

Summary showing Area of Dusky Hill Plantation (745½ Acres in Trees).

How occupied.							Acres.
Pines	...	...	...	...	...	...	270½
Larch	...	...	...	...	...	...	234½
Spruce and Douglas fir	...	...	...	...	...	...	93½
Ash, birch, &c.	...	...	...	...	...	...	46½
Miscellaneous mixture	...	...	...	...	...	...	100½
Roads, tracks, fire-breaks, &c.	...	...	...	...	...	...	99½
Total	...	...	...	...	...	...	845

GREENVALE PLANTATION, OTAGO.

(Area, 5,169 acres; altitude, 700 ft.; commenced 1917.)

During the year an area of 216 acres was planted, making a total area of 953 acres in trees. The number of trees dealt with was 452,125, of which 390,825 were planted on new ground, the remaining 61,300 being used to replace failures in the previous year's planting, principally amongst *Pinus radiata*. The conditions under which operations were carried out were not altogether favourable, the labour required for the preparation of the land not being available until the latter end of winter, while progress in the spring was frequently interrupted by wet weather and snowfalls. Under the circumstances it is doubtful if a larger number of trees could have been conveniently handled.

Tree-growth on the whole has not been good, the growing-period having been a particularly short one owing to the cold sodden state of the ground in the spring and early summer months, and to the protracted spell of dry weather experienced in the autumn. Intensely dry conditions, commencing in January, prevailed for practically three months, during which period no rainfall of sufficient duration to benefit the plantation occurred. Considering the unfavourable weather the percentage of failures amongst the trees planted during the past season is not excessive, although somewhat higher than that of an average year. *Pinus radiata* has done rather better than usual, this being due in a great measure to the special care taken in preparing the plants for transport. Failures were chiefly amongst *Pinus Laricio*, which comprised the bulk of the planting, the majority of the deaths occurring on an area which had at one time been under cultivation and on which the soil cracked badly and dried out rapidly. Satisfactory results were obtained with small numbers of Douglas fir, Japanese larch, and *Pinus Banksiana*. Although the absence of moisture in the autumn months caused a cessation of growth amongst the established trees no permanent injury has resulted, the health of the various compartments of pines being quite satisfactory.

During the summer a new area of approximately 750 acres was enclosed, 105 chains of rabbit-proof fencing of a temporary nature being erected for the purpose. An old boundary-fence of a total length of 109 chains was practically renewed, and also made rabbit-proof by the addition of netting.

Fire-breaks have been kept in an efficient state chiefly by ploughing, but owing to the generally rough nature of the ground a considerable amount of hand labour was also necessary. The preparations for the season's planting are not so well forward as is desirable, this being due to the scarcity of labour during the last three months of the year. The number of pits available for the reception of trees is 155,000, and the approximate number still to be prepared is 400,000.

Six small but comfortable huts were erected to provide accommodation for an increased number of workmen, and several tent-frames—on which tents were unsatisfactory owing to the exposed situation—were re-covered with malthoid, which has proved quite satisfactory and comparatively inexpensive. The kitchen and dining-room have been in occupation during the greater part of the year, and have added greatly to the general comfort of the camp.

The daily average number of men employed was 13·3.

Summary showing Area of Greenvale Plantation (953 Acres in Trees).

How occupied.							Acres.
Pines	...	...	...	...	...	...	912½
Douglas fir	...	...	...	...	...	...	8
Miscellaneous trees	...	...	...	...	...	...	32½
Paddocks, fire-breaks, tracks, &c.	...	...	...	...	...	...	55
Unplanted areas	...	...	...	...	...	...	4,161
Total	...	...	...	...	...	...	5,169

RANFURLY NURSERY, CENTRAL OTAGO.

(Area, 49 acres; altitude, 1,400 ft.)

The past season as regards rainfall may be described as normal, the total for the year of 22·54 in. being about the average recorded for some years past, although slightly in excess of that of the previous year. Rain fell on 118 days, and frosts—from which only one month was entirely free—were recorded on 124 nights. Gales were prevalent throughout the spring and early summer months, and the autumn was much drier than usual. Growth is generally vigorous in February and March, but this year, owing to insufficient moisture, it has been quite unnoticeable.

Transplanted Trees.—Lining-out operations have met with but a poor measure of success, and out of some 430,000 trees dealt with the number now surviving is only 200,000. The number lined out appears to have been overestimated, but the discrepancy is chiefly accounted for by