

<i>Balance-sheet.</i>					£	s.	d.
Total expenditure	..	..	..	..	9,100	0	5
Less Property Account	..	..	..	..	855	6	11
Cost of operations	..	..	..	..	8,244	13	6
1,200 acres planted (average age, two years)	..	..	..	..	£4	10	3
Estimated value of plantation per acre	..	..	..	..	£8	12	0

H. A. GOUDIE,
Superintending Nurseryman.

APPENDIX B.

REPORT ON TREE-GROWING OPERATIONS IN SOUTH ISLAND.

[By the Superintending Nurseryman, Tapanui.]

CLIMATIC INFLUENCES.

In reviewing operations conducted over the South Island section during the past twelve months special notice might be directed upon the most trying conditions under which the work had to be performed. Each officer makes forcible references to the prevalence of a partial drought experienced during the spring months—a period when a moderate amount of moisture is essential to successful seed-germination and tree-planting results. The position, however, was somewhat improved with the advent of summer, and it is interesting to note that the average precipitation of 4.55 in. of rain registered in December had a most reviving effect upon semi-dormant trees on both nurseries and plantations.

A perusal of the detailed reports will disclose the attainment, generally, of a very reasonable measure of success, although it is fortunate that each tree-raising station was well stocked with seedlings, otherwise the increased number of deaths, through failures in transplanting and intensified ravages of the grass-grubs, would have taxed our resources to such an extent as to seriously interfere with the ensuing year's output. The importance of possessing a few hundred thousand young trees in excess of immediate requirements is thus impressed upon one, and further facilities will accordingly be given officers in future in creating a more liberal margin between the desired year's output and trees available by lightly supplementing the seed-supply.

OUTPUT OF TREES AND ACREAGE PLANTED.

The number of trees transferred to nurseries and plantations, domains, and other public institutions is 3,121,570, being a considerably increased output on any previous season. Of this number, 2,966,810 were utilized in extending the State forests, where active preparations are now being made for the reception of an approximate three million trees during the coming planting period.

With each succeeding year the requests for distribution of trees to public bodies become more numerous, but as the adherence to a systematic planting scheme arranged well in advance of the transplanting season is necessary, it is not possible to comply with these outside needs without affecting the afforestation operations generally; and, moreover, the Department has, up to the present, adopted the prudent attitude of only supplying trees to domains, &c., after plantation requirements have been fulfilled.

The year's planting was carried on over 1,025½ acres, which has increased the total area planted to 4,637½ acres, containing 12,732,915 trees (as per table submitted in an accompanying special report). Due allowances have been conceded for the deaths resulting from the deplorable fire experienced at the abandoned Dumgree Plantation some months ago.

Comprehensive summaries of all works undertaken have been compiled, and under the plantation statements various concentrated items of interest hitherto omitted are displayed. It will be noticed that since the initiation of the work no less than 2,512,115 trees have either been destroyed by the agency of fire or failed to succeed where planted, thus necessitating the replanting of blanks with a more suitable variety. The fact of much experimental work being conducted, and consequent high death-rate, must not be overlooked. Moreover, by a critical observance annually of the conditions under which the various trees may be associated and grown advantageously, it is only reasonable to believe that, given normal climatic conditions, this high death-rate will be speedily lessened.

TREES RAISED AND EXPENDITURE INCURRED.

Some 5,634,795 seedlings were raised during the year, at an average cost of 2s. 4½d. per thousand. At Hanmer Springs and Tapanui Nurseries a corresponding rate (1s. 6d.) in tree-raising is recorded, and the increased cost at Ranfurly can only be attributed to the small quantity of seeds dealt with, together with the undesirable presence in seed-beds of the small thread-like worms alluded to elsewhere. In comparing the rates at which any item of labour is carried out, it may be pointed out that the greater the magnitude of the undertaking the more favourable should be the results disclosed; hence we cannot reasonably expect the smaller station at Ranfurly, with its almost similar upkeep-cost, to furnish such comparable records as those obtainable from larger nurseries.