## CHAPTER VI.—FOREST PROTECTION

43. Fire Danage.—Recorded fires in State forests during the year totalled 48 (44), 34 being in indigenous forests and 14 in exotic. The area involved was 4,198 acres, of which 28 acres were planted exotic forest and the balance was mainly milled bush, tussock, scrub, and ferm. There was no significant damage to indigenous forest, and timber was salvaged immediately from the small area burned.

The number of fires recorded outside State forests was 127 (88), covering 24,810 acres. Of this area, 18,000 acres was accounted for by one tussock and scrub fire in the Tongariro National Park starting near the National Park – Tokaanu Road. Practically the whole area covered by those fires was tussock and scrub land, only a very minor amount of timber being destroyed.

During the year, 6 (5) sawmills were destroyed by fire and 1 damaged, as follows:—Destroyed—

Ellis and Burnand, Ltd., Mangapeehi (Auckland Conservancy).

Ranui Sawmilling Co., Ltd., Ranui (Auckland Conservancy).

Nelson Creek Sawmill, Ltd., Rahui (Nelson Conservancy).

Kopara Sawmilling Co., Ltd., Haupiri (Westland Conservancy).

Fleming Timber Co., Ltd., Myross Bush (Southland Conservancy).

Kilkelly Bros., Ltd., Tautuku (Southland Conservancy).

Damaged--

Robert Curry and Son, Ltd., Koutu (Rotorua Conservancy).

44. Fire Detection and Control.—Weather conditions throughout most of New Zealand were moderately dry, with less rainfall than usual during mid-summer and autumn. Particularly was this the case in Canterbury, where one station recorded 58 consecutive days with practically no rain. Dry spells also occurred in other localities as follows: Rotorua - Bay of Plenty, 14 days in December and 38 days in January-February; South Auckland, 52 days in January-March. Shorter periods of considerable hazard occurred in portions of the Nelson and Southland Conservancies.

Fire damage to State forests was negligible, the 14 fires which occurred in the exotic forests and the 34 fires in the indigenous forests being in every instance detected in the incipient stage, and in no case did a fire get out of hand.

By numerous methods and in co-operation with the Soil Conservation and Rivers Control Council, the Forest Service has drawn attention to the potential danger of small fires, and it is felt that as a result the public is becoming increasingly aware of its responsibilities in reporting, suppressing, and preventing fire.

The aerial fire patrol which is established on a permanent basis in the Rotorua Conservancy carried out 31 (54) flights, aggregating 45 hours' flying time, and was valuable in effecting quick reconnaissance of reported fires. The R.N.Z.A.F. provides this patrol and can at brief notice extend it to other localities; this year such extension was unnecessary.

Fire-fighting equipment purchased during the year included a number of portable motor-driven pumps with hose for use where wheeled vehicles cannot operate; and a further 9 fire-engines were completed and allocated to conservancies. A fire equipment officer was appointed for the maintenance of the considerable quantities of valuable equipment held at various stations.

Fire-hazard weather equipment is now located at 25 stations, giving coverage over the greater part of New Zealand. Instruments at these stations are read thrice daily and the readings analysed. Data from 12 stations in the Auckland and Rotorua Conservancies are sent by radio to Wellington twice daily in the fire season, making it possible to have an accurate estimation of the fire-hazard situation throughout those areas within an hour of the reading of the instruments. It is hoped to have the radio network extended to include most of New Zealand during the next fire season.