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## EDITORIAL NOTES

### *Balanced Land-Use*

In his message to the Annual Meeting of the Institute at Napier last May, the President drew attention to some prevalent misconceptions regarding forestry and its place in the New Zealand scene. There is, for instance, the widely held belief that all land capable of supporting any form of agricultural or pastoral activity is wasted unless it is so used. And a large proportion of New Zealanders, including many concerned with the management of land, have little appreciation of the essential and permanent place forests occupy in the overall economy. These attitudes have undoubtedly delayed the emergence of a soundly based land utilisation policy, which would promote maximum, diversified, and above all permanent production from the country's soil resources.

The New Zealand outlook towards forests is understandable. Animal products, grown on all soil types, and over an altitudinal range of some 5,000 feet have been the economic life-blood of this country since the early days of settlement. Destruction of forest cover was often the first step in establishing pasture; thus, in the minds of many, and perhaps even as a national philosophy, forests came to be regarded more as a hindrance to progress than an asset. And until very recent times there appeared to be virtually no limit to the quantity of wool, meat and dairy produce we could sell overseas at lucrative rates. Small wonder that New Zealand repeated the mistakes of many older countries, and pushed her agricultural frontiers far beyond what can now be recognised as prudent limits.

A hundred years' occupation by grazing and browsing animals, coupled with indiscriminate use of fire have destroyed countless acres of protection forest and of scrub, tussock-grassland and fell-field vegetation above the natural timber line. Aggraded river-beds, and

more frequent and catastrophic floods now poise a threat to the very existence of farms and cities alike. And ever mounting charges for river control engineering works levy tribute on all sections of the community. Who would maintain that this position is not the direct result of destroying the delicately balanced vegetation indigenous to our steep easily eroded mountain lands? Many communities, once well endowed with forest resources, now pay dearly for transporting all their essential wood requirements from other districts. Is the comparatively small area needed to provide local timber supplies giving a better return under agriculture? In immediate monetary benefit to the individual owners: perhaps yes; but were it productive forest its total economic contribution to the body politic would certainly be greater. There are now signs that many of our traditional markets, long secure and reliable, have reached saturation point. Is it not wise to diversify our restricted land economy, and grow the maximum range of products that can yield an exportable—and exchange-earning—surplus? There can be no doubt on the evidence available today that some aspects of our land use policy are in urgent need of review.

Forest was the natural vegetation on much of our problem land that is now eroding badly and acting as a gathering ground for floods. Many of the rivers draining these lands are flanked in their lower reaches by costly flood-protection works, demanding continuous expenditure for extension and repair. No forester will query the need for this down-river protection. But no forester will agree that it is more than a never-to-be-finished palliative, until it is matched by equal effort and expenditure aimed at restoring forest cover on the uplands where the problem originates. The plain fact is that if this country is to hold its agricultural pre-eminence, a large proportion of its mountain lands must be maintained in protection forests solely to ensure permanent occupancy of the lowlands. And to scotch another popular misconception, it is unlikely that these protection forests can be managed to give any significant measurable return of produce. Their most valuable yield will always be in soil stabilisation and water control.

In many districts where the land use is purely agricultural, the local economy would be greatly improved by using portion of the soil resources for growing tree crops. The direct yield of forest products, the employment created in tending and harvesting these, and the beneficial forest influences obtained by the whole locality would far outweigh any apparent loss in agricultural production through the use of some land for forestry. The densely populated and intensively farmed countries of the Old World have learned through centuries of trial and error that agriculture and forestry operating in parallel make for better land utilisation and a more stable economy; it is scarcely likely that New Zealand will prove an exception to this well tried principle. Indeed, we already have some

outstanding examples of integration between agriculture and forestry; but there is almost unlimited scope for extension, to communities and individual farms alike.

It is inevitable that circumstances will force many changes in New Zealand's land-use pattern as we know it today. These changes would be the less painful to make if there were general acceptance of two important principles. First, there is the absolute necessity to retain—and in many places restore—protection forests in the river catchments, to ensure permanence and stability for the land and improvements of the lowlands. The second is the part forestry can play as an intimate associate of agriculture, with mutual benefit to both forms of land-use.

The Institute has drawn attention to these vital matters on numerous occasions, but it is obvious that thinking in many quarters is still at variance with the historical, physical and economic evidence. For that reason the essentials cannot be re-stated too often or disseminated too widely. Correct appreciation of the facts would be a desirable first step towards wiser and more permanent land usage; and the Institute can play an important part in attaining this ideal. We could champion no more worthy cause.

#### *Report of the Soil Conservation Committee of the House of Representatives*

Evidence submitted on behalf of this Institute to the Soil Conservation Committee of the House of Representatives was published in this Journal last year. The Report of the Select Committee was tabled in the House in August, 1957. It will be read by foresters with mixed feelings.

The most gratifying feature of the report rests in its total rejection of pleas that responsibility for soil conservation and rivers control work be returned to counties and to the multitude of other petty authorities that had a finger in the pie prior to implementation of the Soil Conservation and Rivers Control Act, 1941. The validity of the basic principles embodied in that Act has been firmly upheld. The "source-to-sea" concept in river control has been maintained against the full pressure of local jealousy and ambition. Equally, the plea that the present elective system for catchment boards be abolished in favour of election or nomination by internal local authorities has been resisted. Acceptance of this plea could only have had the effect of converting boards into battlegrounds of conflicting local interests. Opposition to the appointment of non-elective members of boards has been over-ruled. The services of these non-elective members (senior officers of the State Departments directly concerned with soil conservation and river control problems) are considered by the Select Committee to have been invaluable. Unquestionably their elimination would be, in the words of the Committee, a retrograde step.

For the most part, the report is concerned with matters of a purely administrative or legal nature, understandably so since the Select Committee was appointed specifically "to hear representations relating to Soil Conservation and Catchment Board administration and legislation". Having arrived at the conclusion that no significant change in the design of the administrative machine was warranted, the Committee proceeded with a minor overhaul of the existing machinery. We find in the report recommendations concerning the numerical strength of boards, rating procedures, land utilisation powers, and so on, down to the locale of board meetings and the reading of minutes. These are all matters beyond the scope of our competence to comment. There is nothing contained within these sections of the report that would rouse the ire of any forester.

The catch comes when we turn to consider items that could well have received mention but have been passed over in silence. The burden of the Institute's submission was to the effect that, though the intent behind the 1941 Act was excellent, this intent was nullified by neglect, on the part of the catchment boards and of the Soil Conservation Council, of the all-important mountain lands. The boards, though empowered to deal with the rivers from their sources to the sea, displayed next-to-no interest in lands upstream from the point where the rivers debouch into the lowlands. Though the soil conservation work that has been done in the lowlands is frequently excellent, there has been gross default in respect to the more severely eroded uplands. This neglect receives no mention. The only reference in the report to the mountain lands is contained in the section of the report wherein the Select Committee recommends that research needs be the subject of examination by the Government . . . but even here the emphasis rests mainly on problems of the (occupied) tussock grasslands with no reference to the immensely more difficult problems of the unoccupied mountain country. The only reference to problems of noxious animals control is to the "opossum nuisance" and then only to the damage caused by opossums to trees planted to control erosion on farmlands—possibly the least significant of all forms of opossum damage.

All told, we remain very much in the status quo ante. We may be grateful that no backward steps have been taken. We may regret the failure to seize the opportunity to advance.

#### *Export of Logs to Japan*

Last year the Japanese timber industry became interested in the import of *P. radiata* sawlogs from New Zealand. The first trial shipment, comprising some 6,000 cu. ft., was made from Mount Maunganui in November. It was followed by two further shipments, each of over 200,000 cu. ft. in March and April of this year. Various forest owners co-operated in supplying the orders, some logs coming from as far afield as Taupo. Now we hear that a firm order has been placed with North Island suppliers for nearly 4,000,000 cu. ft., valued at

£470,000 f.o.b. Even the possibilities of export from the South Island have not been neglected. One small trial shipment of Canterbury logs was made from Lyttelton in April, and more recently a marked interest has been shown in the potential of the South Island to export pulpwood.

At first sight this trade would appear to be as welcome as it was unexpected. It gives New Zealand an opportunity to harvest some of its temporary but still considerable excess of growing stock, and is thus desirable from the viewpoint of forest management; it provides an immediate cash return to forest owners who may be embarrassed by the sluggish or over-supplied state of the home market; and it comes at a time when New Zealand is in desperate need both of overseas funds and of alternative overseas markets. It is not surprising that the logging and transport industries have shown great industry and resilience in overcoming all the difficulties attendant on meeting the Japanese orders. Nor is it surprising that the development has been unreservedly welcomed both by the trade papers and by the press.

Nevertheless one wonders whether there should not be some reservations. The advantages of the trade have been well publicised, but it would appear that little thought has been given to some of the possible disadvantages. The first to suggest itself is that it is obviously inefficient to transport bark, slabs, sawdust and water for thousands of miles. Even although there may be the most intensive utilisation of sawmill by-products in Japan, it must be more economical for both countries to trade in dry rather than in green material; and this means trading in the finished product rather than the log. On economic grounds, then, it is doubtful if a permanent trade can develop. Perhaps this is as well, for by exporting logs New Zealand is exporting its processing industries. There is a close analogy with the export of cattle on the hoof to America, a trade which has aroused some instinctive misgivings in the minds of the general public. The matter is perhaps of little moment at the present time, when on the one hand there is a surplus of raw material, and on the other a shortage of plant capacity, of markets, and of labour. But these shortages may not persist, nor may the raw material surplus in relation to markets. It may do no harm to export a processing industry today, but it is the processing industries which take a large share of the profit in forestry, and it is not in the national interest to export them permanently.

A more important consideration arises from the fact that unbarked radiata pine logs shipped through the tropics must eventually arrive badly sap-stained. Despite the utmost inspectional vigilance, many are likely to be dozy as a result of previous *Sirex* infestation, or to be actively infested with *Sirex* at the time of shipment. It is perhaps Japan's business if she chooses to import timber in this condition, or to run the risk of importing injurious forest insects. But as was pointed out in a New Zealand contribution to the British Commonwealth

Forestry Conference there is in this matter a moral obligation on the exporting countries as well as on the importing. The promotion of international forest hygiene should be the aim of all forest-owning countries; a trade such as this is a step away from a goal which is generally agreed to be desirable.

It may be considered that under present conditions New Zealand cannot afford to be idealistic about "clean" forest exports. It could be claimed that self-interest should prevail, particularly since the advantages of the trade are so obvious. Let us then finally look at the matter from the narrow viewpoint of self-interest. Unless the trade in logs becomes permanent and greatly expands, New Zealand will have the potential for a large exportable surplus of *P. radiata* sawn timber for some decades to come. The East must surely be one of the most likely markets, but it will be a difficult market to capture in competition with other timber exporting countries. Success will not be possible unless the product offered is well cut, well seasoned, well graded and above all, clean and bright. By exporting logs instead of sawn timber, New Zealand is not building up a good reputation for a commodity which she may wish to sell in bulk. On the contrary she is launching *P. radiata* timber in the East through a medium which she cannot control, and as a product which must often be badly sapstained. For this reason alone, it may not be in New Zealand's long term interest for the trade in sawlogs to develop.

#### *Farm Forestry Associations*

In 1949, under the leadership of Mr N. A. Barr of Kaukapakapa, a group of farmers in North Auckland banded themselves together and formed a local Farm Forestry Association. Their objects were:

- To gather and correlate all information on tree growing and timber conversion in the district.

- To hold field days to further the dissemination of this information, and to discuss problems.

- To encourage the planting of farm shelter and the general beautification of the farmstead.

The association has also organised the production of tree seed from proven sources and has raised planting stock in its own nursery for distribution to its members.

From small beginnings this association has grown into a strong organisation with over 120 members. At its meetings and field excursions it discusses and demonstrates such matters as the choice of different species, where and how they should be planted, how they should be tended, how the produce can best be marketed, or how it can be converted and treated on the farm for local usage. The emphasis is always on local conditions and local problems. The association has had some support and encouragement from appropriate Government Departments but it is essentially a farmer's own movement, and in large measure it derives its strength from this fact.

The original Lower Northland Farm Forestry Association has been

such a success that the idea has spread to other parts of the North Island, and local associations have now been formed in Waikato, Taranaki, Middle Districts, Wairarapa, Hawke's Bay, Wairoa, Gisborne, East Coast and Bay of Plenty. Farmers in these districts have also found that they could gain considerable benefit from the exchange of information and experience in all aspects of farm forestry, and they have welcomed the movement with enthusiasm. Further associations are in process of formation and it seems as if ultimately there may be a complete North Island coverage.

The interests and emphases of the associations naturally vary from one locality to another, but basically their objects remain the same. For this reason it was soon found desirable to form a national association which would provide a forum for the exchange of experience between associations and which, if necessary, could speak with a united voice on the problems facing farm forestry as a whole. The Combined Farm Forestry Association had its first meeting at Rotorua in May, 1957, and elected Mr Barr President, with Dr J. S. Yeates of Massey College and Mr Meyric Williams of Hawke's Bay as Vice-Presidents. The second meeting in May, 1958, took the form of a weekend conference at Massey College; it was well attended, and from all accounts most successful. More recently still, Mr Barr has done a barnstorming tour of Canterbury, and as a result no less than five separate associations have been formed in that province. They are giving every sign of having vitality.

It is perhaps too soon to say if these associations will have the continued impetus to achieve their stated ends. At the moment they appear to have the right ingredients, i.e., good leadership, community of interest, freedom from sectional domination, and a realistic approach to their problems. It is to be hoped that the early promises of this movement are fulfilled and that the associations become a lasting influence on the farming community. Farm woodlots can make a most useful contribution to both local and national supplies, a contribution in quality and in diversity as well as in mere quantity; and farm shelter, properly designed, can lead to higher production on the farms themselves. Farm forestry thus has an important part to play in both the forest and the agricultural economy of the country. But only if it is organised on sound technical lines. With few exceptions the precepts and principles of sound forestry have been entirely ignored in farm forestry as it has been practised in the past. It is in this matter more than in any other that farm forestry associations can exert the most influence and can prove to be of the most value; perhaps the most heartening thing about the associations so far is the evidence that they are already well aware of this fact.

A few years ago the Institute was pleased, and pleased indeed, to welcome Mr N. A. Barr into its ranks; it is now appropriate for the Institute to extend a warm welcome to the movement which Mr Barr has founded, and which he so ably leads. We wish him every success.

### *Dr H. H. Allan and Forest Botany*

Dr H. H. Allan died in Wellington on 22nd October 1957. He was one of a succession of notable New Zealand botanists who in their day have each had an effect on New Zealand forestry thinking. T. Kirk, a well-known pioneer botanist, was the first Conservator of Forests, appointed under the Act of 1885. Dr Leonard Cockayne was Honorary Botanist to the State Forest Service and carried out many investigations in association with forest officers. Allan was a protege of Cockayne. While he did not pursue his mentor's strong ecological approach to botany, he consolidated the information on natural hybridisation which the two workers had begun.

Allan's leanings and his strength lay in taxonomic botany; not in the old and narrow sense, but in a broad approach which was unusual for a botanist who had had no formal training. He looked at a plant in relation to its variation and ecology. For these reasons he was always loath to attach a name to a plant in the field and would generally wait until he could compare a specimen from it with a range of herbarium material.

A man of very word words, he was, nevertheless, a copious writer and an outstanding lecturer. Before it went out of print, beginners just learning our flora had reason to be grateful for his little book "Trees and Shrubs". Although based on purely artificial keys, this little book contained the first reference to natural hybrids contained in any New Zealand flora. Allan's "Grasses of New Zealand" and "Naturalised Flora of New Zealand" were the first complete floras for these two highly important sections of New Zealand plant life. In his day, Allan had an excellent knowledge of our adventive flora. From the time of his retirement as Director of the Botany Division in 1949, almost until the day of his death, he was engaged in writing a new flora of the flowering plants. The volume of dicotyledons was all but complete. The revision of the genus *Hebe* alone remains and as soon as this has been finished by the Botany Division the volume should be ready for publication. The new flora will be eagerly awaited by practitioners and research workers in the field of forestry, as it will by all students of New Zealand plants.

## OBITUARIES

### ALFRED GRAHAM GROOME

Forest officers throughout New Zealand will have learned with regret that A. G. Groome passed away last November.

Ben, as he was familiarly known, served with the New Zealand forces during the 1914-18 war. On his return home he took up farming on the East Coast-Gisborne district. In 1929 he joined the