

CHAPTER VI.—FOREST PROTECTION

43. *Fire Protection.*—The season on the whole was wet, though a dry spell in January caused concern in North Auckland, where forest fires proved difficult to handle—troops and settlers being called upon before they could be brought under control. For the whole Dominion only 39 fires were recorded in State forests covering a total of 6,555 acres, mainly scrub and fern lands. There were only 3 serious fires—1 burning-off fire at Tairua which destroyed 206 acres of exotic plantation, mainly *P. radiata*, and 2 in North Auckland which destroyed 400 acres of indigenous forest, all of which timber, however, it will be practicable to salvage.

Continued intensive recording by lookouts of fires adjacent to exotic State forests show that 720 were detected, these being mainly land-clearing and rubbish fires. Included in these were 39 previously mentioned in the first paragraph and 41 others outside State forest which were reported upon and shown to have burned off an area of 5,336 acres, mainly tussock and fern country. Assistance was rendered various land and forest owners in combating fires, notably one private forestation company which is estimated to have lost 410 acres of exotic forest, due to the fact that the fire was left unattacked for twenty-four hours and allowed to advance right up to the edge of the forest before any serious attempt was made to check it.

Also included in the above were six sawmills—owned by Kauri Timber Co. (Auckland), Randall Creek Sawmilling Co. (Westland), A. Sharpe, Ltd. (Tawauui), Dominion Timber Co. (Owhango), C. Aitken and Son, Ltd. (Gisborne), and Hopkins, Speirs, and Winger (Pukawa)—and one timber-yard—owned by W. W. Keighley (Christchurch).

44. *Fire-hazard Stations.*—Meteorological and fire-hazard stations have proved more invaluable than ever before in giving warning of dangerous fire conditions and in economizing the use of man-power on fire-protection activities. The danger in certain indigenous forest areas of high winds, accompanied by comparatively high relative humidity conditions, has been shown by recent fires. Normal moist climatic conditions are conducive, especially on the west coast (both Islands), in Southland, and in North Auckland, to the growth on the forest floor and trees of mosses and liverworts, which become a distinct fire hazard after a brief drying period. Indices of this light fuel type have yet to be devised. Of the woods used for the recording of fire hazards, locally grown *Pinus strobus* has proved the most suitable.

45. *Fire Districts.*—A new fire district covering an area of 103,400 acres was constituted for the protection of State forests in the Monowai-Lillburn district of the Southland Conservancy, and one local-body fire district for the protection of a water-supply forest area in the Nelson Conservancy, bringing the grand total to date to 63 fire districts covering 3,558,008 acres.

46. *Forest (Fire-prevention) Regulations 1940, Amendment No. 1 (Serial number 1943/31).*—This amendment rectified certain defects in the principal regulations revealed by administration and legal proceedings since the regulations were introduced in November, 1940, and introduces several new provisions to strengthen fire control and prevention. The principal features of the new regulations are:—

- (a) Logging operators are made responsible to see that engines of any kind are not operated in State forests or fire districts from 1st August in any year to 30th April in the following year unless such engines are equipped with efficient devices for arresting dangerous sparks or flame and for preventing the escape of live coals or fire:
- (b) A steam locomotive engine may not be operated along a tramway adjoining or within an exotic forest in a fire district during the period mentioned unless the operator provides a patrol with adequate fire-extinguishing equipment to patrol the route followed by the engine not earlier than ten minutes nor later than thirty minutes after the passing of the engine and to promptly extinguish any fires:
- (c) The owner of a tramway which adjoins or is within an exotic forest in a fire district may be issued with a notice requiring him to clear his land of inflammable material likely to cause the spread of fire, providing similar steps have been taken by the adjoining forest owner, whether the Crown or not. If he fails to do so, a Forest Officer may have the work done:
- (d) A motor-vehicle using a gas-producer may not be operated in a fire district during the fire season unless the producer is fitted, mounted, and maintained to prevent the escape of fire, sparks, cinders, &c., while material taken from the producer must be emptied into a receptacle containing water to eliminate all fire danger. By *Gazette* notice the Minister may prohibit the use of roads in or adjoining State forests within fire districts by gas-propelled motor-vehicles during any period specified in the notice:
- (e) While a fire is burning in a fire district, the permittee must remain in attendance with the necessary assistance and equipment to control the fire, and may not leave until the fire is extinguished or been made safe from spreading beyond the area specified in the permit to burn. This provision has become necessary because permittees had placed too much reliance on what is termed a "safe" fire, which after being well lighted has been left to its own devices. Sudden weather changes combined with over-confidence, thoughtlessness, or indifference on the part of the fire-lighter have too often been responsible for a "safe" fire getting beyond control and seriously damaging timber stands or protection forests where Forest Officers were not available to render speedy and skilful fire-fighting assistance.