

The Industrial Liaison Service comprises suitably located field representatives who visit sawmill and other woodworking plants in their respective areas to keep industry aware of research development and technical advances that may assist in the solution of industrial problems. These field representatives also undertake liaison duties to keep the Branch laboratories informed of field problems on which research would be of value.

Research activities include the determination of the physical, mechanical and chemical properties of wood and their relation to adaptability in use; studies of the factors affecting the quality of wood and of manufactured wood products; determination of the factors that cause wood waste in logging and manufacturing; research and investigation on the preservative treatment and painting of wood and the use of wood for the manufacture of cellulose, wallboards, alcohols, organic acids, and extractives; studies to determine possible new economic and more valuable uses for woods; and research aimed at determining methods and means for the practical and economical utilization of all wood substances available from the annual timber harvest. Additional work includes the application of laboratory findings to the standardization of lumber grades, development and improvement of engineering designs in wood, and the development of timber specifications for building codes of Canada. By means of numerous technical publications and through other channels, continuous effort is devoted to the widespread dissemination of research results.

Pulp and Paper Research.—The Pulp and Paper Research Institute of Canada is a corporation supported jointly by the Canadian pulp and paper industry, the Federal Government and McGill University. In its laboratories at Pointe Claire, Que., which were provided by the Federal Government, research is carried out in the whole broad field of pulp and paper processing, from the growth and harvesting of the forests through the various chemical and mechanical manufacturing processes to the properties of end-products, including the improved utilization of both liquid and solid wastes. Further details are given at pp. 488-489.

Subsection 2.—Provincial Forestry Programs

All forested land in provincial territory, with the exception of the minor portions in National Parks, forest experiment stations, military areas and Indian reserves (see Table 2, p. 28), is administered by the respective provincial governments. The forestry program of each province is outlined below.

Newfoundland.—Geographically, the Province of Newfoundland has two separate regions—the Island, and Labrador on the mainland. The productive forested land of the Island is estimated at 12,999 sq. miles and of Labrador at 62,575 sq. miles, a total of 75,574 sq. miles. Only 578 sq. miles are classified as farm woodlots. Most of Labrador's forests are leased but are as yet virtually untouched.

A large part of the forest land in the interior of the Island is leased, licensed or owned by paper companies, but a three-mile-wide belt along most of the coastline is retained as unoccupied Crown land for the purpose of providing firewood, construction material, fencing material, etc., for the local population. Within this coastal forest belt, every household has legal right to cut 2,000 cu. feet of wood a year for domestic use. This form of cutting is generally without any control or restriction but a policy is being introduced whereby cutting in certain 'management areas' is controlled by forest officers.

Commercial timber-cutting on unoccupied Crown lands has been by permit since 1952; permits for amounts up to 120 cords per person are issued by the field staff but permits for larger quantities must be approved by the government. This type of permit is almost always preceded by advertising of standing timber for sale by tender, the timber involved usually being over-mature or damaged by fire, insects or storms.

Unoccupied Crown land is divided into 21 Forest Inspector Districts averaging 281 sq. miles in size. The Island is also divided into three Forest Regions, each with a Supervisor who is in charge of Inspectors and is responsible to the Chief Forester. Twenty-seven