

target of about 76.7 million trees. Complementing this are up-to-date tree improvement and nursery soil management programs. The Branch, directly or indirectly, supervises all planting projects on Crown lands but regeneration agreements have been signed with all major licensees under which the latter assume responsibility for planting projects and are paid at an agreed rate for work completed. Other work, such as site preparation for planting, may be performed by the companies under the same agreement.

During 1972, 50.0 million nursery-produced trees were planted on about 72,000 acres of Crown and Agreement lands, and 6.0 million tubed seedlings were planted on about 6,000 acres. Other silvicultural treatments included the direct seeding of 21,800 acres, treatment for natural regeneration on 53,600 acres and stand improvement (cleaning, spraying, thinning, pruning, etc.) on 82,800 acres. In all, 236,600 acres of Crown and Agreement lands were silviculturally treated in 1972 to promote regeneration or to improve the forests. Owners of private lands may purchase planting stock for forestry purposes from government nurseries at nominal prices and may also receive free professional advice on any forestry matter, including silviculture, harvesting and marketing. In 1972 (spring and fall), planting stock furnished for private lands totalled 17.9 million units. Under The Woodlands Improvement Act it is possible to have planting and improvement work carried out completely under government direction and mainly at public expense. Since its inception in 1966, the program has provided assistance for 157,600 acres of privately owned land.

For half a century, Ontario has had enabling legislation that permits municipalities and, within the past 20 years conservation authorities, to place abandoned and submarginal agricultural lands to which they have acquired title under agreement with the Ministry, which undertakes to plant and manage the properties for a specified period of between 20 and 50 years. Nearly 250,000 acres under such agreements are managed intensively and the older plantations are receiving regular thinnings. The trees removed are in demand for pulpwood, posts, poles and sawlogs, making the undertakings financially attractive. In addition, properties close to centres of population have acquired tremendous value as recreational areas. Forest pest problems in 1973 were again dominated by the spruce budworm which infested almost 19 million acres, but spraying operations to control this insect were limited to 90,000 acres in three separate high-value local areas. Smaller acreages on Crown lands and lands managed under agreement totalling 14,000 acres were also treated for white pine weevil, pine and spruce sawflies, white grubs, white pine blister rust, annosus root rot, and mice.

The Forest Research Branch provides scientific and technical knowledge for the management of forest lands and is more specifically oriented toward assisting forest management in attaining production targets. Various disciplines including tree ecology and physiology, site and fertilization, tree genetics and breeding, mensuration, silviculture, pest and fire control, economics, equipment design and development are used in combination to solve management problems such as tree improvement, stock production, regeneration and forest tending. Research is carried out throughout Ontario. Headquarters is at Maple and there are four field stations at Thunder Bay, Sault Ste Marie, Dorset and Midhurst.

The Timber Sales Branch co-ordinates and supervises preparation of management plans for Crown management units and approves the plans prepared for company management units. Forest inventory requirements and priorities for such plans are determined by the Branch. As at March 31, 1974, 182 plans (91 Crown units, 31 company units and 60 Agreement Forests) were completed or in process of completion for approximately 190,000 sq miles. Forest access is most important in the implementation of management plans and the forest access roads program is part of the Branch's responsibilities. The Branch arranges for the orderly sale and disposition of timber and the measurement (scale) of the products removed. Sawmills are licensed and directories prepared. Information is collected and analyzed on the production, transportation and marketing of timber and the data provided to the forest industry.

The Forest Fire Control Branch is responsible for the area under organized forest protection in Ontario totalling 180,275 sq miles and including the main central band of accessible forests. This area is organized into eight regions and 38 fire 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 134,000 sq miles, do not support significant stands of merchantable timber and, except for communities or other special values, are not protected. Within the fire districts, agreements were in effect in 1973 with 208 municipalities for the prevention and