

resources in these stands to justify their management on orthodox forestry principles. Secondly, both the low-rotation or maturity age and the high-increment or growth rate of the exotic species present much more scope for forest management than in the case of the long-rotation and slow-growing podocarps. Thirdly, replacing cut-over podocarp stands with an adequate per-acre stocking presents much greater difficulty and will take a longer period than in the case of exotic stands. Fourthly, logging in indigenous State forests has been moving into more remote steeper areas, particularly in the pumice lands of the central North Island region, and the problem of soil and water conservation requires to be kept under constant review: indeed, a number of applications for timber-cutting rights in such areas has already been refused for this reason. Fifthly, the Empire Forestry Conference of 1947, mindful of the enormous post-war demands for timber, recommended that, if feasible, overcutting of the annual increment should be allowed for the following five years, provided that compensatory reductions in cut should later be made. For the second, third, and fourth reasons alone, such overcutting should be made in exotic, rather than in the once over-abundant but now fast disappearing indigenous, forests. Sixthly, exotic timbers are intrinsically suitable for a number of important uses which are customarily made of indigenous timbers. Seventhly, the Forest Service has always keenly realized the danger in placing complete or main reliance upon exotic forests, prone as they are to damage or destruction by insect and fungus epidemics and other hazards, and that the only sound long-term policy must provide for as large a proportion as is possible of indigenous forests.

It has therefore been decided to reserve the timber on certain areas of indigenous State forest under forest working plans pursuant to the Forests Act, and such areas will be reserved from cutting for the next five or, in some cases, ten years. During the intervening period the national forest survey of indigenous timber resources will have been completed. Silvicultural investigations, including experimental felling operations and possibly requiring longer than ten years to complete, will in time increase our knowledge towards the stage at which cutting under strict silvicultural rules involving close supervision of felling will be permissible.

The fundamental concept is wise land use, by reserving for future use the crop most suited to the lands in question and the subsequent replacement of that crop on an adequate scale. In other words, it is proposed to diminish the tempo of further inroads into forest capital, thus reserving this capital until we have amassed sufficient knowledge to enable us to preserve the capital intact and use the income alone.

Late in the year the management staff was augmented by the appointment of 7 overseas forestry graduates; 2 senior officers, however, were promoted to administrative positions, where less time is available for technical duties. At the end of the year the forest management staff consisted of 15 professional officers, including 4 senior officers occupying administrative positions. The new foresters, who have been occupied on more general duties, have not as yet had sufficient time to settle down to New Zealand conditions and strengthen the position of forest management, but it is expected that next year the arrears in assessment work and management records will be appreciably reduced and new forest working plans completed. In the Rotorua Conservancy, officers and men usually employed on assessment work were detailed for a considerable period to assist the Forest Experiment Station on urgent mensuration studies.

*32. Forest Working Plans.*—The working plan for Whakarewarewa Forest was approved by the Commissioner of State Forests during the year, and the first revision of the plans for the kauri working circle and Dusky Forest are now ready for approval. The first five-year revision plans for Hanmer and Whakarewarewa Forests are under preparation. Approval of the revision of the plan for the kauri working circle is delayed pending Parliament's decision on three petitions praying that the whole or the major part of the large Waipoua State Forest be set aside as a national park, but the programme