

protective associations, of which there are six, are syndicates of lease holders and owners who have availed themselves of their right to form an association to satisfy the law which compels them to protect their limits or private forests of 2,000 acres or over. Members assume operating expenses in proportion to the area owned by each but the Department assumes half the costs of fire fighting incurred by the associations. The third group is composed of lease holders and of owners who prefer to discharge their obligations personally as far as forest protection is concerned. They enjoy the same privileges and their obligations are the same as those imposed upon the associations.

To perpetuate the forestry program of the province, the Department has established a number of nurseries, the first at Berthierville in 1908. This nursery has three sections: one wooded with a variety of valuable species of mature age, one serving agricultural purposes, and another devoted to forestry experiments and the cultivation of trees for reforestation or ornamentation. More recently, the Grandes Piles nursery and the Gaspé nursery were organized and there are also nurseries in the following counties: Abitibi-East, Témiscamingue, Saguenay, Îles de la Madeleine, Rimouski, Roberval, Rivière du Loup, Témiscouata and Chicoutimi. Their object is the preparation of plants for reforesting nearby districts. 'Floating' nurseries, supervised by the engineers of the Forest Extension Bureau and intended especially for growing reforestation plants for private properties, are located at Pont Rouge, Sherbrooke, Scott, St. Hyacinthe, Victoriaville and Mont Joli. The plants are supplied free of charge on request. A dynamic reforestation program is now under way in the province, with an ultimate objective of 10,000,000 plants yearly on private grounds.

The Bureau of Silviculture and Botany and the Forestry Products Laboratory, both subsidized by the Department, are actively engaged in scientific research work in the forestry field. The Bureau studies the possibilities of utilizing spoil-heaps of gold and asbestos mines, tests the fertility of soils in the spruce groves, classifies forests according to type of vegetation, and studies growth and yields of stands in the timber limits by means of permanent research spots. The Forestry Products Laboratory, located at the Duchesnay Forestry Station, examines developments in the field of chemical conversion of wood and in the use of forestry by-products.

Ontario.—The long-range program of the Ontario Department of Lands and Forests reached an important milestone during the year ended Mar. 31, 1959 when the forest resources inventory, a major undertaking begun in 1946, was completed. In addition, 12,500 sq. miles of forest area were photographed again in the first of the annual revisions which will keep the inventory up to date. From now on, the management of forest resources in Ontario will be based on detailed information across extensive areas. This is the necessary foundation for the Department's ultimate object—a continuous balance between forest growth and forest harvest, providing a high yield of forest products in perpetuity.

The steady decrease in forest fire losses since 1955 (when 396,423 acres were burned over) was climaxed in 1959 with the relatively small total of 5,279 acres burned over. This is the lowest loss in three decades and probably the lowest in Ontario's history. Although bad fire years are not necessarily a thing of the past, the improvement in the fire record of the past few years appears to have conformed with advances in fire control methods. Many of these advances have followed from fire fighting tactics and equipment developed by Department personnel.

Another important factor in the reduction of fire losses is the constant crusade of the Department to inform the public of the need for fire precautions and for conservation of natural resources. The continuous publicity campaign includes newspaper and magazine display advertising, radio and television broadcasts, posters, picture books of the comic type for school children, articles and editorial assistance to publishers and broadcasters, poster contests for school children, and lectures and films presented to school and adult groups. It is believed that this publicity may have helped to reduce the number of forest