

the boundary line. Although the strip of fertile country lying between the central arid plains and the foot of the mountains is nowhere so wide as that its eastern limit is out of view of the Rocky Mountains, yet there is a considerable extent of valuable and fertile land reaching (with the exception of one slight break) the whole way to the international line, and following nearly the general direction of the Rocky Mountains, namely, from N.W. to S.E. The general direction of the eastern limit of fertile land is from north to a little east of south, so that as you approach the boundary line the breadth of fertile soil between the arid region and the base of Rocky Mountains considerably diminishes: thus, in lat.  $52^{\circ}$  the fertile belt extends over  $2^{\circ}$  of long.; in lat.  $51^{\circ}$  it is not more than  $1^{\circ}$  in width. South of this the fertile belt is encroached on by a tongue or spur of the sterile plains, about 15 miles in width. South of this, again, in about lat.  $50^{\circ}$ , the fertile land appears, extending from the mountains over about  $1^{\circ}$  in long., and continues gradually to diminish in breadth down to the international line, where it extends about 20 miles to the eastward of the "Cheif" Mountain.

The whole of this land, the position of which I have just described, may be compared to the similarly situated lands of Switzerland and the Tyrol, known to be fertile, and especially valuable for the very nutritious grasses which they produce. The whole region is well wooded and abundantly watered, and enjoys a climate far preferable to that of either Sweden or Norway.

The whole of this region of country would be valuable not only for agriculturists but also for mixed purposes of settlement. To the north it stretches considerably to the westward, enlarging in proportion as the Rocky Mountains recede to the westward, and comprising the upper portions of the Saskatchewan and their numerous lesser tributaries. In the first place, along this region of country, the first quality of land is not merely confined to the river valleys, but much of the third steppe is abundantly watered, and probably its greater elevation obtains for it increased moisture and consequently a superior class of soil. The snow here is not so deep as it is further to the eastward, the winters are more open and the springs are earlier.

The lands exhibit great diversity of surface and are rolling and well adapted for sheep; the timber is abundant and more substantial in bulk than that to the eastward, and therefore better suited for building purposes; lime-stone exists in great quantity, and the beds of some rivers afford argillaceous clay capable of being converted into bricks, and coal of a fair quality was found and possibly exists in considerable quantity.

Throughout the district are numerous lakes abounding in fish.

I now proceed to make some remarks upon the natural facilities offered to agricultural settlement.

Of these, the first is the facility for obtaining good fish for food during the transition state that a country must endure between the periods when its inhabitants live on wild animals alone, and that period when bread becomes the staff of life and animal food is produced by the care and forethought of civilized man.

All along the northern districts in the country above described occur very numerous lakes, supplying immense quantities of nutritious fish, among which are pike, sturgeon, cat-fish, gold-eyed carp, and white fish in greatest abundance. I have seen these obtained with the greatest ease even in winter where holes had to be chopped through the ice in order to catch them. None can so readily appreciate the advantage that a farmer would derive from a certainty of obtaining plenty of fish in the neighbourhood of his farm as those who know the difficulties attending the hunting of animal food, where the settler would have to compete for a bare existence against the Indian trained almost from his birth to the tracking and killing of thickwood animals, such as deer, elk, and moose.

Granting even that the colonist is a skilled hunter and able to compete with the man born in the forest, the greater portion of his time would be absorbed in the same pursuit as the Indian, and little time or energy would remain for agriculture.

Add to this the fact that the smoke and the noise attending the home of the white man frightens the game far and near, and so increases the labour necessary to obtain it.

The second advantage found by the settler is the abundance of good food for cattle growing throughout the region, such as goose-grass, pease-grass, vetches, astragalous and other plants, which preserve their nutritious quality through the winter season. Horses and horned cattle would resist the rigour of winter well and continue in good condition, if not poor when turned out at its commencement, and if provided with artificial food in the very early spring when the partial thaws during the day cause a coating of ice over the herbage, which the animals find very difficult to remove in order to feed. I have killed many fat buffaloes in the months of January and February; after which I have invariably found them lean, and sometimes seen the ground sprinkled with blood from the hardness of the surface, which the animal tries to shovel aside with its nose.