

APPENDIX I.

SUMMARIZED REPORTS ON STATE AFFORESTATION.

AUCKLAND REGION.

Again this region experienced a year with fairly regular and well-distributed rainfall, although the total falls recorded were much below the previous year's figures.

The weather conditions naturally reduced the fire hazard which is usually associated with the kauri forests of the North and the exotic forests during the summer months, and were excellent for tree-growth on light, well-drained soils, but the trees growing on heavy clay formations did not do so well.

Tree-planting was again restricted to minor areas at Waipoua and Tairua and to blanking and consolidation of previously planted areas. Trees distributed from the various nurseries numbered 440,000, while the seedlings raised for future planting total approximately 600,000.

Waipoua Plantation.—In compartment 6 an aggregate area of 294 acres was planted—*P. palustris* 122 acres and *P. pinaster* 172 acres—and a good strike was obtained. In the nursery the following sowings were made and seedlings raised: Kauri, 11 lb., 8,000 trees; *P. palustris*, 42 lb., 39,000 trees; *P. taeda*, 31 lb., 60,550 trees; *P. echinata*, 1 lb., 6,700 trees.

The usual maintenance-work, roading, fencing, telephone-lines, establishment of firebreaks, &c., was carried out.

Riverhead Plantation.—At this station 4,800 poplar cuttings were planted in certain swamp areas and 10,000 *P. radiata* trees were used for blanking. As an experiment 42 lb. of *P. canariensis* were spot sown, but the ultimate results were indifferent. Firebreak clearing covered 202 acres, ploughing 79 acres, discing 132 acres, while 202 chains of gorse were grubbed. Other maintenance included 27 miles of road-grading, clearing scrub from roadsides, &c. In the nursery 70,000 seedlings (*P. radiata*) were raised from a sowing of 8 lb. of locally collected seed, and 15,000 poplar cuttings were put out for rooting. Trees from the previous year's planting were lined out.

Pukipuki Plantation.—At this station *P. radiata* is developing fairly satisfactorily on suitable sites, as are some species of eucalypts, but most of the mixed stands would be improved by thinning.

A topographical survey and reconnaissance of this area is now in hand, and when the contour work is completed a species survey will be undertaken.

Maramarua Plantation.—Rapid growth generally is being made by the trees at this station, and the plantation has now reached the stage where pruning, thinning, and cleaning would be an advantage; plans to this end are in hand.

Maintenance-work included clearing, draining, stumping, discing, and ploughing firebreaks as required, metalling roads, repairs to telephone-lines, painting of buildings, &c.

The main sowing in the nursery was 34 lb. of *P. taeda*, but the seed was not up to the usual standard of quality and only 60,000 seedlings resulted.

Tairua Plantation.—New planting here comprised 33 acres of *P. pinaster*, whilst the usual maintenance-work of clearing, burning, ploughing, &c., of firebreaks, erection of and repairs to telephone-lines and fences, reconditioning roads, &c., was kept well up to date.

Most species continue to make good progress, but the most promising is *P. caribaea*, although *P. ponderosa* and *P. palustris* are also showing up well.

Very little seed was sown in the nursery, the principal species being *P. radiata* 4 lb., germination 50,000; *P. pinaster* 4½ lb., germination 25,000; and *C. lawsoniana* 1 lb., germination 28,000. Poplar cuttings to the number of 1,000 were lined out.

ROTORUA REGION.

Kaingaroa Plantation.—The areas planted totalled 5,568 acres with 3,704,400 trees; an average of about 666 per acre. The species used were *P. ponderosa* 60 per cent., *Ps. taxifolia* 38 per cent., *P. Murrayana* 2 per cent.

Blanking operations were commenced during the year, and 3,025 acres were blanked up mainly with *P. ponderosa*, *P. Murrayana*, and *P. radiata* in that order.

Twenty-eight miles of new roads were formed within the plantation, thirteen miles of fencing were completed, thirty miles of new telephone-lines were erected, and 5 chain firebreaks were laid off along the boundaries of the newly planted areas on Runs 90 and 91.

Thinning and underscrubbing were carried out over an area of approximately 7,600 acres, and 4,710 trees were cleaned to a height of 18 ft.

In the nursery at Wairapukao from a sowing of 581 lb. of seed 3,240,000 trees were obtained, while at Rotorua nursery 40 lb. of seed produced 858,900 seedlings. From the first-mentioned nursery 5,166,000 trees were lifted and from the latter 1,819,600, making a total of 6,985,600. Estimated tree stocks in both nurseries total 8,609,600.

The stocktaking at Waiotapu (mentioned in last year's report) was completed and a compartment survey was immediately taken in hand to secure the necessary data to enable an accurate computation of the volumes of the various species to be made. The field-work is completed, but much plan-work still remains to be done.

The topographical survey of Whakarewarewa Plantation commenced in February, 1935, was completed in May, 1936.

Underscrubbing and thinning were undertaken at both these plantations, over 2,000 acres being treated in this way.

Plantation thinnings of a royalty value of £1,318 9s. extracted by private contract from Whakarewarewa Plantation during the year comprised 12,349 posts, 39 poles, 137 cords of firewood, and 110,348 mine props; from Waiotapu Plantation 22 cords of firewood were obtained, and in addition 369,875 cubic feet of produce was extracted for departmental use. Details are 480 poles, 232 strainers, 1,782 props, 2,463 cords firewood, and 16,403 posts.