

EWEBURN RESERVOIR PLANTATION.

THE planting of this reserve has been undertaken by this Department on behalf of the Department of Mines. 24,722 trees have been planted, at a cost of £75. Since our portion of the work was completed the fences have unfortunately been neglected by the caretaker, and rabbits have played sad havoc by peeling the bark off about half of the trees planted.

A. W. ROBERTS,
Nurseryman in Charge.

TAPANUI NURSERY.

RAIN fell on 173 days, with a total of 48.32 in., as against 39.09 in. on 144 days of the previous year; the maximum monthly fall, 8.05 in., being recorded in December. The lowest shade temperature was registered on the 14th June (22°), and the highest (96°) on the 5th and 20th December.

The growth of nursery stock on the whole has been highly satisfactory during the past season.

The continuous inclement weather greatly retarded seed-sowing, which was not completed until the 11th November.

Great success has attended the seedling-larch crop, which, besides germinating evenly, has made excellent growth, and the trees appear healthier than in previous years.

The seedling pines, with the exception of *Pinus strobus* (the seed of which decayed through excessive moisture), have also made fair headway.

So strongly have the two-year-old stock in seed-beds grown that a large percentage of same are sufficiently advanced for permanent planting, and will be transferred to plantations during the coming season.

The three-year-old lined-out trees have done exceedingly well, with the exception of one small break of *Abies excelsa*, which was attacked during the latter part of spring by the wireworm. No appearance of this pest was noticeable in preceding years.

Transplanting of one- and two-year-old stock from seed-beds was commenced on the 18th August, but frequent rainfalls prevented the work being completed before the 15th November. During that period 652,405 trees were lined out, occupying an area of 8½ acres, the transfer to nursery-lines costing 4s. 9d. per thousand, including lifting, sizing, and puddling.

One of the most pleasing features in connection with tree-growing operations at this nursery is the success of lining in trees instead of leaving them a second year in the seed-beds. A total of 551,000 small seedlings were treated in this manner at a labour cost of 1s. 6d. per thousand, with practically no loss through the operation. A large number of these trees have also reached a suitable size for removal to plantations.

The total number of trees of all ages in the nursery at present is 2,531,640.

During the year 684,722 trees, comprising all varieties grown on the nursery, were transferred to the undermentioned plantations, nurseries, &c.: Dusky Plantation, 556,422; Hanmer Springs, 103,000; Eweburn Nursery, 19,900; Glentanner Plantation, 4,000; Agricultural Department, Fairlie, 1,000; Karitane Domain Board, 400: total, 684,722. Eight hundred thousand trees in the nursery will be ready for permanent planting during the coming season.

The total number of trees grown to the 31st March, 1903, is 4,299,505, representing a total value of £8,269 10s. 2d. The total number of trees transferred to plantations, domains, &c., is 1,743,027, being valued at £5,418 11s. 2d.

Some desirable improvements have been effected during the past year, amongst which may be mentioned:—Water-supply: The water for domestic and other purposes has hitherto been obtained from tanks attached to building, but occasionally during summer months the supply from this source becomes exhausted, causing no little inconvenience in carrying water for horses, &c.; pipes have been extended to a creek, about 5 chains distant in an easterly direction from nursery, where an excellent permanent supply has been obtained. The shelter plantation was extended, and 160 trees, comprising the following varieties, planted therein: *Pinus insignis*, 45; *Pittosporum tenuifolium*, 25; cabbage-tree, 30; *Pittosporum eugenoides*, 30; *Cotoneaster Simmondsii*, 30. The formation and gravelling of road leading from the nursery-gate to Tapanui was completed during September, and is now in a thoroughly fit state for the coming season's traffic. Two extra stalls being necessary for additional horses, the express and harness room was utilised for this extension, and a shed for express wagon has been erected at the rear of building. The drainage from out-buildings has been completely overhauled and relaid with larger pipes, while at various places along water-tables gully-traps were set to carry off surface water. A scrub breakwind was erected on the south-west side of seed-bed ground, which greatly assisted in breaking the south-west gales frequently experienced here. The shrubbery in front of main building was extended by further planting of various suitable shrubs, and the general appearance of surroundings much improved.

Want of space for sizing and bundling in wet weather was severely felt last season. This work is now carried out in the implement-shed, but greater progress would certainly be made if more room were available.

Good progress has been made with the nursery extension, which includes about 50 acres of fertile land adjoining the western boundary of nursery. All surface stones now being removed, the land will shortly be ploughed deeply and cropped with oats. It will then be necessary to prepare about 20 acres of this area for nursery purposes. To continue producing the present number of trees annually the acreage at present in cultivation is insufficient, as rotation of crops cannot possibly be carried on.

A water-reserve and horse-paddock, containing about 60 acres, adjoining the eastern nursery boundary-fence, has also been set apart; and preparations are now well in hand for the erection of a wire-netting fence enclosing the whole of the recently acquired lands.