

Section 4.—Forest Depletion and Increment

Depletion.—The average annual rate of depletion of reserves of merchantable timber during the ten years 1933-42 was 3,933 million cu. ft. Of this total, 71 p.c. was felled for domestic and commercial use, and 29 p.c. was destroyed by fire and pests. Of 2,789 million cu. ft. utilized, 34 p.c. was used in sawlogs, 30 p.c. for fuel, 31 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 444 million cu. ft. annually, and insects and tree diseases destroyed about 700 million cu. ft.

Forest Fires.—The fire season of 1943 was the most favourable since national forest fire statistics began to be compiled in 1918. The losses were uniformly much below average in all provinces.

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, 1944.

2.—Forest-Fire Losses in Canada, 1943, with Ten-Year Averages, 1933-42

Item	Average 1933-42	1943	Item	Average 1933-42	1943
Fires under 10 acres..... No.		2,355	Estimated Values Destroyed—	\$	\$
Fires 10 acres or over... "		1,015			
Totals, Fires..... No.	5,835	3,370	Merchantable timber.....	2,565,445	251,821
Area Burned—			Young growth.....	900,239	181,085
Merchantable timber. acre	548,147	87,809	Cut-over lands.....	271,099	65,423
Young growth..... "	659,335	99,234	Other property burned.....	361,925	271,882
Cut-over lands..... "	375,582	85,074	Totals, Damage.....	4,098,708	770,211
Non-forested lands.... "	783,050	555,713	Actual cost of fire fighting....	850,766	182,661
Totals, Area Burned "	2,366,114	827,830	Totals, Damage and Cost.....	4,949,474	952,872
Merchantable Timber Burned—					
Saw timber..... M ft. b.m.	753,355	86,302			
Small material..... cord	2,398,217	278,075			

3.—Forest Fires in Canada, by Causes, 1943, with Ten-Year Averages, 1933-42

Cause	Averages 1933-42		1943	
	No.	p.c.	No.	p.c.
Camp-fires.....	1,072	18	568	17
Smokers.....	947	16	677	20
Settlers.....	937	16	434	13
Railways.....	238	4	494	15
Lightning.....	1,034	18	432	13
Industrial operations.....	144	2	136	4
Incendiary.....	390	7	87	2
Public works.....	59	1	25	1
Miscellaneous known.....	439	8	329	10
Unknown.....	575	10	188	5
Totals.....	5,835	101	3,370	109

Increment.—From a long-term point of view it is believed that depletion of our forests can be replaced by an average rate of growth over the productive forest area of between 8 and 9 cu. ft. per acre annually. This very low rate is almost certainly being maintained or exceeded. But practically all of the depletion