

Another outstanding climatic episode of the year under review was the wind experienced on 2nd February, 1936. The southern and the central areas of the North Island bore the brunt of this storm. Its recorded wind velocity at the Meteorological Station at Wellington was 54 m.p.h.; but, judging from tree and forest damage elsewhere, this velocity was much exceeded in remote districts where no records are kept. Swathes of considerable width were carved through primitive montane forest in the Tararua Mountains; and many areas of indigenous forest in the lower foothills and valleys had the overstory of mature podocarps levelled to the ground. Shelter-belts and farm wood-lots of exotic species in private ownership suffered severely in the district of greatest intensity of the storm (Central Manawatu), but it so happened that there were no exotic State forests in that district. In the Rotorua district the severity of the storm was slightly modified, although broken and fallen farm-lot and roadside trees bear witness to its unusual violence even there, and there is a certain amount of wind damage in tall podocarp forest in the indigenous areas. Such damage, however, is in the nature of breakage of individual trees on certain faces rather than of the "wide-swathe" damage of farther south.

Particular anxiety was felt for the exotic forests in Rotorua district, as adverse critics have always stressed the wind danger both to areas where thinning has been deferred too long, and to newly-thinned areas. Breakages to crutched and marginal trees did occur, but to a very minor extent; and, without going into detailed cases, it will be sufficient to cite the extreme case of an exposed face carrying tall thirty-year-old larch and Douglas fir, heavily thinned for the first time the season before the gale. This compartment (Block 5, Whakarewarewa State Forest) came through without a single windfall. In the light of the immunity of this extremely critical area, the uninjured condition of the rest of the Rotorua group of exotic forests may be accepted without further description here.

2. FOREST FIRES.

The fire season passed almost without even alarm. There was the usual crop of small fires on the outskirts of fire districts, but not penetrating into State forests; and the usual difficulty of securing adequate evidence of origin of the fire. No damage was done and no convictions were obtained from these fires.

In Nelson district three fires occurred in State forests and resulted in the loss of 17 acres of eight-year-old *P. radiata*, 20 acres of *Sequoia sempervirens* of indifferent growth, and 1 acre of beech regeneration.

In Westland Region extremely dry weather made it necessary to exercise great caution to prevent fires entering the plantation, and numerous small locomotive fires occurred despite a careful patrol. On the evening of 11th January a locomotive fire entered for about 18 chains into Compartment 7 and destroyed about 15½ acres of *P. radiata*, 1926 planting. The affected area was densely covered with scrub, old rotten logs, and high bracken, which made a slow hot fire dangerous and difficult to extinguish.

In Naseby State Forest (Southland Conservancy) a fire set by the Forest Service staff to clear boundary firebreaks in readiness for a settler's burn adjoining, got out of hand, and, aided by a sudden and adverse wind, swept over 300 acres of five-year-old plantings.

3. FIRE DISTRICTS.

So much has been said in previous reports regarding the effectiveness of fire districts in reducing the number of forest fires that it should not be necessary to stress the point here; suffice it to say that the fact of private fire districts increasing in number so rapidly can safely be accepted as definite evidence in support of the fire-district principle. Six such districts were constituted during the year, covering an area of 325,000 acres and one State forest district. Private fire districts now number sixteen, and have been created in response to requests from local bodies, private afforestation companies, &c. The total number of fire districts constituted in terms of the Forests Act, 1921-22, and its amendments is fifty-two, and the area embraced by these districts approximates 2,900,000 acres.

4. ANIMAL DESTRUCTION.

The usual campaign of animal-pest destruction was maintained, the total recorded kill (exclusive of uncounted poisoned rabbits) being 52,568 animals of all species. The gross cost of animal destruction was £3,988.