

APPENDIX III.—SUMMARIZED REPORT UPON STATE FORESTATION OPERATIONS IN THE SOUTH ISLAND.

(By W. G. MORRISON, Conservator of Forests, Canterbury-Otago Region.)

TREE-GROWING.

Seed sown for the region amounted to 1,497 lb. 6 $\frac{3}{4}$  oz., an increase of 453 lb. 6 $\frac{3}{4}$  oz. on the previous year, the average germination being about 4,400 per pound, the greater part of the seed being sown under the open-drill system.

Trees sent out from the various nurseries numbered 4,401,598, an increase of 2,280,001 on the previous year's figures. The output to farmers, local bodies, tree-planting companies, &c., increased from 538,000 to 724,303, while 3,677,295 trees were despatched to State plantations, compared with 1,583,365 last year.

EXTENSION OF PLANTATIONS.

Established plantations at all stations appear to be in excellent growing-condition and present a healthy and vigorous appearance generally without any disease of a serious nature.

During the period under review 4,861 acres were planted in trees, an increase of 2,669 acres on the previous year's operations.

An additional area of 1,600 acres has been resumed on the Blue Mountains and 1,500 at Hanmer for the current season's planting programme, together with 549 acres at Greenvale and 8,608 acres at Balmoral, making a grand total of 12,257 acres immediately available for the formation of future plantations.

FOREST-PROTECTION.

*Fire.*—No damage was done to State forests, owing to the wet weather conditions and adequate fire-prevention precautions. Several serious grass-fires on private property occurred in January and February, and caused damage to buildings, fences, and private plantations. These outbreaks show that settlers must make adequate provision for fire protection when their plantations are surrounded by grassland, and the extension of the "fire district" system to private lands will prove of great assistance.

*Deer.*—Red and fallow deer are still numerous in the back country, and are a serious menace both to the indigenous and exotic forests. The total number of deer-tails received by officers in the region was 4,350, of which 271 were procured in the Hanmer district, and 4,079 in the Tapanui district. Of the latter number 3,890 tails were from fallow deer shot in the Blue Mountains.

*Insects.*—The spruce-aphis has not been so destructive this year, and many trees have almost recovered from previous attacks. The pine-aphis continues to damage insignis pine, Corsican pine, and Austrian pine in some areas. The golden-oak scale continues to do serious damage to oaks in the vicinity of Christchurch, and the gum-scale to *Eucalyptus globulus* throughout the region. In the spring some hundreds of the green lacewing-fly were liberated in Christchurch. The acclimatization of this insect, the larvæ of which prey on all species of aphid and scale insects, will act as a control on these pests.

*Fungi.*—Little damage has been caused by fungi, and the serious danger which threatened insignis-pine plantations last year is almost absent, though odd trees still die out without any cause being discernible.

AFFORESTATION AND FOREST-EXTENSIONS.

Increased public interest in afforestation is disclosed by the fact that farmers and others have planted more trees during the past year than ever before. Tree disposals amounted to 724,303, of which 69,100 went to State plantations in other regions, 40,297 to local bodies, 604,581 to farmers and others, and 10,325 to schools in the South Island. Disposals of seed totalled 469 $\frac{1}{2}$  lb., 221 lb. being sold to farmers and other individuals, 117 $\frac{1}{2}$  lb. distributed to schools, and 131 lb. forwarded to other regions. Apart from the trees distributed to schools, the tree-sales increased by 186,000, or almost 35 per cent. on last year's figures, and the number sold to farmers by 134,500. The increase in numbers is a healthy sign, and shows that the public, and especially the farmers, are taking a more lively interest in tree-planting.

The number of local bodies who were engaged in tree-planting during the year is nineteen, and the area planted was approximately 1,100 acres. The activities of local bodies are greatly hampered by lack of funds, and in many cases by lack of suitable areas for planting operations.

The forestry movement in schools has made marked progress, and, after the experience gained during the period since its inauguration, excellent results are anticipated during the ensuing year.

REVENUE.

	1925-26.			1924-25.			1923-24.		
	£	s.	d.	£	s.	d.	£	s.	d.
Sale of trees .. ..	2,306	14	9	1,822	3	6	1,893	18	8
Sale of tree-seeds .. ..	430	3	11	63	3	0	82	11	0
Sale of firewood .. ..	25	17	6	73	6	3	89	12	6
Sale of posts, &c. .. ..	..	..	..	5	2	0	5	18	6
Grazing .. ..	160	13	9	202	11	6	235	8	11
Rental of departmental cottages ..	295	7	8	282	17	3	297	2	1
Sheep and wool .. ..	35	9	6	14	10	0	53	12	5
Miscellaneous .. ..	259	11	7	39	7	10	25	0	0
	£3,513	18	8	£2,503	1	4	£2,683	4	1