

Thus, taking the average yield as above, 19 bushels fall wheat at 85c. per bushel, also the average price, would give \$16.11; 25 bushels barley, \$13.75, and 34 bushels oats, \$9.20.

Comparing the above figures, it will be seen that the position of the average grain-growing Ontario farmer is not better than the wage earner, with this disadvantage, that a large portion of the year is non-producing, and nothing is earned, as from force of circumstances he is obliged to be idle. And, again, in selling his grain he is surely selling from his farm its producing power, or his stock-in-trade; yet this is the practice of perhaps three-fourths of our farmers. Is it surprising that they are dissatisfied, while he who feeds a few cattle, breeds a few horses, and raises a few sheep by what is commonly called the mixed method, is decidedly better off? He at least is contriving to keep up his land, yet his progress is of necessity slow. There is no rest time with him. It is by steady work and constant thrift many of our farmers have attained a competency.

The successful system for the future must be more intensive, by which means a greater production of feed per acre may be produced, a far greater number of cattle fed—the farm producing the bulky feed, while the more concentrated food, in the form of cheaper grain and mill stuffs, may be purchased, which will add largely to the fertilizing elements and allow the more expensive wheat and seed grains to be sold, and yet ever improve the farm in value. The successful course must take all matters into consideration, the chief points of which are: A system by which the greatest quantity can be produced on the land; the crops so arranged that the land is always being prepared for the next crop, so that there is no hurry, and yet there is work provided for the whole year, and such crops grown that are certain of giving good returns.

The following system includes a five-year course, and is calculated to produce the best paying crops, as well as those that are certain to give good results throughout the whole course:

First Year—Soiling Crop—Rye, clover, oats, peas, corn.

Second Year—A Grain Crop, for sale—Fall wheat, spring wheat or barley.

Third Year—Hay—Red and alsike clover, Timothy.

Fourth Year—Silage Crop—Corn.

Fifth Year—Grain Crop, for sale or feed—Oats.

The object sought is to have the work evenly distributed throughout the whole year, the cattle to be bought up in the fall and fed throughout the winter, while provision is made for keeping them later if desired, as the price of export cattle early in May, and even on into June, is not always satisfactory; and again this same system would be applicable to a dairy farm.

In a fall wheat growing section it is designed to have a crop that will allow a perfect preparation for this crop without having recourse to a bare fallow, and without losing a year's production on any part of the land.

The manure is applied to both the corn and green crops; in both cases a light dressing is applied and hauled out in the winter.

Rye is the first of the series of crops for soiling, and should be ready from the 15th to the 20th of May, and will hold good until the 5th of June. The rye may be seeded with clover, but the land on which the crop was grown should be ploughed by the beginning of July. Clover is then ready, which is followed by the peas and oats, and later on the corn, which can be used for the silo if not used for soiling, care being taken to have it early enough to take off before wheat seeding. But it is to the corn field proper that the silage is looked to for the bulk of the winter supply of feed, and is ready to put in

the silo immediately after fall wheat seeding. It is unnecessary to go further into detail, except to summarize the whole output of the year, which is intended to cover 125 acres of tillage land:—

Cr.	
By 100 head export cattle, at \$65 per head...	\$6,500 00
" 1,000 bushels wheat, at 85c. per bushel...	850 00
" 1,200 bushels oats, at 30c. per bushel...	360 00
	\$7,710 00
Dr.	
To 100 head export cattle for feeding, at \$35 per head...	\$3,500 00
" Feed required to be purchased or allowed from above...	1,370 00
" Wages and board of three men at \$200 per year...	600 00
" Seed...	100 00
" Repairing items, twine, etc...	100 00
" Rent and taxes...	550 00
" Interest on capital, such as farm stock...	250 00
	\$6,770 00
	\$940 00

Nothing is allowed for horse feed, as it is calculated there is sufficient grown outside that otherwise accounted for. Neither is anything allowed for fences, as none are in use, thus saving one of the most expensive items on the farm. There is nothing excessive about the figures. This result can be obtained on any good land. And where seed growing is added, instead of the mere commercial prices estimated for grain a much better balance would be forthcoming. We contend that, at the present basis of the price of land and the value of money, there are few lines of business that will equal farming, when pursued with the same tact and thoroughness as that practised in the mercantile or manufacturing trade.

Pork Productions—Views of a Leading Manitoba Firm of Packers.

To the Editor of the FARMER'S ADVOCATE:

DEAR SIR,—We are glad to say that hogs are rather more plentiful this season than in former years. We are certainly very much pleased to see that our farmers are now commencing to pay attention to this industry, as, in our opinion, it is one of the most important in this province, considering that there is such an abundant quantity of cheap feed that usually cannot be sold, and if it were converted into money in this way it would certainly be a great benefit to farmers and the province. It seems strange that farmers have not gone into it before this time. However, from all information we can gather, we think the change has come now, and we hope it may continue, as it is really too bad to see the large amount of money that goes out of this country for hog products each year, and which, instead, should go into the pockets of the farmer. They should also not forget that well-bred stock is always the most profitable; and we strongly advise marketing just as soon as fit for market, as the demand for hogs dressed, weighing from 150 to 250 pounds, is increasing, and very heavy weights decreasing, and in so doing they get quick returns. We have no doubt but Winnipeg will always afford a good market for hogs all the year round, and farmers that give this matter some attention, and market their hogs quickly, will be well paid for their trouble.

J. Y. GRIFFIN & Co.,
Winnipeg, Man.

This last season, from what had been a sheep pasture for six years, Mr. Arch. Wood, of Foxton, reports a yield of 46 bushels per acre, good quality, White Fife wheat; barley stubble on same farm yielding only 25 bushels wheat, and wheat stubble (second crop) 18 bushels. Mr. Wood utilizes all the manure made on his place, and finds that, judiciously applied, it causes the wheat to ripen about a week earlier, besides giving a larger yield.

Seed Wheat.

BY D. F. WILSON, BRANDON.

At the beginning of the harvests of 1891 and 1892, owing to the pressure of work and the dread of early frost wheat was cut very green—so green that it might well be called an experiment; and it was thought by many in 1891 that farmers in numbers of instances were spoiling their sample of wheat, but they were, in most cases, agreeably disappointed. The question is, Is this early cut wheat suitable for seed?

It is now generally acknowledged that wheat cut on the green side makes a better sample of grain than that which is allowed to get dead ripe. Not only does it appear a better sample to the ordinary observer, but the miller also prefers it, as it makes a whiter flour. But while it makes a whiter flour authorities in the matter say that it is not as nutritious flour as that made from wheat that has stood till it was thoroughly ripe. The early cut wheat contains more starch and less gluten than the ripe grain. Its supply of nitrogen having been cut off before it was matured, it makes up the deficiency by drawing on the air for an extra amount of carbon, which in the form of starch makes a very pretty flour. A wheat plant contains all its nitrogen when in blossom, but if cut before it is ripe some of this will be left in the root, and also some in the straw, for by cutting while green the water can no longer ascend in the stem, and there is, therefore, nothing to convey the nitrogen on to the head and form the perfect grain. All farmers know that the green cut straw is much better feed than that which has been allowed to get thoroughly ripe, which is a practical proof that it contains more nitrogen. I have seen wheat cut so green that it seemed almost impossible that the grain could ever be anything but shrunken; and had it been put up in long stooks, so as to quickly dry out, there is no doubt that it would have been so; but in this case it was put up closely in large, round stooks, and well capped, the result being a very good sample of wheat. By stooking in this way the sun and wind were prevented from doing their work too fast, the wheat remaining green for a considerable time, in which state it is able to absorb carbonic acid gas, which, being converted into starch, made up the deficiency in the grain which should have been derived from other sources. Such wheat as this is not perfect grain—it is immature, though the eye cannot detect it; it is in reality deficient in vitality, probably quite as much so as wheat that is somewhat frozen.

The germinating qualities of frozen wheat have been proved by tests in many instances to be equal to No. 1 Hard. These tests have, however, been generally under favorable conditions, and where the young plants would be able to get enough nourishment out of a very much shrunken seed to reach the surface, when it may be said to be independent; but were the crop grown from frozen seed, frozen and that sown again, and this repeated a few times, I think we should find that the yield of wheat per acre, even when not frozen, would be much below that where good seed had been sown year after year. This being the case, it is a great mistake to sow wheat that has been cut green, for we may expect the same results in the course of a few years as if sowing frozen wheat had been persisted in, and not only would there be a falling off in the yield, but also a deterioration in the quality of the grain. In the early days of settlement, when it was almost impossible to get seed potatoes, I grew an excellent crop from the smallest seed I ever saw planted, but I would not expect to do so if I picked out small potatoes for seed every year for a few years.

There are many good farmers who make a practice of sowing the best wheat they have, and this will often be that which has been cut greenest, and is, therefore, anything but the best for seed, and would be much better sold, for the buyers will pay the highest figure for it. No. 1 Extra is not necessarily the best seed.

The wheat crop of Manitoba being of so much importance, everything that tends to its improvement should be taken advantage of, and to do so farmers should make a practice of growing their seed. In doing so a piece of land should