to utilize the larger timber on their limits to the best advantage, and some lumber manufacturers divert a portion of their spruce and balsam logs to pulp mills. Less than 13 p.c. of the pulpwood cut in Canada is exported in raw or unmanufactured form and a large portion of such exports is cut from private lands.

13.—Production, Consumption, Exports and Imports of Pulpwood, 1947-56

Note.—Table compiled on a new basis; figures not comparable with those published in the corresponding table of previous Year Books.

:	Total Production of Pulpwood in Canada			Canadian Pulpwood Used in Canadian Pulp Mills		Canadian Pulpwood Exported Unmanufactured		Imported Pulpwood Used in Canada	
Year	Quantity-1	Total Value	Aver- age Value per Cord	Quantity ¹	P.C. of Total Pro- duction	Quantity ¹	P.C. of Total Pro- duction	Quantity ¹	P.C. of Total Con- sump- tion
	cords	\$	\$	cords		cords		cords	
1947	13, 657, 107 13, 814, 970 10, 308, 783 13, 424, 358 18, 151, 853 14, 755, 089 13, 545, 181 14, 739, 571 16, 087, 951 17, 556, 265	249, 911, 951 271, 560, 306 202, 544, 308 280, 837, 687 416, 196, 281 346, 802, 085 309, 011, 150 323, 800, 478 369, 476, 288 419, 470, 968	18.30 19.66 19.65 20.92 22.93 23.50 22.81 21.97 22.97 23.89	9,701,078 10,394,718 10,464,990 11,406,688 12,587,792 11,960,014 12,060,853 12,875,978 13,494,496 13,843,711	85.3 83.0 84.0 86.7 84.1 82.9 86.8 87.6 88.3 87.6	2,001,477 2,352,552 1,644,253 1,782,134 2,893,615 2,529,353 1,783,657 1,826,193 1,882,784 1,953,470	14.7 17.0 16.0 13.3 15.9 17.1 13.2 12.4 11.7	50,508 75,969 5,491 28,220 46,634 31,060 48,805 105,030 134,917 188,144	0.5 0.7

¹ Given in terms of rough or unpeeled wood.

Pulp Production.—The manufacture of pulp, the second stage in this industry, is carried on by mills producing pulp only and also by paper manufacturers operating pulp mills in conjunction with paper mills to provide their own raw material. Such mills usually manufacture a surplus of pulp for sale in Canada or for export. Spruce, supplemented by balsam fir in the east and by hemlock in the west, is the most suitable species for the production of all but the best classes of paper.

The preliminary preparation of pulpwood is frequently carried on at the pulp mill but there are also a number of cutting-up and rossing mills operating on an independent basis, chiefly for the purpose of saving freight on material cut at a distance from the mill or on material intended for export. Pulpwood is measured by the cord (4' by 4' by 8' of piled material). One cord of rough pulpwood contains approximately 85 cu. feet of solid wood, and one cord of peeled pulpwood 95 cu. feet.

Of the total 1957 pulp production, 86 p.c. was made in combined pulp and paper mills by companies manufacturing paper. The remainder was made for sale in Canada or for export by mills making pulp only. Over 53 p.c. was groundwood pulp and about 17 p.c. unbleached sulphite fibre, these being the principal components of newsprint paper. Bleached sulphite, bleached, semi-bleached and unbleached sulphate, soda fibre, semi-chemical, other grades and groundwood and chemical screenings made up the remainder. A considerable market has developed for screenings in connection with the manufacture of rigid insulating boards.

The manufacture of 10,425,295 tons of pulp produced in 1957 entailed the use of 13,367,088 cords of rough pulpwood valued at \$361,151,710 and the equivalent of 1,091,805 rough cords of other wood (i.e., sawmill chips, slabs and edgings, sawdust, butts, cores, etc.) valued at \$20,828,204. The total value of materials used in the manufacture of pulp was \$456,222,811.

² Newfoundland included from 1949.