

trying what might seem to some uncertain speculations in agriculture. The land was still in good heart, and the improvements in agriculture did not present themselves to us as so absolutely necessary as we have since found them to be. There was, besides, another objection to our going to any great expense in stock feeding—it did not pay. Beef and mutton were sold at 3 to 5 cents per pound, butter at 10 to 12 cents. This is no longer the case; we have now better markets and higher prices, and our stock is paying for all the care bestowed on it. We have learned the value of root crops.

Shall we continue to raise the turnip as the main staple of our root crops? We have raised it almost exclusively, and shall we continue to raise it as we have done? There can be no question as to its great value. We know of no other root that yields so much good meat-producing return for our labor. It has been fed profitably to all the stock on the farm. In England it has been the means by which agriculture has been brought to its present state of excellence; and farming has largely profited by it even in the New World. But we find it a very uncertain crop. In growing it we have many obstacles to contend against. At the time of sowing there may be a drought that will retard, if not altogether prevent the germination of the seed; if it escape this danger, the tender leaf is liable to be destroyed by the fly; if it escapes the first dreaded drought and the fly, still a later drought may prevent the crop being more than a very light one. Of this we had experience the past season. In the crop returns for Ontario, in the Report of the Commissioner of Agriculture, the highest return given is one of 700 bushels, while a large proportionable number are under 500, some under 200. The report, not a solitary one—"turnips in most places almost a failure, owing to drought and insects"—tells us of the uncertainty of the turnip crop. Still we cannot dispense with it, with all its uncertainty. There is no other root to take its place in every respect. Our substitute for the turnip must be a partial one.

Mangolds and Kohl Rabi are both valuable crops for winter feed—both heavy producers and long keepers. Of the growth and use of the mangold, we have had many years' experience. It is not equal to the turnip for fattening, but for dairy cows it is better, producing a greater yield of milk and not communicating to it an unpleasant flavor. With grain added, it is a good food for growing or fattening hogs. Much of its utility for feeding is owing to its saccharine properties, in which it is very rich. We have never found it to be as liable to fail as the turnip, and if there be blank patches in the drills, they can be filled by transplanting from spots where the plants may be too thick. Mangolds and beets bear transplanting very well. The returns of the yield of mangolds in the Agricultural Reports are much more favorable than those of the turnip crop. One electoral division (S. Grey) reports an average of "1000 bushels, quality very good," and many others report good crops. Would it not be well, taking all things into consideration, to sow less turnips and more mangolds?

Carrots should also be grown, at least in small quantities, as part of our farm crops. For horses, especially, they are excellent food in small quantities; and they are not only good food, they also serve to keep in good health the horses, of whose food they form a part. They are not a substitute for oats, but when carrots are fed the quantity of oats used is less, and the horse is in better health, with high spirits, his coat having that glossy appearance that indicates perfect health and vigor.

Is there a Profit from the Potato Crop?

This is a question still unanswered, if we are to judge from the frequency of its repetition and the contradictory replies given. We would otherwise think there could exist no difference of opinion on the subject. The fact is that the potato crop is a very remunerative one, if properly planted and attended to. (In considering the subject we do not take into account the seasons, fortunately very rare with us, when potatoes are affected with the disease.) The potato crop is attended with loss to the grower if it be a very light one, but from experience of many years in potato culture, we have no doubt the farmer has it in his own hands to grow a large, profitable crop. From some of our correspondents we have reports of very large yields of potatoes that they have raised, and we know that such crops can be and have been raised.

The past season the crop has generally been much lighter than usual. The drought, and, in some instances, the potato beetle, have prevented as good a produce as we generally have. Such is the general complaint. In no less than thirteen electoral districts the Report of the Commissioner of Agriculture for Ontario gives returns under one hundred bushels. With such a poor yield we would be inclined to say—Why attempt farming at all if such is to be the return? Such yields—such farming cannot pay. It must be a losing business. But much better can be accomplished. It is not, we believe, impossible to raise four times the yield here given.

From the Riding of North Wellington we have the return of an average of two hundred bushels; from two divisions—E. Middlesex and S. Huron the average returns of one hundred and eighty bushels each. Where there is an average of two hundred, there must be, doubtless, individual returns of far higher yields, as the low returns from some portions reduces the average proportionably. Though a higher average than the highest given is attainable, still two hundred bushels is a good return, and were other divisions to make similar returns, we would have few complaining that potato culture does not pay.

In the report of the potato crops raised in competition for the prizes offered by Messrs. Bliss, the returns are very large, especially of the produce from one pound. Of Early Vermont 1 lb. produced 708 lbs.; of Compton's Surprise, 1 lb. produced 900 lbs.; of Brownell's Beauty, 1 lb. produced 1018 lbs.

In competing for the prize offered for the largest produce of Early Vermont, Compton's Surprise and Brownell's Beauty, on a quarter acre of ground, the largest yields were respectively 416, 490, and 593 bushels per acre. We note that the manure used was, in most instances, well rotted farm-yard manure, and afterward, at the time of cultivation, a fertilizer composed of ashes, soot, salt and sulphur. In preparing for the crop, the ground, where not new, was plowed deep, in some instances eight or ten inches, and in one case twelve inches in depth.

In considering this question—Is there a profit?—our reply in the affirmative is based not so much on the very high prices of potatoes this season, as on the produce the farmer can raise from a given area of ground. A large yield of potatoes must pay well, even if fed to stock. This the writer can say from his own experience, having fed farm stock largely on potatoes, and proved that there is a good profit in feeding them to pigs, horses and horned stock. For cows giving milk in winter they are an excellent food. The prices for which they have been sold these few years leave a good profit to the grower, and even a medium crop at a medium price will do so; while better crops—say

one hundred and twenty bags at ninety cents to one dollar per bag pay as very few crops on the farm do.

A potato crop, as well as any other root crop, is a good preparation for a grain crop, to be followed by clover and grass seeds. This is a gain not to be overlooked in considering the profits of root crops. By their aid we are able in a great measure to dispense with the naked summer fallow, keeping our ground, meanwhile, clean and in good tilth. —S.

Crop Returns for the Year 1874.

We are enabled now, in our May number, to review the Annual Report of the Commissioner of Agriculture for the year 1874, having received it only in April. The Report says:

"The average of fall wheat was considerably under that of last year, owing not so much to the drought as to the absence of snow and the unusually severe frosts in the spring. Large breadths of land sown to wheat were plowed up, and devoted to spring grain. In many places where the crop was allowed to stand, patches of fields could be seen in which the grain almost died out, and was succeeded by weeds, and in this way the yield of fall wheat became seriously injured. It is noteworthy that the drier, and consequently higher portions of fields escaped injury more or less from spring frosts, while in the lower portions, where the soil was generally deeper and wetter, the crop was greatly injured, and, in not a few instances, absolutely destroyed. The facts clearly indicate the necessity and advantages of underdraining, which secures warmer and more uniform temperature of the soil, and in a great measure averts the disastrous effects of the frost in throwing it out."

The returns that we published some months since in the *ADVOCATE*, compiled mainly from the Report of the Harvest of the G. T. R. officials, was so full and embraced such an extent of country, that it is unnecessary now to give another full report. Hence we will give a brief synopsis, with very few remarks.

Of fall wheat there are 43 returns. The average is 18½ bushels, being an average of 3¼ bushels less than in 1873; ¾ bushel greater than in 1872.

Spring wheat, 16½ bushels, being 1 bushel greater than that of 1873; 2½ less than 1872.

Oats, 38½ bushels, less by 1½ bushels than in 1873; greater by 5¼ than in 1872.

Barley, 30½ bushels; greater by 2½ bushels than in 1873; greater by 2½ bushels than in 1872.

Rye averaged 17½ bushels.

Peas, 24½ bushels.

The highest return of fall wheat is from West Hastings, averaging for the Division 30 bushels; there are two returns of 22 bushels from East Hastings and East Elgin—there are 17 returns of 20 bushels; 12 returns less than 20, but not less than 15; the other returns are some under 15, some no average stated.

How the average returns are affected by the light yield of some crops of inferior farms, may be seen in many cases, as, for instance, in South Huron. Some time ago we had, sent to us by the Secretary of that Agricultural Society, a report prepared by him with considerable care. In it it is stated—"where fall wheat was not winter-killed, it was an excellent crop, both as to quantity and quality. Instances were not unusual of a yield of from 35 to 40 bushels to the acre; but winter-killing is a great drawback, and, to all appearance, is likely to continue, and perhaps get worse, owing, no doubt, to the fact of the country being too much divested of timber." Now, in the Annual Report, the return for S. Huron is thus given: "Fall wheat, 16 bushels."

ROOT CROPS.

Potatoes—Generally a light crop, owing in a great measure to the great drought of the season. There are 11 returns of an average under 100 bush. per acre; 17 returns of 100 and over, but under 150; 9 returns of from 150 to 200.

Turnips—19 returns under 500 bushels; from 500 to 700 there are 7 returns.

Mangolds—9 returns under 500 bushels. Of the returns over 500 there is one average of 1000.