

Summary showing the Area of Kaingaroa Plains Plantation (3,839·616 Acres in Trees).

How occupied.						Acres.
Pines	...	...	...	...	...	3,473·864
Douglas fir...	...	...	...	...	...	340·176
Larch and chestnut mixture	...	...	...	...	...	25·576
Roads, tracks, and fire-breaks	...	...	...	...	...	446·180
Unplanted land	...	...	...	...	...	29,069·204
Total	...	...	...	...	...	33,355·000

PUHIPUHI PLANTATION.

The rainfall for the year ending 31st March, which amounted to 101·70 in., is probably a record one for this district, and to this may be attributed the good growth which has been made by the trees. Some 61,000 trees were transferred from Rotorua Nursery and used chiefly for replacing deaths which had occurred in the areas planted during the two preceding years. An experimental planting of six species of *Eucalypti* was made, but the results were on the whole not very good. There are so many causes which may contribute towards failures that it is not safe to come to a hasty conclusion. One of the chief difficulties, of which mention has been made in previous reports, is the loss of trees in transit between Rotorua and Puhipuhi, a journey which occupies the best part of a week.

Some of the species of *Eucalypti* are much faster-growing than others, and the large-sized trees do not endure a journey as well as the slower-growing hardy sorts. The loss in transit was very much less than during the two previous years, which is due to the plants being on the whole smaller than usual, and also to the fact that the heads of the trees were not covered except by sufficient battens to protect them from external injury. This method of packing entails considerably more expense in carriage, and would be prohibitive except for small consignments.

The growth made by the trees planted during the past two years is exceptionally good, and this is especially noticeable with *Eucalyptus resinifera grandiflora*. For the most part the planting was done on the faces of sheltered gullies, and the good growth made affords striking proof of the adverse part the wind has played towards the growth of *Eucalypti* generally throughout this plantation reserve.

The clearing and burning-off of 1,146 chains of boundary and cross fire-breaks cost at the rate of 2s. 6d. per chain. The boundary breaks average 1½ chains in width, while the cross-breaks are 2 chains in width. The cost is somewhat greater than usual on account of the rainy season, which caused a vigorous growth of bracken and greatly retarded the burning-off. The average daily number of men employed during the year was 3·35. Labour has been very scarce, and it has been impossible to attend to other than urgent work.

Following is a record of the rainfall and temperature 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	..	..	3·67	9	74	42	..
May	..	..	12·23	11	66	38	..
June	..	..	3·53	17	66	36	..
July	..	..	14·10	16	66	32	1
August	..	..	10·46	18	62	32	1
September	..	..	5·44	12	68	32	1
October	..	..	8·40	12	74	38	..
November	..	..	9·74	16	78	38	..
December	..	..	5·82	8	86	40	..
1917.							
January	..	..	8·96	14	76	48	..
February	..	..	14·82	8	78	40	..
March	..	..	4·53	14	78	40	..
Totals	..	..	101·70	157	..	..	3

RUN NO. 24, RANGITIKEI.

The work of controlling the sand-drift, as described in last year's report, has been continued, but owing to the necessity of curtailing expenses and also to the shortage of labour only one man has been employed during the year. As circumstances did not permit of an extension of the work, the available labour was used in maintaining that already done, and experimenting with different types of sand-catching fences and several kinds of trees. The most effective fence