

ON THE GENERAL MANAGEMENT OF A FARM IN LOWER CANADA;

Showing how an exhausted soil may be rendered perfectly fertile without the aid of capital. By a Farmer in the District of Montreal.

The habitants of Lower Canada are in general thrifty and industrious: their farms lay well, although they are, for the most part, worn out. All that they want is a good system, and such a system, to be available, ought to possess the following qualities, viz:—

1st. It ought to be economical, and not require more capital than the actual system, or rather than the present absence of system, requires. It is undoubtedly of great advantage to apply capital to the land, but this advantage is in general beyond the reach of our farmers, as their means are not sufficient.

2d. It ought to restore fertility to the soil, and maintain it by the products of the land itself. Manures got from other quarters than the farm itself are always expensive, and, at a distance from town, are often not to be had at all.

3rd. It ought to be simple and of easy application.

4th. Finally, it ought to have experienced clearly in its favor.

The author of this Essay, having for a long time made the practical application of a system which unites all these advantages in a high degree, believes that it is his duty and privilege to submit it to his fellow Colonists, and he feels certain, that if this plan is adopted, it will render the country more productive, and consequently more prosperous; it will in the space of six years, convert worn out, worthless, weedy land into smiling, rich and fertile farms, and the small miserable animals of Lower Canada into valuable stock, and all that without a greater expenditure of labor and money than is incurred by the system actually in use.

Before explaining his system, however, the author will take the liberty of relating his own experience, and for greater clearness, he will speak in the first person.

I came to the country thirty years ago, and burdened with a debt of £10; I leased a worn-out farm in Lower Canada of eighty-four acres, in the midst of a French population, and at an annual rent of £45. Well, in the space of twenty-one years, I have paid my original debt, and saved enough to enable me to purchase in the same neighborhood a much better farm than the one I rented. The owner of the farm which I bought, was going on every year from bad to worse, until he was forced to sell it, whilst I, the tenant of a less productive farm, and paying rent all the while, was enabled to buy him out, as just said. What was the reason of this anomaly? The Canadian was stronger than me, had equally good health, and had no rent to pay. The

reason was, that he had no system; he let his land become exhausted, and full of weeds; he let his stock starve; he wasted his manure, the gold of the farmer, and let every thing go to ruin for want of method; but when I had got hold of this same farm, and had applied the system which I am about to describe, the whole was brought gradually, field by field, into good condition by the end of six years; since then, the condition of the land has steadily improved, and that by resources drawn wholly from within itself. The system to which I allude, is known to all good farmers everywhere as the basis of all improvement, I mean that of

A Rotation of Crops.

There are two sorts of reasons in favor of this plan of rotation of crops.

1st. Because different plants draw from the soil different sorts of food, so that one plant will grow freely in a soil which is worn out as regards another.

2d. Because the crops being various, the occasional failure of one is not so much felt, seeing that the others furnish subsistence sufficiently without it.

The cultivation of a fair proportion of all the varieties of crops which Providence permits to grow readily, ought therefore to be considered as the best means of averting a famine, and what intelligent farmer, with the case of Canada and Ireland before him, would wish to be limited to the culture of wheat and potatoes only.

I shall now explain the system of rotation, which, during thirty years experience, I have found best suited to the climate, the soil and the actual condition of Lower Canada, and which I believe to be generally applicable to the lands held by the French Canadians, and herein I shall speak of nothing that I have not done myself and practised with success.

Plan of the Rotation.

Divide the arable portion of the farm, whatever may be its size, into six parts, as equal as possible, with a direct communication from the barn yard to each field, and from one field to the other, so that the cattle may pass from one to the other when required. This division into six fields, may require on most farms new fencing, and it will be proper, beforehand, to see how this can be done with the least possible expense. I shall now suppose the farm prepared to receive the application of this system, and that is the one which I have found the best for even the poorest settler.

1st. Root crop, such as potatoes, carrots, beets, parsnips, &c., [turnips and also flax.] and in cases where the land is not sufficiently open for a crop of this kind, the field must be left in fallow.

2d. Crop of Wheat or Barley.

3d. Crop of Hay.

4th. Pasture.

5th. Pasture.

6th. Crop of Oats or Peas.

In beginning the application of this system, that field of the series which is in best condition for a Root crop, should be called Field - - - A
The best for Wheat or Barley - - B
That which is actually in Hay - - C
The Pasture fields - - D & E
That which is best for Oats or Peas - F
Each field for the first year ought to be appropriated to the crops above mentioned, and after the fashion now in use among the farmers of Lower Canada, except in the case of field A. By this plan they will at all events still get as much from their five fields as they get at present.

The culture of field A and of crop No. 1 come up together for the first year, and ought to be the object of special attention, as this is, in fact, the key to the whole system; for the good culture of this field has for object, and ought to have for its effect, not only a good crop the first year, but also to improve the land for the five other years of this Rotation of Crops.

In the following year the cultivation of the different crops will be according to the following order:

Crop No. 2 in the field A	
Do. " 3	" B
Do. " 4	" C
Do. " 5	" D
Do. " 6	" E
Do. " 1	" F

and so on, changing each year until the seventh, when crop No. 1 comes back to field A, and the whole will then be in a good state of fertility, and free from weeds. The above system has been proved to be capable of restoring old land, and extirpating all weeds.

In order to render the thing more simple and easy of comprehension, I shall suppose myself to be again obliged to take a worn-out farm in the autumn of 1849. The first thing that I should do would be to divide the land into six fields, by proper fences, to prevent the cattle going from one field to the other; and I would then take for field A, that which appeared best for green crops or root crops; I would collect all the manure which I could find in or out of the barns, I would take up the flooring of the cow-house, stable and piggery, and I would take out as much of the soil underneath as I could get, for this soil is the essence of manure, one load of it being as good as four or five loads of common dung. The portion thus removed ought to be replaced by an equal quantity of ordinary soil, or, if it be possible, of bog earth, which might be removed when necessary afterwards.

The dung and other manure thus collected should be placed on the field A in September, or the beginning of October, spread with care [as far as it will go], and covered up in a shallow furrow. Manure aids the decomposition of straw and the weeds of the soil, and frees it from these plants, which thus help to keep the soluble portion of the