

## 6.—Forest Fires, by Cause, 1957 and 1958, compared with Ten-Year Average 1948-57

Cause	Average 1948-57		1957		1958	
	No.	p.c.	No.	p.c.	No.	p.c.
Campfires.....	879	16	933	15	970	12
Smokers.....	1,097	20	1,042	17	1,222	15
Settlers.....	570	10	653	11	804	8
Railways.....	711	13	904	15	1,529	20
Lightning.....	1,065	19	874	14	1,620	21
Industrial operations.....	260	4	282	5	359	4
Incendiary.....	142	2	159	3	263	3
Public works.....	104	2	206	3	131	2
Miscellaneous known.....	492	9	694	11	835	11
Unknown.....	266	5	333	6	304	4
<b>Totals.....</b>	<b>5,586</b>	<b>100</b>	<b>6,080</b>	<b>100</b>	<b>7,817</b>	<b>100</b>

## Section 4.—Forest Administration, Research and Conservation

## Subsection 1.—Federal Forestry Program

**Administration.**—The Federal Government is responsible for the protection and administration of the forest resources of the Yukon and Northwest Territories and of other federal lands such as the National Parks, forest experiment stations, military areas and Indian reserves. The Federal Government also administers the Canada Forestry Act which provides, among other things, authority for the operation of forest experiment stations and forest products laboratories.

The Act also authorizes the granting of federal assistance to the provinces to enable them to improve the management of their own forests. Under the Federal-Provincial Agreements signed under authority of the Act, seven of Canada's ten provinces have undertaken a forest inventory with federal financial assistance, and six provinces have reforestation agreements. The history of the Federal-Provincial Agreements and their relation to the Canada Forestry Act is described in a special article appearing in the 1956 Year Book, pp. 459-466. In 1957 the Federal Government broadened the implementation of the Canada Forestry Act by providing financial assistance to the provinces for forest fire protection. A total of \$5,000,000, available over a five-year period, may be applied to capital expenditures, such as the cost of fire protection equipment and improvements, and of forest access roads, trails and buildings required for forest fire protection.

The Forestry Branch of the Department of Northern Affairs and National Resources has been continuing work on the aerial forest mapping of federally administered lands and other territories. For example, forest inventory maps have been prepared from air photographs for portions of the Yukon and Northwest Territories and data have been collected on the ground to support the interpretation of the photographs. The development of instrumental aids in forest photography and in interpretation is being continued by this Branch.

**Forestry Research.**—In the field of forestry the chief responsibility of the Federal Government is to carry out research in problems affecting the forests of Canada and their development, conservation and more effective utilization. To this end, forest research and forest products research facilities have been expanded greatly throughout the country during the past five years. The Forestry Branch of the Department of Northern Affairs and National Resources conducts research in forest economics, silviculture, forest management, forest ecology, tree physiology, tree breeding, forest soils, forest inventory methods,