

CHAPTER VI.—FOREST PROTECTION

43. *Fire Damage*.—The number of recorded fires occurring in State forests during the year was 44, involving an area of over 1,700 acres, of which 40 acres were exotic forest and the remainder mainly tussock, scrub, and fern country.

Recorded fires outside State forests numbered 88, involving over 2,700 acres. Most of these were in milled bush, tussock, and scrub country, but one fire near Mangapeehi entered State forest and scorched 1,000,000 board feet of millable timber which will, however, be salvaged without significant loss.

During the year fire destroyed 5 (12) sawmills, as follows :—

Kaitaia Timber Co., Ltd., Kaitaia (Auckland Conservancy).

Bowen and Wilkinson, Te Puke (Rotorua Conservancy).

Wilson Timber Mills, Ltd., Te Whaiti (Rotorua Conservancy).

Curry Bros., Rotorua (Rotorua Conservancy).

Waipawa Cases, Ltd., Waipawa (Wellington Conservancy).

44. *Fire Detection and Control*.—Fire-hazard prediction in the Rotorua-Taupo district has been facilitated by the introduction during the year of radio telephonic communication with Wellington through the Forest Service control station at Kaingaroa and the Post and Telegraph Department's Makara receiving station. Readings from eight stations recording fire-hazard data are analysed twice daily, and the hazard rating is graphed to provide a cumulative index of conditions. Increased public awareness of the recurring fire danger in that area, assisted by radio warnings, has undoubtedly played its part, along with the improved suppression measures, in reducing major outbreaks.

Weather conditions during February and March were moderately hazardous in forest areas near Taupo, in North Auckland, and in the King-country and National Park, westwards into Taranaki and southwards to the Tararua Ranges. The dry spell was longer in the Nelson, Marlborough, and Buller districts, with a localized maximum in the Takaka-Collingwood area of more than three months. Under such conditions and with high winds very serious hazard developed rapidly in the central North Island, necessitating the closing-down for a brief period of steam-operated equipment in the forests of that district. The need for additional fire-hazard recording stations in the King-country was again emphasized, and equipment now coming to hand will be installed at Pureora, some sixteen miles east of Mangapeehi. In some Nelson areas, also, milling operations were curtailed owing to the extreme fire hazard. The co-operation of the Weather Office and the National Broadcasting Service in providing special forecasts and in issuing broadcast warnings respectively has been very helpful.

A new lookout station, providing a good view for fire-detection purposes, was erected on the side of Gordon's Knob, Golden Downs Forest, during the year. At Eyrewell Forest arrangements are being made for the erection of another 100 ft. tower, the data from which, together with those from the tower erected last year, will permit the location of fires by means of resection of bearings as well as by direct observation.

The aerial fire patrol operating from Rotorua Airfield was again brought into use at the beginning of the fire season, but owing to the loss of a machine in a fire at Rongotai Aerodrome some delay occurred in providing aircraft fitted with radio. In all, 54 patrol flights were made from Rotorua over all parts of the conservancy except the Gisborne district, and including the Mangapeehi forests, in the Auckland Conservancy; 4 flights were made from Whenuapai over the Coromandel and Main Trunk forests, Auckland Conservancy; and 2 flights were made from Ohakea over the King-country and Taranaki forests. The assistance and co-operation of the Air Department and Air Force personnel are gratefully acknowledged.

The 28 Desert Mule 800-gallon water-tankers referred to in last year's report were completed and are now stationed in strategic forest locations. A further 9 fire-engines