

EDITORIAL NOTES

The future of native timbers

On 28 June, A. P. Thomson, Director-General of Forests, announced to a meeting of the Local Section of the N.Z.I.F., in Rotorua, plans for the future management of State Forest land on the Mamaku plateau, at the same time reiterating long-term Government policy for native forests: reduction of the cut, multiple use, and the application of management practices where feasible. He drew attention to increasing demands for cut-over land for conversion, for supplies of indigenous pulpwood, for recreation in these forests, for revegetation of eroding land, for planting of native species, for more forest parks and forest sanctuaries, and for more native forest to come under public ownership. At the same time he noted a "dramatic decrease . . . in the demand for indigenous sawn timber, and this is perhaps the most important and significant of all". While the cut of native timbers has been declining in private forest for some time, the more recent slackening of demand will undoubtedly lead to a reduction of the cut from State forests, and will allow the forest authority to plan, with more confidence, for long-term reserves, for more areas for recreation and landscape preservation, and for more positive management of the remaining native forests. This is as it should be, for all these are in line with public needs. The New Zealand primaevae forest has withstood devastating attack for several hundred years. The "fires of Tane" eventually cleared much of the vast forests of Southland and Otago before the pakeha came. In the North Island, following the introduction of the potato and maize, early explorers testified to the great extent of forest clearing, and the frequent uncontrolled fires eating into the remaining stands. The extent of this devastation was greatly eclipsed by early European-land-clearing fires, not only on farmable lowlands, but on unstable steep country in Canterbury, and on the unconsolidated mudstones of Poverty Bay and East Cape, where the mossy boulders of the placid forest streams have now been replaced by wide braided muddy river beds and where the catchments appear impossible to stabilize.

Much attention has been diverted to the positive attempts of the Forest Service to rehabilitate country suffering from past mistakes, but it must be conceded that efforts to manage native forests have, until very recently, been at best half-hearted. The most important aspect of conservation of native timbers, pursued with vigour in the 1920s and 1930s, and over the last decade, has been the establishment of exotic plantations and the successful efforts to promote the use of pine for every possible purpose. Henry Horrocks, of Whakatane Board Mills, first gave a lead in this field, when he produced fibreboard from pine thinnings taken from Matakana Island in 1939. Later, the efforts of A. R. Entrican, Director of Forestry, not only to use the vast timber resource established in the great depression, but also to process it by the most modern and efficient means, were equalled in the industrial

sphere by Sir David Henry, the first Managing Director of N.Z. Forest Products Ltd. As a result, in the North Island pine timber is produced by large integrated industries or by modern and efficient sawmills, to a standard of quality not even attempted by the indigenous sawmilling industry which, during this promotional phase, remained a sort of Cinderella. With a few notable exceptions, mills remained small, under-capitalized and often inefficient. Timber was poorly sawn, untreated, stacked and sold green, and generally mishandled. Yard hygiene was usually deplorable. Control of dimensions and of quality was such as to deter any customer who could find alternative supplies. On a seller's market following the war anything could be, and was, sold. Marketing skills were not needed and were often not available in small family businesses. Forest Service policy was, generally, to keep these sawmills going in order that there should be no shortage of building timber, and stumpages tended to be low under price control to allow for relatively cheap housing. Little was done to improve practices in bush or mill, and there was much waste, especially of hardwoods which were considered too troublesome to deal with, while the best heart rimu was often cut into junk sizes for use as relatively short-lived bridge decking and the like. It was considered that the indigenous industry would ultimately wither away from lack of supplies, and that the main use of this source of often superb wood was rough-sawn building timber. This continued in many places while the industry based on pine diversified into pulp, paper, soft- and hard-board, particle- and block-board and plywood with, finally, the chipping and sale of residues.

In 1950 the Forest Service eventually, on the basis of work by J. T. Holloway, introduced management into small areas of silver beech forest in Southland. Then, in 1954, attempts were started to manage terrace rimu forests in Westland, culminating in selection management in south Westland from 1962. By far the greater area of native forest continued to be simply exploited (by all owners) while few efforts were made to study or improve conversion and treatment of the timbers. It was in vain that J. S. Reid, of the Utilization Division of the Forest Service, tried to introduce grading of beech as a special-purpose timber; the sawmillers would have none of this and insisted that it be graded as building timber. In Westland, however, following the report of the West Coast Committee of Inquiry, there was some improvement in the structure of the industry, initiated by the Forest Service, who granted long-term cutting rights only on the condition that a certain amount of processing should be undertaken on the Coast. This resulted in the amalgamation of several sawmilling companies, and some improvement in practices.

While the native forest resources were being relegated to lowly uses, foresters deplored the quality of the untended radiata pine stands planted in the great depression and began to pour money into pruning, often with little appreciation of the concomitant need to thin in order to obtain sufficient growth in girth to make this pruning operation worth while. Because it was still considered unnecessary to treat native

timbers with preservative (a consideration which may well have prolonged the agony of a decaying industry, since it allowed such timber to be sold at relatively low prices) home builders began to specify treated pine and to shun weatherboards in favour of more permanent sheathing. The most recent substitution, rapidly gaining in favour, is the use of (pine) particle board for flooring. The indigenous industry has, in fact, been in trouble for ten years or more, but has made little effort to hoist itself out of traditional outmoded attitudes.

Perhaps, from the conservation viewpoint, this is as well, for many fine examples of podocarp forest, which previously might have been exploited, will now be preserved for all time. At the same time, to continue to produce rough-sawn timber from the stands still to be cut is simply a council of despair. To be sure there will always be a proportion of lower grades, but podocarps were examined for paper-making qualities forty years ago, with satisfactory results, and no doubt sales of chips would not be hard to arrange. The larger proportion of the wood, properly converted and manufactured, could, and probably should, produce much of our requirements for veneers, mouldings, high-grade finish, furniture and fittings and specialty uses. But this desirable state of affairs will not come about when a large part of production is in the form of indifferently sawn, poorly seasoned, warped, sap-stained and unattractively presented material. The indigenous sawmilling industry needs a drastic re-thinking and redevelopment if it is not to fade away with scarcely a whimper. It may be that the State, having invested a great deal of money in promotion of the use of pine should now, even though woefully late, turn its attention to the proper use of the wide range of native timbers which have so far received such cavalier attention.

Forest Research Institute public relations and the application of research findings

In the Annual Report of the Director of Research for the year ended 31 December 1971, no less than 196 individual items of research, under 24 major heads, are reported upon, in the fields of Production Forestry, Protection Forestry, Forest Pathology and Forest Products. Ninety scientists are listed. This report, like its predecessors, gives an admirable bird's-eye view of recent research results. But this is only one among a large number of methods of communication adopted by the Forest Research Institute. Indeed, the array of methods now used is impressive. At the more humdrum end of the spectrum is the *Newsletter*, published three or four times a year, in which are described research results that are considered to be of general interest to a wide public. A more recent departure, sent to forest managers and foresters throughout the country, are synopses of Branch Reports; these should allow busy men to pick out those results which are of interest in their particular sphere quickly and easily. For more popular consumption are two excellent films for general distribution both here and overseas. One deals with

tree breeding and the other with *Dothistroma pini* needle blight. It is understood that further films are planned. In 1969, and again in 1972, the Institute staged excellent open days at which were displayed many current research projects and results in graphic form. These created much local interest, and a reasonable clientele from other parts of New Zealand, and from sister research organizations. Some of the exhibits went on tour for the benefit of those unable to attend.

The usual method of dissemination of research results is by way of scientific papers. Over the past four years, FRI officers have published some 237 papers and research leaflets; of these, about 25% have been published overseas, but most are available as N.Z. Forest Service reprints. They are all listed in FRI Annual Reports. Thirty-two papers have been published in the *N.Z. Journal of Forestry* since the beginning of 1968 while in May 1972 the *Journal of Forestry Science* was launched by FRI. Possibly of more importance to the man in the sticks have been the numerous Branch Reports promulgated. This form of "instant reportage" circumvents the process of official publication, but most of these reports are widely disseminated and there is no reason why any interested person should not find access to them. Since 1 January 1968 some 463 Branch Reports have been produced — 207 from the Production Forestry Branch, 165 from Forest Products, 70 from the Protection Forestry Branch and 21 dealing with pathology and entomology: no mean volume of information!

More direct contact with forest managers is through courses at the F.T.C., at which scientists are often required to instruct and enlighten. But perhaps even more important are the FRI Symposia, of which there have been 14 since 1961, at which are aired the state of our (national) knowledge on particular subjects. No. 11 (Land Preparation) attracted 91 participants; No. 12 (Pruning and Thinning Practice) had 125 and No. 13 (Mechanization of Silviculture) was attended by over 200. Apart from this, FRI staff visit the provinces fairly frequently and maintain a copious correspondence with foresters throughout the country.

FRI thus maintains a wide diversity of communication methods sufficient, one would think, for all tastes, yet how many forest officers read its publications, and how many are simply unaware of their existence? For on the whole the impact of research findings on forestry practice is small. True, theories on intensive silviculture have in some places been taken up with alacrity, and there have been some tentative approaches to using grazing animals in forests. These are fairly spectacular novelties and may have attracted attention on that ground alone. Most research findings are of a more pedestrian character and are perhaps ignored for that very reason. And yet, conjoined, they could effect some valuable improvements in forestry practice. For example, radiata pine seedlings raised at the FRI nursery each year are in general far superior in quality to those raised elsewhere, yet all the techniques necessary to produce such stocks have been widely disseminated. If equally good stocks were available elsewhere, initial stocking could be less, there would be very little blank-

ing necessary, and the need to release would be substantially reduced. Moreover, the evenness of stocking would doubtless be improved with concomitant improvement in ease of tending and the quality and value of the crop. Each of these is a small gain, but together they appear well worth while.

There are many similar examples, and it is pleasing to observe that the newly-appointed Director of Research is not only well aware of this lack of response but is also determined to seek remedies. For it appears that the information supplied by FRI is not percolating down to the men doing the work and to their immediate supervisors. These are all busy men, trained on the job, and probably not avid readers of arid scientific prose. Even the symposia, probably the most effective means of communication, are usually attended not by forest managers but by foresters and technical staff. It is thus possible that FRI goes in for the wrong sort of printed communication. All the solemn progress from "Background", through "Objectives", "Methods", "Results" and so on to "Discussion", laced liberally with "significants" and nice algebraic terms and mathematical equations, cuts no ice with the man with muddy boots and horny hands.

FRI clearly needs to identify with considerable care the particular "public" to which reports of research findings should be directed — a public which may be more at home with lurid paperbacks, punchy news magazines, or even *Playboy*; certainly the public it wishes to persuade to put its findings into practice. Seeing could be much more potent than reading, and the widespread use of demonstrations could be one major method of getting the message across. Perhaps also FRI should take a hard look at advertising methods, and produce colourful pamphlets with two minutes of reading matter and several glossy technicolor photographs as the most useful method of seeing that the necessary information goes to the right people and persuades them to act. For it can be truly said that research results not put into practice are of use neither to man nor beast.

A new "Te Kura Ngahere"

In 1925 was formed the Forestry Club of the Canterbury College School of Forestry. The inaugural meeting of the club was attended by the staff of the School — C. E. Foweraker and F. E. Hutchinson — and "Messrs. Barker, Clark, Hamilton, Kingan, Roche and Skipworth, students". A written constitution was deemed unnecessary, "and all formality has been dispensed with as far as possible".

The Club issued its first journal, *Te Kura Ngahere*, in December 1925. The editor was anonymous, as were the authors of several portions of the contents. The first editorial stated: "It is intended in future issues to extend the range of technical articles and to publish researches conducted by the School. The Club is yet small, it is true; the School has just completed its first full working year; yet it is felt that many forestry enthusiasts in New Zealand and abroad will find topics of interest in the pages of this modest journal."

The contents are listed under ten heads, seven of which were largely to do with the School. There were three articles: one by C. E. Foweraker entitled "The rain forests of Westland". The other two — "An identification scheme for common woods of New Zealand" and "Forestry as a profession" — are unsigned, although the author of the latter may not be hard to guess. In it are listed the essential attributes of the forester. These are: first, he must possess a genuine love of his work; secondly, he must have honesty of purpose; third, the right mentality (native intelligence, mental alertness and the ability to grasp essential principles and apply them); fourth, physical fitness; fifth, unselfishness; and sixth, the possession of a sense of humour. The rewards of the forester are the pleasures of work well done and of comradeship. Worth reading, this article. No mention is made of narrow professional expertise — or the need for a thorough grounding in computer techniques! Here is described an amateur in the old good meaning of the word; a man in the round. "Would he desire that his profession ask less of him than his utmost capacity?" "Can he ask a greater reward than the personal surety of work well done?" These are good questions, which (it is suspected) their author could honestly answer in the affirmative.

An inaugural member of the Club, now in active retirement, writes once again in this issue of the *Journal*, still doubtless staunchly maintaining that a forester "is a man who has made a long study of the forest and of the needs of men in regard to it, and who spends his life in securing . . . that greatest good of the greatest number in the long run from the forest".

The early issues of *Te Kura Ngahere* were devoted, in good part, to the management of our native forests. Depression and war deflected foresters from this field into the more glamorous pursuit of high production and the intriguing possibilities of radiata pine, but now, nearly forty years after the Canterbury School of Forestry "temporarily" closed its doors, foresters in increasing numbers are turning their attention to the management of native forests and the many ways in which they can serve the needs of men. This issue of the *Journal* testifies to this awakened interest.

In 1934 the Club was disbanded, and the journal was taken over by the N.Z. Institute of Foresters who, in 1937 discarded the original title. It is pleasing to note, therefore, that the students of the resumed School of Forestry at Canterbury University have found a need for a corporate identity and have formed an association with a journal, appropriately titled *Te Kura Ngahere*. It is hoped, indeed expected, that "many forestry enthusiasts in New Zealand and abroad will find topics of interest in the pages of this modest journal" and we wish it every success and a long and fruitful life. Perhaps, too, students will look at that original number and learn how their profession in New Zealand grew from a small group of men imbued with integrity, energy, purpose and enthusiasm; attributes no less important today — and tomorrow.