

There are to-day three classes of mills in the industry. These, in 1938, numbered 27 mills making pulp only, 48 combined pulp and paper mills, and 24 mills making paper only.

The industry in Canada includes three forms of industrial activity, the operations in the woods with pulpwood as a product, the manufacture of pulp, and the manufacture of paper. These three stages cannot be treated as entirely distinct nor can they be separated from the different stages of the lumber industry. Some of the important pulp companies operate sawmills to utilize the larger timber on their limits to the best advantage, and many lumber manufacturers divert a proportion of their spruce and balsam logs to pulp-mills. So far as operations in the woods are concerned, it is often impossible to state whether the timber being cut will eventually be made into lumber or into pulpwood.

On account of legislation already referred to, pulpwood cut on Crown lands must, in every province, be manufactured into pulp in Canadian pulp-mills except under special permit. The pulpwood that is exported to the United States, therefore, is cut largely from private lands. Table 5 shows the annual production of this commodity from 1931 to 1938, together with the quantities used by Canadian pulp-mills and the quantities exported and imported.

In 1908 almost two-thirds of the pulpwood cut in Canada was exported in the raw or unmanufactured form, but by 1916 the proportion had declined to two-fifths, and is now even less.

5.—Production, Consumption, Exports, and Imports of Pulpwood, 1931-38.

NOTE.—Figures for earlier years will be found in the corresponding table of previous Year Books.

| Year. | Apparent Total Production of Pulpwood in Canada. | | | Canadian Pulpwood Used in Canadian Pulp-Mills. | | Canadian Pulpwood Exported Unmanufactured. ¹ | | Imported Pulpwood Used in Canada. | |
|----------|--|--------------|-------------------------|--|---------------------------|---|---------------------------|-----------------------------------|---------------------------|
| | Quantity. | Total Value. | Average Value per Cord. | Quantity. | P.C. of Total Production. | Quantity. | P.C. of Total Production. | Quantity. | P.C. of Total Production. |
| | cords. | \$ | \$ | cords. | | cords. | | cords. | |
| 1931.... | 5,046,291 | 51,973,243 | 10.30 | 4,088,988 | 81.0 | 957,303 | 19.0 | 59,291 | 1.4 |
| 1932.... | 4,222,224 | 36,750,910 | 8.70 | 3,602,100 | 85.3 | 620,124 | 14.7 | 45,654 | 1.1 |
| 1933.... | 4,746,383 | 33,213,973 | 7.00 | 4,027,827 | 84.9 | 718,556 | 15.1 | 17,049 | 0.4 |
| 1934.... | 5,773,970 | 38,302,807 | 6.63 | 4,752,685 | 82.3 | 1,021,285 | 17.7 | 13,919 | 0.2 |
| 1935.... | 6,095,016 | 41,195,871 | 6.76 | 4,985,143 | 81.8 | 1,109,873 | 18.2 | 19,940 | 0.3 |
| 1936.... | 7,002,057 | 48,680,200 | 6.95 | 5,766,303 | 82.3 | 1,235,754 | 17.6 | 9,591 | 0.1 |
| 1937.... | 8,298,165 | 63,057,205 | 7.60 | 6,593,134 | 79.5 | 1,705,031 | 20.5 | 20,505 | 0.2 |
| 1938.... | 6,306,747 | 53,761,999 | 8.52 | 4,554,488 | 72.2 | 1,752,259 | 27.8 | 33,668 | 0.5 |

¹Exports of pulpwood in the calendar year 1939 were 1,539,441 cords.

The manufacture of pulp is 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 to provide 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