

Although little real muskeg was met with in the tract explored this season, there is undoubtedly a good deal of land that is wet, cold, and covered with sphagnum moss to a greater or less depth. These sections are sufficiently elevated above the rivers, but have almost invariably a clay soil, and are so level or flat that the water cannot run off.

It is only, in my opinion, the frequency of bush fires which prevents the accumulation of peat to such a thickness or depth as would convert extensive areas of this land into peat bogs or muskegs. As we now find it, much land of this description could be very easily and cheaply drained and rendered, if not arable, at all events fit for pasture or the growth of trees. I never visit New Brunswick Post that I am not favourably impressed with the luxuriance of the grass, more especially of the red clover and timothy, and I have no doubt that there are other cultivated grasses that would succeed equally well on this soil.

One very important question is yet undecided in regard to this territory, and that is, will fall wheat succeed? To this question no certain answer can be given, for no trial has ever been made. The soil, however, will, I believe, produce good crops of wheat, and the summer temperature is sufficient to fully mature them. The only point on which there is the least doubt or misgiving in my mind is whether the wheat plant will come through uninjured? Now on this point I am decidedly of opinion that it will stand the winter in this territory very much better than Manitoba, or probably any other part of the North-West. A thick mantle of snow covers the ground the whole winter in this territory, which should protect the wheat plant from the frost, for the cold is not more severe than at Winnipeg in any part of this central plateau. I think, therefore, it is, to say the least, exceedingly probable that fall wheat may prove a reliable and good crop.

If Ontario's title to this territory had been confirmed and placed beyond doubt or dispute, one of the very first things I should have suggested would have been such practical tests or experiments as would have set all doubts on this subject at rest.

Indeed several years ago I called the attention of the Government to the importance of experimental farms. See Report for 1884, pp. 24 and 25.

The Federal Government is, I observe, establishing such farms in various places in the Dominion, but of a very much more costly description than I suggested.

I must confess, too, that I am disappointed to learn that some of these farms are located in comparatively old and rich settlements, in which intelligent practical farmers with abundant capital have been experimenting for years, if not generations, and have in regard to many of the more important crops, already proved what the country is capable of producing; whereas a vast territory like this, and districts like Algoma, Nipissing and others, in regard of the soil and climate of which, and their special fitness for the growth and production of many important crops, so little is known, have been entirely overlooked.

RECLAMATION OF WASTE LAND.

In view of the prodigious quantity of wet and swampy land in this territory, it may not be out of place to offer a few suggestions which would, in my opinion, if carried out, reclaim large tracts and render them fit either for settlement or for the growth of much finer and more valuable timber than they can possibly produce in their present condition.

As it is manifestly impossible to elevate or raise the general surface of the country above the rivers by which it is so imperfectly drained, the only alternative left to the engineer is to deepen, if possible, the beds or channels of these rivers, and thus lower the surface of the water.

This may appear a very serious, if not impossible undertaking, and one calling for an expenditure out of all proportion to the value of the land to be reclaimed. But the circumstances are so favourable in regard to many large tracts of low, marshy, and swampy land, that for these and other reasons which will afterwards appear, I think otherwise.

The descent or fall in the rivers from the Height of Land to James' Bay varies from 1,000 to 1,400 feet, and the distance from 250 to 300 miles, which gives an average fall of about four feet per mile.

If the loose material, consisting of glacial and post-glacial deposits, had covered the whole face of the country uniformly and to a great depth, it might have been of little or no importance of what the underlying or bed-rock had consisted.