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EDITORIAL NOTES

New Zealand Southern Beech Timbers

It may be accepted that hard beech, *Nothofagus truncata*, will gradually become the principal beech timber available from north Westland areas whose dedication to permanent forest is not likely to be threatened by farm development. Of the three principal beech species of that district and contiguous areas hard beech yields the least favoured timber, refractory alike in sawing, seasoning, and machining qualities. Although much may be done by improved techniques, the timber cannot be expected to meet the more critical uses for which *N. fusca* and *N. menziesii* are valued. There is therefore real danger in blind agreement on release for farming of forest land carrying *N. fusca* in particular; such release is too often coloured by the lumping together of the several beeches irrespective of their potential timber-use values.

Can we afford lightly to brush aside the suggestion, made in all seriousness, that beech management is a waste of time because exotic softwoods can meet timber needs with far greater ease? Apart altogether from the fact that the growth of beech forests in the north Westland-Buller district is far more assured than that of any alternative timber-producing species, the qualities which the beech timbers have in their strength, toughness, and even texture for wearing, finishing, turning, and slicing, together with heartwood durability in some, are difficult to match in any other species.

Improved markets are a pressing need at the moment to secure full utilisation of the existing virgin forests. No doubt a full utilisation of the beech forests will come in time, but this will be too late to

allow encouraging new productive growth in those areas which have been partially worked and become swamped with weeds.

A much wider understanding of the properties and potential uses of the different beech timbers is clearly a prerequisite to the appropriate management of the forests in north Westland; such an understanding will have an important bearing on the conservation of indigenous resources in general, on the selection of the most suitable beech forests for intensive management, and on the silvicultural techniques which may be used.

Pulp and Paper Production in New Zealand

Throughout the history of New Zealand, no industry based on a raw product has shown such a phenomenal expansion as the pulp, paper, and related industry has in the past few years. The quantities produced in 1955 were: mechanical pulp 30,000 tons, chemical pulp 43,000 tons, and newsprint nil. Last year these figures had risen to 103,000 tons, 131,000 tons, and 75,000 tons respectively. Apart from filling a substantial portion of the internal needs, this expansion added something over 5½ million pounds in value to overseas exchange earnings. This is still a modest amount; but the rate of expansion has not slowed down and double this production is a distinct possibility before long. Radiata pine is the foundation, and forests, the utilisation of which a few years ago appeared to pose a problem, are now apparently all too small—such is the rapacity of industry.

Expansion beyond the immediate future is not possible because of the lack of suitable forests and the need to cater for the ever expanding demand for timber. Ultimate expansion, if there is to be an expansion, must be based upon much accelerated planting. Will the State back up the good start made? If so, will it lead to another radiata planting boom with all the mistakes made in the past? Will industry dictate the policy? These and many other questions are of concern to foresters.

The Noxious Animals Conference 1958

Since the early days of settlement in New Zealand some sporting bodies have had a large voice in the importation and subsequent management of wild animals. And the same sporting bodies have always been to the fore in expressing their views on the complex situation created by many of these introduced animal species increasing to the pest stage. Public opinion was undoubtedly influenced by many seemingly authoritative pronouncements on the subject by sporting bodies, one result being that the very real problem of wild animals out of control has been consistently underestimated. This was reflected in a marked reluctance on the part of governments to get down to earth, to study the situation objectively, or to institute adequate control measures.

From the time that responsibility for those animals labelled "noxious" was transferred to the Forest Service, some deerstalkers

have conducted a harrying campaign. This reached a crescendo following an announcement that compound 1080 would be used in the experimental control of fallow deer in the Caples Valley at the head of Lake Wakatipu. Deliberately misleading statements were a feature of this campaign, which was remarkably successful in confusing the public and throwing the whole question of noxious animals and their control into the melting pot.

The Minister of Forests, the Hon. E. T. Tirikatene, did the country a good service when he retrieved the situation by calling a meeting of all interested parties. Prepared statements were read and circulated, and a day was spent discussing the main matters at issue. For the first time a summary was given of all the evidence accumulated by the National Forest Survey and the Forest and Range Survey of the Forest Service on the effects of browsing animals on protective vegetation. Under the expert chairmanship of the Minister all had a fair hearing, and it was noteworthy that no loose statement went unchallenged.

It speaks volumes for the common sense of New Zealanders that the results of the meeting were decisive. Ample evidence supported the belief that there is a problem, and one of great magnitude and complexity. Whatever part sport may ultimately play, it has little or no effect in controlling animals now. Government hunting has dealt with some animals only. It has made a real contribution towards clearing animal pests from pastoral country but not from the mountain forests so vital to the welfare of the lowlands. It is apparent that impetus must be given to control measures, but above all there is need for greatly expanded investigations. Compound 1080 was recognised to be a legitimate tool for use in control of noxious animals; this was admitted even by some to whom its use was abhorrent.

Whatever the deerstalkers originally hoped to gain from their campaign, there was no doubt they received a rude shock from the meeting. It would be a matter for concern should any sporting body, by virtue of its interest in a few animal species, be permitted to dictate Government policy in respect to animal pests.

Forestry on the West Coast

In 1954 the Institute held its annual meeting in Hokitika, papers and discussions centering round the forest problems of the West Coast. This year the venue was Reefton—the northern part of the West Coast region—and the main theme was management of the extensive beech forests occurring in that district.

The Hon. E. T. Tirikatene, Minister of Forests, opened the meeting, and in doing so dwelt at some length on West Coast forest problems, which he had seen at first hand during the previous week. He probably set a precedent by being the first Minister to visit the Coast exclusively to examine for himself the forest situation there. In the course of his tour, the Minister saw the extensive virgin forest resources—approxi-

mately half the New Zealand total—that occupy so much of the lowland country between Ross and Jacksons Bay. He also saw the devastation caused by opossums and deer in the protection forests of the mountainous Hokitika River catchment, and the widespread rush and sphagnum bogs induced by clear felling and burning cut-over rimu stands on the lowland terraces.

That the Minister grasped the import of what he saw was made abundantly clear, not only from his address to the Institute, but also from the numerous press statements he issued during his visit. Nobody was left in any doubt about his appreciation of the vital role played by the protection forests in safeguarding the whole regional economy, and of the urgent need to deal with the present over-population of animal pests. He was emphatic that some method of logging should be found whereby the remaining terrace rimu stands can be perpetuated, and not, as has happened over thousands of acres, turned into bog impossible of management either as farm or forest. And the Minister had the courage to tell the sawmilling industry this when he met the West Coast Sawmillers' Association at Greymouth.

Management of Westland's rimu forests has long been the subject of emphasis and solicitude in the annual reports of the forest authority. Progress towards this essential objective has been delayed by many factors; one could cite wars, slumps, post-war booms, pressure groups, and so on in this category. And possibly a cogent reason is the almost explosive success of exotic afforestation, causing foresters to be pre-occupied in coping with new-grown resources almost embarrassing in their plenitude. But meantime, the rimu forests have been disappearing rapidly. The institution of forest management in what is left is now a matter of the utmost urgency if rimu is to have any permanent place in our future timber economy. Even with successful management the sustained yield of rimu is likely to be a pitifully small proportion of our total wood requirements.

New Zealand foresters have been accused of being defeatist in their attitude to indigenous forestry. This may be true in part but by and large is far from the case. It could be recalled that as far back as thirty years ago, in the days of the Canterbury School of Forestry, there were those who were itching to do something practical about the rimu forests of the West Coast. Research, in the accepted sense, is not required. The facts stare one in the face: if terrace forest soils are bared a bog is formed; selective logging will retain the forest environment.

Logging is the first step in converting virgin rimu forest from a static to a productive condition. But it must be done in a way that will allow the forest to retain command of the site. Back in the days when hauling equipment was slower and less powerful, and when markets were highly selective, the smaller trees were left standing. Unfortunately the once-universal practice of burning the workings has

annihilated most of these partly logged areas; but there are still examples for all to see of rimu stands which have yielded one timber crop and are in process of growing another. What happened in the past can surely be duplicated by design—and that is the challenge foresters and the West Coast timber industry are facing today. Conversion to suitable logging methods will pose difficulties, and the Minister has justly said that the industry will not suffer. Some form of assistance to meet changing conditions will undoubtedly be necessary, though the cost of this is likely to be trifling in comparison with the incalculable forest values it will perpetuate.

At a time when deteriorating economic conditions on the West Coast have prompted Government to initiate an inquiry into the development possibilities of the region, it is reassuring to know that the Minister of Forests has up-to-date and first-hand knowledge of its forest problems. Let us hope his interest will bear fruit.

The Minister's address, abbreviated, follows.

The Minister of Forests' Opening Address to the 1959 Annual Meeting of the New Zealand Institute of Foresters, Reefton

"These annual meetings of the fraternity of foresters give you the opportunity to discuss and to put in order your Institute's business matters. They do something more: they give you the opportunity to improve your forest practice by presenting papers and discussing technical matters and seeing forest practices in the field.

"I understand your particular subject for consideration at this meeting is the management of native forests. I believe this to be about the most important thing you could be considering. The introduction of management on a greatly increased scale is long overdue. In the past few days I have seen for myself in Westland, by flying down to Jacksons Bay and by travelling on roads and looking into forests, what the lack of management has done and what the introduction of it could do. Only control of logging will allow foresters to produce perpetual yields of timber on these permanent forest soils of Westland. A large part of the country has been laid waste, and, as far as I am concerned, management cannot be introduced into the remaining forests too soon. I could never hold myself responsible for allowing the devastation I have seen to continue one moment longer than can be helped. I believe foresters have the answers now and it is only a matter of providing the right machinery and money to change devastation to forest which will yield perpetual supplies of timber. South Westland could become the cradle of indigenous-forest management instead of the grave we have in north Westland.

"It may be a case of State logging so that loggers work under close direction. It is at least a case for large-scale experimental logging, using methods and equipment to work out a system that will give both the needed supply of logs economically and leave a manageable

forest behind. In the North Island the Forest Service is logging two indigenous forests to great advantage, because permanent roads are formed and planting is being done following the logging. In this way permanent forests are being built up. Logging is the tool of forest management and the forester must have control of it.

"The trade will not be affected because the same amount of logs will be made available. I listened to them in Greymouth on Thursday night with great interest. Their main complaint was the uncertainty of their future and they asked to know the contents of Forest Working Plans for the West Coast. I am going to ask for working plans to be prepared. I want a general plan giving the overall position for Westland and particularly plans for more limited regions where logging will take place in the immediate future. I will be talking to the Director of Forests about these matters. This request from the sawmillers seemed to me to be reasonable because in a sale such as that from the Kaingaroa Forest the buyer of the logs had available to him the working plan of the forest.

"I am fully alive now to the important part commercial native forests must play in the economy of Westland. This has also constantly been brought home to me by all the applications I receive for cutting rights. I have also seen in my travels the economic importance of the limited farm lands along the valleys. These are continually threatened by the swift-flowing rivers, which remind me of the part played by the protection forests we see all along the Southern Alps in safeguarding these limited farm lands. These forests are still intact but they are being damaged, in places badly, by noxious animals. I come from the eastern side of the Alps, where the protection forests have been mutilated almost beyond recognition. They have been burned and are infested with both domestic and wild animals. Much work will be needed to rehabilitate them. The Forest Service must pay particular attention to these protection forests. At first, the control of noxious animals is required, but much more than this will be needed in the future.

"To achieve these things I have outlined to you, some legislation is required to reorganise the Forest Service and also to control activities in protection forests. I have in mind legislation giving due emphasis and authority to protection-forest work, to the proper management of all forests, including especially indigenous, and to much-needed research. And I would like to see milling activities of the Forest Service placed in their proper perspective.

"With these thoughts I wish the meeting every success and hope you will find time to discuss some of the things I have spoken to you about this morning."

*Seventh British Commonwealth Forestry Conference 1957 Summary
Report*

The section of this report dealing with New Zealand forestry is of considerable local interest. It covers matters of policy, silviculture, utilisation, forest protection, research, and education and training.

In the field of policy the report commends the speed of establishment and the extent of the exotic forests, but expresses misgivings about the general handling of the indigenous forests. The rapid rate of cutting, the devastated condition of cut-over forests, the large forest areas "locked up in scenic reserves or national parks", and the increasing damage to protection forests by noxious animals all come in for adverse comment. The forest administration itself has every reason to be highly self-critical on these matters. The large extent of scenic reserves and national parks, for example, can be attributed partly, if not mainly, to the general belief that native forest exploitation invariably means forest destruction. And all too often this is literally true. The creation of the Urewera National Park is a case in point. This was a desperate move to exclude logging from that forest; but it also excluded foresters—probably for all time—from large areas of genuine production forest. It is, moreover, an unsuitable national park. But until foresters have shown their ability to practise multiple-use forestry—to eat their cake and have it—these reservations of large areas for a single and restrictive purpose are likely to continue.

Under silviculture the report comments on the need to widen the range of species used in exotic forestry, the danger that might be inferred from the widespread mortality noted in many pine plantations, the urgent need for thinnings, and the desirability of performing this operation even though it does not immediately recoup its cost. These matters have long been recognised as vital to exotic forestry, and substantial progress has been made over the past two decades. Although radiata pine is still overwhelmingly predominant in privately owned forests, all State forests have a considerable diversity of species, and current policy aims at extending the range even further. The problem of high mortality, particularly in radiata pine stands, is most evident on soils derived from ash showers. The report is timely in its warning against acceptance of this as a normal occurrence; apart from the ill-thrift such mortality portends, it involves the loss of much wood in trees which die before salvage is practicable. Thinning is now accepted as necessary practice in State forests—and in the larger private forests. This highlights a point mentioned in the policy section of the report: anomalies in exotic-forest stumpages. Control of sawn-timber prices is partly to blame for these anomalies. There is no doubt the position must be rectified before forest practices, notably thinning, can be placed on a sound footing, and before there can be the large expansion of farm forestry that is hoped for. No primary production can thrive on inadequate returns.

Dealing with utilisation, the report comments on the excess of potential sustained yield in exotic forests over the capacity of established wood-processing plants. However, in the two years since the Conference, increased plant capacity has largely bridged this gap, at least in central North Island forests. It would even be safe to predict an excess of processing capacity in the foreseeable future, and thoughts are already being turned to an accelerated increase in exotic-forest establishment in anticipation of this expanding demand for raw material. Foresters will applaud the shaft aimed at price control when the report states "In the field of sawn timber, the conservation of indigenous species and the greater utilisation of exotic species would be effectively improved by the free operation of the law of supply and demand, bearing in mind the relative prices of these timbers".

In the section on forest protection the report makes favourable mention of advances in rural fire protection secured over the past thirty years. It expresses concern at "the very real danger of disease and insect attacks, notably in untended exotic forests", and urges intensive study of forest damage and of the ecology of animal pests as a first step in improved noxious-animal control. New Zealand achievements in research, education, and training prompt laudatory comment, with the suggestion that current effort should be sustained and even increased in all these fields.

In a country unfamiliar to the great majority of its members, a conference of this nature is at a marked disadvantage in reporting on local forestry matters. Members have but a fleeting glimpse of the forests, and little time for the study and discussion of problems. Moreover, there is the guest's natural reluctance to over-emphasise what appear to be shortcomings in the host country. For these reasons the report may sound to those with current knowledge of New Zealand forestry like preaching to the converted. But it should be remembered that a major function of these reports is to inform the Government of the host country of the Conference of conclusions on local forest practice; and in its report, the Seventh British Commonwealth Forestry Conference has undoubtedly pinpointed our main forestry strengths and weaknesses. The Conference is a highly respected forum, representing the united experience of men engaged on the practical work of forestry in every part of the Commonwealth. Its findings amount to an authoritative review of contemporary New Zealand forestry, which could well be re-read periodically by everyone concerned with the management of land and forests.