

The rigid climatic conditions in the South insist upon the utilization of only sturdy transplanted trees if a reasonable measure of success is to be the outcome, and repeated experiences prove the uselessness of endeavouring to afforest our exposed lands with small seedlings after the manner applicable to more favoured semi-tropical localities.

#### TREES FOR FARMERS, AND ADVISORY WORK.

With increased knowledge of the probable requirements of farmers it has been possible to make the distribution scheme more attractive this year, although again the shortage of the more popular shelter-trees to some extent influenced the distribution. To some 217 applicants a total number of 226,560 trees, valued at £476 5s. 5d., were supplied from the following nurseries: Tapanui, 161,100; Hammer Springs, 38,200; Ranfurly, 27,260. The South Island stations have thus distributed 87,708 more trees this season than in the previous year. Although fast-growing varieties were much in demand, timber-trees were also much sought after, as the following statement will disclose: *Pinus Laricio*, 81,400; *Pinus radiata*, 77,117; *Pinus ponderosa*, 17,875; *Pinus muricata*, 13,075; *Pinus pinaster*, 1,575; *Cupressus macrocarpa*, 7,270; *Pseudo-tsuga taxifolia*, 3,837; *Populus fastigiata*, 13,881; *Populus deltoides*, 2,275; eucalypts, 3,702; *Larix europaea*, 3,500; various trees, 1,053. Most gratifying reports have been received from applicants generally regarding the success that has attended their operations with the trees supplied, although in several cases sufficient precaution had not been taken to protect the young plantations against the ravages of the rabbit pest.

Much advisory work was undertaken, although the necessary amount of clerical work indispensable from an expanding branch insisted upon brevity in many cases that perhaps warranted the devotion of more intense co-operation. The newly revised printed price-list, containing also a few cultural notes, will likely provide the desired assistance to many intending tree-planters; but there still appears to be scope for the publication of practically written articles, specializing on matters that require greater emphasis and more elaborate detail.

#### GRAZING PROPOSITION, AND REMARKS ON FIRE-BREAKS.

It is again possible to present a satisfactory statement of stock transactions, which, however, have been confined solely to the Tapanui district this season. Owing to the high cost of breeding-cows in the Canterbury Province it was decided to defer the renewal of the departmental flock there and temporarily lease the planted reserve at a very remunerative figure. To the presence of the sheep must be attributed the excellent condition of our internal fire-breaks, which have throughout the year been in an absolutely effective state without the Department having had recourse to the usual costly cultivation work. So far little expenditure has been devoted to the construction of fences and yards, and even the shearing of the flock was undertaken by one of the staff. Inexpensive drafting-yards and small holding-paddocks at each grazing-station will be formed immediately, as the mustering operations proved to be intensely trying this season, notwithstanding the engagement of expert men with trained dogs. The dense shelter afforded by trees makes the whereabouts of many stragglers a mystery, and dogs are not eager to search in the thicket. Efforts to secure a suitable man to undertake the combined duties of rabbitier and shepherd have so far proved fruitless. Advantage was taken to dispose of our old ewes and lambs at high-water-mark prices, whilst at a late auction sale the flock was replenished with a much better line of sound-mouth ewes at reasonable prices.

The actual profit on the year's transactions, as shown on the statement hereunder, amounts to £258 4s. 2d.

#### Statement of Stock Transactions.

Dr.	£	s.	d.	Cr.	£	s.	d.
Balance forward at 1st April, 1917	689	6	0	Sale of sheep and lambs	768	18	6
Additional purchases during year	647	7	10	Sale of wool	140	1	1
Management expenses, mustering, dipping, shearing, &c.	40	5	0	Stock on hand, 31st March, 1918 (at valuation)	750	17	10
Commission on sales	19	4	5				
Fencing, &c.	5	10	0				
Balance, being profit on year's transactions	258	4	2				
	<u>£1,659</u>	<u>17</u>	<u>5</u>		<u>£1,659</u>	<u>17</u>	<u>5</u>

Although this result is not so satisfactory as in the previous year, we are able to disclose a total profit of £816 5s. 1d. on the sheep-breeding venture over a period of three years, irrespective of the dispensation of labour previously involved in bringing about the same result. Perhaps the prime cause of the reduced profit was the lighter lambing, which was adversely influenced by not having sufficient holding-paddocks before the flocks were liberated. This drawback, however, has been remedied this year, and the outcome can be regarded with confidence.

#### SURVEY WORK.

The abnormal circumstances arising from the war have caused an unavoidable delay in the projected survey of the southern plantations and presentation of planting plans. This work, however, is gradually being assembled, and an earnest endeavour will be made to submit complete reliable records in the next annual reports. Labouring under difficulties, Surveyor Leonard prepared excellent plans of Dusky Hill, Naseby, and Greenvale Plantations, whilst that of Conical Hills Plantation will be available at an early date. At Balmoral Plantation the subdivision by Surveyor Sutton of 7,636 acres into blocks of approximately 250 acres, with suitably defined