

Acreages of Trees planted.

Name of Tree.	Area.	
	Pure.	Mixed.
	Acres.	Acres.
<i>Pinus austriaca</i>	74	..
<i>Larix europaea</i> and <i>Pinus ponderosa</i>	14
Totals	74	14
	88	

HANMER SPRINGS NURSERY, CANTERBURY.

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

Rain fell on 139 days during the year, the total precipitation being 59·17 in., showing an increase of 16·30 in. on the rainfall of the preceding twelve months, and an increase of thirty days on which rain fell. The average monthly fall was 4·93 in., the heaviest falls being registered for the months of May, September, and December. The rainfall was, however, well distributed throughout the year, and at no time did dry conditions prevail. The highest shade temperature (89° F.) was registered on the 29th January, and the lowest (17° F.) on the 28th June and 10th August, and frost was recorded on 120 nights. Compared with the temperatures registered during the preceding twelve months little difference was observable.

Tree-growing.—Nursery operations generally were attended with a fair measure of success; but some difficulty was experienced in carrying on works owing to the shortage of labour and the difficulty in procuring efficient workmen, and during the spring months this was particularly acute. As a result the transplanting of the whole of the young trees ready for transfer to nursery-lines could not be carried out, and lining-in was resorted to; but even though the young plants were much more expeditiously dealt with in this manner it was found necessary to allow a large number of seedlings to remain in the seed-beds for a further season. The abnormally wet weather experienced also greatly retarded transplanting operations, a start with this work not being made until almost a month later than usual. The results obtained were not entirely satisfactory with all varieties, *Larix leptolepis*, *Pinus muricata*, and *Cupressus macrocarpa* being poor “strikes”; but all other varieties were quite satisfactory. The number of trees transferred to nursery-lines was 1,193,000. Two- and three-year-old trees have made very fair headway, *Pinus radiata* and *P. muricata* (three-year-olds) making specially rapid growth. The results obtained from the sowing of 248 lb. of seed were highly satisfactory, the estimated crop being 1,471,200 generally sturdy plants, only a few varieties being in any way poor, as will be seen by perusal of schedules attached. It is estimated that about 1,300,000 trees will be available for transfer to plantations, &c., during the coming season. A total of 810,307 trees was sent out from the nursery during the year—772,107 to departmental stations and 38,200 to farmers and others. The total number of trees now on the nursery is 3,487,900.

Horse-feed.—An area of about 44 acres was put down in crop during the spring; but the results were not altogether satisfactory, the yield being much below the average. Owing to the last season’s shortage a large amount of chaff and oats had to be procured from Culverden. The hay crop proved more satisfactory, however, and there is abundance of this feed for winter use. The carrot crop is also satisfactory.

General.—All vacant areas on the nursery were again put down in oats, and the stubble ploughed in after harvesting. Roads received attention with regard to shingling and repairs. The general upkeep and cleanliness of stables, workshops, and outbuildings was attended to. Repairs were effected to wagon, implements, tools, &c., where necessary. All fences requiring attention were thoroughly repaired, and are now in good condition. During the year two useful draught mares were purchased for the purpose of supplementing our teams for cartage-work to plantations. Our stock of horses was increased by the addition of a useful-looking filly.

In view of the increased distance to deliver trees from this station—thirty-two miles—and the greater labour involved, it would be advisable to procure a more suitable wagon than the one now in use, which at best will hardly last another season. The installation of a water-wheel for the purpose of supplying power for cutting chaff, wood-cutting, &c., would be a paying proposition, an ample head of water being available. The initial cost would practically cover the expenditure on this item, as subsequent running-costs would be nil. The wheel and necessary accessories could be constructed and installed for under £50, and would result in a yearly saving of chaff-cutting expenses, &c. An additional room is required for the dwelling of the Nurseryman in Charge, and also for that of the Assistant Forester, the accommodation being now too meagre for family comfort. The addition of a hot-water service is also very desirable, the absence of this necessity being a great hardship during the severe winters experienced at this altitude.

The daily average of men employed throughout the year was 7·67.

The expenditure for the year amounted to £1,671 8s. 5d., the total expenditure to date being £18,437 8s. 8d.