

## APPENDIX II.

## SUMMARIZED REPORT UPON STATE AFFORESTATION IN THE FOREST CONSERVATION REGIONS OF THE DOMINION.

## AUCKLAND REGION.

*Plantations and Nurseries.*

*Riverhead.*—As a means of supplying the future timber-requirements of the City of Auckland and surrounding country, the establishment of the Riverhead Plantation was commenced last year (*vide* report for 1927), and good progress has been made. The area planted for the season (including trial spacings on 50 acres) is 2,615 acres, with approximately 1,807,100 trees. Two miles of new permanent roads were completed, 43½ miles of fire-breaks laid off, 15 miles of fire-breaks ploughed, and 2½ miles of interior roads regraded. One bridge was constructed, and the material secured for two others. A topographical survey of 6,220 acres was completed. In the nursery 1,430 lb. of seed were sown, 1,023,300 trees lifted for planting, 46,200 lined out, and 61,000 carried over as two-year-old seedlings. The stock of trees at the end of the year was 4,117,300. Further areas of land were acquired to round-off and thus safeguard this plantation unit from fire, &c., and negotiations are in progress for the purchase of other suitable sections to consolidate the area.

*Pukipuhi.*—Maintenance-work was carried out on existing fire-breaks and three miles of new internal breaks were laid off and cleared. The planting-up of 80 acres of the unsuccessful eucalypt plantation was accomplished, and 73,350 insignis pines were put out. The portion planted with two-year-old stock struck well, but in the remainder, where one-year seedlings were used, the dense bracken militated against a successful strike.

*Waipoua.*—A further area of 55 acres was planted with 32,800 trees, bringing the total so established to 141 acres. Included in this is an area of 25 acres of trial spacings with 12,600 trees.

*Maramarua.*—Early last year 14,431 acres of national-endowment land in the northern corner of Waikato County, lying midway between the Firth of Thames on the east and the Main Trunk and the Waikato River to the west, were proclaimed a State forest, with the object of forming a plantation to meet the future needs of the settlers from the sparsely forested Hauraki Plains and Waikato district. The block is well situated for the purpose and has access by good metalled roads. The preliminary work preparatory to planting carried out during the year included the laying-off of thirty-four miles of fire-breaks, formation of many miles of wagon and sledge tracks, and the erection of 30 chains of fencing round the proposed headquarters site. No planting was done, but 100 acres were experimentally direct sown.

*Objectives for 1928–29.*

1. Raising 4,500,000 trees.
2. Establishing a nursery at Maramarua.
3. Establishing 4,278 acres of new plantation.
4. Establishing 1,000 acres by direct sowing.
5. Completion of topographical survey at Riverhead.
6. Laying-out of fire-breaks, tracks, roads, &c., for 1928–29 planting-areas.

## ROTORUA REGION.

*Tree-raising.*

When consideration is given to the exceptionally dry summer, the true crop both at Rotorua and Wairapakao Nurseries must be regarded as quite satisfactory. A sowing of 5,019 lb. of seed was made which resulted in a crop of approximately 30,861,000 seedlings, and this, together with the lined-out and two-year-old seed-bed stock, increased the total available nursery stock to 34,988,500 trees.

The line-sown crop has again given excellent results; damping-off was practically nil, and the very high strike of 10,970 plants per pound was obtained. Insignis pine composed the bulk of this crop, and the remainder—Corsican and prickly-cone pine—also showed splendid results. Trayed stock again did exceptionally well, and from this source 107,000 *Cupressus macrocarpa* and 189,000 eucalypt plants of excellent quality will be available for sale.

*Tree-planting and Direct Sowing.*

Last year's objective for the new season—the establishment of 15,000 acres of new plantations—was more than realized, as the season closed with the record planting of 12,889,730 trees on 22,768 acres, while 161,500 trees were absorbed in blanking. In addition, 2,345 acres of new plantation were formed by direct seeding, making in all a grand total of 25,113 acres. The survivals on the planted areas have been, generally speaking, very good, averaging approximately 83 per cent., while in direct seeding varying success has been obtained, germination counts showing from five hundred to two thousand seedlings per acre.

Although exceptionally wet weather was experienced during the major part of the planting season, conditions, on the whole, were favourable, with the exception of the hot dry weather which prevailed towards the latter end of the period, and which necessarily curtailed planting operations somewhat and was responsible for certain losses.

Labour planting-costs were reduced to the very low figure of 8s. 5d. per acre, a very appreciable reduction of 23 per cent. over similar costs last year. To the greatly increased size of the planting-area this substantial reduction is due to a large extent.