

protection of watersheds. The latter are called protection forests. In neither case is the timber withdrawn from use. On the contrary logging operations are carried on, but particular care is taken to see that the forest resources on the area are not seriously depleted at any time. In the case of protection forests, the decision as to whether any particular area can be logged at a given time depends on the effect which such action will have on the run-off of water. If logging a certain hillside in a protection forest is likely to lead to erosion or otherwise interfere with the control of stream-flow, no logging will be allowed even though it may appear highly desirable from a commercial point of view.

Parks are primarily recreational areas and in some of them all logging operations are forbidden. In others logging is permitted under close control and particular care is taken to see that scenic values are not damaged.

Game and Fish

In most provinces the administration of laws respecting hunting and fishing is carried out by staffs specially appointed for that purpose but in others forest officers are required to act as game and fish wardens in addition to their other duties. Whether he is responsible for game and fish laws or not, the forest ranger must always take an interest in the movements of hunters and fishermen in his district because of the danger of forest fires which their presence entails. The majority of men who go into the woods to hunt or fish are careful with their camp fires and tobacco but there is always likely to be a small number who may start conflagrations either through ignorance or carelessness.

Forest Surveys

Since the provincial forest services are responsible for the administration of large forest areas, it is most important for them to know as accurately as possible what those forests contain and how much wood can be cut or burned each year without causing permanent damage to the forests as a whole. Extensive forest surveys are, therefore, carried out by the provincial services and results are compiled in the form of forest inventories. Much has been accomplished in this direction but a very great deal remains to be done before satisfactory information for the whole of the Dominion will be available. Field survey parties are usually headed by qualified forest engineers who may or may not be members of the permanent staff of the provincial service, while the remainder of the crew are temporary employees engaged on a seasonal basis. Most timber cruising is carried out during the summer months but some winter work has also been done. The use of aerial photographs has been greatly developed during the past ten years and the Dominion Forest Service, many of the provinces and several private timber holding companies maintain their own forest air survey organizations.

In several of the provinces the Dominion Forest Service has undertaken preparation of forest inventories, and all provinces supply information to the Dominion which permits revision of the national forest inventory from time to time.