

of the summer months in reopening pits on the Hammer River area where failures had occurred, and the planting will be taken in hand during the coming winter. Boundary fire-breaks were ploughed throughout. The portions inaccessible to the plough were clipped, thus reducing the risk of fire gaining access from adjoining properties. The discontinuance of sheep-grazing allowed growth to make headway on the internal fire-breaks; but the letting of grazing-rights to St. Helens Station during the autumn months had the desired effect, the growth being quickly eaten off. The usual attention was given to the destruction of hares and rabbits by poisoning, trapping, and shooting. Fences received attention with regard to repairs, and drains were opened up in paddocks where necessary. Some pruning was done to birch adjoining fire-breaks and roads, and the destruction of noxious weeds, such as gorse, broom, and briars, was carried on. A small amount of crop was grown for horse-feed. Two lines of *Pinus muricata* adjoining Jollie's Pass Road were cut out, and the timber was disposed of in the township for fuel, a total of 55 cords being sold. A large number of fencing-posts were sent to Balmoral Plantation. Red deer are becoming more numerous about the district, and have done some damage to trees on the borders of plantations, but have so far managed to escape, though efforts have been frequently made to destroy them.

The standard of tree-growth throughout the plantations was well maintained, and all varieties made good headway with the exception of larch breaks situated on flat country, where needle-cast was very pronounced and had the effect of retarding growth. On the sidelings, however, this disease did not manifest itself, and the trees made good headway and present a healthy appearance. The marginal lines of *Betula alba* were slightly affected with fungus, probably due to the wetness of the season, but have made good headway in spite of this. The disease, however, had the effect of destroying the seed, and there is none available this season. *Picea excelsa* have also made but poor headway, and have not made any appreciable advance during the last few years. It would be advisable to plant up the areas under this tree with any good variety of poplar, and also deal in a similar manner with swamp areas, which are numerous throughout the plantations. Attached hereto are details of trees planted and the area covered since the initiation of tree-planting at this station—area approximate only.

The daily average of men employed throughout the year was 4.41.

The expenditure during the year amounted to £851 9s. 4d., and total expenditure to date £26,561 13s. 10d.

*Acreages of Trees planted.*

Name of Tree.	Area.	
	Pure.	Mixed.
	Acres.	Acres.
<i>Pinus Laricio</i> and <i>P. ponderosa</i> .. .. .	..	750
„ and <i>P. Benthamiana</i> .. .. .	..	145
„ and <i>Pseudo-tsuga taxifolia</i> .. .. .	..	140½
<i>Pinus radiata</i> .. .. .	133½	..
„ <i>austriaca</i> .. .. .	361	..
„ <i>muricata</i> .. .. .	17½	..
„ <i>Taeda</i> .. .. .	1½	..
„ <i>contorta</i> .. .. .	1½	..
<i>Larix europaea</i> .. .. .	1,177	..
<i>Picea excelsa</i> .. .. .	60	..
<i>Cupressus Lawsoniana</i> .. .. .	1½	..
<i>Alnus glutinosa</i> .. .. .	71½	..
<i>Betula alba</i> .. .. .	9½	..
<i>Sequoia gigantea</i> .. .. .	4½	..
<i>Thuja gigantea</i> .. .. .	1½	..
<i>Acer pseudo-platanus</i> .. .. .	1½	..
<i>Eucalyptus</i> (species) .. .. .	1½	..
<i>Populus</i> (species) .. .. .	6	..
<i>Salix</i> (species) .. .. .	2½	..
Totals .. .. .	1,851	1,035½
	2,886½	

BALMORAL PLANTATION, CANTERBURY.

(Area, 7,636 acres; altitude, 550 ft.; commenced operations, 1916.)

Operations at this station have again been attended with a fair measure of success during the past season. There was a bountiful rainfall throughout the summer months, which just suited the shingly formation of this station. A general review of the first and second season's operations must at once convince those who had any doubts, and even the most pessimistic, that