forest land allocated to wood production and private forest land. These two ownerships constitute 163.8 million hectares. On a volume basis, it was estimated in 1976 that the annual allowable cut to maintain productive forests was 255 million cubic metres. From 1966-75, the average annual total of wood harvested amounted to about 121 million m<sup>3</sup>, approaching half the allowable cut. In addition to cutting, extensive forest depletion is caused by fire, insects, diseases and natural mortality but no reliable estimates of these losses, either physical or economic, are available. A total of 10,358 forest fires occurred across Canada in 1976, destroying 2.2 million hectares of forest land (Table 10.3).

A large surplus of timber exists in Canada although there are shortages in some regions and species which could be overcome by increased silvicultural and management techniques. In addition, greater utilization of individual trees and of certain species could extend the resource.

## Forest administration

## Federal forestry programs

The federal government is responsible through several departments and agencies for protection and administration of forest resources in the Yukon Territory and Northwest Territories and on other federal lands such as 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 Fisheries and Environment Canada. Its headquarters organization consists of a director general with five branch directors covering policy analysis and development, forest protection, production and environmental forestry, forestry relations and technology transfer and forest utilization.

To promote improved management of forest resources and better forest products, the Canadian Forestry Service, through publications, workshops and seminars, 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 industry. In the forest products field, special testing services (unavailable commercially) are provided both for government and industry. The service also helps develop codes and specifications for forest products.

Through its publications, press releases, films, displays, visitor centres and demonstration areas, the service seeks to increase public awareness and understanding of forest values and to enlist support in the protection and wise use of forest resources.

## Provincial forestry programs

All provincial forest land with the exception of minor portions in national parks, federal forest experiment stations, military areas and Indian reserves (except in Newfoundland) is administered by the respective provincial governments. The forestry program of each is outlined below.

Newfoundland. The forest resources of this province are geographically separated by the Strait of Belle Isle into two distinct regions — the island of Newfoundland and Labrador on the mainland. A forest inventory of Labrador, completed in 1975, was conducted on lands south of 56°N. The inventoried area disclosed a total of 258 012 square kilometres of which 55 374 km<sup>2</sup> were productive forest area; the total volume of black spruce and balsam fir in Labrador was 320.7 million cubic metres. A forest inventory of the island of Newfoundland showed that of a total area of 111 445 km<sup>2</sup>, over 37 863 km<sup>2</sup> were classified as productive forest. This area supports a total gross volume of 281.8 million m<sup>3</sup> of softwoods and hardwoods. The principal commercial species of trees are black spruce and balsam fir. White pine, white spruce, and white and yellow birch are of lesser commercial importance.

10.1.3

10.1.3.1