

giving assistance to certain provinces in the preparation of their inventories, the Service is developing improved methods in interpreting the valuable forestry data contained in aerial photographs. The Economics Division also assembles data and issues reports on forest revenues and expenditures, the production of forest industries, the employment of labour, and trade in forest products.

Five forest experiment stations, where investigations of the underlying principles governing the growth of forests can be made, and where practical methods of management can be tested, are now in operation. Besides the original station at Petawawa, new establishments, opened since 1930, include the Acadia station near Fredericton, N.B.; the Valcartier station near Quebec; the Duck Mountain station in Manitoba; and the Kananaskis station in the foothills west of Calgary. The total area of the five stations is approximately 238 square miles. These stations, or experimental areas, are used for forest fire-hazard research as well as for silvicultural work, and also form centres from which investigations can be conducted in other areas in the regions in which they are located.

One of the principal problems now exercising the minds of all who are interested in the future welfare of our forest resources concerns the present condition and future prospects of forest areas which have been cut or burned. The Forest Service is conducting a special series of investigations into this question in co-operation with the provinces and timber owners.

Forest Products Laboratories.—In order to promote the more efficient use of the forest resources of Canada and at the same time assist the wood-using industries in the more technical problems encountered in their manufacturing operations, the Forest Products Laboratories of Canada were organized in 1913 under the Forest Service of the former Department of the Interior. The need for them was felt because of the influence of the establishment of such laboratories in other important timber-growing countries. Besides, on account of Canada's large exports of timber and timber products, it became increasingly apparent that, in order to meet world competition in the timber trade, it was necessary that Canada keep fully abreast of other countries in scientific developments in wood utilization.

For several years the Laboratories carried on all their work in Montreal, under an arrangement with McGill University. The subsequent development of their work has necessitated the establishment of a branch laboratory in Vancouver in a building provided by the University of British Columbia, the transfer of the main Laboratories to Ottawa, and the establishment of the Pulp and Paper Division of the Laboratories in Montreal in a building erected by the Canadian Pulp and Paper Association. In this building are also housed the executive offices of the Association and certain laboratories of McGill University devoted to research in cellulose and related products. The Pulp and Paper Association, in addition to providing accommodation for the Laboratories, makes a yearly grant to the Laboratories to assist in financing the work, and through a Joint Administrative Committee, consisting of representatives of the Government and the Association, takes an active part in formulating and forwarding the work of the Division. Close co-operation is also maintained with McGill University.

The main Laboratories in Ottawa carry out work in timber mechanics, wood fabrication, wood preservation, lumber seasoning, timber pathology, wood structure, wood identification, wood chemistry and general wood utilization; they also co-operate with other Government Departments and industrial organizations in timber marketing problems. In addition, the Ottawa Laboratories carry out many investigations in connection with logging problems of the pulp and paper industry.