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### AGRICULTURE.

REPORT ON THE AGRICULTURAL CAPABILITIES OF THE PROVINCE OF NEW BRUNSWICK.

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(Continued from our last.)

a. Late sowing, by which the development of the young grain is retarded until the season has passed at which the fly usually deposits its eggs.

b. The use of varieties of grain and seed brought from districts in which the insect has hitherto been unknown. The use of seed from affected localities has no doubt been one of the causes which has contributed to its rapid spread over this Continent; while on the other hand, the introduction of the variety called Black Sea wheat, is said to have in many places saved the wheat crop from the midge, and in many more from the rust.

c. The floating of the seed, immersing it and stirring it in water, so as to separate the light affected grains from the heavy and sound ones;—and

d. The steeping of this heavier grain in salt and water or in water containing in solution certain quantities of nitrate of Soda, or saltpetre, or sulphate of copper, (blue vitriol,) and afterwards drying the steeped seed with slaked lime or burned gypsum.

2. The Rust is complained of as having been very destructive to the wheat crop in many parts of the Province, as well as in the Canadas and in the States. Along the shores of the Bay of Fundy, where fogs and mists prevail, especially in the latter periods of the plants growth, when it is most subject to the attacks of this pest—upon the river islands, and along the intervals which skirt so many of the North American streams—in the neighbourhood of cedar swamps, and around the borders of boggy cariboo plains, and the edges of marshy lakes,—the rust most frequently appears, is most feared, and is most destructive. It is considered a worse foe to the farmer even than the midge, because while the insect destroys only the grain, the fungus injures or destroys both straw and grain together. The only known remedies or palliations are—

a. Early sowing, with the view of having the wheat nearly ripe before the season of the most fatal mists and fogs arrives.

b. General arterial drainage of swamps and marshes, and special thorough drainage of low and wet lands upon which water rests, or where mists in the summer evenings are prone to settle. Such draining, even on the margins of rivers, will often be found efficient; but I cannot from experience say how far the injurious action of mists from the Bay of Fundy would be modified by such improvements. I can only infer, that as in all circumstances mists collect and settle most heavily and most frequently on the coldest and comparatively on the wettest spots, the probability is that such treatment of the land along the bay shores would be attended with like good effects.

c. The introduction of more hardy varieties of wheat, or such as from some peculiarity are less subject to be rusted. Of this kind is the Black Sea wheat, which has been found to escape where other varieties were almost destroyed.

This question of the wide failure of the wheat crop throughout Northern America, and the consequent gradual retrocession of the wheat exporting regions of the shores of the great western lakes, and to the western territories of the United States, is important enough to merit a much more lengthened discussion than I should be justified in introducing here. There is one phase of this question however, which is important to this Province briefly to consider. I shall draw my illustration of it from the Province of Lower Canada.

In this Province the Produce of wheat, oats, Indian Corn and Buckwheat and barley, was as follows, in each of the three years 1827, 1831 and 1844, respectively:—

	1827.	1831.	1844.
Wheat,	2,931,240	3,404,756	942,835
Oats,	2,341,529	3,142,874	7,237,753
Indian Corn,	383,150	339,633	141,008
Buckwheat,	121,337	109,050	374,809
Barley,	363,117	394,795	1,195,456

From this Table it will be seen—

a. That from 1827 to 1831 a gradual increase of the wheat and oat crops took place, more in proportion in the oats than in the wheat however, while the Indian Corn, buckwheat and barley were nearly stationary. That of buckwheat had even diminished one sixth. This implies that during those years the wheat and oat crops were the most profitable, but that some unpublished influence was already at work, inclining the French Canadians to turn their attention to oats, in comparison with wheat, somewhat more than formerly.

b. But that from 1831 to 1844 a remarkable revolution took place in the kind of cropping found most profitable in Lower Canada. The growth of oats increased from 3 to 7 millions of bushels, while that of wheat diminished from 34 to 9 hundred thousand bushels. The growth of Indian corn also underwent a diminution similar to that of wheat—falling off from 339 to 141 thousand bushels. In the same period, buckwheat and barley both increased to three times their former growth.

I am not aware of the publication of any agricultural statistics of the States of the Union which exhibit so interesting a series of changes as this. How much agricultural distress—how much disappointment and loss of crops—how many disheartened men and starving families—how many mortgages, sales, and transfers of property—must have preceded and accompanied so entire an alteration in the general direction of agricultural industry, and in the kinds of produce the growers were able to send into market?

What is the cause of this great change? Is it the wheat midge and the rust which have almost driven the wheat plant from Canada? Is it the ruinous husbandry of the French Canadian which has so exhausted his land that it can no longer supply the wants of the wheat crop, and minister to its healthy growth? Or is it some unobserved alteration in the climate which has rendered the country unpropitious at once to the wheat, and to the Indian Corn? Has the culture of wheat been expelled forever from the shores of the Saint Lawrence, or can it again be brought back?

I do not dwell on these topics, but I return to the wheat crop of New Brunswick.

In Mr. Wilkinson's concluding Report on the Railway between Saint John and Shediac, it is stated that "the wheat crop was formerly certain and abundant in the valley of the Kennebecasis. It was sufficient not merely for the producers, but a large surplus was annually sent to market, in appearance and quality surpassing the best descriptions imported. The soil now refuses to bring this crop to maturity, just as it is found to do in the older parts of the United States, where similar exhaustion has taken place."

It is certain that the banks of the Kennebecasis do not now produce so much wheat as formerly, and that the raising of wheat has ceased to be certain or profitable in many of the older States of the American Union. So far the above extract is correct. But the crops of 1849 have shewn that the soil of the Kennebecasis still possesses the power of "bringing this crop to maturity." Whatever may be the case in Lower Canada therefore, (if the midge and the rust can be conquered) there is still hope, when seasons favour and the husbandry is properly adapted to the soils, that New Brunswick may recover from the depression under which its wheat crop has during the last few years been labouring. What the agricultural adaptations are, which the present condition of the soils demand, will be adverted to in a subsequent part of this Report.

3. The Potato Disease here, as elsewhere, has confessedly paralyzed the rural industry of many districts, greatly added to the other distresses, especially of the new settlers and very much retarded the agricultural progress of the Province. But like the wheat midge and the rust, this infection has not been special to New Brunswick, among the American Provinces, and States; nor can it be considered a valid cause for dissatisfaction with his own homestead, or a reason why the New Brunswick farmer should forsake it, and flee to other countries in search of more fertile fields.

My own persuasion has long been, that this disease, in its most grievous form, would be only limited in its duration. Its severity has now, it is to be hoped, in a great measure been allayed, and the produce of the potato crop this year in New Brunswick seems to hold out the promise of a well-founded renewal of that confidence in this root, which has hitherto formed the basis of many of the farmer's most important plans and calculations.

In regard to the various maladies of the wheat and potato crops, it is to be observed, that the reason why they have so seriously affected New Brunswick, has been that so many of its inhabitants were new to the country, were still

more or less steeped in their original poverty, and were unable therefore to endure the cruel vicissitudes of three or four years of successive visitation. With the new hopes and new energies now awakening, better days are coming even to the poorest of these suffering settlers.

III. The want of protection from foreign competition. I allude to this as an alleged cause of depression to New Brunswick agriculture, in consequence of my attention having been specially called to it by one or two of my numerous correspondents. Thus Mr. R. K. Gilbert, of Dorchester, writes—"If our farmers had the supplying of our home markets with meats, bread-stuffs, and home produce, without the prospect of competition with the United States, they could then calculate on increased sales, so as to pay labourers; but as it is now, they are paralyzed, and the circulating medium of the country is constantly drained, and sent abroad to purchase articles which can be produced at home; and our lumberers cut foreign produce, and are induced to do so by free trade legislation."

In regard to the imports of provisions, so far as I have been able to learn, they are owing—

1. In the case of salt provisions, to the fact that the beef and pork now raised in the Colony is of an inferior quality, will scarcely bear the salt, and cannot compete in quality for shipping purposes with the beef and pork produced in certain parts of the United States. The remedy for this importation is to improve the quality of the fat stock which are intended for the purpose of curing.

2. In the case of wheat, to the failure of this grain in New Brunswick, owing to the attacks of the midge and rust.—If these evils be overcome, enough of Spring wheat at least may be grown to supply the home market.

3. In the case of wheaten flour, to the extravagant habits of the lumberers, who have always been accustomed to superfine flour, and to the prejudice among other parties against flour manufactured in the Provincial mills. The cure for this importation is to encourage more the consumption of oat-meal and of buckwheat, until the growth of home wheat increases again, and to patronise the provincial mills in preference to those of Rochester and Oswego.

I do not advert to the political part of this question.—But if the comparative productiveness of the soil of New Brunswick, as represented in a preceding part of this report (Tables IV. and V.) be correct, and if the rate of wages given in Tables XXXVII. and XXXIX. are to be depended upon, this Province ought to be able to compete successfully with the United States farmers, and to drive them from its home markets. I believe that a little more skill, energy and determination among the landholders of this Province, combined with a more hopeful spirit, would render unnecessary the discussion even of restrictive fiscal regulations, the adoption of which could not fail to produce an effort very unfavourable to the North American Colonies at a time when they are complaining so loudly of the liberal tariff of the United States, and of the twenty per cent. duty levied by them on the agricultural productions of Canada, New Brunswick and Nova Scotia.

Of the various circumstances I have considered in the present and the preceding chapters, several have no doubt had much influence in rendering the agricultural body less prosperous, the agricultural interest less influential, and the agricultural capabilities of the soil less appreciated in New Brunswick, than under more favourable conditions they would undoubtedly have been. But it will be seen that all these circumstances are independent of and extrinsic to the natural capabilities of the soil itself, and that they do not in reality determine or permanently interfere with the natural adaption of the Province as a field for agricultural exertion.

The lumber trade may be put under proper restraints—the produce markets may be improved—labour may be profitably employed by all who desire to farm more largely—emigration from the Province, so far as it is to be regretted, may cease—the wheat midge, the rust, and the potato disease may all disappear: The circumstances of the farmer would no doubt be improved by such changes, but the natural capabilities of the soil and Province would be still intrinsically the same.

Now whilst these varied circumstances have been acting as I have said, more or less injuriously upon the interests of the farmer, it has been very satisfactory to my own mind, and has disposed me to take upon the whole a less unfavourable view of their evil influences—that the unanimous reply to all my inquiries in every part of the Province has been "that those who have confined themselves to their farming operations alone, and have been ordinarily skillful, industrious and prudent, have in no case failed to do well." In the midst, and in spite of these evils therefore, there is still