

HANMER SPRINGS NURSERY, CANTERBURY.

(Area, 40 acres; altitude, 1,225 ft.)

Rain fell on 111 days during the year, with a total precipitation of 45·50 in., as against 48·94 in. for the preceding year. The highest shade temperature (93°) was registered on the 18th December, and the lowest (9°) on the 26th June. Frost was recorded on 117 days during the year, an increase of eighteen days on the records of the year previous.

Tree-growing.—The usual success has not attended operations over the past twelve months, and only very medium results have again to be recorded. Until the newly acquired nursery area is brought under cultivation good results cannot be expected. It is anticipated, however, that the new ground will be ready for tree-growing operations next spring, when it is hoped that our efforts will be attended with a greater measure of success. The transfer of 1,156,000 seedlings to the nursery lines was not attended with very satisfactory results, the percentage of losses being very heavy and subsequent growth not good. Seed-sowing again gave but poor results; from 194 lb. of seed only 1,104,877 trees were raised. It is estimated that the nursery contains 2,688,877 trees at the present time, of which approximately 745,800 are fit for transfer to plantations, &c. Trees to the number of 688,250 were sent out to the plantations, and 17,675 to farmers, making a total of 705,925 trees transferred for the season.

Horse-feed.—A very fair crop of oatsheaf was harvested, and it is estimated that approximately 25 tons are now in stack. The amount grown, however, is not sufficient for the season's requirements, and additional chaff and oats will have to be purchased to see the season through. From the areas under clover two crops were harvested, and the area sown in lucerne during the spring produced a light crop by the end of February. The carrot crop proved a failure; but the area under turnips turned out well.

General.—During the summer much-needed improvements were effected to buildings generally, the additions to dwelling and hot-water service being greatly appreciated. Two serviceable horses were purchased, and one young animal was broken into harness. It is anticipated that another young horse will be brought into work during the coming season. A good deal of labour was necessary in keeping roads, fences, &c., in good order and repair.

An area of 15 acres suitable for nursery-extension purposes was recently purchased, and will be brought under cultivation during the approaching winter.

It is proposed to purchase a new wagon, a double-furrow plough, and other implements, those at present in use being almost completely worn out. A small portable engine capable of driving wood-sawing and chaff-cutting plants could be advantageously employed at this station, and should pay the initial cost in a comparatively short time.

Meteorological records and tree schedules are appended.

The daily average of men employed throughout the year was 10·2.

Rainfall, Temperature, &c.

Month.				Rainfall.	Number of Days Rain fell.	Temperature.		Number of Days Frosts occurred.
						Maximum.	Minimum.	
1919.				In.		Deg. F.	Deg. F.	
April	..	..	..	2·21	9	77	17	20
May	..	..	..	0·90	5	66	10	29
June	..	..	..	3·60	10	61	9	25
July	..	..	..	4·90	16	66	11	25
August	..	..	..	4·24	19	61	12	23
September	..	..	..	7·62	12	68	13	27
October	..	..	..	2·66	13	71	18	12
November	..	..	..	6·19	9	74	27	6
December	..	..	..	3·38	8	93	27	4
1920.								
January	..	..	..	3·82	8	83	28	2
February	..	..	..	5·18	7	91	34	..
March	..	..	..	0·17	5	83	30	4
Totals	..	..	..	44·87	111	..	..	177

Details of One-year-old Trees, sown 1919–20.

Name of Tree.					Number in Seed-beds.	Amount of Seed sown.	Growth.
						lb.	
<i>Pinus radiata</i>	..	..	..	..	800,000	115	Medium.
„ <i>ponderosa</i>	..	..	..	..	50,000	60	„
„ <i>strobus</i>	..	..	..	..	20,000	5	„
„ <i>muricata</i>	..	..	..	..	25,000	4	„
<i>Cupressus macrocarpa</i>	..	..	..	..	5,000	4	„
„ <i>Lawsoniana</i>	..	..	..	..	4,000	$\frac{1}{2}$	„
<i>Betula alba</i>	..	..	..	..	200,000	5	Good.
Total	..	..	..	..	1,104,000		