

There is probably no district on the North American continent which can boast of a soil as fertile and productive as that of Western Canada. This applies very generally, and is the result of tons of deposit by the great inland sea which once covered this part of North America, and of which the Great Lakes of the Northwest are the remaining links.

It is only of recent years that the abnormal fertility and lasting qualities of the soils of the great plains of America has been properly appreciated and understood. Soil chemists nowadays are accepting the theory that the principal cause of soil exhaustion is a heavy rainfall, which brings into suspended form the available plant food in the soil, and carries it away with the storm waters into the drainage channels.

It stands to reason that where the rainfall is not sufficient to create floods or heavy run-off, so characteristic of Eastern Canada and the Eastern and Central States, but remains, more or less, in the sub-soil, there is practically no loss by leaching whatever, and consequently the lasting qualities of the soil are correspondingly greater. While the Western Provinces over the greater part enjoy a rainfall entirely sufficient for agricultural purposes, they are very seldom subject to excessive rains. This is an important fact to take into consideration in connection with agriculture on prairie soils.

The general character of the soil of the three Prairie Provinces is very well described by Professor Shaw, one of the best known agronomists of the United States, who has made a careful and thorough study of them all:

"The first foot of soil in the three Provinces of Manitoba, Saskatchewan and Alberta, is their greatest natural heritage. It is worth more than all the mines in the mountains from Alaska to Mexico, and more than all the forests from the United States boundary to the Arctic Sea, vast as these are. And next in value to this heritage is the three feet of soil which lies underneath the first. The subsoil is only secondary in value to the soil, for unless the former be of good value, there is a proportionate neutralisation of the latter. The worth of a soil and subsoil cannot be measured in acres. The measure of its value is the amount of nitrogen, phosphoric acid and potash which it contains; in other words, in its producing power. Viewed from this standpoint, these lands are a heritage of untold value. One acre of average soil in the Canadian West is worth more than twenty acres of average soil along the Atlantic seaboard. The man who tills the former can grow twenty successive crops without much diminution in the yields; whereas, the person who tills the latter, in order to grow a single remunerative crop, must pay the vendor of fertilisers half as much for materials to fertilise an acre as would buy the acre in the Canadian West."

The soils of the Province of British Columbia vary from the light but fertile soils of the inland plateaus to the deep, black loams of the coast districts. The former is specially adapted to fruit-growing, and, where irrigation is available, to the production of fodder crops. The latter rank as the most productive soils in America, and grow phenomenal crops of nearly every kind.

CLIMATE OF WESTERN CANADA

It should be understood that in such a vast extent of territory with so many varying local conditions the climate cannot be expected to be uniform. Each portion of the country has its own peculiar advantages in the way of climate, and the settler can select for himself that portion for