

10.1.2 Forest depletion

The average annual forest depletion by cutting and fire is shown in Table 10.2 for the ten-year period 1960-69. The primary sources of Canada's current wood production are the areas of Crown forest land allocated to wood production and private forest land. These two ownerships constitute 434.8 million acres and, of that area, 1.8 million acres (based on 1968 information), or less than one fifth of 1%, were cut annually over the period shown and 593,000 acres, or about one tenth of 1%, were burned. On a volume basis, the average annual depletion from cutting was 3,649 MM cu ft, which may be compared with an estimated permissible cut on a sustained-yield basis of 8,481 MM cu ft from approximately the same areas of Crown and private land. In addition to cutting and fire, extensive forest depletion is caused by insects, diseases and natural mortality but no reliable estimates of these losses, either physical or economic, are available.

In aggregate, a large surplus of timber exists in Canada although there are shortages in some regions and shortages in some species which could be overcome by increased silvicultural and management inputs where such are considered to be economic. Also, greater utilization of individual trees and certain species could further extend the resource.

An unprecedented 9,253 forest fires burned a total of 2.6 million acres of valuable forest land across Canada in 1970 (Table 10.3). Despite the exceptionally heavy fire load, fire control organizations were successful in holding the acreage burned to a level only slightly above the corresponding ten-year average. Furthermore, the \$11.4 million in estimated fire damages compares favourably with the \$16.3 million average annual losses reported over the previous decade.

Through carelessness and incendiarism, man has been blamed for 64% of all forest fires reported in 1970 (Table 10.4). Lightning accounted for 3,299 fires or 36% of the annual total. This represents the highest percentage of lightning fires ever recorded in Canada.

10.1.3 Forest administration

10.1.3.1 Federal forestry programs

The federal government is directly responsible through several departments and agencies for the protection and administration of forest resources in the Yukon Territory and Northwest Territories and on other federal lands such as the national parks, Indian reserves, military areas, and forest experiment stations. In addition, there are important federal responsibilities with respect to the nation's forest resources as a whole. These responsibilities, which relate to forestry research and development and the provision of information and technical services, are defined and established by the Forestry Development and Research Act (1966) and the Department of the Environment Act (1970).

The primary federal organization concerned with forestry is the Canadian Forestry Service of the Department of the Environment. Heading this Service is a director-general who is responsible to an Assistant Deputy Minister of the Department. Reporting to the director-general are branch directors for program development, program operations, and forestry relations. The three directors are concerned respectively with: guiding and evaluating the long-term development of the Service's program; organizing, co-ordinating, and managing the annual research and services program; and with planning, co-ordinating, and directing the external and international program of forestry relations. Also responsible to the director-general is the head of the Forestry Information Section and an administrative officer in charge of the Administrative Services Section.

The program of the Canadian Forestry Service falls within six categories: forest resource research, development and services; forest products research, development and services; technical information and advisory services; public information; aid to universities; and special assignments.

Departmental programs in forestry research and development are described in Chapter 9, Section 9.2.4.

To promote improved management of forest resources and better forest products, the Canadian Forestry Service, through publications, workshops, seminars, etc., disseminates technical information to forest resource and wood processing managers. Forest advisory services are provided for federal departments and international agencies, and assessments are also made of operational trials and treatments conducted by resource organizations and