

It is anticipated that another season's planting here will practically complete the area enclosed, so that further land will require to be obtained for future operations.

The total expenditure for the year was £1,910 0s. 6d., and the present estimated value is £7,401 0s. 11d.

Particulars of expenditure, values, trees planted, &c., will be found in attached schedules.

WHAKAREWAREWA PLANTATION, NEAR ROTORUA.

(Area, 817 acres. Established 1899.)

Trees to the number of 232,754—details of which will be found in Schedule C⁴—were planted here permanently during the year, with good results. The failures in the redwood compartment amounted to nearly 2 per cent., and in the Eucalypti about 8 per cent.

Owing to the difficulty previously experienced in transferring Eucalypti from the seed-beds to the plantation, a trial was made of sowing the seeds direct in prepared pits on the plantation, thus avoiding the risk of removal. Seven varieties were thus sown in 28,000 pits, with fairly satisfactory results.

During the year a good deal of labour was expended in keeping growth of fern and tutu in check amongst newly planted trees, which grow luxuriantly here, and, if neglected, would very soon choke the young trees. The growth on the fire-breaks was kept in check chiefly by a free use of the horse-hoe.

For next season's planting an area of 60 acres was cleared at a cost of 10s. per acre. On this area 120,000 pits, costing 14s. 6d. per thousand, are now being made for larch and redwood, the latter being the permanent trees.

The total area permanently planted to date on this reserve of redwoods, pines, and Eucalypti is 229 acres, equal to 416,490 trees. The planting was done by Natives (at 6s. per day), and each man was attended by a Native woman (at 3s. 4d. per day) to hold and tramp in the trees, the cost being 12s. 6d. per thousand trees planted.

WAIOTAPU PLANTATION (PRISON LABOUR), ROTORUA DISTRICT.

(Area, 1,280 acres. Established February, 1901.)

As nearly one-third of the area is affected by thermal action of an interesting nature, it is proposed to divide the plantation area from the thermal portion in order that each area may be gazetted as State-forest and hot-springs reserves respectively, so that their protection can be carried out according to the separate regulations relating thereto.

When the area was originally taken in hand both the hot-springs and plantation portions were under control of this Department, and a vast amount of labour was expended in forming paths to open up springs and places of thermal action, and also in ornamental planting. The control of the hot-springs reserves was taken over by the Tourist Department in September last.

The work of fencing was commenced last year, and completed towards the end of June, in a very creditable manner. The fence consists of totara posts and seven wires, with eight 10 ft. gates and eight turnstiles, erected alike for the convenience of the camp and tourists who visit the thermal springs within the enclosure.

A building comprising stable and workshop was erected and thatched with raupo and rushes.

The total number of trees planted during the year amounted to 82,277. Of this number some 40,000 were planted along each side of the roads and paths, and around the camp on edges of plantation area for shelter purposes. These consisted chiefly of *Cordyline*, *Pittosporum*, *Cupressus lawsoniana*, and birch. 30,130 *Berberis vulgaris* were planted as a hedge along the fence-line, a strip of land 3 ft. wide by 2½ miles long having been previously trenched 2 ft. deep in readiness. On the three trial plantations some 12,000 trees were planted, comprising *Pinus benthamiana* as permanent trees and Corsican pine and Lawson's Cypress as nurses. Very good results have been obtained amongst all the trees planted—a careful examination showing rather less than 3 per cent. of failures, most of which occurred among the Corsican pine.

An area of 14 acres was enclosed within a post-and-eight-wire fence in order to keep a supply of sheep for the prison use. As this land was of a swampy nature, some 52 chains of ditching had to be done to bring it into condition for sowing down in grasses.

A small area was also enclosed with wire netting for the purpose of growing vegetables for prison use.

For next season's planting an area of 106 acres was cleared of scrub and other growth, and up to the 31st March 203,848 pits had been dug at 4 ft. apart. This work is still going on, and by the end of April it is anticipated that over a quarter of a million pits will be in readiness for the coming season's planting.

The average number of prisoners employed was twenty-two, four of whom were fully occupied in cooking and other works connected with the prison camp.

Owing to the varied nature of the work carried on during the last twelve months it is difficult to arrive at even an approximate estimate of its value. In commencing forest-tree planting by prison labour there is necessarily a great deal of preliminary work before actual tree-planting can be proceeded with—fencing on very uneven treacherous ground necessitated heavy cuttings and fillings, as well as extreme care on the part of the warders to prevent accident; roads were formed to give access to all parts of the area, as well as improving the adjoining road-lines in the vicinity of prison camp. Now that the preparatory work is practically completed, it will be possible to keep a correct record of the value of labour done. From frequent personal observation, as well as by estimating certain defined works such as digging holes for trees, it can be said that there has been an entire absence of loitering by prisoners, and, although perhaps hardly equal to free labour in point of speed, the works undertaken have been carried out in a thorough and workmanlike manner.

Details of expenditure (chiefly for fencing material and timber for stable and workshop) are appended.