PRESIDENTIAL REVIEW

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The technical portion of an Institute Annual Meeting offers the President a happy combination of circumstances. In the first place he has the privilege of starting the ball rolling; secondly, he can say practically anything he likes; and finally, he has a captive audience to say it to.

In my few remarks this afternoon I hope to cover briefly the main points that have been of significance in forestry during the past twelve months; and also to touch on the subject which is the theme of this meeting: indigenous-forest management.

The past year hasn't yielded much of a sensational nature. We've seen the exotic-forest industries going from strength to strength, with a greater proportion of their total output finding its way into highly processed products such as pulp, paper, composite board, plywood and so on. Small low-grade logs are used to a large extent in the manufacture of some of these products; this is raw material which the exotic forests can yield in superabundance and to their undoubted silvicultural advantage. The demand for small round timber, created by these new industries, has thus sparked off the thinning of long-rotation species to an extent not thought possible a few years ago.

There appears to be some difficulty in finding markets for the whole of the sawn-timber output coming from the exotic forests, and the Australian demand in particular does not seem to have expanded in accordance with earlier forecasts. However, it can be expected that a virile industry—which may have been the victim of over-much prosperity in its formative years—will eventually meet and beat challenges of this kind.

The export of radiata pine logs to Japan appears to have shaken down to an economic proposition, with some promise of expansion. The forester's natural qualms about this type of export, and the possibility of its damaging the prospects for longer-term, more profitable trade, were summed up editorially in last year's Journal. But with an overplus of radiata likely to persist for the remainder of the century, and with the Australian demand for sawn timber proving unexpectedly coy, it would be difficult to do other than welcome this Japanese demand. Our timber-inspection service for both imports and exports is commendably thorough; and it seems unlikely that any great harm will come to the good name of New Zealand radiata pine through this comparatively minor item.

The Summary Report of the Seventh British Commonwealth Forestry Conference was published during the year. The section dealing with New Zealand forestry mentions three matters which are of

particular interest to this meeting. These are the rate at which the indigenous forests are being cut, the poor condition of many forests brought about by past exploitation, and the need for careful attention to protection forest problems.

These three items pinpoint the major deficiencies of our indigenous forestry, and examples of the conditions which prompted the comments of the Conference can be seen nowhere more clearly than on the West Coast. But like many other shortcomings, they are more easily detected than corrected. The timber-supply position does give some opportunity for grappling with the thorny and many-sided problem of overcutting in the indigenous forests, as our requirements are now being more fully met than at any period over the last twenty years. Ideally, there should be no further need for destructive exploitation on any portion of the permanent forest estate, but in terms of practicability such a policy will obviously take some time to implement.

The question of derelict and unproductive forest land stripped of its timber is one to which our Past President drew attention last year at Napier. It is certainly not too early for foresters to be taking a keen interest in this land; the policy of abandoning cut-over indigenous forest and planting up naturally treeless areas has limitations too obvious for comment. Even if economic circumstances don’t force us to use a great proportion of this cut-over land in our time, we should certainly be investigating practicable methods of getting the largest possible area back into production. Foresters coming after us will have to deal with much land that is idle today; and as we helped to create this problem of cut-over land it’s only fair we should also help to solve it. It is also a fact that some of the “built in” difficulties met with in regenerating, or perhaps more accurately reclaiming, cut-over indigenous forest are beginning to appear in the older exotic forests. So it could well be that lessons learnt in handling our derelict cut-over land will point out the shape of things to come in exotic forestry.

The condition of the protection forests poses a series of problems unrivalled for complexity by any other aspect of forestry—or indeed of land use in this country. Apart from the “stop gap” action against noxious animals now being carried out to ameliorate the condition of critical areas, research both basic and applied would appear to be the only line of attack promising durable results. The Institute can probably do little more in this matter than it has already done: reiterating the facts and the demands of the position, and bringing these to the attention of the authorities and the public at every opportunity.

Let us hope that by the next time the Commonwealth forum visits New Zealand our efforts will have so improved the indigenous forest picture that its 1957 criticisms will no longer be valid.

During the past year much publicity was aroused over the question of noxious animals and their impact on the New Zealand way of life. This culminated in a meeting, convened by the Minister of Forests, whereat all organisations having any interest in noxious animals and
allied wildlife matters were invited to express their views. It is a curious manifestation of our times that despite an official policy which aims uncompromisingly—perhaps unrealistically—at total extermination, and about which, be it said to the credit of our legislators, there has never been the slightest political cleavage, no latter-day subject is more fruitful of controversy than noxious animals. Their great sporting and economic potential, their utter harmlessness, or even benefit, to protection forest and mountain vegetation, the barbarity of poisoning and its dire implications for avian and human life, the futility and ineptitude of official control measures—these and similar matters have been dilated upon in word, print, and colour slide by an articulate and sophisticated minority composed almost wholly of organised deerstalkers. Objective evidence, based on investigation by trained ecologists, and rarely confirming the asseverations of the sporting interests, has naturally been slower in filtering out to the public. By providing a venue for assembling and disseminating the known facts, and, no less important, for debunking many widely publicised fallacies, the Minister of Forests has assisted materially in giving the taxpayer at large an opportunity to view New Zealand's noxious-animals problem in its correct perspective.

When we come to consider the overall question of indigenous-forest management we run into some rather striking anomalies. We know that exotic forestry in New Zealand has been a success story, probably without parallel in any other part of the world. And we know that indigenous forestry, as far as it has gone, has been extremely complex, and is scarcely yet assured of a permanent place in our land use. It could also be said that no plant or animal indigenous to New Zealand has ever been developed into a permanent resource of economic significance. Danthonia, whitebait, and New Zealand flax do come to mind as indigenes which have been economically important in the past; but the average New Zealander would need convincing that whitebait are not rapidly going the way of many other natural resources, or that danthonia and Phormium tenax will ever again rival the acreage of ryegrass and clover. With the possible exception of a few not very important pasture plants, our whole agricultural economy is based on introduced plants and animals.

In forestry the position is much the same. We can grow exotics in volume and at speeds not possible elsewhere; and if we take a lesson from agriculture in the fields of plant breeding, crop treatment, and site maintenance, there is no reason to believe that exotic forestry cannot go on indefinitely. But we cannot point to a single industry based on indigenous-wood supplies that can be regarded as permanent in the true sense of the term.

If we try the theory that there is some obscure aberrancy in Southern Hemisphere biology we don't get very far. Australia is managing at least some of her native timber species, and eucalypts have been and are still being acclimatised in many foreign lands. Nor does the opossum or nasella tussock appear likely to become a relict
species, although they apparently had to migrate from one part of the Southern Hemisphere to another to find optimum conditions. For purely New Zealand examples disproving the theory that indigenous flora and fauna cannot be perpetuated, we have all seen farmers waging an unequal tussle with bracken, manuka, and wineberry on cleared forest land in high-rainfall districts; and we know that the pukeko, if not actually a pest, has established itself as a bit of a nuisance in many localities.

It's easy to understand why we haven't been able to manage any of the indigenous land animals; apart from birds there are virtually none. But the vegetation would appear to be in a different category altogether. It is floristically diverse, ranges from alpine to subtropical, and includes a variety of forest types yielding high-quality timbers of almost unlimited adaptability. And as a bulwark against flooding and erosion, the primeval vegetation had few equals anywhere in the world. One can imagine that a forester seeing any type of indigenous forest as it was a century ago would have thought he had the ideal subject for management. Its only apparent defect would have been the one we have induced, by herculean effort and at great cost, in the exotic-forest estate: a serious imbalance of age classes.

There's little need to re-traverse the difficulties that beset indigenous-forest management. Many of these difficulties are obvious; others are obscure, but two are perhaps worthy of mention here. First, because there are marked differences, we have tended to "compartmentalise" our forestry. Exotic forestry is one thing, indigenous another, and never the twain shall meet. An exotic forest, with its defined boundaries, compartments, firebreaks, and so on is readily seen and understood. It is even accepted by the public as a legitimate occupier of the land, especially if they see, as many have, the planting, harvesting, and regeneration of a second tree crop on the same area within a period of thirty years. But it's hard to convince the same public that a large tract of native bush is no less a forest, capable of producing permanent wood supplies. I think that as foresters we are ourselves to blame if the public harbour illusions about different categories of forestry. And I suggest we ourselves can improve the position if we try to consider New Zealand forestry "all of a piece" and eliminate this exotic-indigenous fault line from our thinking.

The other difficulty that puts indigenous forestry behind scratch has its origin in our fluid and still evolving land-use policy. Most of our farming is based on forest land cleared of its indigenous plant cover, the clearing process having gone on from sea level to the altitudinal limits of vegetation. There is still the widely held belief, and in high places too, that indigenous forest is merely pasture in reserve, that the sooner we clear the land for farming the better for our ultimate prosperity, and that exotics will take care of all our wood requirements in any case.

These considerations lead on to some perfectly logical queries. If indigenous forestry is so difficult and the main timber species so un-
cooperative, why attempt permanent management? Why not liquidate the indigenous forests of commercial value while the demand for their timbers is good, and before they are pushed completely off the market by exotics? Wouldn’t this policy speed up the development of farm land, which will always be New Zealand’s main economic strength?

Foresters are continually being asked these questions by the timber interests, by agriculturists, by those who have some concern with rural economy, and by many others who have none. And it could be added that those foresters directly concerned with indigenous forestry have asked themselves and their colleagues exactly the same questions many times, and in deadly seriousness.

However, there are answers, and it seems to me they stand out more clearly on the West Coast than in any other part of New Zealand. For example, have we anything in sight to take the place of the protection forests, which constitute by far the greatest forest area in this region? We know the protection forests and the mountain vegetation above them are suffering cumulative damage from a diabolical combination of animal pests, and we have been assured that the present deterioration, if allowed to continue, will ultimately bring disaster to the whole region. Remedial measures so far undertaken have been directed solely at reducing animal populations—a policy which tacitly accepts the fact that the indigenous vegetation of the uplands cannot be replaced by any alternative cover of equal efficiency, and still able to withstand the impact of browsing animals. Thus forest protection for the protection forests is in itself a colossal problem of indigenous management, and one for which a solution is both essential and urgent.

So far as the lowland forests of the West Coast are concerned, the management picture is not wholly black. We have extensive stands of red and hard beech, and although these may not be quite so amenable to management as Douglas fir is on pumice country, they can undoubtedly be brought to a state of permanent productivity. It is becoming increasingly clear, however, that much of the lower terrace land which produces the finest stands of red beech will be sought for agriculture in the future. This touches a problem which was highlighted by our Past President in his address to the Institute at Napier last year—the difficulty of acquiring or holding land of any agricultural potential, no matter how important such land may be to the practice of economic forestry in a particular locality. In this region, any attempt to hold agricultural land for forestry would be not, as Poole described it, a rearguard action, but a very forlorn hope. With almost half the total area under forest reservation, and with only about ten per cent of the land farmable, the forester has no option but to release any land capable of being developed for agriculture. The position does mean that hard beech, which can tolerate less fertile soils, may ultimately become a more important species than red.

The forester’s major challenge on the West Coast, and the one that will undoubtedly be the hardest to meet, is the management of rimu forests. These forests are still very much an enigma. Why should a
species so widespread, so tolerant of a wide range of soils and climates, so resistant to natural calamities, be so readily destroyed by the intervention of man? And destruction in the case of the rimu forests extends not only to the loss of the growing stock; it is also often accompanied, especially on the terrace lands of the West Coast, by marked deterioration of the site.

But there are plenty of fortuitous examples to be seen locally which disprove the long-held belief that rimu will not regenerate. It does regenerate freely in certain conditions. Moreover, many of our remaining rimu forests are on soils impossible for agriculture, and equally impossible for any of the commercially important exotics so far established in New Zealand. Taking the good with the bad in these circumstances, surely there is both justification and hope for the management of rimu. A high-quality timber species, content to occupy sites too poor for either ryegrass or radiata is undoubtedly something a forester should cherish, and he should be prepared to tolerate its foibles.

It may appear out of place to mention exotics when speaking of indigenous-forest management; but it is a fact that both native and alien tree species must be intimately linked if the West Coast is to have any future as a major forest region. Because past logging has resulted in what a former President termed "the desolation of half a province", and because of slow growth and the possibility of a low sustained yield in what remains, forestry here, dependent solely on indigenous species, would be a weak prop indeed. Fortunately there are extensive areas where the soils are capable of supporting some of the better-quality exotics. Admittedly the successful establishment of exotics is not the straightforward matter it is in most other parts of New Zealand; we encounter more than our share of adversity in the form of animal pests, insects, fungi, and aggressive weed species. But the extent to which exotics can be used to eke out the rimu forests will largely determine whether or not the indigenous-forest estate, now heavily depleted, can be brought under management. At this late stage time is not on our side. Mention of this matter may perhaps illustrate some of my earlier remarks. We cannot, on the West Coast at least, think in terms of "indigenous" or "exotic" forestry; our thinking and our practice here must necessarily embrace both, not only in the same forest but very often on the same hauler stand.

Finally I would like to tell you how much local foresters appreciate this visit from a considerable proportion of the Institute membership. In the next two days we hope to discuss our problem with you in detail, and to show you some of our forests. For our part we hope you can throw some light on many points that are still obscure, but which must be resolved before permanent forest management can be considered a reality in this part of the country. We think this objective is desirable to ensure that New Zealand will have a balanced forest economy; we think it is absolutely essential if the West Coast region is to have any permanent economy at all.