



Editorial

The New Zealand brand

It takes a while, but inevitably the feeling that something is different still creeps up while reading the New Zealand Pine User Guide. At first one is drawn to believe that the difference is the gloss and presentation of the publication produced by the New Zealand Pine Remanufacturers' Association. A little more reading and it looks like the difference arises in the way that the technical information has been packaged to be readable to a range of technical and non-technical audiences.

Finally, all of these possibilities are discarded as the real source of the difference emerges. This is a document that is focused on telling the story of New Zealand's plantation forests and selling the production and use of plantation wood. What is interesting is that you will find *Pinus radiata* D. don mentioned only once by that name in the entire 53 page document, and even then it is only in passing. Radiata pine has become "New Zealand Pine".

At this point, wider changes start to be recognised. The New Zealand Pine Remanufacturers' Association used to be called the Radiata Pine Remanufacturers' Association. One of the important emerging international faces of the New Zealand plantation-based industry has taken the name of New Zealand Pine International (published by the same organisation which published the New Zealand Pine User Guide). While the domestic side of the forest industry appears to be content to continue along with "Radiata Pine", the export side of the forest industry (or at least part of it) seems to be following in the footsteps of other New Zealand producers and developing generic industry branding for offshore markets, like Wools of New Zealand and Cervena.

The process of promoting New Zealand Pine raises two interesting questions. The first is why the development and introduction of a 'brand' which is obviously intended to be generically 'New Zealand' has been so quiet. At this point the term 'lead' seems to be the most appropriate way of describing the process by which this has happened. Without a unitary industry voice, as with wool and venison, the quiet introduction of New Zealand Pine seems more like a subliminal process of trying to influence opinion. The second and more interesting question

though, is what lies behind the development of a New Zealand brand and how important is this in the long-term international success of selling radiata pine or "New Zealand Pine".

The development of the New Zealand Pine brand represents an important departure from earlier marketing activities which were largely directed at getting radiata pine accepted as part of the global softwood commodity grouping. The new approach builds on radiata pine from New Zealand being different from, rather than being the same as, other softwoods. Why make this type of change? One important factor is that a number of nations, such as Chile and Australia, are now or will soon be producing radiata pine for export. While New Zealand may have had a head start, all of these will eventually be providing wood into the same markets as New Zealand. A particular feature of the New Zealand Pine type of brand is that it facilitates the process of product differentiation in a market which will soon become more crowded with radiata pine. All of this points to some interesting scenarios in market differentiation for the New Zealand forest industry.

It has often been asked if the relationship between New Zealand and Australia in the radiata market is one of competitors or collaborators. While there are a host of research-related associations and collaboration, the two countries have basically pursued entirely different paths in ownership, silvicultural regimes, and market focus for their plantation resources. The New Zealand industry has been active in particular areas of plantation research, such as pruning regimes, and in the development of sawing, drying and grading technologies. The Australian industry on the other hand is still largely divided between the state forest services and corporate forests. The corporate forests are in turn dominated by pulp and paper companies which have focused on pulp-wood generating regimes.

While there are many areas of overlap in terms of radiata use in Australia and New Zealand, the presence of substantial pruned volumes gives New Zealand a different market focus for a large part of its plantation resource. Combined with processing knowledge, New Zealand producers have the potential for a much

higher level of product specification and quality that a brand name will enhance than their Australian counterparts. This in turn provides better market opportunities, and brand recognition, and suggests a separate path in the market.

New Zealand already has a major export market presence, which Australia does not have. This leads one to wonder if Australian producers will only follow the easy route of trying to piggyback New Zealand efforts when their turn comes to develop export markets. The key issue here is that when Australia does produce for the export market, will the export market's view be that Australian output is part of a homogeneous 'radiata' commodity, or will it see New Zealand products as being largely separable. The obvious direction of branding is to ensure that the market differentiates New Zealand and Australian products. Again, in this vein the New Zealand Pine brand may be considered to be an important move.

New Zealand producers have worked hard to develop sawn timber markets in the US and the US now ranks as a close third after Japan in terms of value of sawn timber exports (\$74 million). With Chile applying to become part of the North America Free Trade Agreement (NAFTA), it will have unrestricted access to the US and Canadian markets in a way that New Zealand does not. This is not particularly a tariff issue since most forest products enter the US and Canada duty free or with low tariffs. The problem is more in the context of Chilean exports of radiata pine building on the New Zealand presence and having access to a generally larger presence and the growth of distribution channels and linkages. There should be some concern that without premium brand name recognition this market will be at risk with potentially lower-priced (and lower-quality) Chilean products becoming more prevalent. Again, the New Zealand Pine brand could be an important factor in maintaining US markets.

While this is not an exhaustive list of potential effects of branding, it is sufficient to show that the development of the New Zealand Pine brand can be an important factor in developing and maintaining export markets for New Zealand producers. What is required now though, is to take the process from being a subliminal

one to something which is far more widespread and understood in the industry. All parts of the production process will be by default part of the quality product that lies

behind that brand name, yet at this stage, only the secondary manufacturing end of the forest products industry is involved. Let's bring the "New Zealand Pine" story

down to the forest and make sure that everyone is part of the same process.

Hugh Bigsby

The importance of wood quality

Piers Maclaren

Which is more profitable, a diamond mine or a coal mine? Diamonds are undoubtedly worth more per tonne. So the answer must definitely be diamonds, right? Those who bemoan the poor product issuing from modern radiata pine regimes seem to follow this simplistic philosophy. They appear to argue that price per cubic metre, at mill-door, should be the paramount determinant of regime choice.

There's an alternative viewpoint: namely that wood quality is important, very important, but it is only one component of profitability. The other factors – recoverable volume, cost, timing and risk – are equally important, and debate is trivialised by emphasising one of these at the expense of the others.

Let's compare two radiata pine regimes, A and B, and look at each of the five factors in turn.

Regime A:

Fertile farm site, plant 800 s/ha, prune to 6 m, thin to 200 s/ha at age five, fell at age 23

Regime B:

Traditional forest site, plant 1600 s/ha, prune to 6 m, thin at ages five and eight down to 400 s/ha, fell at age 35

Wood quality

In all respects, Regime B produces wood of superior quality. Although the trees will have approximately the same diameter at breast height, the trees in Regime B are much taller, with less taper. Branches are much smaller and there is less likely to be wind damage. External characteristics such as these are regularly analysed with MARVL analysis, and the differences are no surprise to most foresters. Internal characteristics are also superior in Regime B. The proportion of corewood is lower, with its associated problems of spiral grain, checking, etc. Whole-tree wood density, and therefore strength and hardness, is greater for the older trees.

None of this means much to the grower unless it is reflected in stumpage prices. Processors can rage and curse about inferior wood, but growers are unlikely to listen unless quality is expressed as premiums or penalties. Qual-

ity gradients, such as currently exist, are extremely crude. Two consignments of pruned export logs, similar in all other respects except small-end diameter, will often fetch the same price. The domestic market separates unpruned logs into 'S' (branches up to 6 or 7 cm) and 'L' (larger branches but less than 14 cm), but modern silvicultural knowledge is sufficiently advanced to design regimes that produce branch sizes to much tighter specifications. Moderately swept logs are often priced the same as logs that are as straight as gun-barrels. Canterbury sawmillers sometimes pay higher prices for low-density logs than Northland buyers for high-density logs.

Wood volume

The recoverable volume in Regime B is significantly greater than Regime A, for two reasons. Firstly, the stocking is higher, and secondly the stand is older. MAI does not peak for radiata pine until at least age 35. Whereas Regime B yields approximately 24, Regime A produces less than 17 m³/ha/yr.

When making this comparison, it is essential to take account of the relative rotation ages. Douglas-fir may yield a stupendous 935 m³/ha of recoverable volume at age 60, whereas radiata pine may produce only 577 at age 30. It is embarrassing to have to point out to some commentators that two harvests of radiata pine can be obtained in 60 years, giving an equivalent production of 1154 m³/ha. The MAI approach provides a fair comparison, and once again Regime B is superior to Regime A.

Costs

A diamond mine may be less profitable than a coal mine for the simple reason that extraction costs may be higher. Regime B is likely to have higher growing costs. The land may be cheaper, but there are twice as many tree seedlings to purchase, to plant, and to release. Pruning costs are almost twice as high. Thinning costs are also much higher. Harvesting and transport costs are lower per m³, but higher on a per-hectare basis.

These cost differences may not seem particularly large relative to the huge dif-

ferences in revenue that result from the superior quantity and quality of wood in Regime B. The important point to note, however, is that the growing costs are *up front*. This leads us to the fourth factor, which is arguably the most misunderstood feature of commercial forestry.

Timing

The timing of cost and revenue streams is critical to the profitability of forestry. Is there any other investment, any other human activity, where no benefit is expected to be obtained for two to three decades after the initial cost? When new power stations, undersea tunnels, or lunar landings are conceived, the initial payback usually occurs in less than a decade. Economists and accountants whose experience is based on short-term investments need to rethink their ideas when they enter the forestry profession. For example, if an accountant is assessing the profitability of wheat production, choice of interest rate may be a minor consideration. The cost of land preparation, seed, fertiliser, etc., has to be carried for only one year. Changes in interest rate of a few per cent may make little difference.

The enormous power of compounding, at high rates of interest taken over many years, can be gauged from the following examples:

- A dollar invested at 5% today is worth \$3.07 in year 23, but \$5.52 in year 35;
- A dollar invested at 10% today is worth \$8.95 in year 23, but \$28.10 in year 35;
- A dollar invested at 15% today is worth \$24.89 in year 23, but \$133.18 in year 35.

In recent years, high real interest rates have been obtainable from New Zealand lending agencies. Forestry investors are not necessarily committed to trees; they want to make money they best way they can. If Regime A is to compete with alternative investments, it must yield a high revenue at the harvest age of 23, but Regime B must yield a revenue several times higher again.

Some commentators argue that when "normality" is reached, timing becomes unimportant. Once a forest with an even