

revealed, destroy the value of the evidence alleged to have been obtained. It is well known that fires are lit on the property of land-holders by others who are actuated by spite. A country Magistrate would be well aware of this possibility and would consider it in any proceedings before him."

This and other doctrines should be fully investigated before resorting to the more drastic alternative already discussed. Likewise, the State Forest Service policy of fire-control propaganda and education must be persevered with, but it is respectfully submitted that the subject of fire-control should command from every section of the community an intensive study commensurate with its scope and far-reaching importance.

All legislation being permissive, it may be necessary for the time being to be satisfied with an improvement in the practical aspects of fire control and protection, but there appears to be little doubt that some authority will be required to close down all burning operations, whether in bush haulers, locomotives, or sawmills, during periods of abnormally high fire hazard. There has always been a tendency in New Zealand to decry the possibility of the so-called green rain forest burning readily, but since the bad fire in the Tongariro National Park district two years ago investigations have shown that for short periods, of several days at the most, extremely dangerous conflagration conditions may develop, and to prevent a recurrence of any fire of the proportions of the Raetihi disaster in 1918 recommendations will probably be brought down for a complete "black-out" of all fires in any district named by radio broadcast. Voluntary co-operation in this direction has already been effected with the sawmillers' national organization; and on the first occasion that a radio broadcast was used it was of startling significance to find that the only forest fires which did occur on that particular date were located in those areas for which the radio warning was broadcast.

FOREST MANAGEMENT.

The maintenance of forest lands in a state of maximum productivity applies equally as well to the growing of timber as to the wider uses previously discussed, but the condition of the indigenous forests leaves much to be desired in this respect. By far the greater part comprising the rain forests stretching between Auckland in the North Island and Westport in the South Island and those of Southland-Otago are in a mature or even decadent condition, consisting typically of a few large trees per acre with little regeneration and with any new growth offset by decay. The forests in which regeneration is relatively plentiful and net growth appreciable are strictly limited, the principal types being kauri and beech in numerous favourable localities, and possibly rimu in the Westland district of the South Island.

Reference has already been made to the national importance of managing on a multiple-purpose basis the whole of the kauri forests. By virtue of their much larger area and greater productivity it is of even greater importance to manage similarly the whole of the rimu-pole-type forests of South Westland (Plates Nos. 7-10). From Ross northwards there is, amongst the remaining patches of bush, the usual picture of forest devastation—a wilderness of unsightly snags, blackened stumps, and noxious weeds, the usual results of fire following logging. As the remaining bush is so treated and the timber exhausted in North Westland, is this practice to continue southward? It is believed that Westland, no less than the rest of New Zealand, desires to avoid this.

Here is the real challenge to forestry in New Zealand. South of Ross there is, except for a relatively few areas, a stretch of State forest land carrying the finest stand of young rimu that exists or probably has existed for many centuries in New Zealand. Similar stands have already been exploited, using the word advisedly, in North Westland. About fifty medium-sized trees have been used from each acre, but one hundred or more young trees up to 10 in. in diameter, representing over a century of growth, have been razed to the ground. Even a cursory examination of the photographs appearing in this report must arouse grave doubts in the minds of the public as to the protection of its assets and to the discharge