

APPENDIX I.

SUMMARIZED REPORTS ON STATE AFFORESTATION.

AUCKLAND.

Afforestation in this region proceeded on much the same scale as in the preceding year; under all heads approximately 800 acres were planted with 865,500 seedlings, while another 189,400 trees were used for blanking and reconditioning areas previously planted.

The actual planting period was not entirely favourable, climatically speaking, particularly at Tairua, where dry spells affected the growth of *P. patula* and *P. taeda*, the strikes being only 26 per cent. and 48 per cent. respectively. On the other hand, the strike of *P. palustris* and *P. radiata* was almost 100 per cent. Almost equally good results with these two latter species were obtained at Waipoua, but here again *P. patula* failed to transplant satisfactorily.

In South Auckland a beginning was made with the rehabilitation of the cut-over areas of the pumice country bordering the Main Trunk line south of Te Kuiti, and Waimiha was finally chosen as the centre of future activities, where a small nursery will be installed next year.

Tairua.—As will be seen from an earlier portion of this report, the bulk of the new planting in Auckland was done at this station. From the nursery 834,800 trees were lifted and 334 lb. of seed were sown. New planting accounted for 719,300 trees, interplanting for 86,800, and blanking 2,000, the predominating species being *P. radiata*, *P. palustris*, and *P. patula*.

Operations in advance of planting included burning 878 acres, line-cutting 171 acres, and clear felling 31 acres.

The necessary maintenance to buildings, fences, roads, telephone-lines, &c., was given attention, and firebreaks were cleared where required.

Riverhead.—Heavy winter rains here were followed by a dry spring with further rainfall in early summer and drought conditions during late summer and autumn. Planting was mainly confined to blanking 84 acres, and maintenance-work included painting residence at headquarters, clearing slips on roads, ploughing, burning, clearing firebreaks, &c. Thinning of *P. radiata* stands will soon be necessary. Pruning was carried out on *P. radiata* stands, 310 acres being dealt with, and 127 acres of planted lines were opened up.

Maramarua.—Tree growth of *P. radiata* is making good progress, but the few other species planted are slow in conquering the fern ground cover. In a year or two at longest pruning of all of the *P. radiata* compartments will be necessary. From the nursery 119,500 trees were lifted and distributed, mainly to other stations, and 8,500 one-year-old *P. radiata* were lined out.

Permanent works accomplished were the renovating of the old mess-room and its conversion into quarters to accommodate four men, the metalling of 47 chains of road, and widening and reconditioning of other roads, whilst maintenance covered repairs to roads by removal of slips, replacement of wooden culverts by concrete ones, strengthening bridges, &c., clearing of firebreaks, cleaning drains, and altering and reconditioning telephone-lines. Stands of *P. radiata* totalling 546 acres were pruned.

Waipoua.—Sixty acres of new planting was carried out at this station, and a small area was underplanted. Routine work and maintenance were kept well up to date.

Puhipuhi.—The main work carried out here was routine maintenance; 39 acres were cleared for planting, repairs effected to ranger's cottage, firebreaks cleared and burned, and tracks opened up. An area of 110 acres was exploited for pit props, and 16,000 props were extracted.

ROTORUA.

Kaingaroa.—Very little new planting was done during the year, but a total area of 3,800 acres was blanked, 2,920,300 trees, mainly *P. ponderosa* and *P. murrayana*, being used. A subsequent survey showed that the average mortality was about 3 per cent.

Nursery.—Although seed-sowing was commenced on 20th October, unfavourable weather conditions delayed its completion till 7th November; 522 lb. of seed, principally *P. murrayana*, *P. ponderosa*, and *P. strobus*, were sown, which produced a crop of 3,535,000 seedlings. Unfortunately, very bad weather followed seed-sowing, and the *P. ponderosa* and *P. strobus* completely failed to germinate. Further sowings of *P. radiata* (60 lb.), *P. murrayana* (50 lb.), and *P. pinaster* (23 lb.) to replace the losses were made at the end of December, but the result was not satisfactory; the crop was severely affected by high winds, and only 495,600 seedlings survived.

Rotoehu.—The small area of 67 acres was planted with 65,700 trees, mainly *P. taeda* and *P. palustris*; a mortality count showed that about 94 per cent. have survived. Blanking of 44 acres absorbed 14,800 trees, 11,800 *P. radiata* and 3,000 *S. sempervirens*. Nursery seed-sowing commenced about the middle of October, and, owing to adverse weather conditions, was not completed until early in January. Germination was eventually very satisfactory in all species, but storm losses occurring in late January so reduced the crop that only 2,843,500 young trees were raised from 643 lb. of seed, *P. strobus*, *P. taeda*, *P. palustris*, and *P. caribaea* being the principal species.