

The Forest Fire Control Branch is responsible for the area under organized forest protection in Ontario totalling 200,000 sq miles and including the main central band of accessible forests. This area is organized into eight regions and 38 districts. An additional 11 administrative districts are located south of this area in the highly developed agricultural counties where municipalities are responsible for fire control. The vast inaccessible areas to the north of the fire districts, totalling over 114,000 sq miles, do not support significant stands of merchantable timber and, except for the protection of private property and human life, are not normally protected. Within the fire regions, agreements were in effect in 1974 with 209 municipalities for the prevention and control of forest fires. An agreement was also in effect with the federal government for fire protection of 968,968 acres of Indian lands in the province.

Organized forest fire detection is accomplished primarily by aerial patrols with a limited amount of backup detection provided by two or three lookout towers in areas of high value (e.g. Algonquin Park). Public reporting of forest fires (unorganized detection) continues to be an important and very necessary part of the over-all detection program. The basic fire-fighting strike force comprises 135 trained five-man fire crews and 39 fire-bombing aircraft. These forces, with the aid of timber operators, municipal fire brigades and the general public in some instances, provided initial attack on 1,625 fires that occurred in 1974. The Ministry of Natural Resources owns 43 aircraft, most of which can drop either long- or short-term retardant on fires. Fire-bombing aircraft provided initial attack on 306 of the 1,625 fires; however, fixed-wing aircraft were used on 648 of the fires. Ministry and hired aircraft dropped 7.8 million gallons of water and almost 2.2 million gallons of long-term retardant on fires during 1974. Rented helicopters were used on 323 fires during the summer of 1974. The communications system included a network of ground stations, radiotelephones, fireline radios, aircraft radios, portable aircraft radiotelephones, Telex and facsimile.

**Manitoba.** The administration of provincial Crown forest lands in Manitoba is the responsibility of the Department of Mines, Resources and Environmental Management which consists of a Field Operations Division, an Operational Policy Division, a Mines and Departmental Services Division, an Environmental Management Division and a Water Resources Division. A special planning section is charged with developing short- and long-range forestry plans and programs relating to the forest inventory, timber utilization and industrial development, reforestation, silviculture and forest protection.

The Research Branch of the Environmental Management Division undertakes the necessary practical research for the qualitative development of these programs and the various projects and activities within them. The Branch co-operates with several federal services which maintain two research areas in the province and works closely with federal authorities in investigating and controlling forest damage resulting from insects and diseases.

The Field Operations Division is charged with implementing forestry programs and projects developed. It also provides considerable input with respect to plans developed for specific areas within the four regions into which the province is divided, each headed by a regional director responsible for the field administration of the forests and other resources in the region. The Operational Policy Division is responsible for administering the Forest Act and Regulations. Policy guidelines, programs and procedures are established by the Policy Division which co-ordinates control measures for the propagation, improvement and management of the forests, for the harvest of forest products, and for forest inventory surveys. A provincial forest nursery is maintained to supply stock for reforestation of denuded Crown land and some natural seed areas have been established for nursery stock. Seedlings are supplied to farmers for woodlots and to commercial Christmas tree producers; an average of more than 4 million are planted each year in reforestation projects on Crown lands. Conventional planting programs are being reduced and reforestation of cutover lands is being achieved by scarification and seeding. The program of forest stand improvement comprises thinning, clearing and chemical spraying to remove undesirable species and encourage growth of preferred trees. Forest inventories cover about 10,350 sq miles annually and, on the basis of these inventories, working plans with annual allowable cuts on a management unit basis are in operation.

Timber-cutting rights are awarded by forest management licences, timber sales and, in certain cases (particularly for salvage operations), by timber permits. Forest management