

## 4.—Production, Consumption and Export of Pulpwood, calendar years 1908-1927.

Years.	Total Production of Pulpwood.			Used in Canadian Pulp-mills.		Exported Unmanufactured <sup>1</sup> .	
	Quantity.	Total value.	Average value per cord.	Quantity.	Per cent of total production.	Quantity.	Per cent of total production.
	cords.	\$	\$	cords.	p.c.	cords.	p.c.
1908.....	1,325,085	7,732,055	5-84	482,777	36-4	842,308	63-6
1909.....	1,557,753	9,316,610	5-98	622,129	39-9	935,624	60-1
1910.....	1,541,628	9,795,196	6-35	598,487	38-8	943,141	61-2
1911.....	1,520,227	9,678,616	6-37	672,288	44-2	847,939	55-8
1912.....	1,846,910	11,911,415	6-46	866,042	46-8	980,868	53-2
1913.....	2,144,084	14,313,939	6-67	1,109,034	51-7	1,035,050	48-3
1914.....	2,196,884	14,770,358	6-72	1,224,376	55-7	972,508	44-3
1915.....	2,355,550	15,580,330	6-61	1,406,836	59-7	949,714	40-8
1916.....	2,833,119	19,971,127	7-05	1,764,912	62-3	1,068,207	37-7
1917.....	3,122,179	26,739,905	8-56	2,104,334	67-4	1,017,845	32-6
1918.....	3,560,280	37,886,259	10-64	2,210,744	62-1	1,349,536	37-9
1919.....	3,498,981	41,941,267	11-99	2,428,706	69-4	1,070,275	30-6
1920.....	4,024,826	61,183,060	15-22	2,777,422	69-0	1,247,404	31-0
1921.....	3,278,131	52,900,872	16-16	2,180,578	66-6	1,092,553	33-4
1922.....	3,923,940	50,735,361	12-93	2,912,608	74-2	1,011,332	25-8
1923.....	4,654,663	57,119,596	12-27	3,270,433	70-3	1,384,230	29-7
1924.....	4,647,201	57,777,640	12-43	3,316,951	71-4	1,330,250	28-6
1925.....	5,092,481	62,181,537	12-23	3,668,959	72-0	1,423,502	28-0
1926.....	5,621,305	68,100,303	12-14	4,229,867	75-2	1,391,738	24-8
1927.....	5,929,456	70,284,895	11-85	4,387,687	74-0	1,541,769	26-0

<sup>1</sup>Exports of pulpwood in the calendar year 1928 were 1,532,266 cords.

The exportation of raw pulpwood, as shown in the accompanying table, has increased but little since 1912, while the quantity consumed in Canadian pulp-mills has increased more than fivefold during the same period. In 1908, almost two-thirds of the pulpwood cut in Canada was exported in the raw or unmanufactured form. In 1927, with an increase of almost 350 p.c. in total production, the proportion exported has fallen to about one-fourth.

The manufacture of pulp forms the second stage in this industry. This is carried on by mills producing pulp alone and also by paper manufacturers operating pulp-mills in conjunction with paper-mills for the purpose of providing their own raw material. Such mills usually manufacture a surplus of pulp for sale in Canada or for export.

The supply of rags for paper making is distinctly limited and the material too expensive for the manufacture of cheap paper. Early paper makers experimented with fibres from the stems, leaves and other parts of numerous annual plants, but the small proportion of paper-making material recoverable from such sources led to experiments in the use of wood. Different species were tried, and finally spruce and balsam fir were found to be the most suitable 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 in Canada 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 exportation. Pulp logs are measured in board feet but the shorter material is measured by the cord (4' by 4' by 8' of piled material), which is approximately equivalent to 500 feet board measure or to 90 cubic feet of solid wood.

There are in Canada four methods of preparing wood pulp, one of which is mechanical and three chemical. In the mechanical method, green coniferous woods are preferred; spruce forms over 80 p.c. of the total, with balsam fir, hemlock and