

GIMMERBURN PLANTATION RESERVE.

(Area, 425 acres; altitude, 1,200 ft.; commenced operations, 1903.)

(W. T. Morrison, Nurseryman in Charge.)

There is nothing of note to record in connection with this plantation. Since initiation the locality has not evidenced any special adaptability for the successful growth of trees, and operations here have been attended with a considerable amount of difficulty and with only indifferent results. It has, however, served to demonstrate in a way the species which might with careful handling meet with a fair measure of success. *Pinus austriaca* is the dominant species at present, but there is evidence that *P. ponderosa* will probably prove the best species to utilize in completing the planting. The area occupied by trees at present covers about 100 acres, and the bulk of the remainder has been leased for sheep-grazing purposes, the lease terminating on the 30th April. This is not, however, a paying proposition for the Department, and it is intended to prepare during the next season for the completion of tree-planting. In the meantime preparation is being made to crop a considerable area with oats and wheat, from which, judging by previous experience in this direction, a successful return might be expected, the expressed desire on the part of the Minister of Agriculture for every effort towards increasing the area sown in cereals this year being the main inducement to undertake this proposition, apart from the benefit to ourselves in providing horse-feed, &c. As soon as the crop is removed pitting for tree-planting could be commenced, provided sufficient labour is available, or failing this the Department might very well use the ground for sheep-grazing, the success of which has been amply demonstrated at the Tapanui stations. The blanks in the present planted area require filling up, and two men could be engaged at this work while at the same time giving necessary attention to sheep.

During the year the usual work of cutting noxious weeds and the eradication of rabbits, which have been fairly numerous, has been carried out.

HANMER SPRINGS NURSERY, CANTERBURY.

(Area, 40 acres; altitude, 1,225 ft.; established, 1902.)

(W. G. Morrison, Nurseryman in Charge.)

Rain fell on 109 days during the year, the total precipitation being 42·87 in.—almost double that of the preceding twelve months. Compared with the previous year there was a substantial increase in the rainfall, but the precipitation was not well distributed throughout the year, as will be seen by perusal of the meteorological sheet, the main rainfall taking place from the month of July to November. During the principal growing months there was a dearth of moisture and a prevalence of high temperature much above the average, and as a consequence the standard of tree-growth was not up to that of previous years. Crops grown for horse-feed also suffered from lack of moisture, and it is anticipated that a shortage of chaff will be experienced during the winter.

Tree-growing.—Owing to the adverse weather conditions prevailing during the main growing months the growth of all nursery stock was much below the average. The results obtained from seed-sowing were fairly satisfactory, however, a total of 2,000,080 seedlings being raised. The work of lining out seedlings proved fairly successful, a total of 985,100 plants being transferred to the nursery-lines under medium conditions. The subsequent growth, however, was not good, but the plants appear to be sturdy enough. Owing to lack of labour it was found necessary to leave a very large number of seedlings in the seed-beds for a further season. The trees intended for transfer to plantations, &c., have only made fair headway, with the exception of Austrian pine, but have a hardy appearance, and it is anticipated that from 800,000 to 1,000,000 will be available for transfer. The number sent out to plantations, &c., during the year was 375,562, as per schedule attached. The total number of trees in stock on the 31st March was 4,365,800.

Horse-feed.—Between 50 and 60 acres was put down in crop during the spring, the result being much below the average and producing but 30 tons of oatsheaf. Two crops of clover hay were cut from the old seed-bed area, the result being a stack of about 8 tons of good winter feed.

General.—All areas not under trees were put down in oats, the stubble being ploughed in after harvesting the crop. The whole area treated under lime the previous year is now showing the beneficial effects of this treatment, the sorrel having decreased to a very appreciable extent. The usual attention was given to the upkeep and general cleanliness of premises. Repair works were effected in connection with the wagon, drays, implements, and tools. The stable buildings received a much-needed coat of paint, and a commencement was made with the repainting of dwelling, office, &c.

Proposals.—The purchase of two useful horses for wagon purposes is recommended, and also the purchase of a more suitable wagon for the distribution of trees and general carting purposes.

The daily average of men employed throughout the year was 6·7.

The expenditure for the year amounted to £1,482 3s. 4d., the total expenditure to date being £16,766 0s. 3d.