

WELLINGTON REGION.

Karioi Plantation.—Planting was continued at this station, and at the end of the season an area of 5,410 acres was planted with 2,966,000 trees, *Pinus radiata* being the predominant species. In addition 297 acres were direct seeded, 191 lb. of seed being used for the purpose. Planting was commenced in May and completed in October, but a good strike did not result, owing to the severe climatic conditions. Blanking to replace losses in the 1927 planting was undertaken.

Nurseries.—A new nursery was established on an area of 10 acres at an altitude of 2,700 ft. about eight miles from Karioi Homestead, and the stock raised here will be used for planting on the high country adjoining. This will minimize transportation expenses; reduce weeding-costs, as virgin ground was used; and will produce a hardy class of seedling, well able to withstand the rigorous climatic conditions of this high country. The nursery was sheltered from the prevailing strong wind experienced at this altitude by 53 chains of manuka protection fences. A supplementary nursery of 4 acres was also established close to the homestead, which makes a total of 30 acres now under cultivation for this purpose. A total of 1,204 lb. of seed was sown, which produced, in round figures, 9,000,000 seedlings.

Flax-culture.—An experimental area of 20 acres was planted with 57,000 flax-plants (*Phormium tenax*), and the result to date shows a mortality of less than 5 per cent., which is very satisfactory.

Telephone Communication.—The residence of the Officer in Charge was connected by telephone lines with the various planting-camps, which necessitated the erection of eight miles of line. Direct communication with Ohakune Exchange has also been secured.

NELSON—MARLBOROUGH REGION.

Golden Downs Plantation.—Planting was continued, and when the season closed a further 2,465 acres of new plantations were established with 1,676,200 trees. The area available for planting was augmented during the year by the acquisition of 1,253 acres of adjoining land, about 20 per cent. of which is in beech forest. The nurseries were extended to meet the requirements of the increased planting programme, and a stocktaking in February last revealed an estimated crop of more than 6,000,000 seedlings.

Dumgree Plantation.—As this plantation has been on a maintenance basis for some years, the main work consisted of blanking (8,000 trees) and routine work, such as reconditioning of fire-breaks, underscrubbing, cleaning, &c. From the small nursery attached 50,500 trees were sold locally and 87,000 transferred to Golden Downs Plantation.

Seed-collection.—This work was continued, and 487 lb. of tree-seed was collected and cleaned—a slightly smaller quantity than in the preceding year—the chief species being *Sequoia sempervirens* (139 lb.), *Pinus canariensis* (96 lb.), *Cupressus Lawsoniana* (93½ lb.), and *Pinus pinaster* (92 lb.).

CANTERBURY—OTAGO REGION.

Tree-raising.—Excellent crops of seedlings were obtained at both Tapanui and Balmoral Nurseries, although the damp weather was responsible for a heavy growth of weed. 1,198 lb. of seed was sown at the former station, and 1,765 at the latter. The tree stocks on hand, although slightly smaller than last year, are sufficient for coming requirements and are made up as follows:—

TABLE 15.

Station.	One-year.	Two-year.	Three-year.	Total.
Hanmer and Balmoral	4,464,600	3,600,700	233,400	8,298,700
Tapanui	4,143,500	5,921,000	455,000	10,519,500
Naseby	104,300	664,600	730,900	1,499,800
Totals	8,712,400	10,186,300	1,419,300	20,318,000

Tree-planting.—The new area planted totalled, in round figures, 12,300 acres, and approximately 8,711,000 trees were used. This was distributed as follows: Blue Mountains Plantation, 5,000 acres, 3,497,400 trees; Balmoral Plantation, 4,200 acres, 3,070,200 trees; Eyrewell Plantation, 3,100 acres, 2,143,400 trees. The Blue Mountains area is hilly and difficult of access, while practically the whole area at Eyrewell is densely covered with manuka scrub. Maintenance-work was carried on at Hanmer Plantation, and in addition an area of 1,348 acres was blanked up.

SOUTHLAND REGION.

Tree-planting on a small experimental scale on cut-over areas and underplanting were carried out in Longwood, Catlins, and Wakaia State Forests. The results to date indicate that, provided second growth is not dense and vermin is absent, shade-bearing trees can be successfully established.

Sample Plots.—In order to study increment and silvicultural treatment on native-beech forest, three small plots, with a central control plot, were laid off in Longwood State Forest. The plots, which are 1 chain square, have been treated to various degrees of thinning, and the trees have been measured and classified according to diameter.