

New lookout stations were erected at Rotoehu, Eyrewell, and Ashley Forests during the year. One erected last year at Golden Downs was destroyed in a severe gale (see para. 51).

On Balmoral Forest, 6 concrete-grouted reservoirs, each of 12,000 gallons capacity, were constructed to provide a readily accessible supply of water for fire-fighting purposes. These reservoirs are constructed with a catchment area double that of the water surface and the rainfall is more than sufficient to balance evaporation.

The assistance given by the R.N.Z.A.F., the Weather Office, and the National Broadcasting Service in the work of fire detection and control is greatly appreciated.

45. *Fire Districts.*—Fire districts containing a total of 5,193,578 acres were in force at 31st March, 1948.

Following the enactment of the Forest and Rural Fires Act, 1947, all fire districts (excluding those under the Fire Brigades Act, which deal with city and urban areas) constituted under other Acts remain in force until 18th November, 1948, or until reconstituted under the new Act, whichever is the earlier.

Forest-fire prevention and control by fire district organization was introduced by section 27 of the Forests Act, 1921–22, which provided for the protection of a State forest by the constitution of a fire district, which in practice embraced a belt of adjoining land of sufficient width to give reasonable protection; and for the declaration of a period (usually confined to the dry summer months) during which it was an offence to light a fire in the fire district except with the permission of a forest officer and subject to such conditions as he might require. In 1925, by amendment to the Forests Act, the forest fire district principle was extended to provide protection to private forests with a minimum area of 200 acres. It may be mentioned that at this time considerable attention was being given to the establishment of exotic forests by public investment, and by 1936 some 300,000 acres had been established by public companies formed for the purpose. It soon became clear that forest protection from fire arising either from uncontrolled burning for land clearing and similar operations, industrial operations, or from causes due to trespass, &c., was a major problem for which there was no adequate remedy under the ordinary laws. Consequently, it was a logical step that the protection afforded State forests by forest fire district organizations, which had proved in a large measure to be successful, should be extended to vulnerable private forests. Control in forest fire districts is, however, by law vested in a forest officer, and in the case of private forest fire districts persons of good standing, usually employees of an applicant afforestation company, were appointed honorary forest rangers, who under the Forests Act were deemed to be forest officers.

In 1932, by an amendment to the Land Act contained in section 9 of the Land Laws Amendment Act, the fire district principle was extended for the protection of peat lands and flax, and in 1941—by an amendment in section 28 of the Statutes Amendment Act—was further extended for the protection of gum lands and sand-dune areas. Fire districts constituted under these amendments to the Land Act were controlled by the Commissioner of Crown Lands for the district in which the fire district was situated.

However, notwithstanding the success of the protection achieved under the fire district law, it was clearly evident during hot, dry periods that its scope was too restricted and extensive rural areas which had little or no protection were repeatedly burnt over during hot, dry weather, and it was inevitable that some suitable organization to deal with an acute problem would have to be devised on a national scale. At the outset it was recognized that the factors of speed, economy, and efficiency were paramount in any organization to effectively deal with fire prevention and control, so that the matter must be attacked from the point of view of available man-power and equipment at the place and time of need, with consideration given to the wide variation of fire-hazard conditions throughout the Dominion.