

Section 4.—Forest Depletion and Increment

Depletion.—The average annual rate of depletion of reserves of merchantable timber during the ten years 1934-43 was 3,150,000,000 cu. ft. Of this total, 73 p.c. was felled for domestic and commercial use and 27 p.c. was destroyed by fire and pests. Of 2,312,000,000 cu. ft. utilized, 37 p.c. was used in sawlogs, 31 p.c. for fuel, 28 p.c. for pulpwood, and 4 p.c. in miscellaneous products. Between 75 and 80 p.c. of the total cut was of softwood species. Losses by fire averaged 338,000,000 cu. ft. annually, and insects and tree diseases destroyed about 500,000,000 cu. ft.

Forest Fires.—Fire losses in 1944 were somewhat higher than the average for recent years. The fire season was particularly severe in New Brunswick and Nova Scotia, whereas in Ontario and Saskatchewan losses were considerably below normal.

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, 1945.

2.—Forest-Fire Losses in Canada, 1944, with Ten-Year Averages, 1934-43

Item	Average 1934-43	1944	Item	Average 1934-43	1944
	\$	\$		\$	\$
Fires under 10 acres.....No.		3,943	Estimated Values Destroyed—		
Fires 10 acres or over.....“		1,877			
Totals, Fires.....No.	5,542	5,820	Merchantable timber.....	2,470,697	3,083,944
Area Burned—			Young growth.....	872,882	763,671
Merchantable timber.....acre	536,488	503,764	Cut-over lands.....	258,911	787,880
Young growth.....“	647,196	401,017	Other property burned.....	372,906	1,449,222
Cut-over lands.....“	350,928	759,279	Totals, Damage.....	3,975,396	6,084,717
Non-forested lands.....“	813,449	739,001	Actual cost of fire fighting....	818,108	1,328,338
Totals, Area Burned “	2,348,061	2,403,061	Totals, Damage and Cost.....	4,793,504	7,413,055
Merchantable Timber Burned—					
Saw timber.....M ft. b.m.	736,949	738,496			
Small material.....cord	2,360,992	2,145,684			

3.—Forest Fires in Canada, by Causes, 1944, with Ten-Year Averages, 1934-43

Cause	Averages 1934-43		1944	
	No.	p.c.	No.	p.c.
Camp-fires.....	1,008	18	805	14
Smokers.....	925	17	1,077	18
Settlers.....	854	15	816	14
Railways.....	256	5	838	14
Lightning.....	983	18	846	15
Industrial operations.....	149	3	208	4
Incendiary.....	348	6	172	3
Public works.....	55	1	48	1
Miscellaneous known.....	442	8	593	10
Unknown.....	522	9	417	7
Totals.....	5,542	100	5,820	100

Increment.—Practically all of the annual depletion or drain on the forest is concentrated on the 435,000 sq. miles of productive forest which is classed as accessible, and replacement of normal depletion by this area alone requires an 50871—17½