

EDITORIAL COMMENT

Land Use Planning and Forestry

A number of recent New Zealand developments which appear to be taking land use decisions further away from the hands of foresters and forestry interests must be viewed with concern by the Institute and its members.

In essence these arise from planning schemes originating under the Town and Country Planning Act 1953, and ones that will arise when the new Town and Country Planning Act 1977 comes into force.

Under the earlier Act and its 1977 revision, local (territorial) councils are obliged to prepare a District Scheme whose general purpose is to plan and implement the use, management and development of the resources of a district.

In 1975 the Marlborough County Council, administering an area in which there is great potential for production forestry, introduced its proposed district planning scheme. This scheme made forestry on any scale greater than 4 ha a conditional use (*i.e.*, subject to specific application in the case of each proposed planting) in almost all rural zones. This was largely on the grounds that forestry implies a future high cost of roading and transport in the district (needing to be met out of rates); but the environmental impact of forestry was an additional factor.

Following appeals against the proposed scheme, changes were made which generally allowed forestry as a predominant use in some areas, but still made it conditional in the Sounds and all land north of the Wairau River with access only on to county roads (as distinct from State highways). These criteria, which are presently the subject of appeal to the Town and Country Planning Appeal Board, must be viewed with considerable concern in an area such as Marlborough where commercial forestry is already well established, and where large areas of potential forest land are at present contributing little to the economic or general welfare of the district.

Traditionally in New Zealand, county councillors are farmers, and county planning has been directed towards the agricultural use of rural land. Against this background, and with the general apprehension shown by the farming community towards any extension of land use for forestry, foresters can be excused the feeling that they are being discriminated against in present district land use planning.

It is thus of interest to see whether the situation will improve in the future, under the new Town and Country Plan-

ning Act 1977 which was passed at the end of the last session of Parliament. Amongst other things, the new Act was designed to promote a clearer relationship between national and local planning, and it introduces a new system of regional planning. Of specific interest to foresters are the regional planning clauses. United or Regional Councils (as set up under the Local Government Act 1974) are now given responsibility for formulating (*inter alia*) the broad distribution of major land and water uses within a region. Because district planning must now operate within a regional framework, it is clear that the broad decisions on land which may be used for forestry will now become the prerogative of a United or Regional Council, rather than a District Council. The composition of such a council, and particularly of its Regional Planning Committee which will be responsible for preparation of a regional plan, is therefore important.

The Regional Planning Committee in essence will consist of local and regional authority members, catchment authority representatives, a representative of the Maori people, and an officer of the Ministry of Works and Development. Despite contrary submissions by our Institute, there is no requirement on a Regional Planning Committee, or the Land Resource Advisory Committee it may appoint, to have representation from any or all of the major forms of land users. Nor are the major land administering Government departments required to be represented, despite the fact that they too zone land, and that Crown land dominates in a number of regions. Thus, as under the previous Act, forestry has no right of representation in regional planning, despite the fact that more than 25% of New Zealand is under indigenous and exotic forest and that forest land dominates over farm land in some regions. Further, regional planning schemes, once approved, dictate the activities not only of individuals, companies and local and public authorities, *but also of the Crown*.

If not represented at the planning level, what rights do foresters have, either of submission, or of appeal, against planning which appears to discriminate against forestry as a land use? There is provision in the Act for submissions to be made prior to actual production of a draft scheme, and again following its preparation. Once these submissions have been considered, the draft scheme becomes a proposed scheme, and is subject to appeal, but *only* by a local authority, not by any other body or person. Further, the appeal tribunal is advisory only, to the Minister of Works and Development; and in the ultimate the Minister may not only decline their advice but may direct in his own right that the scheme or any provision of it be amended, modified or deleted.

Thus, to summarise, the implications of the Act are rather serious for foresters. In essence, Regional Planning Committees (which are not required to include in their membership expertise in any form of land use) *are* required to determine what activities are and are not permissible on each and every piece of land in New Zealand. And their decision is not subject to general appeal. Even more disturbing are the clauses of the Act which give the Minister of Works and Development powers to modify or delete the scheme or any part of it. These place extraordinary powers in the hands of one Minister, powers which again are not subject to appeal.

While the Crown must adhere to the provisions of approved regional planning schemes, the Minister of Works and Development, by his ability to change them at will, has in essence power over every Government department and local body in the country. His power over other Government departments is compounded by their lack of representation on planning committees, in contrast to his own.

What does this mean for foresters? In the short term it means that they must take every opportunity which occurs, to make land use submissions and comments to regional and district planning authorities in all areas where forestry is either important or potentially important. Because it is critical that these opportunities not be missed, and because they will largely be advertised at the local level, it could well become an important function of local sections of the Institute to watch for such invitations.

But in the long term it is the *image* of forestry in the public mind, as well as in the mind of the planner, which will determine whether or not forestry is accepted as a legitimate land use. In this respect issues such as the recent Pureora controversy, which must have set back the public image of forestry five years, are doubly unfortunate. The stakes of our respectability as responsible land users are too high to be allowed to suffer such reversals.

Forests of the Rangitoto and Hauhungaroa Ranges

Local and regional timber supply problems are generally expected to result from introduction of the recently adopted indigenous forest management policy, and the forests of west Taupo have become an early victim. At Pureora, for example, planning showed that if any reserves were to be left in the forest, insufficient wood would be available under selective logging to meet existing mill commitments; and there were strong pressures for the establishment of scientific and wild-life reserves. While surplus wood was available from the

adjacent Tihoi forest, it too was under conservation and other pressures. Thus a re-examination of the wood supply situation was necessary.

In line with its broad philosophies, the Forest Service chose to plan, not for individual forests, but for those of the region as a whole. And as has become its pattern it invited public participation in decision-making, using a seminar in Taupo to present to representatives of interested groups the management options available and the background information on which they were based. But in addition — in a departure from tradition — the Forest Service indicated the management option it preferred for the forests.

Briefly this was to combine the ten State forests of the region into a single State forest park of approximately 84 500 ha. Of this, a total of 48 500 ha would be zoned for protection, and the balance as suitable for production. Both these zonings are broadly compatible with recreation usage. The indigenous portion of the production forest would be selectively logged, removing on average about one-quarter of the podocarp volume from any given area. The Forest Service indicated a preference for a low *rate* of utilisation, using the figure of 6 000 m³ per annum as an example of the volume that a single logging gang could perhaps cut efficiently. That figure is nearly double the present sustained podocarp yield, but is close to what may be the ultimate sustained yield of the area. In addition, a tawa working circle was proposed, yielding an annual sawlog supply of some 4 000 m³ from forests previously logged for podocarp. That figure equates with the sustained yield.

While the proposed options may seem middle of the road, they are in fact well to the left of centre to the extent that they propose reducing a present annual podocarp cut of 57 000 m³ down to perhaps one-tenth of that; with major implications for the present mills including prospects of closure, finding alternative sources of timber, and re-negotiations of sales agreements. And the proposals were at pains to leave the door open for an even further reduction in the cut if circumstances changed.

To the conservationists and the Wildlife Service this was not enough. To continue selective logging and thus put at risk the habitat of both the kokako and other wildlife, as well as a recreation area for future generations of New Zealanders, for such a trivial amount of wood was regarded as nothing short of criminal.

How criminal this indeed is depends primarily on the ability of the Forest Service to selectively log the forests without destroying their potential values for wildlife or man.

That ability is of course unproven, as is the alternative proposition that the qualities of the forest may in fact be *enhanced* by selective logging. However, if the demand for indigenous wood is both legitimate and continuing — if future generations of New Zealanders are as much entitled to some rimu panelling in their houses as they are to retain their wildlife and their forests — then selective logging in New Zealand's forests will be necessary.

All the evidence would suggest that at least some of the forests of west Taupo are resilient, with a high potential to tolerate selective logging. A basic tenet of foresters has always been that, where it is compatible with other values, forests should be managed as a renewable resource. If we still believe this, there can be little argument with the approach of the Forest Service and the broad options it proposed, particularly as it undertook to move slowly with its selective logging, with care and without commitment to continuation; beginning in non-sensitive areas and continuously evaluating the impact on the forest and its wildlife. If, in addition, the Forest Service chose to cut *only* at a rate which could be sustained by present increment, the area selectively logged each year would be so low it is possible that the conservation movement, as well as foresters, could accept the proposals.

New Zealand Tree Crops Association

Formed only three years ago, this Association highlights an interest in growing tree species outside those used in normal production forestry. In particular, its interests relate to nut trees for human consumption, to these and other trees for animal fodder and use by bees, and to unusual fruits which are not presently commercially cropped. The fact that its national membership is already 700 (a figure comparable with the membership of the N.Z. Institute of Foresters) is evidence of the interest New Zealanders have in such crops.

Examination of the group reveals essentially no connection with production forestry as accepted by our Institute. In contrast to farm forestry with its strong N.Z. Forest Service connections, the N.Z. Tree Crops Association receives support from a number of scientists and extension workers at DSIR and the Ministry of Agriculture and Fisheries, along with the horticultural departments at Lincoln and Massey universities. The Association is hopeful that Government will shortly establish a small Tree Crops Research Institute at Lincoln College.

It must be time for foresters to consider whether their interest in farm forestry, now extended to two-tier combined forestry and agriculture, should not extend further to include

fruit and nut production as legitimate production forestry activities. While our Institute's constitution does not define forestry, the Forests Act 1949 clearly interprets trees and forest produce sufficiently widely to include fruit and nuts.

Executives of a number of the ten or so tree planting associations and tree interest groups within New Zealand (including the N.Z. Farm Forestry Association) are presently considering a proposal (from Jolyon Manning, an affiliate member of this Institute) that their activities could well be rationalised and co-ordinated under a single "N.Z. Tree Federation". Such a group, linking perhaps 5000 people with strong tree interests, could not be ignored. Thus very soon foresters may have to decide whether or not they wish to interact with members of what they have in the past regarded as fringe tree-interest groups. Our decision will be an interesting guide to just how far we as an Institute really have moved in our thinking over the last five years.

The Replanting and Enrichment of Native Forests

The New Zealand Institute of Foresters submission on "The Future of West Coast Forestry and Forest Industries" presented an appendix in which prescriptions for the re-establishment of native forests were examined. This opened with the sentence: "In general we are in favour of artificial re-establishment by planting nursery grown seedlings rather than using protracted natural regeneration."

When one considers the paucity of New Zealand experience in successfully regenerating indigenous species, there can be little argument with the recommendation. However, it immediately raises the possibility that the seed used in a given region may have been collected a considerable distance away from the planting area. How important would this be?

A recent paper by R. Silen and I. Doig (*Pacific Search*, 10 (8): 7-9) examines some of the problems of re-establishing native forests in the Pacific north-west of North America. There, a number of provenance studies have shown a very close adaptation of the species to their local environments, adaptation which has developed over a period of more than a million years. With artificial re-establishment after logging, however, stands are frequently being replanted with seed of a different provenance. Much of a very old and little understood gene pool is being replaced in a short period of time by genotypes which (it is believed by the authors) will frequently be so poorly adapted to the site where they have been planted that they may not even be capable of lasting a full rotation.

Sir Charles Fleming (*N.Z. Jl For.*, 22 (2): 249-62) has categorised the development of New Zealand's flora from the arrival of the podocarps, some 100 million years ago, and the earliest *Nothofagus* species only a few million years later. Much older than Douglas fir, today's species have survived major contractions and expansions of land areas, eras of warmer climate than the present, the great upheavals that created our main mountain ranges, a subsequent series of ice-ages with extensive glaciation of the South Island, and a contemporaneous series of devastating volcanic eruptions in the central North Island.

It is probable that, despite considerable loss of forest during these happenings, local refugia were left from which subsequent recolonisation occurred. Thus, in any part of the country there would have been continuous genetic adaptation to a climate which, while progressively changing, was still different from that in other parts of the country. One would therefore expect at least a reasonably high degree of adaptation in the form of provenance variability. Thus, if our indigenous forests are to be managed for sustained yield by planting, rather than through natural regeneration, it is important that soundly based provenance trials be established in the major species to determine the extent of geographic variability. And until such trials provide the necessary information it is important that replanting and enrichment of managed indigenous stands be *only* with seed collected from the same general area. The finely tuned genetical adaptations of the past, once lost, cannot readily (if ever) be re-obtained.

The Institute — A Major Role at Last?

In his 1977 Presidential Address, B. H. Childs suggested that the Institute may have been too inward looking for too long, and he stressed the need for it to provide society with professionally reliable information for resource decision-making.

It is only recently in New Zealand that there has been a public demand for informed professional prediction of the consequences of a forestry option, compared with its alternatives, and the demand comes of course with increased public participation in decision-making. Regrettably it also arises in part from the failure of Government departments to differentiate publicly between the professional and the political components of Government decisions.

Requests made to the Institute from the Native Forests Action Council and the Royal Forest and Bird Protection Society in the last year were in effect to clarify the extent to

which specific Government decisions were based on sound forestry principles. It is proper for our Institute both to be asked such questions and to provide the information, and our role in this area can only increase.

Similarly, with the current increase in public consultation by Government we have an important role in making submissions on new legislation, environmental impact reports, regional management plans, and major development plans such as that concerning the future of the West Coast forests and forest industries. In the last 12 months Council has made submissions ranging from 1 page to 39 pages on a total of some dozen different issues.

For an Institute uncertain of its role, this is an exciting development. It is also, however, one of the more demanding and time-consuming roles we have had, and there is a need, before the field increases too greatly, to decide how best it should be handled.

The President in his report to the 1977 Annual General Meeting proposed the appointment of a full-time executive officer, and has also promoted the idea of the Institute hiring consultants to prepare its briefs. The work-load in preparing a submission such as the recent West Coast one is very high, and Council cannot be expected to handle the likely increases in the volume of such work. But neither did the use of a permanent secretariat or paid consultants meet with massive enthusiasm at the A.G.M. Perhaps one answer would be for the Institute to maintain a list of its members (along with their special fields of expertise) who would be prepared to offer their services where appropriate in preparing such briefs. With such assistance, and under the co-ordination and control of Council, a number of briefs could be prepared simultaneously and effectively.

There seems little doubt that, if we as an Institute meet this challenge effectively, we will not only fill an important public need, but will also find increasing self-satisfaction in our role.