

PART III.—FOREST-PRESERVATION.

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GENERAL REMARKS.

It is generally supposed that a very large proportion of the forest-area of New Zealand has been permanently reserved for all time. Although the total area of land reserved for public purposes is fairly large, amounting to perhaps eight million acres, yet a great proportion of these lands are not covered with forest, but are utilised for settlement and other purposes. For example, the endowments made for education, university, harbour, and municipal purposes comprise very large areas, whilst railway, gravel, Native, and other reserves are included in the total.

Moreover, even all the lands now covered with forest, or which have been set apart as forest reserves, will not eventually remain in that state. An area of two and three-quarters million acres have been reserved for National Parks, of which two and a quarter million acres are absorbed by the Sounds National Park, mostly consisting of rugged mountain country and fiords, with here and there narrow valleys giving access to the various parts of the country. The Tongariro National Park, of 62,000 acres, does not contain one single acre of forest land, whilst the Tasman and Arthur's Pass Parks contain hardly any timber suitable for milling; and when the reserves which are clothed with good timber are analysed, it will be found that they are mostly ill adapted for settlement, and are better fitted for reservation than for any other purpose.

Although an area of 2,117,215 acres has been reserved under the State Forests Act, yet here, again, it has to be pointed out that this will not insure the permanent retention of the forest land included therein, and that it may all be used for sawmilling purposes under the State Forests Act and Regulations. Practically speaking, State forests are reserves for future sawmilling, and cannot be considered as permanent forests.

As the result of inquiry, it is found that the total area of land covered with forest in New Zealand that may, by virtue of statutory enactments under which it was set aside, remain in a state of nature for all time is about 2,100,717 acres, or only 3·1 per cent. of the area of the Dominion; and this is made up of the Waipoua State Forest (near Hokianga) which is an absolutely unique specimen of a typical kauri forest, containing 22,000 acres; various scenic reserves amounting to about 80,000 acres; timber and forest reserves under the Land Act; reserves for the conservation of the water-supply; climatic reserves; and a portion of the great Sounds National Park (West Coast), estimated to contain about 800,000 acres. In the whole of the North Island only about 290,000 acres may be classed as permanent forests, and in the South Island as 800,000 acres (just mentioned) are in the West Coast Sounds, and 700,000 acres on the slopes of the Westland ranges, the present reservations cannot be regarded as in excess of urgent requirements. Whilst it is not desired that forest land suitable for settlement should be locked up in this manner, yet it is strongly represented that judicious selections of forest land should continue to be made and set apart for the protection of our water-supply, climatic equilibrium, and protection of streams and mountain-sides. Most of the land required for these purposes would only support a scanty population, is not considered agricultural land, and is much more valuable to the State in its present condition than if denuded of vegetation and exposed to the disastrous effects of heavy rainfall and other climatic influences. The following articles by Dr. Cockayne and Mr. Grossman indicate the evil effects of unwise deforestation.

(A.) THE NECESSITY FOR FOREST-CONSERVATION.

[By L. COCKAYNE, Ph.D.]

The climate of New Zealand as a whole is admirably suited for the well-being of trees. This is evidenced not only by the native forests, but by the ease with which almost any species of the cold or warmer temperate regions can be cultivated throughout the Dominion.

At the time of early colonisation a more or less continuous forest clothed the land, unbroken except where certain conditions of soil or climate (especially excessive wind and high altitude) were antagonistic. At the present time detached portions or fragments of this great tree-community alone remain, which, although collectively of considerable area, are but in many districts a fraction of the original. This state of affairs has come about chiefly from the land being required for farming purposes, though at the same time much needless destruction has taken place from wasteful methods in dealing with the timber, or from careless or wanton damage through fire.