

in establishing themselves ultimately languish and die from lack of light on the forest floor. In contrast, when heavy gales, for example, devastate large stretches of forest by uprooting many trees, the mineral soil is sufficiently exposed to allow seedlings to develop and a replacing forest of the same species to succeed its parent forest.

The adoption of a look-up-use-not policy would certainly result in either the displacement of magnificent rimu by some minor and much less useful species such as kamahi or tawa, or by devastated areas devoid of any trees of substantial size for a century or more. To a thinking conservationist either alternative is a contradiction in terms. True forest conservation is preservation by wise use. The very logging of the larger millable boles not only exposes the mineral soil for rooting in the seeds from the remaining trees, but opens up the canopy sufficiently to assist the subsequent development of the young seedlings. Thus conditions more favourable to the replacement of the major forest species are secured at the same time as a crop of useful timber, which otherwise would rot away and decay. What is of vital importance is that in not the slightest degree is the soil-stabilizing value of the forest adversely affected by the removal of this crop of a few trees out of a total of many hundreds of plants per acre. The term "crop" is used advisedly, because timber is just as much a renewable resource when taken from the indigenous forest on a rotation of centuries as when taken from an exotic forest on a rotation of thirty or forty years. Logging admittedly creates inflammable debris for a few years, but, as a result of Forest Service propaganda, regulations, and law enforcement, fires on all forest lands are being annually reduced, both in area and in numbers, and on State forests have been virtually eliminated.

Controlled logging and fire-prevention are therefore the essence of New Zealand's forest economy, just as multiple use is the essence of national forest policy. The ultimate objective of forest management is to convert every acre of utilizable indigenous-forest land into a state of maximum productivity—a productivity which is measured in terms not merely of cubic feet of timber grown annually on each acre, but of stream-regulation values, of aesthetic and recreational worth, &c. Most of the Dominion's forest resources, even in the high country, can be managed on such a multiple-use basis, and should be so managed. This, however, is not to be interpreted as implying that the whole remaining indigenous resource should be logged as rapidly as possible. Rather the reverse. Yielding as it does the country's only supply of high-quality, defect-free timber, this resource should be rationed down to absolutely essential requirements for such timber, and as much as possible of current demands met by the exotic forests. Only by this means can a sustained and balanced yield of both indigenous and exotic timbers be assured to the country.

All appropriate basic measures to achieve the various aims and purposes of the national forest policy are being persevered with even during the war period. Suspicious, however, have been voiced that pressure has been brought to bear upon the Forest Service to dispose of State timber resources for the sake of increasing revenues and of keeping individual mills in operation. Nothing could be further from the truth. Not since the inception of the Department has any Administration even considered, let alone ordered, that the forest resources should be sacrificed for revenue getting, and not 1 acre of State timber has been released during the war period except in the public interests or for the successful prosecution of the war. These are categorical statements requiring no apology, the more so because local forest sentiment is meticulously studied and every effort made, consistent, of course, with the war effort and other questions of public interest, to foster Dominion-wide support of the national forest policy.

CHAPTER II.—ADMINISTRATION

13. *Permanent and Temporary Staff*.—Permanent, 224 (210); temporary, 145 (131). The increase is due to cadets appointed to the permanent staff, and to war relieving personnel appointed to the temporary staff.

14. *Military Service*.—Second New Zealand Expeditionary Force, 58 (58); R.N.Z.A.F., 23 (25); Territorial, 13 (40); Navy, 11 (1).

15. *Casual Staff*.—Average for year, 915 (920).

Major concern is expressed hereon, as some forest stations have inadequate suitable personnel to combat fires. Fire-fighting requires young, fit men, but the labour personnel left at many of the stations is numerically and physically incapable of meeting a major outbreak, and relief for the next fire season is being sought from the National Service Department.

16. *Honorary Staff*.—Honorary Forest Rangers, 250 (233); 24 new appointments and 7 resignations.

17. *Health of Staff*.—The amount of overtime still being worked by some officers as a result of extra wartime activities gives rise to serious concern, but should be materially reduced with the announced easing of the general man-power position. The general health of the staff continues to be satisfactory, except in the case of older officers who have been engaged on timber appraisals over a long period of years. Such duties are particularly arduous, and officers engaged thereon should be transferred to other field duties periodically. Even the younger officers on this work must be relieved, and preparations are in hand for the appointment and training of sufficient new appraisers both to replace the older staff and relieve the younger.

18. *Safety of Employees*.—Total accidents, 256 (169), made up as follows: cuts, 67 (52); strains, 61 (39); fractures, 4 (8); crushes and bruises, 78 (37); septic wounds, 23 (9); eye injuries, 7 (9); miscellaneous, 16 (15). In addition, it is reported with regret