

APPENDIX.

SUMMARIZED REPORTS ON STATE AFFORESTATION.

AUCKLAND REGION.

Nurseries.—The nurseries in this Region are now confined to Wharekawa (Tairua Plantation), where from small sowings of *P. radiata* and *P. Pinaster* seed 55,000 and 30,000 trees respectively were raised; Waipoua, where the main seed-sowings were *P. caribaea* (28 lb.), *P. palustris* (17 lb.), *P. Pinaster* (5 lb.), and *P. echinata* (5 lb.), and a variety of eucalypts (a few ounces each); and at Waitangi, where *P. caribaea* (12 lb.), *P. palustris* (5 lb.), and *P. echinata* (2 lb.) were sown. At the last-mentioned station about 100,000 seedlings were raised.

Plantations.—It was not possible to adhere to the afforestation programme owing to difficulty in obtaining relief labour at Tairua Plantation. Not only did this shortage of hands reduce the volume of work done very considerably, but also compelled the destruction of a large number of trees which would be too large if carried over for another year. The following is a summary of the work done, the figures in brackets indicate the projected programme: tree-planting, 578 acres (765); blanking, 452 acres (1,556); underplanting, 24 acres (24); interplanting, 24 acres (30).

Better results have been obtained by pit-planting of *P. radiata* at this station than notch-planting. The pines from the Southern American States are also making good progress, and the same can be said for *P. ponderosa* and *P. Laricio*, but the growth of *Sequoia sempervirens* and *Thuja plicata* is somewhat disappointing.

Maramarua.—Stocktaking after planting was completed showed a strike of 96 per cent. of the blanked trees and from 60 per cent. to 78 per cent. of those underplanted.

Pukipuki.—At this station an area of 31 acres of eucalypts was interplanted for experimental purposes with *Sequoia sempervirens*.

Riverhead.—At Riverhead about 30 acres were planted, while blanking was done over approximately 500 acres.

ROTORUA REGION.

Nurseries.—The two main nurseries are at Rotorua and Wairapukao (Kaingaroa Plains); at the latter 495 lb. of seed were sown, comprising *P. Murrayana*, 56 lb.; *P. ponderosa*, 280 lb.; *P. radiata*, 157 lb.; *Thuja plicata*, 2 lb.; and at the former 17 lb. of *P. radiata* and *P. Murrayana* in nearly equal proportions.

The total trees lifted numbered 8,114,500, of which approximately 5,000,000 came from Wairapukao. Grass grub destroyed 3 acres of lined-out stock at Rotorua Nursery, 730,000 *Pseudotsuga taxifolia* (Douglas fir) seedlings being lost. It is noticeable that this pest does not appear on land where blue lupin has been dug in.

Trees available for future planting are Wairapukao, 9,400,000; Rotorua, 6,900,000.

Plantations.—The total area planted was 9,429 acres, with an average of 702 trees per acre, and the planting-gangs were mostly relief workers. The absence of unseasonable frosts resulted in good growth amongst all species. The daily planting per man averaged 555 trees, or 282 trees per man fewer than the previous year. This drop is accounted for by the loss of time in handling, as larger trees were used than formerly. Blanking accounted for 145,700 *P. ponderosa* trees. A mortality count taken in February showed 31 per cent. loss of *P. Laricio* and 11 per cent. loss of *P. ponderosa*, due probably to the fact that three- and four-year-old stock was used and the dry weather set in before the trees were properly rooted.

WELLINGTON REGION.

A small sowing of *P. ponderosa*, *P. Murrayana*, and *P. Laricio* seed was made at Karioi Nursery, while 591,000 trees were lifted and used mainly for local planting. Nursery-tree stocks number 309,800, including 2,500 rooted cuttings of *Pop. fastigiata*. The predominating species are *Larix decidua*, five-year-old, 135,000, *P. Laricio*, five-year-old, 50,000.

Plantations.—Very little new area was planted at Karioi, but 1,350 acres were blanked with 310,200 *P. Laricio*, 40,000 *P. ponderosa*, and smaller quantities of *P. Murrayana* and *Pseudotsuga taxifolia*. Rain fell on 155 days at this Station, the three driest months being April, 1934, and January and March, 1935. At Erua Plantation 169 acres were underplanted and 80 acres were interplanted, the species used being *Cupressus Lawsoniana* and *Pseudotsuga taxifolia*. At this plantation *P. ponderosa* and *P. Murrayana* are making good growth in the open country, but in the burned-over bush land *Thuja plicata* shows poor results and was not nearly so successful as *C. Lawsoniana*.

NELSON REGION.

At Golden Downs Plantation the planted area was increased during the year by 1,424 acres, which brings the net area of this plantation to 19,181 acres and the gross area to 22,527 acres.

Deer have caused some damage to the young trees, but this pest is kept in check by continuous shooting. The dense fern-growth in many of the gullies has rendered clearing necessary to give the young trees a chance in their early stages.