

Silvicultural Research.—Research in the field of silviculture is centred in five Dominion Forest Experimental Stations located in New Brunswick, Quebec, Ontario, Manitoba and Alberta, but supplementary studies are conducted in other areas in co-operation with the Provincial Governments and with industry. The purpose of this work is to keep all forest lands in continuous production and to obtain the highest possible volume of timber of good quality within a shorter period of time than is permitted by the unaided operations of nature, and at a cost that is economically feasible. Problems of regeneration, methods of cutting and tree breeding—by selection and developments of superior strains for artificial propagation—are dealt with.

Forest Products Research.—Research in this field is carried out by Forest Products Laboratories operating at Ottawa and Vancouver, and work covers lumber seasoning, timber mechanics, timber physics, timber pathology, wood preservation, wood chemistry and wood utilization.

Pulp and paper research is carried on at the Pulp and Paper Research Institute of Canada at Montreal and is organized under a co-operative agreement among the Federal Government, the Canadian Pulp and Paper Association and McGill University. The program of work includes woodlands research and refers to investigations in the Division of Industrial and Cellulose Chemistry of McGill University.

More detailed information on forest products research may be found at pp. 994-995 of the 1940 Year Book.

Forest Entomology.—The study of forest insect problems in Canada is entrusted to the Forest Insect Investigations Unit of the Division of Entomology, Science Service, Department of Agriculture. Seven main laboratories are maintained and in addition four sub-laboratories and a number of temporary field stations and camps.

A more detailed analysis of the activities of the Forest Insect Investigations Unit is given in a special article entitled "Noxious Forest Insects and Their Control" which appears at pp. 389-400 of the 1947 Year Book.

Forest Insects Control Board.—The Forest Insects Control Board operates under the Department of Mines and Resources and is composed of ten members representing Federal and provincial governments and the pulp and paper industry. Its purpose is to secure additional funds where necessary, and to supplement the functions of the existing Federal and provincial government agencies in order to co-ordinate all efforts into one program aiming towards the solution of the forest insect problem in Canada.

Secondary Wood and Paper-Using Industries.—In addition to the primary forest industries, there are a number of important industries that use the primary forest product as raw material for further manufacture. These include industries that produce commodities made almost entirely of wood or wood-pulp and also those that take paper—a secondary product—as their raw material and fabricate it into still more highly processed forms.

The veneer and plywood industry has enjoyed phenomenal growth during the past decade. Production has more than trebled since 1939, and the use of plywood is expanding as its properties are becoming more widely known.

A detailed description of the wood-using, paper-using, and veneer and plywoods industries will be found at pp. 427-430 of the 1948-49 Year Book.