

STATE FORESTS AND PLANTATIONS.

At the date of last report the total quantity of land reserved for forest, plantations, scenic purposes, &c., all of which come under the head of forests, was 1,172,750 acres. Since then an area of 4,640 acres has been added, and 1,768 acres removed from reservation for settlement purposes, leaving an area still under reservation of 1,175,622 acres. In the State forests the fires have not been so destructive this last year as in the previous one, but on the ordinary Crown lands, and on private properties situated in bush districts, they have raged with unprecedented force, causing a vast amount of damage to settlers in the destruction of houses, fences, bridges, and stock. It has frequently occurred in recent years that the destruction of forests by unintentional fires amounts to more than could be replaced by planting in a century. The risk of loss by fires increases from year to year as settlement advances into the heart of the forests, whilst the area replanted by the Government and private individuals is infinitesimal in comparison. The losses by fire were so heavy that it became necessary for Government to step in and assist a large number of settlers to renew their burnt pastures by providing seed, which has been done to the extent of over £3,000, as per report attached. The districts where the greatest destruction of forests have taken place are in Wairarapa and Rangitikei in Wellington, in Taranaki, and in the Oxford Forest in Canterbury. Most of the burnt and scorched timber in the Auckland District has been disposed of, £8,324 worth having been sold during this last year within the State forests, and a nearly equal amount from ordinary Crown lands. The payments, however, do not all come in at once.

The operations connected with the forest plantations are shown in report attached. At present they consist of the following:—

	Area Reserved. Acres.
State Forest Nursery and Plantation Reserve, Eweburn, Otago	1,233
" " Tapanui, Otago	22
" Dusky Hill, Tapanui, Otago	845
Plantation, Kaingaroa Plains, Rangitaiki, Auckland	50
" " Galatea Road, Auckland	15
" Whakarewarewa, Rotorua, Auckland	21
" Tarukenga, Rotorua, Auckland	15
" Mamaku, Rotorua, Auckland	6
" Wai-o-tapu, Rotorua, Auckland	18
" Seaward Forest, Southland	304
Nursery and Plantation Reserve, Rotorua, Auckland	847

Last year's drought has affected the planting operations considerably throughout the colony, but a fair measure of success has resulted so far. The object of the nurseries is to provide trees for more extensive planting in the treeless parts of the colony. In Inland Otago it is specially needed, but many other parts would benefit greatly by extending the forest-clad areas, more especially with a view of retaining the rainfall in the soil, and of allowing of a more gradual flow away by the rivers. In the Auckland District the two plantations on the Kaingaroa Plains are intended to test the capabilities of this large pumice area for the growth of timber. It is well-known that the native forests grow well on this class of soil, and in former times much land that is now growing nothing but fern and tussock-grass was under forest. Mr. Mathews reports that owing to the drought of last season no very favourable results have yet been obtained, but efforts should still be made in the same direction, especially in planting trees which will serve as shelter from the cold winds of that region, behind which more valuable trees may be raised. In connection with the Rangitaiki Plantation experiments have been made in the sowing of various grasses, some of which are doing well, whilst others have completely failed. An extension of these experiments, more especially with those sorts that are doing best, will serve to demonstrate whether it is possible to grow grasses on these, at present, useless plains; whilst the tree-planting will show whether it is possible eventually to mitigate the cold winds prevalent there. That the pumice soils will grow native trees requires no illustration; whether such soils can be made to grow other trees, and at a reasonable cost, is what the experiments are intended to prove.

The drought in the South has affected the nurseries in Otago to a considerable extent; but, nevertheless, the young trees have made fair progress. At Eweburn, the total rainfall for the twelve months was only 9.23 inches, but the water-supply from a spring, conveyed through the nursery by pipes, was sufficient to save the young trees. Twenty acres in addition is about to be enclosed for further extension.

At Tapanui, twenty-two acres have been enclosed and tile-drained, whilst three acres have been trenched as a seed-bed, and part of it sown with forest-tree seeds, as per Mr. Mathews's report attached. Large batches of these seedlings were unfortunately attacked during the dry weather by the fungus *Phytophthora omnivora*.

The Dusky Plantation-ground, twelve miles from Tapanui, has been enclosed (845 acres) and roughly formed roads made through it, drains opened, and about thirty acres sown with turnips preparatory to planting.

During the year the attention of the Commissioners of Crown Lands has been drawn to the necessity of recommending for reservation areas lying within the main watersheds, and which are now covered with forest, with a view to preserving the forests as "sponges" to retain the rainfall, and thus allow of its gradual flow down the rivers, instead of in the form of floods; for this, no doubt, is the end toward which the settlement operations are tending at the present day. Connected with this subject is, of course, the desirability of preserving the banks of many of the rivers for scenic purposes, and the timber near them for commercial use hereafter. The total revenue credited to State Forests Account last year was £10,995 13s. 1d., and the expenditure, £5,078 8s.