

various forestry acts and regulations. Policy guidelines, projects and procedures are established in conjunction with regional forestry staff assistance who are subsequently responsible for implementation and delivery of the program. The head office of the three functional programs is also responsible for co-ordination, evaluation and effectiveness of the programs once they have been implemented.

The forest management office is responsible for the licensing, allocation of timber sales and permits, statistical data and collection of royalties on timber harvest. Forest management is also responsible for control measures relating to propagation, improvement and management of forests. The forest inventory section determines the extent of Manitoba's forests and how much may be harvested on a sustained annual basis. The forest protection section co-ordinates fire, insect and disease control activities.

A provincial forest nursery is maintained to supply stock for reforestation programs and a dynamic tree improvement program has been initiated to ensure that future supplies of seedlings will be of the highest possible quality. Seedlings are supplied to farmers for worklots and to commercial Christmas tree producers. An average of 3 million seedlings are planted annually in reforestation projects on Crown lands. Conventional planting programs are being reduced in some areas and reforestation of cutover lands is being achieved through scarification and seeding. Forest improvement consists of thinning, cleaning and chemical spraying to remove undesirable species and encourage growth of preferred trees on plantations and in natural stands. Forest inventories cover about 26 806 km² annually and, on the basis of these inventories, working plans with annual allowable cuts are made.

Forest management licences may be granted for periods of up to 20 years and are renewable. Timber sales may be from one year upward and timber permits for periods of up to one year. Three pulp and paper mills and one large sawmill provide the backbone for Manitoba's primary forest industry. A dozen intermediate-sized sawmill operations augment the production of the four larger mills. Numerous small sawmills and timber harvesting operations provide the balance of production.

There are 332 477 km² under forest protection with zones of priority in less accessible areas. Fires are detected through a comprehensive network of lookout towers and a highly efficient aircraft detection system and supporting ground patrols. Approximately 233 000 km² are covered by aerial patrols.

Public education in fire prevention and forest conservation is carried out through radio, television, newspapers, pamphlets, signs, films and tours.

Saskatchewan. The forests of Saskatchewan cover 352 000 km² of which 115 000 km² are productive and suitable for harvest.

The forestry branch of the tourism and renewable resources department consists of four sections — management, wood products and operations, inventory and silviculture — and develops and evaluates forest policies which are carried out by regional authorities. The province is divided into seven resource administration regions and further divided into resource officer districts. The Northern Saskatchewan department administers the northern forested area. Forest protection is also the responsibility of this department, and is effected by a network of 75 lookout towers, supplemented by patrol aircraft during high hazard periods. A VHF communication system is operated in towers, vehicles, aircraft and bush camps for detection and suppression of forest fires. Helicopters and fixed-wing aircraft capable of water-dropping provide aerial support. Six land-based Tracker aircraft were purchased, equipped to drop long-term fire retardants, and operate from four new airports constructed in 1977.

Alberta. The 383 751 km² of forest lands in Alberta include 276 494 km² capable of producing forest crops. The Alberta forest service of the energy and natural resources department through its five branches (program support, timber management, forest protection, land use and reforestation and reclamation) is responsible for their administration. Jurisdiction is decentralized into 10 forests, each responsible for the forest area within its boundaries. Each forest is under the control of a superintendent