

THE GLEANER:

AND NORTHUMBERLAND, KENT, GLOUCESTER AND RESTIGOUCHE
COMMERCIAL AND AGRICULTURAL JOURNAL.

OLD SERIES]

Nec araneorum sane textus ideo melior, quia ex se fila gignunt, nec noster vilior quia ex alienis libamus ut apes.

[COMPRISED 13 VOLUMES]

New Series, Vol. X.

Miramichi, Monday Evening, May 5, 1851.

No. 28.

Agricultural Journal.

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.

Translated and published with additional Notes, under the superintendence of the New Brunswick Society for the Encouragement of Agriculture, Home Manufactures, and Commerce, and by that Society presented and recommended to the Farmers of this Province.

The habitants of Lower Canada are in general thrifty and industrious: their farms look 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.

2nd. 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 experience 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 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 £40; 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 I, 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 expence. 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 Pease.

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

The best for Wheat or Barley A

That which is actually in Hay B

The Pasture fields D & E

That which is best for Oats or Pease 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 its 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 old 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 manure until its juices become necessary for the crops of the succeeding years. The greater variety there is in the crops of this field, the better it will be, provided the soil is suitable for them. Thus, this field ought, as nearly as possible, to look like a kitchen garden.

Under the actual circumstances of the country, I would particularly call the attention of farmers to the cultivation of the Carrot as being one well adapted to our soil and climate. The Carrot has fewer enemies than any other plant that I know: the best sort for field culture is the Red Altringham, and the method of cultivating it is as follows:—

CULTURE OF THE CARROT.

The land which has been manured in the fall, as above described, ought to be ploughed at least twice in the spring, the one furrow across the other, and both as deep as possible. It is then to be harrowed until it is properly mellow. You then make with the plough two furrows, distant two feet, or two

feet three inches from each other, taking care to raise the soil as much as possible between each. You pass the roller over this ploughed portion, and then with the corner of a hoe, make a small furrow or drill along the top of the rows: drop the seed into this furrow, and pass the roller over it again: this last operation will cover the seed sufficiently.

If you can get a seed-sower, that will simplify matters considerably. A roller is essential in the culture of root crops which spring from small seeds, but it can be readily got by all farmers. A log of twenty inches diameter, and five feet long, with a pole fixed at each end, will do the business admirably.

Carrot seeds (and you may say the same of the other seeds) ought to be soaked in rain, or soft water, until they are about to sprout, and then rolled in quick lime until the grains are dry enough not to stick to each other. When there is no lime, wood ashes will do as well. A pound of seed, if it be good (and you ought always to try it before sowing), will be sufficient for one acre of land. By the above plan, the young plant will come up before the weeds, so that it will be easy to distinguish the rows of carrot before the weeds appear: this renders the cleaning comparatively easy, since it may be done (except the thinning) by means of a cultivator. This cultivator is an instrument which every settler ought to have, and which, like those already mentioned, is extremely simple in its construction. It is made of three bars of wood joined in front, and separated behind according to the width of the furrows which you wish to clean. This instrument, called the Horsehoe, or Drill-harrow, or Cultivator, is drawn by one horse, and has handles to it like a plough, only lighter. A man or a boy may guide it so as not to touch the rows of Carrots or other crops, but only to raise the soil to a greater or less depth, at pleasure. As soon as the weeds appear, you draw this harrow between the rows, so as to bring the soil as close as possible to the young carrots, but without touching or covering them. This process will keep the plants sufficiently clean until the time for thinning them and leaving them four or five inches apart from one another; soon afterwards you may plough between the rows thus harrowed and raised. These operations do good to the plant by permitting air and moisture to have access, and by facilitating evaporation. My plan for gathering the carrots in autumn is to pass the plough along the right side of the plants as close as possible, without injuring them: this frees them on one side, and the stem is strong enough to allow us to haul up the roots by it afterwards.

This method of culture requires a good deal of labor, but the return is more than enough to recompense the farmer.

When we consider the large amount of nutritive matter contained in this root, and its general application to all the living things on a farm, its culture cannot be too strongly recommended; besides, it is relished by all animals, especially by working horses, to whom it may be given instead of Oats.

I have dwelt particularly upon the culture of the Carrots, because the same method applies to the culture of all the root crops, which can be advantageously grown in this climate, such as Parsnips, Beets, Mangolds and Turnips.

Parsnips will grow in close soil, almost in clay, and do not require cellars, since they will remain uninjured all winter in the ground. In this case, you will have them in the spring, affording a new and succulent food, at a time when it is most necessary. Every animal will eat parsnips with a relish, and cows fed upon them yield a very rich milk.

Beets and mangolds have the same value as a crop, and as food for milk cattle; but I do not consider them to be so good for fattening cattle.

[In spring, all manure made during the past winter should be carted to the field, placed in a heap, and twice turned. All bones should be gathered and broken up with a hammer, all coal and wood ashes, scrapings of sewers, the dung from the fowl-house, and the contents of the privy, should be collected, and made into a compost, with dry loam or bog earth.

The above manure may be used for that portion of the field devoted to cabbages, potatoes, and turnips. It should be put in the bottom of the drill on which the above are to be planted or sown.

When the ground is properly ploughed and harrowed, and a sufficient quantity of sound seed sown, say at least four pounds to the acre, the Turnip crop is as certain as any other.

The sowing of Turnip seed should be commenced early in June, and may be continued up to 20 July. If the fly takes the first sowing, a second will be likely to succeed.

The Turnips, when well up and getting strong, should be thinned out to a foot apart, and the hoe or cultivator passed through them, at least twice before they meet in the drills.]

HORSE-BEANS AND PEASE.

If the land is too heavy for root crops, beans and green pease will suit for No. 1, taking care to sow them in drills, and to prepare the land as above described for root crops.

[To be Continued.]