

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 licences may be granted for periods of up to 20 years and are renewable; timber sales may be for varying periods from one year upward and timber permits for periods of up to one year. In 1972, one long-term pulpwood berth with an area of 2,745 sq miles was in force together with four long-term timber berths, all granted prior to 1930. A second long-term pulpwood berth agreement was signed in 1966, covering the construction of a pulpmill and sawmill at The Pas in northern Manitoba.

There are 128,370 sq miles of the province under forest care protection, with zones of priority established in the less accessible areas. Fires are detected through a comprehensive network of lookout towers and supporting air and ground patrols, all in communication by radio and departmental or public telephones. Seven twin engine and one single engine aircraft supplement the tower fire detection system. Approximately 90,000 sq miles are covered by these aircraft. Two Canso water-bombers and three helicopters, two Turbo Beavers and two single engine Otter aircraft are contracted for the fire season to provide an aerial fire suppression force.

Public education in the fields of fire prevention and forest conservation is carried out through extensive use of radio, television, newspapers, pamphlets, signs, film tours and talks.

The Mines and Departmental Services Division provides accounting and clerical services for the other two divisions, and is responsible for issuing permits, licences and leases relative to forestry projects and activities.

Saskatchewan. The forests of Saskatchewan cover 117,738 sq miles of which 40,500 sq miles are productive forest land and 38,206 sq miles are suitable for regular harvest. Provincial forests constitute approximately 92% of all forest land in the province and are managed and developed by the Forestry Branch of the Department of Natural Resources.

The Forestry Branch, consisting of three sections — forest management, inventory and silviculture — develops and evaluates forest policies and management programs which are carried out by the various regional administrative authorities. For purposes of resource administration, the province is divided into six regions, each directed by a superintendent. The regions are subdivided into conservation officer districts which vary in size according to resource base and population to be served. Close liaison is maintained between the Forestry Branch and the various regional authorities.

Development of techniques in prevention, detection and suppression of forest fires is a function of the Support Services Branch, which is composed of three sections — fire control, heavy equipment and communications. A network of 75 lookout towers equipped with two-way radios is maintained throughout the province and is supplemented by aircraft on regular patrol duty during high-hazard periods. The Department of Natural Resources communication system is being converted to VHF. Approximately 1,400 two-way radio sets, operated in towers, vehicles, aircraft and bush camps, are used for the detection and suppression of forest fires; six helicopters and eight fixed-wing aircraft capable of water-dropping provide aerial support. Outside help may be requested when available and necessary.

Alberta. The 148,167 sq miles of forest lands in Alberta include 106,755 sq miles which are considered productive. The Alberta Forest Service of the Department of Lands and Forests through its six Branches (Administration, Timber Management, Forest Protection, Construction and Maintenance, Land Use and Training) is responsible for their administration. Jurisdiction is decentralized into ten Forests, each responsible for the forest area within its boundaries. Each Forest is under the control of a superintendent, supported by specialists in the fields of timber management, fire, land use, construction and communications, as well as by other clerical and casual staff. These Forests are further subdivided into Ranger Districts under a district forest officer responsible to the superintendent. District officers may have several assistant rangers, in addition to other staff, under their charge.

The Timber Management Branch is responsible for implementation and supervision of the timber quota system, acceptance and approval of management and annual operating plans