

order is the Saguenay Territory, 140 miles above the Point des Monts, at the head of the Gulf of St. Lawrence. The Saguenay River discharges, from the northward, the drainage of 27,000 square miles. This river is navigable for ships of the largest outline for a length of over 60 miles. Its surface is diversified by lake, river, and stream, but the character of its soil forbids profitable settlement to any considerable extent. It must always continue forest land, and, judiciously managed, can furnish an inexhaustible supply of lumber, chiefly spruce, as well as a large proportion of minerals.

Between the valley of the Saguenay and the next great lumber region, the St. Maurice, a territory of 8,000 square miles interposes. The City of Quebec stands about midway between the Saguenay and St. Maurice on the shores of this territory. Its surplus waters are discharged into the St. Lawrence by isolated but sufficiently copious streams.

The St. Maurice River discharges the drainage of an area of 21,000 square miles into the St. Lawrence at a point ninety miles above Quebec. Its valley may literally be called a "land of many waters." A map of its territory resembles a section of a "plum pudding" where the fruit is uncommonly large and plentiful, more than any other object, so thickly is it studded with lakes and lakelets.

Between the St. Maurice River and the Brute de l'Isle, at the Island of Montreal, where the north branch of the Ottawa joins the St. Lawrence, a small valley of 9,600 square miles intervenes. It is drained into the St. Lawrence by its own streams, some of which are seventy to eighty miles in length, and good floatable rivers.

The valley of the Ottawa covers an area of 60,000 square miles. It is traversed throughout its greatest length by the river from which its name is derived, and which may be said to encompass the whole area on the south, west, and north. Its sources overlap the St. Maurice, and itself is overlapped by the sources of the Saguenay, the head waters of these rivers being within two days' journey or forty miles of each other. Its tributaries are of great magnitude, many of them being from 300 to 400 miles in length, while the main stream has a course of 780 miles and is navigable for canoes to its source.

The valley of the Ottawa is the principal site of the pine trade, and has been since June 11th, 1866, when the first raft left the mouth of its great tributary, the Gatineau.

Thus the total area of timber lands whose rivers run into the St. Lawrence and Lake Ontario is 161,911 square miles.

The principal part of the forest lands of British North America belongs to the Crown, but vested in the Provincial Government; in other words, they are public property, and are administered for the benefit of the people. The lumber manufacturer obtains the area on which he works, which is called a "timber berth or limit," by bidding the highest price for it at auction. It is generally supposed to be ten miles square, containing one hundred square miles, or 64,000 acres, but, owing to the topographical features of the country, the "limits" are of all sizes and shapes, from 24 square miles upward.

The limit holder becomes a yearly tenant of the Crown at a fixed ground-rent, and pays a slight duty per cubic foot of square timber taken out and on each saw log, but has no right in the land.

The areas covered by these leases or limits were as follows in 1894:—

Provinces.	Provincial. Sq. miles.	Dominion. Sq. miles.	Indian. Sq. miles.	Total. Sq. miles.
Ontario	21,574	—	982	22,557
Quebec	46,397	—	139	46,536
New Brunswick ...	6,371	—	17	6,388
Manitoba and Territories ...	—	2,707	17	2,724
British Columbia ...	820	421	8	1,249
Total	75,692	3,128	1,107	79,927

In the province of Manitoba and in the Territories and in the Railway Belt of British Columbia (40 miles wide by 300 miles long) the Dominion Government, filling the place of the Provincial Governments, owns the Crown lands and their forests.

In Nova Scotia there is no system of timber licences, the trees being sold with the land and not much timbered Crown land remaining. This is also the case with Prince Edward Island.

In the settled portions of the provinces the woodlands are in the hands of private owners, but contain comparatively little that can be classed as forest, though the census returns indicate that about one-third of the occupied land is in woodland and pasture, possibly leaving one-fourth for woodland.

In Quebec province no spruce tree can be cut that is less than 12 in. on the stump, but in Ontario the limit is 9 in. The limit for pine trees is 12 in. on the stump.

Much more timber has been destroyed by fire than by the lumberman's axe. The successive Governments have allowed settlers to locate in the centre of green pine districts—on land totally unsuitable for agriculture, and devastating fires have resulted in laying waste immense areas of the most valuable forest trees. It is satisfactory, however, to see that more care is now being taken of the forest wealth, and if the Government will give the limit holders more security from the dangers of destruction by fire, and if lumbermen do not cut the limits too severely, the present wooded areas can be cut over periodically for all time to come. The Ontario Government have a service of fire rangers during the dangerous months of the year on the recommendation of Mr. Aubrey White in 1886, half of the expense is borne by the lumbermen, and half by the Government, the number of rangers required is left to the limit holder.

It is quite impossible to arrive at anything like a reliable estimate of the present forest area or future supplies. The lumbermen are not disposed to give much information, and almost every writer who touches the subject gives a different estimate.

The following approximate estimate is based upon returns of the Provincial and Dominion Governments, reports of surveyors of the Crown Lands and other departments, the Geological Survey, and other trustworthy sources:—

Provinces.	Total Area. Sq. miles.	Forest and Woodland. Sq. miles.	Wood- land. p. c.
Ontario	219,650	102,118	46.47
Quebec	227,500	116,521	51.22
New Brunswick ...	28,100	14,766	52.55
Nova Scotia	20,437	6,464	31.63
Prince Edward Island...	2,000	797	39.85
Manitoba	64,066	25,626	40.00
British Columbia ...	382,300	285,554	74.69
Territories	2,714,811	696,952	25.39
Total	2,315,647	1,248,798	37.66

It must not be supposed that this area is all forest, much, though wooded, being covered with small trees.

The Hon. Sir Henri Joly has studied the question for many years, and from the following extract in a report he made to the Minister of Agriculture at Ottawa, his views of the subject will be gained:—

He set forth the difficulty of an inquiry which had for its object to calculate the contents of growing forests scattered over half a continent, from the Atlantic to the Pacific.

"Let us try and make an inventory of the timber resources of the Dominion, beginning in the west. On the Pacific shores of the Dominion, in British Columbia, the bountiful gifts of Providence are still stored up for us and the forests have been scarcely attacked by the lumberman. From the Rocky Mountains to the Province of Ontario there are scattered here and there certain tracts of well-timbered land, but they are the exception, and which timber will be required for the local wants of the people who are now beginning to settle our fertile prairies, and it will never I think, contribute to swell the bulk of our timber exports.

"The great forest of Canada *par excellence*, is spread over that vast territory watered by the Ottawa, the St. Maurice, the Saguenay, and their tributaries, over one hundred thousand square miles in extent. Before drawing your attention to it, I will mention our remaining timber limits that cannot compare with it either for size or resources. They are found in the Georgian Bay country; the Muskoka and Nipissing regions; the eastern townships of Quebec and south shore of St. Lawrence to the Gulf; the region on the north shore of the St. Lawrence, from the Saguenay to the Bersiamis, and perhaps still lower down as far as Mingan; and the country watered by the St. John, the Miramichi, the Restigouche, and their tributaries. These timber limits in many places are scattered and isolated; they have with few exceptions (such as the Bersiamis at the east and some newly discovered pine tracts at the west on Lake Superior) been worked for a long time and cannot be expected to supply much longer any considerable quantity of first-quality pine, but they still contain an immense quantity of spruce, sufficient for a great many years' supply if carefully worked and protected. I will now return to the great Canadian forest, our great pine country with its wonderful network of streams and its three great arteries, the Ottawa, the St. Maurice, and the Saguenay. Does it begin to show signs of exhaustion? Look at the map of that