

Research, Science and Technology's GRIF programme, said the project took into account a number of factors such as environmental and RMA considerations as well as the more rigid commercial aspects supported by pure research. He said the aim of the programme was to encourage industry to undertake research which would extend the company's capabilities. In turn, postgraduate students would be exposed to the realities of the commercial environment. Approximately \$2.5 million is awarded by FRST each year for postgraduate Research in Industry Fellowships.

LETTERS

An urgent need for reappraisal of forest prescriptions

Sir,

It is 40 years ago when discussions were centred on the problems of spiral grain and low-density wood. They were strong points against using *P. radiata* as a building timber.

These arguments died when the trees being milled increased in age and a great proportion of the cut was directed into crates, boxes etc. Where New Zealand *P. radiata* has earned its great reputation is in the high-quality market with timber cut from trees over 30 years of age. It is good to see such people as Charlie Kerr and Wayne Coffey (N.Z. Forest Industries, April 1997) expressing concern that these problems are arising again.

Recent trends towards short rotations for *P. radiata*, led by economists and other enthusiasts, give the same value to all clear wood, irrespective of age. It is in the young clear wood where the problem is showing up. If the value of young wood was lowered then the "short rotations" would lose their attraction. If we continue to sell this wood as high-quality then our reputation will suffer, prices will drop and the overall value of all forests will fall drastically. Today's forest economists persist in viewing a forest on a one-crop basis and not as a continuum. It may be all right for small forests but large forests should be looked at as sustained units.

The 1981 New Zealand Forestry Conference report states: "If the production of high-quality saw logs and the maximum volume of clear wood is the essential ingredient of our industry strategy, stands should not be felled early. If it is considered necessary to spread individual development, felling can be delayed with

subsequent gains in volume and particularly and more importantly, gains in value."

New Zealand missed a golden opportunity to hold rotations at 35 years when the major utilisation plans for the 1925-30 plantings got under way and when large areas were still uncommitted. Attempts to establish sustained management were thwarted by pressure for increased utilisation. Some owners made strenuous efforts to balance this by major new planting in the 1970s and 1980s. However, the temptation to cash up the standing growing stock was too great and the accounting systems such that the reduction in the value of the standing forest was not reflected in the balance sheets. This situation was too tempting and successive managements were only too eager to jump on the bandwagon and to use the "short rotation philosophies" as justification.

Forest managers fight a losing battle when it comes to holding up rotation age. Everything is against them. If markets are good the financial managers want to sell more to take advantage of the opportunity and if the market is bad they want to sell more to keep up the cash flow. It is not easy for forest managers to convince financial managers of the need for long-term management objectives, as I found out from trying to do just that for over 30 years.

There needs to be more dirt forestry practised along with the computer modelling. Companies using "discounted cash flow methodologies" for their forest values should bear in mind B.J. Allison's [1992] summation, "some measures lie wholly in the future, such as discount rates, **inaccessible of verification**, subject to the interaction of many competing and cooperating interests and **scarcely determinable even in hindsight.**" [The emphasis with bold type is mine.]

There is an urgent need for a reappraisal of the present forest prescriptions to ensure that we can compete in the quality timber market and not again become the supplier of low-grade timber.

J.E. Henry

Allison, B.J. (1992). In Whyte, A.G.D. (Ed), Proceedings of IUFRO 53.04.01 Meeting. Pp 39-44.

Biodiversity issues

Sir,

In Ian Spellerberg's review of the FRI Bulletin, Environmental Effects of Planted Forests (May 1997), he raises a

number of significant points. Unfortunately the obvious biases in the Bulletin are intended to, as Spellerberg points out, "... advocate that afforestation of New Zealand pasture by pine trees was good ..." It is a disappointment that the large amount of useful information in it is tainted by these biases and selectivity. A broad multi-sector review team would have helped prevent this.

However, I would like to pick up on the biodiversity issues that are raised and the Biodiversity chapter itself, which largely misses the point, and is short on guidance for foresters on biodiversity issues for plantations.

The biodiversity chapter gives a detailed account of records and research of indigenous biodiversity in New Zealand plantations. The short section on aquatic life in the chapter was concise and to the point. But the basic apologist summary of the chapter was that pine trees have a greater incidence of indigenous biodiversity than pasture, and therefore plantations are OK. To me this is not a particularly glowing report card for plantations when the central theme here is biodiversity protection as a component of sustainable land use.

The Convention on Biological Diversity (CBD) is the primary international instrument that deals with biodiversity, with New Zealand a signatory, yet it doesn't get a mention in the bulletin. The CBD lays out binding commitments for the protection, conservation and sustainable use of biodiversity. The author, Piers Maclaren, also confusedly claims the Principles for Commercial Plantation Forest Management as being an international convention (p.128).

A big deal is made of incidental indigenous plants and animals in plantations, but no information is given on the level of this biodiversity after harvest. Emphasising the number of individuals or species found in plantations rather than what type of species, and on comparable sites, is misleading. The photos at the beginning of the chapter (higher altitude native beech forest to illustrate low natural biodiversity and pine on what looks like a lowland site to illustrate potential biodiversity), sets the biased foundation of the chapter. Most plantations are planted on former biodiverse lowland forest ecosystems. The photos and such comparisons are irrelevant unless they are on comparable sites, as an objective scientist should know.

Maclaren implies that more numbers and species is better. However, protecting biodiversity is not about maximising numbers. It is about protecting and restoring the indigenous gene pool, the variety and abundance of species, and the ecosystems which they are part of. Thus protecting the