

Forest Fire Protection

Protection of the forests against the ravages of fire is the most difficult, and most costly, of all the functions entrusted to forest administrations throughout Canada. The vast extent of our coniferous forests, lack of adequate road systems in many regions, and climatic conditions, combine to make fire protection especially difficult. Very great improvements in organization and methods have been achieved over the past thirty years, but the fire menace is a major obstacle to the introduction of better forest management.

In Quebec and Newfoundland, fire protection associations have been formed by owners and lessees of forest properties, to provide protection for their own holdings. Elsewhere, the provincial fire-protection services afford protection for all forests except those occurring within organized municipalities. All fire-protection services possess modern equipment such as portable fire pumps, special vehicles, lookout towers, and effective communication systems. Aircraft is used extensively both for reconnaissance and fire detection as well as transport machines to carry men and equipment to the scene of a fire. A large proportion of the efforts of the provinces is directed towards the prevention of the outbreak of fires, and this involves intensive efforts to educate the public regarding fire danger.

Disposal of Crown Timber

Since it is the general policy to continue public ownership of forest lands, it has been necessary to devise suitable means through which industrial and private users of wood may obtain supplies of standing timber. This is accomplished by granting or selling, to companies or individuals, rights to cut standing timber under prescribed conditions. Title to the land itself, however, remains with the Crown.

The needs of some users can be satisfied if relatively small quantities of timber are made available to them from time to time. Others, such as the great pulp and paper companies, must be assured that large supplies of wood will be available to them for long periods in the future because, without sure access to sufficient raw materials, they could not contemplate the huge capital investments which are needed to erect modern manufacturing plants. All sorts of intermediate requirements exist between these two extremes, and several methods of timber disposal have been devised to meet the needs of the different users. One feature is common to nearly all of them, namely, that the operator pays the Crown for the timber he cuts at the time of cutting. Rates are paid on a unit-volume basis. The unit of volume may be 1,000 board feet, one cord, a cubic foot, or a product such as a railway tie. These rates are described in different provinces as Crown dues, stumpage, or royalties, but they are essentially the same in nature. In addition to Crown dues, the operator usually must pay ground rentals and fire-protection charges, at fixed rates per acre.

Forest Management

During the past twenty-five years great advances have been made towards systematic management of the larger forest holdings in Canada. Provincial Governments now require occupants of such properties to make inventories of their forests and to prepare long-term and short-term working plans. These plans must be acceptable to the