

General.—As the whole of the block should be planted during the ensuing year, provision only for a temporary camp was made, and for a small expenditure four huts and eight well-constructed boarded tents were erected in a convenient position adjacent to the main thoroughfare. Protection against the prevailing south-westerlies was afforded by constructing a scrub breakwind near to the buildings, and the camp must now be considered as reasonably comfortable. Much work will require to be undertaken here in fencing and subsequently planting the whole enclosure in one season, particularly if the shortage of labour continues. No meteorological records are being kept at this station, as it is believed that the conditions almost exactly coincide with those experienced at the Conical Hills Plantation. The main fire-break of 2 chains in width will follow one of the main spurs from the highest point, thus dividing the area into two blocks of slightly over 300 acres each, about our usual safety unit. A marginal fire-barrier of about 66 ft. has been marked off round the enclosure, and poplars will constitute the few outer lines.

An expenditure of £638 15s. 4d. was directed upon operations here, giving employment to an average of 4·5 men throughout the year.

DUSKY HILL PLANTATION, OTAGO.

(Plantation Foreman, F. Benfell; area, 845 acres; altitude, 400 ft. to 800 ft.; commenced operations, 1898.)

Very uniform progress is being made by trees growing at this station. There is nothing of an outstanding nature to report, but efforts will be devoted during the approaching winter to undertake a small amount of thinning, where such a procedure will prove financially remunerative and beneficial to the dominating trees. The larch continue to make the usual headway, although towards the latter part of summer rapid defoliation of the laterals became conspicuous. It is hoped that circumstances will permit next season the compilation of a special report on investigations into the whole question of larch growing and conversion. Little improvement in the rate of development of the *Piceas* has been the outcome of the favourable growing season, and should these trees not give indications of responding to the shelter gradually being provided there seems to be no option but to replant the area so occupied with pines. The European birch (*Betula alba*) were much affected by the aphis, and this insect in many cases caused complete defoliation early in the growing season. Fortunately, however, only a very small number of these trees have been planted out. Some 19,300 *Pinus radiata* were planted in situations where the Norway spruce is not thriving, and such works as cleaning around trees, tree-pruning, clearing tracks, and caretaking have been carried on by the one man employed. Much improvement to the marginal fire-lines was effected by widening, and the plantation may now be regarded as much more secure from any encroaching fires. Very good results emanated from the grazing of the fire-lines with sixty-six ewes, and the numerical increase of the flock has been decided upon.

The expenditure for the year amounted to £431 13s. 10d.

RANFURLY NURSERY, CENTRAL OTAGO.

(Nurseryman in Charge, A. W. Roberts; area, 49 acres; altitude, 1,400 ft.; established, 1896.)

The total rainfall for the year was 15·62 in., which fell on ninety-seven days. Frost occurred on 183 nights, the minimum temperature being 18°. The maximum temperature was 90° in January. As will be seen by a glance at the meteorological records for the past year, the months of April to September were exceedingly dry, only 3·82 in. being recorded. Owing to the sparse rainfall for these months the work of lining out trees was not very promising. However, lining out was commenced and good weather was experienced for a time; but during the latter part of the work a succession of north-west gales prevailed, and this, together with the fact that most of the hands were inexperienced at the work, greatly influenced results, which have not been as successful as anticipated. *Pinus austriaca* seems to have suffered; but the strongest of these were transferred to the plantation and were evidently affected by the operation. *Pinus ponderosa*, *P. Benthamiana*, and larch, however, have done well; but the height-growth is not up to the usual standard. All seeds sown, except *Pinus Benthamiana*, have germinated well, and a crop of 1,073,200 has resulted from 196½ lb. of seed. *Pinus radiata*, sown in drills without any covering or protection of any kind, have attained a height of 8 in. to 10 in. for six months' growth. All these will be too large before the second year, and they will be severely wrenched and the strongest transferred to the plantation. Seed-sowing was commenced on the 24th August and completed on the 18th September. Owing to the lack of funds the expenditure has been reduced as far as possible, only two hands being employed during the past three months. The total number of trees sent to the plantation was 401,350, and to other places, 7,350, making a total of 408,700 trees. As it has been decided to discard larch from all future plantings, the output for the incoming season will be about 400,000. The output for the following year should reach 800,000.

All tools and buildings have been kept in order; but it will be necessary to paint all buildings in the near future. Shelter-breaks, roads, general weeding, and hoeing have been carried out satisfactorily during the season.

The total expenditure for the year is £909 1s. 10d., and the total since initiation £17,073 0s. 7d. The average number of men employed for the year was 4·57.