

In the more settled areas with better transportation facilities, fire detection is carried out by means of lookout towers fitted with telephone or radio for reporting fires. Field staffs and equipment are maintained at strategic points ready to deal with fires when they are reported. These staffs, when not engaged on fire-control duties, are employed on the construction and maintenance of roads, trails, telephone lines, fire guards and other necessary improvements.

Portable gasoline pumps, which usually weigh between 60 and 100 lb. each, and linen hose are important equipment. These pumps can be carried to a fire by canoe, motor-boat, automobile, aircraft, pack-saddle or back-pack and can provide hose pressures up to 200 lb. per square inch, depending upon the elevation above and distance from the water supply. Hose lines over a mile in length are frequently used. Small hand-pumps supplied by 5-gallon portable containers are also used effectively in many cases. Tractors equipped with bulldozers or ploughs are commonly used for fire-line construction. In some regions, trucks fitted with water tanks and power pumps are employed for the control of fires adjacent to roads.

The various governmental forest authorities conduct forest conservation publicity work independently and in co-operation with the Canadian Forestry Association. Since its beginning in 1900, that Association has played an important part in securing popular co-operation in reducing the fire hazard. By means of its magazine, which has a large circulation, by railway lecture cars and motor-trucks provided with motion-picture equipment, and by co-operation with radio broadcasting stations and the press, the Association reaches a large proportion of the population of Canada. Special efforts are made through the schools, by specially appointed junior forest wardens and other means, to educate the younger generation as to the value of forests, the devastation caused by fire and the means of preventing such destruction.

Forest Fire Statistics.—The total number of fires in Canada (including Newfoundland) in 1949, 7,046, was the highest on record since 1922. The total area burned was 40 p.c. above the previous ten-year average. Fire-fighting costs were also the highest on record. Periods of high hazard were recorded in the spring in Newfoundland and the Maritime Provinces with the remainder of the season remaining normal. More favourable than average conditions obtained in Quebec following the critical hazards which developed in May and July. Ontario had somewhat drier weather than normal, especially in the southern parts of the Province's protected areas. A period of serious spring hazard was followed by about average summer and autumn conditions in Manitoba and Saskatchewan. However, Alberta experienced in 1949 the worst fire season of any province, especially in April and May when the bulk of the damage occurred. Dry weather persisted throughout the rest of the summer and autumn in most parts of the Province. Average conditions prevailed throughout the year in British Columbia, the Northwest Territories and Yukon.

More detailed statistics of forest-fire losses may be obtained from the Forestry Branch, Department of Resources and Development, Ottawa.