

Water-bombing aircraft took action on 70 fires in Ontario in 1965. At the end of 1965, the fleet consisted of 41 aircraft—six turbo-Beavers, 24 standard Beavers, 10 Otters and one Super Widgeon. Five helicopters were leased during the fire season. The communication system included 174 ground stations, 308 lookout-tower radios, 15 patrol vessels, 538 mobile radio telephones, 1,046 portable fire-line radios and 41 aircraft radio telephones.

Forest pest control programs were carried out on about 10,000 acres of Crown owned or managed forest lands in 1965. The main effort was concentrated on the European pine sawfly, the white pine weevil and the white pine blister rust. Experimental work was carried out with the chemical Bidrin, a systematic pesticide, to test the effectiveness of protecting individual elm trees with it against the conventional spraying method for controlling Dutch elm disease.

Manitoba.—The central administration of Manitoba's forests is organized into two Branches—Forest Management and Forest Protection. Each is in charge of a director and is a Branch of the Department of Mines and Natural Resources. The Province is divided into eight regions, each under a regional supervisor who is responsible to the Branch directors.

The Management Branch co-ordinates control measures for the propagation, improvement and management of the forests, the harvest of forest products, and forest inventory surveys. Two nursery stations are 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 shelterbelts and woodlots and to commercial Christmas tree producers. 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 3,000 to 4,000 sq. miles annually and on the basis of these inventories working plans with annual allowable cuts on a sustained-yield basis have been brought into 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. At present, one long-term Pulpwood Berth with an area of 2,745 sq. miles and 10 long-term Timber Berths, all granted prior to 1930, are in force. A second Pulpwood Berth agreement was signed early in 1966, covering the construction of a pulp mill and sawmill at The Pas and debarking units placed near Arnot in northern Manitoba.

The area of the province under forest fire protection is 120,000 sq. miles 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 tied together by radio and Departmental or public telephones. Two Canso water-bombers and two helicopters are rented for the worst of the fire season to supplement the aircraft of the Manitoba Government Air Service.

The province has no forestry research organization but co-operates with several federal services which maintain two research areas in the province. The Department co-operates fully with federal authorities in investigating and controlling forest damage resulting from insects and diseases. Public education in the fields of fire prevention and forest conservation is carried out and use is made of all usual methods including radio, television, newspapers, signs, talks to school children and club members, film tours, etc.

Saskatchewan.—The forests of Saskatchewan are located mainly in the northern half of the province and cover 117,738 sq. miles, or 53 p.c. of the total land area. Provincial forests constitute approximately 92 p.c. of all forest land in the province and are managed and developed by the Forestry Branch of the Department of Natural Resources.