labour, home grown lumber, etc... Nearly all is roundwood softwood pressure treated.

* They giggle at the suggestion that a European law may prevent them from some of the chemicals they presently use; they feel they are untouchable, well protected by politicians.

* With such a state of mind, the visit was not of great interest; but it must be observed that this type of attitude is not uncommon in France.

5. **Gourdon at Chatenoy le Royal 71880**

* This is a small firm. They manufacture verandas, custom-made, one at a time, fitted and installed in private homes. They use mainly WRC. Some meranti. They buy lumber in 4"x6" and wider in grade, factory flitch and better.

* This firm is a typical actor in this business, acting very locally. There are hundreds like them throughout the country. Adding a veranda to a home is just like adding an extra room, without having to apply for a building permit.

* The market for this is very large and depends a lot on WRC because it is lightweight, decorative, durable, easy to machine and fit on the job site.

* However, these small firms complain that only few lumber yards carry an inventory of WRC. These users have to buy too large quantities for their limited financing or go too far. This complain is not uncommon.

6. **AMCA at Paris**

* This company is a large wholesale distributor of playground equipment for private customers. See Brochure attached.

* For this type of customer steel is preferred because it is easier to erect for the home owner. There is no WRC in this segment of the market.

7. **Domi - Lille** (see Brochure attached)

* Also a distributor of a wide range of outdoor equipment.

* Garden furniture in teak and pine. Playground equipment in roundwood treated CCA. Garden sheds in a variety of materials.

* No WRC in this line.

8. **Jardibois at Peca Belgium**

* A small manufacturer of garden sheds made of pine, pressure treated CCC (copper).

* They also act as distributor for a top line of garden furniture in teak.

* See Brochure attached.

9. **Piveteau at Sainte Florence 85140**

* This firm was introduced to me as a major garden furniture manufacturer, which they are, but I found out that in addition they are running a logging and sawmill operation as well, cutting only local pine (Pinus sylvestris) with an integrated pressure treatment plant.

* The manufacture of garden furniture is only a way to upgrade part of their output. It is an interesting operation but out of our present study.

10. **ICPEF at Paroy le Monial 71**

* A large firm involved only in treatment of roundwood and some sawn timber.

* They treat approximately 2,000 m^3 per year of round timber; pine, spruce, fir, Douglas fir with CCA and CCB. 75% of it is used for telephone poles; balance is split in various end-uses including security rails along roads. See photos in Brochure attached.

* They also supply playground equipment manufacturers.

* They are aware of possible ban on some of the chemicals used now; but it does not seem to worry them too much at the present time.

11. GPF at Balbigny 42510

* A medium large manufacturer of shutters and garage doors. They offer a wide range of different types and sizes of shutters, in a choice of three species of wood:

  60% Scandinavian spruce
  30% Tropical hardwoods, Mowingui
  10% WRC

  The WRC volume amounts to approximately 50 m^3 per month.

* Grade: approximately 30 m^3 of 4 clear and 20 m^3 of factory fitch
  Sizes: 4x6 and wider

* The 4" is resawn into 1x4 - 5/4x4 - 7/4x4 depending on the thickness of the shutter. 5/4 is the main thickness. They said they were interested in 5/4x4 stock in a grade stk with small tight knots.

* The WRC finished shutter sells at approximately 15 to 45% higher than the same model in spruce. Tropical hardwood at 40 to 60% premium over spruce.

* The firm is aggressive and forward looking. They represent a good potential for the less scarce grades and sizes of WRC. They find that WRC has all the qualities required for their products. The only criticism would be for its soft texture and fragility.

* The location of the factory is out of the way; 5 hours from Paris, 1 hour from Lyon. A visit would take up a full day but it would be worthwhile. See Brochure attached.

12. Pic Bois at Saint Martin en haut 69750

* This small firm consumes only WRC, no other wood, 5 m^3 per month.

* They specialize in the manufacture of engraved signs for all sorts of outdoor applications; on golf course, parks, shops, etc....

* The grade required is clear, vertical grain. They buy 4"x random width and resaw most of it in 5/4x4. The boards are edge glue and engraved by sandblasting. A natural clear finish is applied.

* See photos in Brochure attached.

APPENDIX III

LIST OF EUROPEAN CONTACTS MADE DURING THE STUDY

MARKET RESEARCH CONTACTS

UK

Peter Chinn
Larch Lap Ltd., Stourport

Jack Cruddace
Amdega Conservatories Ltd., Darlington

Mark Caulfield
Oak Leaf Conservatories Ltd., York

Mr. Adams
Woodwise (Scotland) Ltd., Grantown on Spey

Mr. Clark
Finlay Clark Garden Centres Ltd., Aberdeen

Michael Timmis
Forest Fencing Ltd., Stanford Bridge, Worcaster

Charles Norman
Timber Trade Federation, London

Tony Sparkes
FIRA, Stevenage

Paul Sharphouse
TRADA, High Wycombe

Michael Pyne/Paul Newman
COFI, London

Ian Brown
Simply Cedar, Hampton in Arden

Malcolm Margison
Metro Buildings Ltd., Barnsley

Mr. Smith
The Loft Shop, London

Brian Jones
Barlow Tyrle Ltd., Braintree

Peter Alexander
Marshalls Mono Ltd., Brighouse

Arthur Findlay
Eglantine Timber Products Ltd., Belfast

Germany

Herr Schulz
Brugmann & Sohn GmbH, Dortmund

Herr Kock
Ostermann & Scheiwe GmbH, Munster

Herr Jungbluth Inr.
August Jungbluth, Neuss

Grimmeissen & Co., Neresheim

Herr Brandt
O.A. Lughausen KG, Siegburg

Alistair Bryson
Benn Publication GmbH, Hoohst

Leo Lukge
COFI, Aachen

Holland

Nard Lutek
Foham Houtagenturen b.v., Utrecht

Mr. Bell
Abrahams Van Stolik, Rotterdam

Franz Veldhuizen
RET, Utrecht

Mr. Stennenburg
Trima, Amsterdam

France

Mr. Delacroix
Serlis S.A., Bergues

Mr. Gilet
Gilet Sports, Chateau Chinon, France

Mr. Gourdon
Gourdon, Chatenoy le Royal

Mr. Lafuge
AMCA, Paris

Mr. Dupont
Domi, Lille

Mr. Fort
Piveteau, Sainte Florence

Mr. Segaud
ICPEF, Parray Le Monial

Mr. Guillaume
GPF, Balbigny

Mr. Chuteignon
Pic Bois, St. Martin en Haut

Mr. Henry
Henry, St. Hilaire du Rosier

Mr. Cheuvil
BIP, Bordeaux

Mr. Sagour
Clobois, St. Georges des Gardes

Mr. Laforge
Jardeco, Moissat

Mr. Deevsclos
COFI, Rome

Mme Malherbe
COFI, Paris

Mr. Grandet
Artix, Breteuil sur Noye

Mr. Sebilleau
Fifas, Paris

Mr. Muller
Van Minden, Nice

Mr. Gourdol
Gourdol, Paris

Mr. Poux Berthe
Seaboard, Nantes

Mr. Samamo
Seaboard, Lille

Mr. Bouvier
Pinault, Sainte Malo

Mr. Huc
FNB, Paris

Mr. Ivanes
Afieb, Thomery

<u>Belgium</u>

Mr. Cras
Cras S.A., Waregen

Mr. Chevillotte
Saphibois, Goe

Mme Beuemans
Jardibois, Pecq

HOLM/DRAKE CONTACTS

UK

Mr. Peter Chinn
Larch-Lap Limited, Hartlebury, Worchester

Mr. Mark Caulfield
Oak Leaf, York

Mr. Jack Cruddace
Amdega Limited, Durham

Mr. Michael Paul
Enso (Softwoods) Limited, Orpington, Kent

Mr. David Gill
Regency Garden Buildings, Barnslay, South Yorks

Mr. George Roberts
Groom (Spalding) Ltd., Lincs

Mr. Chris Fraser
F. Peart & Co., Ltd., Hartlepool

Mr. Nigel Walton
E.C. Walton & Co. Ltd., Nottinghamshire

Mr. Paul Sharphouse
Timber Research & Development Association, Buckinghamshire

Mr. Charles C.G. Trevor
Canadian High Commission, London

Mr. Mark W. Jones
Taranaki Sawmills Ltd., Plymouth, NZ

Belgium

Mr. Jacques Cras
N.V. Houtinvoer J. Van Reeth & Co., N.V. Somex

Mr. Keith L. Aird
Canadian Embassy, Luxembourg

Germany

Mr. Matthias Kock
Ostermann & Scheiwe GmbH & Co., Munster

Mr. Klaus Radenbach
Radenbach & Spaing Holz-Zentrum GmbH, Menden

Mr. Reinhold Muller
August Jungbluth GmbH & Co. KG, Holzfachmarkt

France

Chantal Balas
Ambassade du Canada, Paris

Mr. Henry
Henry, St. Hilaire du Rosier

APPENDIX IV

NORTH AMERICAN USES FOR WESTERN RED CEDAR

Introduction

WRC is known as "the tree of life."

It was the traditional wood used by the West Coast Indians for canoes, buildings and clothing, as well as for their magnificent totems.

While light in weight, it is very resistant to decay. The fibre in trees, that have fallen in the forest decades ago, is still in the same prime condition as when the tree was alive.

Western red cedar is the timber of choice for outdoor applications.

Summary of Advantages

* **Visual Beauty**

  Western red cedar has a warm rich colour and an appealing texture. Clear and semi-transparent finishes work well with cedar and enhance the natural beauty of the wood. If left in its natural state, cedar will weather to a silver grey.

* **Durability**

  Western red cedar possesses its own natural preservatives that inhibit insect attack and decay. Western red cedar is listed in the American, Canadian and British versions of their wood property handbooks as "highly resistant" to decay. This is due to the presence of fungicidal substances within the wood. These extractives give cedar its colour, odour and durability. Cedar lumber can be further sawn on the job site without the risk of chemical contamination or the breaking of a pressure treated chemical seal.

* **Stability**

  Western red cedar exhibits exceptional dimensional stability - twice that of other softwoods. It resists twisting, shrinking, swelling and splitting. Fences remain stable, gates hang evenly and decks lay flat. This is a major advantage over the softwood species used in treated wood. Pressure treatment will not enhance the stability of timber. Cracking and checking will continue to occur and will break the treatment seal allowing decay to begin.

* **Versatility**

  Western red cedar can be effectively used in areas of high moisture and safely in settings such as pool decks and playgrounds where the wood is coming in direct contact with bare feet and small children. It can be easily finished to match or contrast with the colour and texture of its surroundings.

  Cedar comes in a variety of grades and sizes to fit the full range of end uses. Grades range from knot-free through knotty. Sizes can be as small as 1/2"x1" or as large as 12"x12" timbers with lengths up to 20' or in some cases even longer.

* **Workability**

  Western red cedar is light in weight, split resistant and free of pitch and resin. It machines easily and well and has good nail and screw holding abilities. It can accept a wide variety of paints and oil-based stains and gives a long lasting finish.

* **Availability**

  With over 2.5 million m^3 of western red cedar cut annually from British Columbia's sustained forests, there is and will continue to be a wide selection of cedar grades and sizes to meet buyers' needs.

Outdoor Uses in North America

Cedar is sold as rough or surfaced, seasoned (kiln dried) or unseasoned (green). The rough material is most often full sawn in the unseasoned form. In the case of surfaced lumber, the sizes usually conform to the North American lumber grading rules for green and dry lumber, for example: surfaced four sides unseasoned lumber.

Nominal Size	Actual Size
1x4	3/4 x 3-1/2"
1x6	3/4 x 5-1/2"
1x8	3/4 x 7-3/8"
2x4	1-9/16 x 3-9/16"
2x6	1-9/16 x 5-9/16"
2x8	1-9/16 x 7-3/8"
4x4	3-9/16 x 3-9/16"

Fences

Use primarily in unseasoned surfaced, rough or resawn tight knotted grades but also available in clears. Main sizes: 2" x 4",6",8" 10" boards, 2"x4" rails, 4"x4" posts. One popular style combines a lattice screen using clear 1"x2" on the top of a solid fence. In North America prefabricated fence panels are very popular for the do-it-yourself trade. Cedar fences are long lasting and maintain their appearance.

Decks

Primarily surfaced, unseasoned tight knotted grades are used. Main sizes: 1" x 3",4",6" and 2" x 2",6",3",4",6" decking with 4"x4" or 6"x6" posts and 2"x6" or wider stringers depending on load appearance and durability.

Patios

As per decks.

Garden Houses and Sheds

Use a full range of sizes and grades depending on style. Employing timber frame construction. Often use knotty or clear bevel sidings on the walls and shingles on the roof. Cedar enhances the garden setting and is long lasting.

Planters and Flower Pots

Usually employ the off-cuts from other programs as they are a good home for short lengths. The natural oils in the cedar will do an excellent job of resisting rot.

Lattices and Trellises

Use clear seasoned or unseasoned surfaced lathe in 1"x2" or alternate sizes as the main component. Cedar lattice will last for years.

Pergolas

Use a wide variety of grades and styles of unseasoned timber depending on style - such as 6"x6" posts and 2"x8" beams. Cedar beams and posts will resist cracking and maintain their fine appearance.

Gazebos

Uses as per pergolas.

Garden Furniture

There is a wide selection of styles of furniture on the market. Primarily of clear construction, they range from benches, chairs, lounge chairs to tables. Cedar furniture maintains its beauty in all weather.

Playground Equipment

Normally use unseasoned knotty cedar poles and posts and surfaced dimension lumber. Cedar is preferred as it in non-toxic and durable.

Greenhouses

Use surfaced clear kiln dried timber frame and knotty or clear bevel sidings. Where humidity and heat are prevalent, cedar remains stable and is long lasting.

Hot Tubs

Use clear, kiln dried, surfaced 1" finish for the exterior of the tubs and unseasoned decking materials for the surrounding deck. Cedar is ideal for moist, humid conditions.

Doors and Windows

Use kiln dried clear grades in 7/4", 1-7/8" and 2" thicknesses. Stability, appearance and ease of machining are good reasons for using cedar.

Balconies

Normally use profiled clear kiln dried timber. Often the rails are run from 2"x4" and the spindles from 2"x2". Durability and beauty are the main selling features.

Facia

Cedar sidings are complemented by using 2" x 8",10",12" resawn finish. Cedar facia provides durability and appearance.

Posts and Beams

This "West Coast" building style is very popular and allows for large open spans both within the house and for large view windows. Sizes of posts of 6"x6", 8"x8" and beams of 2"x8" and 10" or larger are the norm. They are normally left in the rough sawn form and graded for appearance to give a warm rustic look.