REPORT.

CHAPTER I.—FOREST POLICY.

1. General.—All departmental activities have been reduced to a bare maintenance basis, except in the case of timber-production, forest appraisal, fire prevention, and rehabilitation planning. Even so, timber-control work under the Emergency Supply Regulations has so strained departmental resources that it has been necessary to work extended hours—nominally forty-six per week, though in numerous cases, many more. To meet expanded demand for timber resulting from allied requirements it has been impossible to avoid appeals for the reservation of numerous officers from military service.

2. Recruitment and Training.—It has been estimated that the staff will require to be at least trebled during the first post-war decade, and plans continue to be studied for the large-scale training involved. There will be unrivalled opportunities for officers of ability not merely in the field of general forestry, but in the specialized branches of botany, entomology, surveying, engineering, economics, and law. In the meantime, recruitment of trainees from secondary schools is being actively pursued, even though such officers seldom receive more than a year or two of training before taking up military service. Short as it is, this period is invaluable in directing the thoughts of the better men towards specific lines of forestry study which may become available to them during their military service either in New Zealand or abroad.

3. Indigenous Forest Resources.—A shortage of indigenous timbers in the relatively near future is a certainty and not a bogy, but it is a major objective of the national forest policy to alleviate its seriousness by careful conservation of all remaining resources. Limitation of the kauri and white-pine cut to absolutely essential demands has already been achieved, and early extension of this policy to totara and matai is essential, particularly in the interest of rehabilitation housing, leaving rimu and insignis pine to meet the bulk of war demands. Extensive reconnaissance of insignis pine and the more accessible rimu resources is being undertaken as a preliminary to eventual complementary control of their cutting.

4. Indigenous-forest Management.—Permanent indigenous-forest communities with modern amenities should and can replace the uncomfortable transitory and "ghost" villages of the past century. Major indigenous-forest areas are accordingly being selected as management units upon which long-life sawmills may be established and rehabilitation activities inaugurated at the conclusion of

hostilities.

5. Indigenous-forest Knowledge.—Lack of knowledge of soils, of ecology, and of silviculture in the indigenous forests is serious. It is vital that this deficiency be remedied by appropriate reorganization of work and concentrations of staff. As from the next planting season, all interplanting with exotics and other silvicultural treatments on untended forests will be terminated and thereafter be concentrated on management units adequately staffed and equipped to give a return commensurate with the expenditure and time given to the various investigations. Such units will be established on both commercial and protection forests and managed on a multiple-use basis—that is, not only for the sustained production of timber, but for the preservation and improvement of recreational, historical, scientific, watershed, and counter-erosion values.

6. The Tawa Forests.—Tawa is the only general-purpose-factory-use hardwood which exists in sufficient quantities as to make the Dominion independent of foreign supplies of such woods as oak, beech, birch, maple, elm, &c. The tawa forests therefore merit much more attention than previously accorded them. They are widespread and contain a fair distribution of age-classes, thus favouring their management on a sustained-yield basis, and a suitable unit has been selected on the Mamaku Plateau in which silvicultural and related problems will be investigated. Concurrently, the wider utilization of tawa timber will be developed, and, as will appear later in this report, a solution has already been found to the problems of drying tawa and protecting it from fungal and insect attack.

7. Exotic-forest Resources.—The demand for exotic timbers much exceeds the available supply, and assessment surveys and management plans for the older State exotic forests are being persevered with in order that a maximum yield of sawlogs may be effected at as early a date as practicable. The log-frame type of sawmill already developed by the Department has advanced the date of sawlog production by many years, but forest wastage in very short and crooked logs is still large enough to warrant investigation into the development of special sawing equipment for such material. The departmental policy of planting a variety of species of general utility rather than of concentrating upon insignis pine continues to find vindication with every passing year. Larch and Douglas fir, in particular, are filling many unexpected uses and the quality of the timber produced both by these species and by Corsican pine augurs well for their future.

8. Silviculture in Exotic Forests.—In view of the general man-power position of the Dominion, forest staffs have been reduced to such an extent that they are barely able to ensure the safety of the forests, and the silviculture work effected has been purely incidental to fire-prevention and utilization activities. It is to be noted, however, that while this deferment of silvicultural treatment will do some irreparable harm to many forest stands it will provide a huge reservoir of rehabilitation

work.

9. Local Exotic Forests and Farm Forestry.—Forestry should be an integral part of the farm economy of most districts, and the establishment of relatively small State exotic forests has been accepted as a major rehabilitation effort of the Forest Service. Land acquisition, covering as it will numerous titles, some of them subject perhaps to mining rights, &c.. will be difficult, but the advantage of producing timber-supplies locally and of providing seasonal employment for farm workers make it imperative to solve these various problems, no matter how involved. Complementary to the State effort, encouragement should be given in suitable districts to the proper development of farm forestry, and a special study of this branch of forestry in other countries has been commenced as a preliminary to the drafting of suitable recommendations.

10. Integration of Indigenous and Exotic Forest Utilization.—Exotic softwoods must replace the indigenous timbers as extensively as practicable and as rapidly as the exotic forests will yield suitable sawlogs. Only by this means can the Dominion be made self-sufficient in timber-supplies. Most