

TAPANUI NURSERY, OTAGO.

During the year rain fell on 144 days, with a total of 36·09 in., the maximum fall being 5·81 in. during January. The greatest heat—94°—was experienced on the 20th January, and the lowest shade temperature was registered on the 30th June—16°.

The general growth of nursery stock has been highly satisfactory throughout, notwithstanding the dull sunless weather prevailing during both summer and autumn.

Transplanting was commenced three weeks later than the previous year owing to prolonged rainfall, but by the end of October 604,820 trees were "lined out," and 504,500 smaller stock "lined in," making a total of 1,109,320 trees planted. The whole of these (with the exception of *Pinus laricio*, which does not transplant successfully here) have made excellent growth, permitting the removal of a large proportion of same to Dusky Hill Plantation during the approaching season, where they will be permanently planted.

All seedlings have made good headway, especially larch, which, having reached a suitable size, will be removed from seed-beds and "lined out" during the coming spring. An experimental second sowing of larch was made about the end of November, when the protecting-frames were available from the previous sowing; but, although germinating freely, they have not made sufficient headway to warrant a repetition of this experiment, and a large number will probably not survive if the present winter proves to be as severe as in previous years.

The labour in tending transplanted trees has been greatly reduced by the introduction of a machine-hoe for working between the rows, which is also beneficial in keeping the soil open.

During August 33 chains of hedges, comprising *Pittosporum tenuifolium*, *P. eugenoides*, and broadleaf, were planted throughout the nursery, dividing it into breaks. This will enable "setting out" previous to planting being done with greater facility, and also be of service as shelter to young trees. A shelter plantation consisting of 870 trees—chiefly *Pinus insignis*, *Pittosporum tenuifolium*, cotoneaster, and cabbage-trees—was also formed, and will prove beneficial in breaking the south-west gales so frequently experienced here. All these have done well, very few deaths occurring.

A substantial cook-house has been erected, which is greatly appreciated by employees.

An additional forty-five seed-frames were made, thus allowing of a much larger quantity of seed being sown in future.

All spare land was utilised either for growing horse-feed or sowing down with clover to be ploughed in as green manure.

General improvements throughout the nursery have been made, including asphaltting work-shed, forming lawn, and extending border and shrubbery, fencing horse-paddock, erecting break-wind for seed-beds, and painting implements, gates, buildings, &c.

The value of nursery stock has increased from £3,375 6s. to £4,451 12s., this year's seedlings numbering 708,000, and being valued at £557 12s. 6d., the total number of trees of all ages in nursery at the 31st March being 2,401,000. 422,350 trees, valued at £1,448 15s. 7d., were transferred to Dusky Hill Plantation in forty-two express-wagon loads, and 169,340 trees, valued at £232 19s. 6d., were sent to various public bodies, &c. A transfer of about six hundred thousand trees will probably be made to plantations from this nursery during the coming season.

The expenditure for the year amounted to £1,413 5s. 11d., making a total expenditure to date of £5,849 18s.

Details of trees and statements of expenditures and values will be found in attached schedules.

The following is the record of rainfall and temperature :—

Record of Rainfall and Temperature at Tapanui Nursery.

Month.	Rainfall.	Number of Days Rain fell.	Highest Reading of Ther-mometer.	Date.	Lowest Reading of Ther-mometer.	Date.
1901.	Inches.		Degrees.		Degrees.	
April ...	2·59	12	80	6th	28	27th
May ...	3·13	17	66	4th	28	17th
June ...	0·41	6	68	12th	16	30th
July ...	3·42	15	56	11th	20	1st
August ...	2·81	15	62	29th	24	22nd
September ...	2·53	9	68	22nd	26	19th
October ...	2·22	9	80	27th	27	27th and 6th
November ...	4·81	16	80	11th	28	6th
December ...	3·98	19	88	5th and 24th	30	22nd
1902.						
January ...	5·81	9	94	20th	34	19th
February ...	1·55	8	93	2nd	38	11th and 20th
March... ..	2·83	9	82	2nd	34	13th and 19th
Totals ...	36·09	144				