

is also serious, and reference must be made to the destruction of the forest along the boundaries of unfenced "bush-edge" reserves as a result of browsing by domestic sheep and cattle. The introduction of browsing animals into New Zealand has indeed had a profound effect on the vegetation; and the Forest Service is co-operating with the Departments of Internal Affairs and Scientific and Industrial Research in investigating the problems which these forest pests have created.

The policy of retiring to forestry land-use submarginal land which is unsuitable for agriculture has been steadily pursued, and the assistance given by the Department of Lands and Survey in negotiating the acquisition of land in this category has been particularly helpful. During the year seven areas totalling 46,000 acres were taken over, including one of 8,000 acres which was donated by the owners. These areas will be largely locked up, and regeneration encouraged by extermination of pests and exclusion of fire.

Throughout the year the Forest Service has taken an active part in the work of the Soil Conservation and Rivers Control Council and the twelve Catchment Boards now in operation. The Service is represented on the Council and on all the Catchment Boards by senior forest officers; and, in addition, a professional forester, seconded from the Service, is employed in an advisory and liaison capacity with the Council.

Owing to shortage of trained staff it has not yet been possible to implement fully the programme of work which the Service has envisaged in connection with soil conservation. There is, nevertheless, much progress to report. Problems of plant and animal ecology are being investigated; field surveys have been carried out to assist Catchment Boards in classifying land; farmers have received advice and help in selecting and planting trees for various counter-erosion purposes; the area of land acquired for protection forests has steadily risen; and it is hoped that a Forest Extension Service (see Chapter IV) will shortly be functioning.

MISCELLANEOUS FOREST USES

(1) *Grazing*.—At the end of the year there were 216 grazing leases in operation, all but a very small number being on a year-to-year basis. A close watch is kept on the effects of grazing, and where it appears that the results may be detrimental, applications are refused.

(2) *Mining Privileges*.—One hundred and five applications for mining privileges and 5 for coal-mining rights were granted by the Mining Warden over State forest land. These are not granted under the Forests Act, 1921-22, but entail the same obligations regarding the protection of State forests as any of the other privileges.

(3) *Recreation*.—Whilst the Forest Service is entrusted with the control of the State forests for the general good of the Dominion, it would be both unreasonable and unwise to lock up the forests to all but departmental employees and rightholders who actually work in the forests. In addition to their functions of growing useful wood material and conserving water and soil, forests afford wide scope for healthful recreation and relaxation. The educative value to forest visitors is also highly important: they get to know the forests and its trees and birds, and are likely to develop a personal interest in the care of the forests and their protection from harm. Such a feeling of sharing ownership in the forests leads to a diminution in vandalism and in carelessness with fire which will be infinitely more stable and permanent than if left to "officialdom" to inculcate by means of warnings and prosecutions.

The development of this multiple use of State forests has received prominence in other countries both old and new, and must be actively and progressively pursued in New Zealand by opening up tracks, providing camping facilities at key points, and so on. State forests are being used increasingly for recreational purposes—mainly shooting, tramping, and climbing—but they can have a very much wider appeal than they do at present if their use for recreation is developed with initiative and imagination.