

(2) *Timber*.—Growing stock assessments of indigenous and exotic forests have not yet been completed, but in some conservancies they are sufficiently far advanced to enable an estimate to be given. The following figures will be subject to correction when the work is completed :—

Conservancy.				Indigenous Forests.	Exotic Forests.
				Cubic Feet.	Cubic Feet.
Nelson	..	..	..	Not yet assessed	25,000,000
Canterbury	..	..	..	Not yet assessed	80,000,000
Southland	..	..	..	180,000,000	Not yet assessed

The Southland estimate, made by the national forest survey (see Chapter V), is further subdivided into—

				Cubic ft.
Hardwoods (beech, &c.)	..	..	..	123,000,000
Softwoods (rimu, &c.)	..	..	..	57,000,000
				180,000,000

The above estimates include forests on lands of all tenures, not only State forests. A broad provisional estimate of the total resources of indigenous podocarp species has been submitted by the national forest survey; this estimate, which is based on incomplete data, indicates that the remaining supply of podocarp species on lands of all tenures is probably in the vicinity of 5,000,000,000 board feet of standing timber.

SILVICULTURE

(1) *General*.—Despite continued labour and accommodation shortages, considerable progress is reported. The aggregate acreages dealt with under planting, release cutting, high pruning, and thinning showed a 50-per-cent. increase over those of 1947–48 and a 300-per-cent. increase over the areas covered in 1946–47. The low-pruning acreage has remained steady over the past three years. Immigrant labour has again accounted in the main for the increased scale of silvicultural operations. In view of the necessity for commercial costing of utilization operations, including felling and extraction, roading, and incidental work, and of the importance of maintaining fire-preventive measures at the highest possible standard, it is perhaps natural that such works should claim the major portion of the most efficient labour. Such has been the tendency during recent years, leading to the inevitable, though regrettable, result that the forest stands which are being protected from fire and exploited on the best standards available are, owing to force of circumstances, being neglected silviculturally. As mentioned in the previous report, large areas are now too old to respond to silvicultural treatment (mainly pruning and thinning); while stands that would still respond have to remain untended due solely to the lack of sufficient labour (and accommodation) to deal with the very large areas requiring treatment. So large are the areas involved that even were adequate labour available, it would be necessary in many cases to leave convertible thinning logs on the forest floor to rot. In this connection, thinning by mechanical felling is being investigated with a view to economizing man-power.

(2) *Natural Regeneration*.—Natural regeneration of worked compartments of *P. radiata* in Rotorua and Canterbury Conservancies is progressing satisfactorily, with the prospect of complete restocking in many cases. During the year 231 acres were classed as fully stocked with exotic trees by natural regeneration, bringing the total area so stocked to 1,058 acres (836 acres in Whakarewarewa and 222 acres in Kaingaroa Forest).