

Section 3.—Forest Depletion

General information on forest depletion and increment as well as statistics on forest fires and fire losses are presented in this Section. The scientific control of the influences that account for wastage, such as forest fires, insect pests, etc., is dealt with in Section 4.

The average annual rate and cause of depletion of reserves of merchantable timber during the ten years 1947-56, together with annual data for 1956 and 1957, are given in Table 3. Of the total depletion of the forests in the ten-year period, 93 p.c. was utilized and 7 p.c. was destroyed by fire. (Information on the extent of damage caused by agencies other than fire, such as insects, disease and natural mortality, is not available.) The average annual utilization of 3,146,846,000 cu. feet comprised 46 p.c. logs and bolts, 39 p.c. pulpwood, 12 p.c. fuelwood, and about 3 p.c. miscellaneous products. About 6 p.c. of the total utilization was exported in the form of logs and bolts and pulpwood.

The accessible portion of the productive forests of Canada, covering an area of 720,421 sq. miles, constitute the reserve from which forest production will be obtained for many years to come. The supply of merchantable timber on this area is estimated at 585,788,000,000 cu. feet and the utilization in 1957 of 3,096,000,000 cu. feet therefore represented 0.5 p.c. of the accessible productive volume. However, it should be noted that utilization does not occur evenly throughout the accessible productive forest area but is concentrated on the relatively small area of occupied forest land (land under lease, licence or private ownership). Thus overcutting may occur on many of these occupied areas, emphasizing the need for orderly management of all commercial forests if the forest industries are to maintain a dominant position in the Canadian economy.

The more efficient utilization of cut timber is an important factor related to forest depletion, for there is little doubt that in the past too high a percentage of the sawn log was discarded. However, changes of great significance have taken place recently in the uses of wood, permitting the utilization of sizes, qualities and species previously considered unmerchantable. The development and manufacture of rayon, cellophane and other products of the cellulose industry have extended the use of wood and the increasing production of plastic-wood products, fibre board and laminated wood has resulted in greater use of inferior grades of wood and species of trees and therefore in the more complete utilization of forest resources and the elimination of much waste.

3.—Average Forest Utilization and Depletion 1956 and 1957 compared with Ten-Year Average 1947-56

Item	Usable Wood			Depletion		
	Av. 1947-56	1956	1957 ^a	Av. 1947-56	1956	1957 ^a
	M cu. ft.	M cu. ft.	M cu. ft.	p. c.	p. c.	p. c.
Products Utilized—						
Logs and Bolts—						
Domestic use.....	1,442,333	1,619,708	1,429,000	42.4	39.0	45.1
Exported.....	10,208	5,925	7,000	0.3	0.1	0.2
Pulpwood—						
Domestic use.....	1,065,090	1,318,849	1,165,000	31.3	31.7	36.7
Exported.....	175,521	166,045	153,000	5.2	4.0	4.8
Fuelwood.....	378,206	289,771	280,000	11.0	7.0	8.8
Other products.....	77,488	63,006	62,000	2.3	1.5	2.0
Total Utilization.....	3,146,846	3,463,304	3,096,000	92.5	83.3	97.6
Wastage—						
By forest fires.....	254,724 ¹	693,111	75,000	7.5	16.7	2.4
Total Depletion².....	3,401,570	4,156,415	3,171,000	100.0	100.0	100.0

¹ Excludes Newfoundland.

² The figure for depletion does not include wastage caused by agencies other than fire, such as insects, diseases, and natural mortality, for which no reliable estimates are available. It represents an average annual depletion of 7 cu. feet per acre on the accessible productive forest area; a much higher rate of depletion occurs on the more accessible occupied productive forest lands.