A survey of alternative species markets

I. D. Nicholas and S. A. Garner

Abstract

To help understand the current New Zealand market status of alternative species, (species other than mainstream New Zealand plantation species, pine and Douglas fir), a survey of processors, retailers, users, and architects was undertaken in 2005.

Survey forms were mailed to approximately 70 firms, based on information in the Good Wood Guide. The questionnaires requested information on species and quantities processed and comments on species/timber and business issues were sought. Approximately 37 returns were returned. Several businesses were also visited and interviews, based on the survey form, were conducted.

The majority of businesses providing information were sawmillers, followed by timber retailers and architects. The volume of alternative timbers handled by these groups was over 30,000 m³. Returns from the survey identified an alternative species market in New Zealand.

The major issue for those surveyed was the availability of alternative species, information on alternative species, choice of species and log/timber quality. Several respondents identified a growing demand for naturally durable timbers with current demand exceeding supply.

There was a general concern at the lack of resource of cypresses and eucalypts for future processing. There is also a call for improved information on resource and processed timber.

Introduction

As background material to the writing of the Farm Forestry suite of species handbooks (cypress, eucalypt, redwood and blackwood) supported by MAF’s Sustainable Farming Fund project, a survey of alternative species markets (species other than pine and Douglas fir) was undertaken. The aim of the survey was to provide farm foresters and other land managers with a greater understanding of the issues and requirements of those currently involved in processing or utilising alternative species.

Survey

In February, 2005 a questionnaire was sent to range of businesses based on the Good Wood Guide list of companies using alternative species. This did not include companies concentrating on pine, Douglas fir or native timbers. The companies selected included a range of businesses activities. The questionnaires were also supplemented by individual company interviews.

The questionnaire requested information on:

• Business activities
• Species handled
• Quantities
• Log grades

Comments were sought on the following issues/topics:

• Resource
• Price
• Quality
• Imports
• Exports
• Biosecurity
• Science

Volumes and Species

The volume of wood handled was dominated by Cupressus macrocarpa, followed by Lawson cypress, C. lusitanica and Eucalyptus saligna (Figure 2). The survey solicited information from people involved in handling 21,000 m³ of cypress timber and 7000 m³ of Eucalypt timber. This suggests that the processors of these genus

Figures and tables

Figure 1: Key business activities of respondents

<table>
<thead>
<tr>
<th>Business Activities</th>
<th>number</th>
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</thead>
<tbody>
<tr>
<td>Sawmill</td>
<td>10</td>
</tr>
<tr>
<td>Timber retailer</td>
<td>15</td>
</tr>
<tr>
<td>Architects</td>
<td>5</td>
</tr>
<tr>
<td>Log/timber quality</td>
<td>8</td>
</tr>
<tr>
<td>Imports</td>
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<td>2</td>
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<td>Science</td>
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</tr>
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</table>

Figures

Figure 2: Volumes and Species

Volumes and Species

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has been well captured. MAF figures of sawn production in 2004 was approximately 20,000 m$^3$ of cypress and 3,000 m$^3$ of Eucalypt timber sawn, so the survey should reflect those involved in the industry.

*Figure 2: Volume of timber handled by respondents*

**Key Issues**

The key issues identified by respondents was availability of alternative species, lack of information on alternative species, choices of alternative timbers and quality issues of alternative timbers. There was also a strong need identified for treatment free timber, and also a call for more use of native timbers (Figure 3).

*Figure 3: Major issues identified by respondents*

**Specific Comments**

Respondents also made specific comments on some of the issues they were concerned with. Several of these are repeated below:

- **Comments-Durability**
  - “More demand for treatment free timber, more demand for native alternatives”
  - “Big demand for naturally durable timber by my clients”
  - “Growing demand for non-toxic untreated timber-

- **Comments-Marketing**
  - “Need national marketing strategy”
  - “National branding strategy needed to improve marketing and sales of alternative species and improve prices”
  - “Better access to alternative species, no-one really telling architects what is available”
  - “Need to make it easy to access for contractors, Placemakers etc”
  - “Client driven demand to use alternative species”
  - “Architects would specify more alternative softwoods and hardwoods if NZ grown and available.”
  - “The exercise you are undertaking is long overdue”
  - “Portable sawmillers damaging market-price and quality”
  - “Need to ensure best use of prime hardwood sawlogs (ie not chipped)”
  - “We fully support NZ grown sustainable wood”
  - “Presently there are too many divergent industry groupings (all necessary to their own sector) but not working together”.
  - “Government should fund an industry generated overarching promoting body that supports/initiates efforts regarding exports, adding value, design importance, science”

- **Comments-resource**
  - “Need more planting of special exotics, especially red heart eucalypt species”
  - “Very concerned that the resource of minor species is becoming scarce”.
  - “Straight good quality macrocarpa and eucalypt flooring hard to get”.
  - “Macrocarpa and eucalypt becoming harder to source”
  - “Macrocarpa resource slowly disappearing”

- **Comments-Information**
  - “Need information on availability of timbers and suitability for different applications”
  - “Need good information to counter ignorance”
  - “Want more information on the location of alternative species, age etc”
  - “Product information would help customers move to alternatives”
• “More education of woods available and their uses would be really helpful”.
• “A publication similar to the Good Wood Guide or a NZS would be useful”

Comments-macrocarpa
• “Macrocarpa becoming more popular”
• “I think there's a lot of passion associated with users of cypress. People really enjoy/appreciate it”.
• “Popularity of macrocarpa and cost have skyrocketed”
• “Macrocarpa seems to be a shrinking resource with no active planting”
• “Finding it hard to get a good supply of sawable macrocarpa logs”
• “Limited macrocarpa availability, Need alternative good species”

Comments-eucalypts
• “Getting saligna in larger dimensions difficult”
• “Macrocarpa and eucalypt are certainly becoming harder to source”
• “Local sourced E. saligna better than imported material”
• “New Zealand saligna better quality than imported”
• “Quality eucalypt hard to get”
• “Confusion as to species so don't know how durable a stick of eucalypt might be”
• “I see a great opening for eucalyptus if we can master the drying”

Discussion
The survey was based on a targeted sample and so should not be considered a random sample reflecting the whole industry. Therefore it is by inference biased towards those with an interest in alternative timbers. However the capture of most of the MAF reported sawn timber volumes suggest that the majority of processors in the industry have been surveyed and therefore these results should reflect the industry viewpoint.

The survey shows that cypress timbers are clearly the third most important group of exotic timbers being processed in New Zealand. However they are a long way from the 4.2 million m$^3$ of pine and the 164,000 m$^3$ of Douglas fir (MAF, 2003). Several respondents commented on the lack of information on alternative timber species, despite there being Bulletins published on the properties and utilisation of exotic speciality timbers by Haslett (1986 a-f). There is also an excellent book by the late Norm Clifton that provides an informative overview of New Zealand grown timbers (Clifton 1990). BRANZ (2004) have also published an excellent reference book on selecting timbers for building, although it appears to rely heavily on Australian information and fails to reference key publications such as Bier (1999) and the Haslett 1986 series.

The issue of durability was reflected more strongly in the specific comments rather than captured off the specific questions. Several processors have made the comment that they could sell all the naturally durable timber they could process (M. Esson, pers comm. 2006).

Several respondents called for a more cohesive industry suggesting targeted publications and even a government overarching body. There was also a plea for more information on the resource and where timbers could be sourced.

Conclusion
There was a strong interest in alternative species from those surveyed, suggesting that a market exists for the alternative species. Those who participated in the survey processed over 30,000 m$^3$ of alternative species. Most of this was cypresses, macrocarpa, lusitanica and lawsons cypress, with the eucalypts dominating the hardwood markets.

There was a strong call for more information on alternative species from both processors and architects.

Several of those surveyed identified a growing demand for naturally durable timbers, with demand being greater than supply at the moment.

There was concern that the increasing demand for quality cypress and eucalypt was outstripping supply.

Overall the conclusion from the market survey of alternative species was that a New Zealand market exists for these timbers, but that there is a need for more information on species attributes and how to access either trees or timber. The survey shows that those involved in plantations of alternative species can have some confidence in future markets especially if alternative species marketing is improved.

Acknowledgements
The support of those who completed the questionnaire and returned it, and those who gave up their time to be interviewed is most appreciated.

The support of the New Zealand Farm Forestry Association via the MAF sustainable Farming Fund Project “Best Practices with Farm Forestry Timber Species” is also appreciated.

References
Haslett, A.N., 1986b: Properties and utilisation of exotic speciality timbers grown in New Zealand. Part 2:
Forestry books

New Zealand Forestry Companies in Britain and Europe during the Second World War 1939-1944.
Compiled by David Field, 2006

When Germany cut off traditional timber supply from Europe to Britain in 1939, the British Government sought assistance from Commonwealth countries to harvest and mill domestic forests in Britain. New Zealand foresters, bushmen and sawmillers responded quickly to a call from the NZ Government in January 1940 to form a Forestry Company for service in the Armed Services overseas. Some 600 replies were received, and men were selected and trained as the 11th Forestry Company. The main company of 163 men joined Railway Survey and Construction Companies on RMS Andes and sailed as the 2nd Echelon, 2 NZ Expeditionary Force, via Australia and South Africa, landing in Gourock Scotland on 19 June. German occupation prevented the foresters setting up their sawmills in France, and 11 Company set up logging and milling operations in Gloucestershire and Wiltshire instead. Subsequent reinforcements from New Zealand led to the creation of 14th and 15th Companies too.

The New Zealanders set up both circular and band saw mills, cutting oak, beech, larch and other species, with some of the timber being used in aircraft manufacture. A reconstituted 15 Company moved to North Africa and Italy in 1943 to work on timber supply for the occupying Allied forces and the domestic market. Production of timber by the New Zealand Companies was consistently higher than forestry companies from Canada, Australia and Britain.

Dave Field is the son of 11th Forestry Company’s Quartermaster Sergeant. He has extracted the history of the Forestry Companies from the official NZ War History record, added some reports from members of the companies, and included lists of company members plus some correspondence relevant to forest operations in Cirencester and the estate of the Earl Bathurst.

The 163 page, A5, book is available from David Field, 44 Dalbeth Road, RD2, Rotorua, New Zealand. (email dmfield@xtra.co.nz) for NZD5.00 plus postage.

Genetically Modified Forests: From Stone Age to Modern Technology
Rowland D. Burdon and William J. Libby, 2006

This book provides an engaging summary of tree breeding along with some thoughts about the future. It is written to be accessible to non tree breeders. From the back cover:

“The term biotechnology came into common usage in the 1980s. Broadly defined, it is anything that combines biology and technology, but it commonly refers to genetic manipulation of plants and animals. And it has a long history; the genetics of many tree species have been purposefully modified for more than 5,000 years. In Genetically Modified Forests, the authors trace the history of tree improvement, helping the reader to understand both human effect on tree genetics and the real and imagined concerns of genetic engineering.”


Pohutukawa: Ecology, Establishment, Growth and Management
David Bergin and Gordon Hosking, 2006

“80 pages of information about pohutukawa ecology and distribution, a practical guide to collecting, propagating and managing seedlings as well as a guide to managing existing stands for natural character, biodiversity, erosion and property views. Over 200 photographic images. A great practical resource for agencies, community members, industry, schools, universities and other learning institutes. A4 / full colour.”

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