

EDITORIAL COMMENT

Co-operative Forestry Companies Act

Currently 50 000 ha of forest has been planted by small growers since the introduction of Government incentives during the 1960s. An additional 50 000 ha has been approved for planting under the Forestry Encouragement Grants Scheme. The establishment and subsequent management of the crop has largely been carried out by independent contractors under the direction of consultants and Forest Service extension officers. By the turn of the century a sizable volume of (hopefully) quality wood will be due for marketing from a number of generally small (average size 25 ha) woodlots.

The marketing of this produce, in competition with the State and large private owners, has concerned the Government, individual owners, the Farm Forestry Association and Federated Farmers. The Co-operative Forestry Companies Act was a response to that concern. Under the Act co-operatives (with some structural analogy to co-operative dairy companies) may be formed. Estimates for the appropriate number of co-operatives to cover New Zealand range from 4 to 12; each will be granted exclusive rights to operate within a geographically defined area. It is expected that the prime concern of each will be with marketing the produce grown by their members and providing management (including protection) services. Marketing will, with time, almost inevitably involve a degree of processing. Membership of a co-operative will be voluntary; but those who join may be required to accept a levy system of finance and to commit their wood resource to the Association in advance—a commitment which will subsequently remain with the land title for the duration of the crop.

Clearly the legislation will have a considerable impact on forestry in New Zealand. With a total area of small woodlots either planted or approved for forestry grants nearly equal in size to Kaingaroa, the marketing impact of a small number of co-operatives controlling this will be very high. If the conservative figure of 5 co-operatives for New Zealand is accepted, each unit may be marketing $\frac{1}{4}$ to $\frac{1}{2}$ million cubic metres of roundwood per annum by early next century—compared with the present figure of between 1 and 2 million cubic metres per annum for N.Z. Forest Products and Tasman. While it is anticipated that much of the produce of co-operatives will be exported, it is likely nonetheless that volumes of wood of this order will have a considerable im-

pact on the level of domestic stumpages—particularly prior to the period when co-operatives develop their own processing plants. It is also possible that the existence of co-operatives will lead to increased planting under Forestry Encouragement Grants, and to improved forest management.

It can be expected that co-operatives will offer employment opportunities for foresters, but that as each co-operative builds up its own staff the services presently provided by consultants to small forest owners will reduce. Consultants able to provide management services to co-operatives will clearly benefit.

Little opposition is expected to the development of the co-operatives—except possibly from the larger private companies. For New Zealand generally it can only be beneficial to improve forest management, provide increased rural employment and have a further type of marketing force, distinct from the State and the large private companies. To be successful in world marketing, co-operation will be necessary between all radiata pine marketing forces in New Zealand, and ultimately those overseas also.

2,4,5-T — Health, Vineyards and Legislation

In a recent editorial (Volume 23, No. 1) attention was drawn to forestry problems arising from conditional-use zoning of forestry in the Marlborough County District Scheme. Subsequently a further issue has arisen which again is not conducive to increasing confidence in the future of exotic forestry in the Marlborough County.

A recently proposed Variation to the Marlborough County District Scheme would now give predominant-use zoning to land on the Wairau Plain south of the Wairau River for *vineyards*. The concern of this to foresters lies in the fact that No. 14 of the Agricultural Chemical Regulations 1968 forbids the application of any herbicide mixed with oil to any land within 8 km of a vineyard if applied from an aircraft (or 1.6 km if applied from the ground) at any time of year. This regulation effectively could prevent the application of 2,4,5-T ester, water and oil used for the successful forestry establishment of much of the gorse-infected reverting hill country adjacent to the Wairau Plain. No other herbicide is known which can approach 2,4,5-T in oil for cost-effectiveness in controlling gorse; and with a total area of 280 000 ha of land which is unsuited to horticulture at stake, the Nelson section of our Institute has lodged an objection to the proposed Variation.

Such a happening emphasises forestry's dependence on 2,4,5-T as a chemical: currently some 150 000 litres are used

annually to spray about 17 000 ha of forest at establishment, a situation which will stop if the use of 2,4,5-T is banned in New Zealand. If this does not occur following its banning in the U.S.A., it could happen when the Pesticides Bill currently before Parliament becomes law. The Bill, which repeals and replaces the Agricultural Chemicals Act, will replace the present Agricultural Chemicals Board with a Pesticides Board to control the registration and thus the use of pesticides. While the Bill itself does not place the use of 2,4,5-T in jeopardy, it seems certain that submissions to the Select Committee studying it will press for more public participation in decisions taken on registration of chemicals such as 2,4,5-T. If accepted and drafted into the Act, such public participation could result in the deregistration of 2,4,5-T on health grounds, despite recent official acceptance of its safety by the Department of Health.

While the public press for participation in pesticide decision-making it is ironic that forestry, which next to agriculture is the largest user of pesticides in the country, will not (unless the Bill is amended) be represented on the Pesticides Board. Representation on the proposed 12 person Board is predominantly agricultural and horticultural, but also includes for example a representative from departments representing Health and the Environment, as well as each of the National Beekeepers Association of New Zealand (Inc.) and the Wine Institute of New Zealand (Inc.). Our Institute has presented a submission on the Bill seeking forestry representation on the Board. Such representation is seen to be vital to sane decision-making on the future use of chemicals, in both exotic and indigenous forestry.

With regard to 2,4,5-T, it behoves forestry, while we still have its use, to make every attempt to find substitutes. At present, work at the Forest Research Institute indicates the likelihood that alternative chemicals *can* be utilised in revised management systems, which will be comparable in efficiency and economy to 2,4,5-T for controlling gorse *regrowth*. There is however no substitute in sight for controlling "old man" gorse.

An Unusual Restriction to Forest Practice

Marlborough, while rapidly gaining a reputation as a difficult place in which to practise exotic forestry, still has some surprises for the unwary. Recently a Mr R. Lambert decided to plant some of the property on which he lives at Pelorus Sound in radiata pine and *Eucalyptus delegatensis*. He established some 25 ha in each of the years 1972 to 1974 under forestry encouragement grants, and planned further planting.

His land is steep, rising to some 400 m a.s.l., and is highly erodable. Accepting the views of both the Marlborough Catchment and Regional Water Board and the Ministry of Works that roading in such country is undesirable, he planned, at the end of the rotation, to harvest his timber by using a gravity hauler system to lower logs either on to a barge or directly into the water. His planting proposals were accepted by the District Planning Authority.

In the meantime, however, the Ministry of Agriculture and Fisheries, with other Government departments and local bodies, carried out an assessment of areas in the Sounds suitable for marine farming, and designated these—including the sea front of Mr Lambert's property—"Marine Farming Zones". Mr Lambert's objection that a marine farm would make it impossible to extract timber by water and thus to afforest such steep land at all, was not upheld; and Marine Farming licences were duly issued. At the present stage a bitter Mr Lambert, who fails to see why marine farming cannot take place underneath protection forest, has appealed to the Supreme Court. In the meantime the Ministry of Agriculture and Fisheries zoning *may* be upset by the Marlborough County Council which is seeking to establish legally that *it* has planning authority over the waters as well as the land in the Sounds.

The future is uncertain, but if Mr Lambert ever does get to continue his planting operations it will be after considerable delay and expense—and it will have added one more chapter to the already considerable saga of exotic forest development in Marlborough.

After Pinus radiata—What?

Two statements from a paper in this issue by I. L. Baumgart, Commissioner for the Environment and a past Chairman of the Production Forestry Research Advisory Committee, should strike a chord with all foresters:

"If (exotic forestry) is to become an element of the environment into which communities will integrate and on which they will depend—then it must be soundly based and with its future as fully secured as possible."

"We would all be happier to become more dependent on exotic forestry if we knew that there were back-up alternatives to *P. radiata* available, with methods of management researched and understood. . . . I would hope that this breadth would have been achieved by the turn of the century."

Their author is *not* (in contrast to many people) advocating that foresters *plant* alternative species to *P. radiata*. He

simply asks that we have such species *fully ready*, if and when they are required. In the event of a disease or insect pest which rendered radiata pine uneconomic, we might choose not to replace the export component of our forests. There would still, however, be a need for domestic self-sufficiency in wood.

It is hard to visualise the replacement of radiata pine with any other single species. Corsican and ponderosa pine can still be grown in parts of New Zealand, as can Douglas fir. Several eucalypt species would clearly play a part, and we have already made progress in sorting out the establishment, genetics and utilisation of these. Recent work at the Forest Research Institute, too, has overcome the establishment problems of coast redwood, and this species could help fill a part of the vacuum. Other species whose natural range takes them close to that of *P. radiata* are macrocarpa, grand fir, western hemlock and Sitka spruce. *All* have practical problems in New Zealand, some quite severe, but they also have potentially very high growth rates. We have made virtually no effort, however, to determine whether suitable genotypes of these species could be established, grown and utilised commercially in New Zealand. A recent symposium in Auckland has examined still other prospects.

We are not, at present, within sight of the hope expressed by I. L. Baumgart that we be able (if necessary) to substitute fully for *P. radiata*. We need to be, and that imposes a considerable requirement for further research and development.