

those units of the Department not engaged in scientific research or economic studies. It is composed of five Divisions: Provincial Agreements, Forest Management, Information and Technical Services, Personnel Services and Administrative Services. The Provincial Agreements Division is concerned with the administration of federal-provincial cost-sharing agreements (see p. 530). The Forest Management Division conducts forest surveys on federal lands throughout Canada and provides advice and assistance regarding forest management to the administering agencies. It also provides for the management of forests including timber disposal in certain areas on behalf of other government departments, the most important of these being the military training area, Camp Gagetown, in New Brunswick. Co-operation is extended to the External Aid Office in administering technical assistance programs involving forest surveys in other countries. The Information and Technical Services Division includes both operating and servicing functions in that it provides a program of public information on forestry as well as library, editorial and technical services. A comprehensive public relations and information program, in course of development, will include the production and distribution of a number of lay publications designed to increase public awareness of the importance of Canada's forest resources and the need of conserving them; the distribution of scientific publications and the interpretation of the scientific work of the Department to the general public; the use of press, radio, and television facilities; the production of exhibits, displays and posters; and the maintenance of a photographic library dealing with forestry subjects. The Personnel Services and Administrative Services Divisions are servicing elements for the Department as a whole.

The functions of the three Research Branches and the Economics Division, as well as the Federal-Provincial Forestry Agreements program, are described in the following paragraphs.

Forest Research Branch.—The functions of this Branch are (1) to provide basic information on the characteristic occurrence, growth, development and behaviour of forest tree species throughout the wide range of forest types and environmental conditions of Canada and (2) to develop and test new or improved methods for use in forest management and forest fire control. The program is conducted through seven district offices across Canada and often in co-operation with other federal departments, provincial forest authorities, other research agencies, universities and industry.

Forest management research deals with silviculture, tree biology, forest land and forest mensuration. Many of the silvicultural studies involve (a) assessing the factors responsible for the success or failure of natural regeneration following various cutting methods and treatment of seed beds, (b) comparing different methods of seeding and planting, and (c) determining the effects of different methods of intermediate cutting on the development of residual trees and stands. Studies are made of successional changes in most of the important forest types. Application of silvicultural techniques as well as research in regulation of cut and in methods of protection are aimed at determining how forests may be maintained at the highest levels of production. The relationships between forest growth and site are being studied with a view to the assessment of long-term productivity. The requirements of light, temperature and moisture that will produce optimum conditions for growth and development are being determined for the seedlings of many important species of trees. The physiological processes of growth and reproduction are under investigation for a limited number of species. In tree breeding, superior strains are selected or developed and there is a continual improvement in propagation and breeding techniques. Research in forest land encompasses forest geography and land classification. Research in soils is directed toward determining the relation of tree growth and nutrition to chemical and physical properties of the soil.

Techniques used in mensuration are constantly under review and study; new methods are tested and developed. Research in forest inventory methods is of increasing importance because of the continuing programs of forest inventories being conducted in most provinces