

Section 4.—Forest Depletion

A general account of forest depletion and increment together with statistics of forest fires and fire losses is presented in this Section. Details of the scientific control of those influences that account for wastage, such as forest fires, insect pests, etc., are dealt with in Section 5.

The average annual rate and cause of depletion of reserves of merchantable timber during the ten years 1945-54, together with preliminary data for 1955, are given in Table 3. Of the total depletion of the forests in the ten-year period, 94 p.c. was utilized and 6 p.c. was destroyed by fire. The utilization of 3,023,922,000 cu. feet comprised 45 p.c. logs and bolts, 38 p.c. pulpwood, 14 p.c. fuelwood, and the remaining 3 p.c. miscellaneous products. Approximately 6 p.c. of the total utilization was exported in the form of logs and bolts and pulpwood.

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. Changes of great significance have been taking place in the uses of wood, permitting the utilization of sizes, qualities and species previously considered unmerchantable. The development and the manufacture of rayon, cellophane and numerous other products in the cellulose industry is rapidly extending the use of wood. The increasing demand for plastic-wood products, fibre board and laminated wood is resulting in greater use of inferior classes of wood and therefore in the more complete utilization of forest resources and the elimination of much waste.

The accessible portion of the productive forests of Canada, covering an area of 642,000 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 to be 363,265,000,000 cu. feet, of which approximately 153,300,000,000 cu. feet are located on that portion of the area at present under lease or private ownership. The utilization in 1955 of 3,280,000,000 cu. feet represents 0.9 p.c. of the accessible productive volume, and 2.1 p.c. of the merchantable volume on the occupied areas (where the utilization is actually taking place). These percentages show that cutting is concentrated in the occupied areas and the wood that grows on the unoccupied areas is not as yet being used. This situation emphasizes the necessity for the orderly management of all commercial forests if the forest industries are to maintain their dominant position in the development of the natural resources of Canada.

3.—Average Forest Utilization and Depletion 1954 and 1955 compared with Ten-Year Average 1945-54

Item	Usable Wood			Depletion ¹		
	Av. 1945-54	1954	1955 ^p	Av. 1945-54	1954	1955 ^p
	M cu. ft.	M cu. ft.	M cu. ft.	p. c.	p. c.	p. c.
Products Utilized—						
Logs and Bolts—						
Domestic use.....	1,346,324	1,482,531	1,555,634	42.0	46.3	44.1
Exported.....	10,863	9,702	7,501	0.3	0.3	0.2
Pulpwood—						
Domestic use.....	978,484	1,097,637	1,207,439	30.5	34.3	34.2
Exported.....	173,105	155,226	160,037	5.4	4.8	4.5
Fuelwood.....	433,486	313,461	289,872	13.5	9.8	8.2
Other products.....	81,660	63,756	59,587	2.6	2.0	1.7
Average Annual Utilization.....	3,023,922	3,122,313	3,250,070	94.3	97.5	92.9
Wastage—						
By forest fires.....	182,519	81,170	250,770	5.7	2.5	7.1
Average Annual Depletion.....	3,206,441	3,203,483	3,530,840	100.0	100.0	100.0

¹ Does not include wastage caused by agencies other than fire, such as insects, disease and natural mortality, for which no reliable estimates are available.