Details of Trees transferred to Plantations, &c., 1911-12.

Where sen		Name of Tree.					Number.	Value per Thousand.		Total Value.			
Whakarewarewa Planta Waiotapu Plantation Mental Hospital, Porir Vice-Regal Residence,	 ua	••	Pinus	Laric			 	2,647,100 2,646,325 25,000 1,474	1	s. d	£ 4,691 4,293 28	0 1 2	5
vice-negai nesidence,	Menning	ton	shr		ornamen	ital free	s and	1,474		••	0	10	U
School, Mount Albert			Ditto					12		i	0	1	0
" Ongarue	• •	••	,,					25	:		0	1	6
"Puha	• •	• • •	,,				••	12	!		0	1	0
" Ohaupo		••	,,					25		••	0	1	6
"Gisborne High		• •	"					21			1	1	0
, Kaitaratahi		•• '	,,					18	i		0	18	0
Borough Council, Te A	roha		"					200		• •	0	4	6
Lands Office, Thames	••	•• :	"	••	• •	••	••	18		· · i	0	9	0
Totals					••			5,320,230			9,021	11	7

H. A. GOUDIE, Superintending Nurseryman, North Island.

## WHAKAREWAREWA PLANTATION.

(Area, 9,547 acres; approximate altitude, 1,200 ft.)

A very successful season has been experienced, both as regards the amount of work performed and the results obtained.

Trees to the number of 2,647,100 were received from the Rotorua Nursery. Of this number, 2,367,815 were planted on new area amounting to 823 acres, and the remainder, 279,285, were used to replace failures in former years' planting. Planting was done by both free and prison labour, the former planting 1,606,900 trees on new area, and 264,285 to replace failures; while the prisoners planted 760,915 on new area, and 15,000 to replace failures. The number of trees dealt with considerably exceeds that of any previous year. The total number of trees now in the plantation is 12,007,976, occupying an area of 5,450 acres.

Prison Labour.—The average daily number of men employed was 11·16, and their work was valued at £934 19s. 9d., or an average of £83 15s. 7d. per man. Great credit is due to the Gaoler, Mr. J. Down, and his officers for the able assistance given in carrying out the various works.

Free Labour.—An average daily number of 26.43 men were employed, and the average cost of the various works undertaken was as follows: Clearing for tree-planting, 19s. 4d. per acre; pitting, 6s. 2d. per thousand; planting, 6s. 11d. per thousand; and planting blanks, 18s. 634d. per thousand.

The natural growth on the greater part of the area cleared was comparatively light, and consequently the work was done more expeditiously and much more cheaply than in the previous year, when clearing cost £1 15s. 9d. per acre. The lightness of the growth was also advantageous to the pitting, as the ground was very clean after burning off was completed, enabling the work to be done at a considerably reduced cost per thousand. The number of pits prepared by free labour was 1,664,680.

Pruning was carried on amongst the older larch and Douglas fir during the summer months, the chief object being to prevent the suppression of the latter species. In this part of the plantation the Douglas fir were planted at 8 ft. apart, amongst the larch; and although a number of them are holding their own with the larch, the majority of the Douglas fir have been outgrown, and, unless given assistance, would in time become completely smothered by the larch. By trimming up the branches of the larch immediately around them, and thus giving the Douglas fir plenty of light, the rate of height-growth will be considerably increased, and they will still have a chance of catching up to the larch. This method of planting these species together was discontinued four years ago, as it was foreseen that it would prove unsatisfactory, owing to the inequality in the rate of growth and the consequent cost of

On the western side of the plantation a large swamp runs back some distance within the reserve, and also extends beyond the boundary. This place has always been a source of anxiety owing to the difficulty of maintaining an efficient fire-break; and as the only remedy was to clear and drain the whole area, it was decided to do so during the summer months. To obtain fall the stream running through the swamp had to be straightened, which necessitated a large drain. The opening of the smaller drains was also somewhat difficult and costly, owing to the nature of the swamp, which in many parts was simply deep black mire. The whole of the area—which was drained at a cost of £1 2s. 8d. per chain—is now rapidly drying, is safe from fire, and will later on be planted with alder.

The sum of £385 10s. 1d. was spent in keeping down the rank growth of fern amongst the young trees, and £127 5s. 2d. was required for the maintenance of fire-breaks. The fire-breaks in the older parts of the plantations, which were sown down in grass some time ago, have proved a success, and a further area will probably be sown down during the next season.

Rabbits and hares, which were on the increase, and starting to do some damage to the young trees, were kept down by trapping, shooting, and digging out the burrows.

A new area of about 540 acres adjoining the Waiotapu Road has recently been added to the plantation reserve. This is a wedge-shaped block of land jutting into the plantation, and is a decided