

Section 4.—Forest Depletion and Increment

**Depletion.**—The average annual rate of depletion of reserves of merchantable timber during the ten years 1932-41 was 3,825 million cu. ft. Of this total, 69 p.c. was felled for domestic and commercial use, and 31 p.c. was destroyed by fire and pests. Of 2,653 million cu. ft. utilized, 33 p.c. was used in sawlogs, 32 p.c. for fuel, 30 p.c. for pulpwood, and 5 p.c. in miscellaneous products. Between 75 and 80 p.c. of the total cut was of softwood species. Losses by fire averaged 472 million cu. ft. annually, and insects and tree diseases destroyed about 700 million cu. ft.

During 1941, the last year of the period under review, depletion totalled 5,099 million cu. ft. and was very much greater than the average for the decade, due, in part, to increased utilization to meet war needs (3,354 million cu. ft.) and in part to abnormally severe fire losses (1,045 million cu. ft.).

**Forest Fires.**—Considering Canada as a whole, the fire season of 1942 was favourable and the losses were below the average for the previous decade. However in British Columbia, Saskatchewan and Nova Scotia the losses were considerably above the average.

Summary statistics of fire losses are given in Tables 2 and 3, while fuller details by regions are given in the Annual Report of the Department of Mines and Resources for the fiscal year ended Mar. 31, 1943.

2.—Forest-Fire Losses in Canada, 1942, With Ten-Year Averages, 1932-41

Item	Average 1932-41	1942	Item	Average 1932-41	1942
Fires under 10 acres..... No.		3,437	<b>Estimated Values Destroyed—</b>	\$	\$
Fires 10 acres or over... “		1,354		Merchantable timber..	2,954,811
<b>Totals, Fires..... No.</b>	<b>5,985</b>	<b>4,791</b>	Young growth.....	920,041	1,011,038
<b>Area Burned—</b>			Cut-over lands.....	320,786	118,737
Merchantable timber, acre	587,112	318,435	Other property burned	326,698	617,035
Young growth..... “	670,947	470,022	<b>Totals, Damage....</b>	<b>4,522,336</b>	<b>2,916,733</b>
Cut-over lands..... “	440,203	126,414	Actual cost of fire fighting	855,786	633,448
Non-forested lands.... “	730,397	923,600	<b>Totals, Damage and Cost.....</b>	<b>5,378,122</b>	<b>3,550,181</b>
<b>Totals, Area Burned “</b>	<b>2,428,659</b>	<b>1,838,471</b>			
<b>Merchantable Timber Burned—</b>					
Saw timber..... M ft. b.m.	784,925	253,420			
Small material..... cord	2,567,294	906,600			

3.—Forest Fires in Canada, by Causes, 1942, With Ten-Year Averages, 1932-41

Cause	Average 1932-41		1942	
	No.	p.c.	No.	p.c.
Camp-fires.....	1,130	19	745	15
Smokers.....	939	16	884	18
Settlers.....	1,015	17	602	13
Railways.....	236	4	379	8
Lightning.....	999	17	996	21
Industrial operations.....	139	2	147	3
Incendiary.....	450	7	147	3
Public works.....	58	1	53	1
Miscellaneous known.....	477	7	465	10
Unknown.....	602	10	373	8
<b>Totals.....</b>	<b>5,985</b>	<b>100</b>	<b>4,791</b>	<b>100</b>