department, through four major sections: forest inventory, forest protection, forest

management and region forestry administration.

A provincial forest nursery supplies stock for reforestation. A tree improvement program has been initiated to ensure seedlings of the highest possible quality. Seedlings are supplied to farmers for worklots, to commercial Christmas tree producers, and about 3 million are planted annually in reforestation of 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 by thinning, cleaning and chemical spraying removes undesirable species and encourages growth of preferred trees. Forest inventories cover about 26 806 km² annually. Based on these inventories, working plans with annual allowable cuts are made.

Forest management licences may be granted for 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. Their production is augmented by a dozen intermediate-sized sawmill operations and numerous small sawmills and timber

harvesting operations.

There are 332 477 km² under forest protection with zones of priority in less accessible areas. Fires are detected through a network of lookout towers and an aircraft detection system and 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 these sections — management, inventory and silviculture — and develops and evaluates forest policies which are carried out by regional authorities. The province has seven resource administration regions divided into resource officer districts. The Northern Saskatchewan department administers the northern forested area and is responsible for forest protection through a network of 75 lookout towers, and patrol aircraft during high hazard periods. A VHF communication system is operated in towers, vehicles, aircraft and bush camps. Helicopters and fixed-wing aircraft capable of water-dropping provide aerial support. Six land-based Tracker aircraft are equipped to drop long-term fire retardants.

Alberta. The 390176 km² of forest lands in Alberta include 201491 km² capable of producing forest crops. They are administered by the Alberta forest service of the energy and natural resources department. Jurisdiction is decentralized into 10 forests, each under the control of a superintendent supported by specialists in timber management, fire, land use, construction and communications. The forests are subdivided into ranger districts each under a district forest officer.

A timber management branch is responsible for the inventory and sale of Alberta's timber resources under a sustained yield management program. The branch prepares plans on all management units to which the quota system of tenure apply, and reviews and approves management plans prepared by forest management agreement holders.

The branch reviews, approves and inspects annual timber harvesting plans and operations, collects Crown charges relating to timber, maintains a reforestation record

system on cutover areas and enforces reforestation legislation.

A forest protection branch employs specialists such as a meteorologist and a telecommunications officer; an aircraft dispatch section assists in prevention, detection and suppression of fires. A forest land-use branch manages multiple land use in the forested area, including grazing, recreation and watersheds. It protects forest lands from excessive damage by industrial activities such as oil, gas and mineral development. Attention is given to the eastern slopes of the Rocky Mountains containing the headwaters of the North and South Saskatchewan rivers.

A reforestation and reclamation branch conducts projects on provincial forest lands and operates the Pine Ridge Forest Nursery which can produce 20 million tree seedlings