

the failures were with this species, these having been planted during seasons 1913 and 1914 on low-lying tussock land subject to unseasonable and heavy winter frosts.

Maintenance.—The expenditure in clearing around the young trees, although small in comparison with former years, was considerably more than was expected, as owing to the moist season there was an abnormal growth of bracken, particularly on the blocks of larch which had been thinned. In bracken-covered country this clearing is necessary for from three to five years after the planting takes place, according to the density of the bracken-growth and the rapidity of the species planted. The trees suitable for rapidly outgrowing and suppressing bracken are limited to a few species. The Corsican pine, which is somewhat slow for the first few years, needs protection from the bracken for four or five years after planting. With the Monterey pine a period of two years is generally sufficient to enable them to get well above the bracken. A lot of two-year-old seedling Monterey pine which were planted five years ago, at the rate of 2,700 to the acre, have completely covered the ground, and several specimens measured show an increase in height-growth of 7 ft., and one as much as 9 ft. 6 in. for the past season. The average height of the trees in this compartment is now 14 ft. *Pinus teocote* comes next to the Monterey pine in rapidity of growth, but has the disadvantage of being rather tender and having a poor root-system. The average height for this species is, under fair conditions, 16 ft. for six-year-old trees. *Pinus patula* is also a rapid grower, trees four years old having produced an abundance of branches which completely cover the ground and attained an average height of 10 ft.

Experimental Planting.—The Weymouth pine, growing as underplants on the thinned blocks of larch and silver-birch, are a splendid healthy lot. The results show that a fairly heavy thinning is necessary in order to get the underplants to succeed. The small lot of Japanese larch planted two seasons ago were slow to make a start, but have now become established, and show an average growth of 2 ft. for the past season.

Survey Work.—Compartment plans have been prepared for blocks 1 to 5 inclusive. These have entailed a good deal more labour than will be necessary on further work of this description, because the blocks dealt with were the first ones planted and contained many small compartments.

Proposals for 1917-18.—It is proposed to commence operations on a block of land on the Galatea Road, adjoining the present enclosure. The preparatory work of clearing and pitting was started during the summer, but the progress made has not been up to expectations owing to a shortage of labour. It is hoped that an area of about 1,400 acres would have been planted by the end of next winter, but the extent of the work will depend entirely upon the labour available. Two small cottages, which are inadequate for the requirements of the staff, are to be enlarged each to four rooms. The question of accommodation for workmen is one which must be faced in the near future. At present when vacancies occur returned soldiers and married men are given preference, but so long as the accommodation consists of a ten-by-twelve tent there will be no inducement for a married man with a family to take up this class of work. With the Great War still unfinished responsible officers are rightly expected to shoulder more responsibility, but when, as was the case at this plantation, all the skilled workmen were single men, who answered the call by enlisting, it simply meant that important works were either indifferently done or not commenced. With a few cottages, the rental from which could be made to pay the interest on the capital cost, married men could be employed, who it might reasonably be expected would endeavour to make their employment permanent. Many single men come to the backblocks with the sole idea of making a cheque and then returning back to the more populous centres, and generally leave about the time when they become of some value to the Department.

The average daily number of men employed during the year was 11·60.

Following is a record of the rainfall and temperatures for the year :—

Rainfall, Temperature, &c.

Month.	Rainfall.	Number of Days Rain fell.	Temperature.		Number of Days Frosts occurred.
			Maximum.	Minimum.	
1916.	In.		Deg. F.	Deg. F.	
April	3·34	10	76	23	12
May	4·71	18	68	18	12
June	3·53	18	66	16	13
July	2·51	17	61	18	15
August	7·26	23	66	19	15
September	2·09	10	70	15	17
October	5·92	22	70	23	9
November	7·32	19	75	25	3
December	6·88	12	83	30	1
1917.					
January	1·39	13	82	34	..
February	6·79	12	84	30	4
March	1·80	6	80	27	11
Totals	53·54	180	..	..	112