

To the Editor of the N. S. Journal of Agriculture:

In answer to Col. Laurie's invitation to farmers to answer Mr. Boyd's questions in reference to wheat growing, I beg to offer a few observations.

Being located in a section of Cape Breton which has always grown wheat largely, and for the most part successfully, and which is in many ways analogous to the district from which Mr. Boyd writes, I feel that my experience should be of value.

I do not intend to confine my observations to personal experience, which has been fairly large, but shall base them partly on facts gleaned from the experience of the most successful wheat-growers of Mabou and vicinity, numbers of whom have the past season harvested from eighty to two hundred bushels, in some cases reaping twenty-fold or forty bushels per acre.

Where my observations conflict with Col. Laurie's advice to Mr. Boyd, the discrepancy may be accounted for on the ground of difference of climate, soil, &c. I shall endeavor to answer Mr. Boyd's questions in the order in which they are put.

1st. "What is the proper time in spring to sow wheat?"—While there was danger from weevil we always deemed it best to sow wheat either very early, say the latter part of April, or late, say from 1st to 10th of June, imagining by this ruse to escape the ravages of that destructive little insect, which was supposed to be confined to certain limits, as to time, in which to commence its depredations, and which required wheat to be in a certain stage of development to insure its success. But, now that all danger from weevil seems to have vanished, the impression obtains that the seed should not be put in until the spring has advanced sufficiently to have warmed and dried the ground, rendering it in good condition for the plough and harrow.

The objections to early sowing are, that the cold and wet to which we are subject in the early spring destroy a great deal of the seed, necessitating much heavier seeding, and it is even supposed that the vitality of that which does succeed in withstanding the deleterious effects of the prolonged north-easters to which we are liable is impaired. These, however, are objections subject to amelioration under certain circumstances, such as warm dry soil, comparative absence of cold winds, &c.

2nd. "Is ground planted with potatoes for the past two years suitable for wheat?"—It is not a common practice with us to plant potatoes two consecutive years in the one piece of ground. But I should not apprehend any difficulty in growing wheat after such usage, provided a sufficient amount of manure is applied

as top dressing, well harrowed in, say enough to insure a good crop of timothy and clover, after having yielded a crop of wheat.

3rd. "Can a good crop of wheat be grown where fog prevails in spring?"—Although not much subject to spring fog, I think we have enough to warrant me in saying that no danger need be anticipated from that quarter. I would be more afraid of fog during the ripening process as causing a liability to rust. Even this danger, I think, can be reduced to a minimum by securing that seed least liable to rust.

4th. "How should the ground be prepared?"—There are so many different kinds of soil, requiring as many different kinds of treatment, that it would be difficult to do this question justice in the limited space for which I would care to trespass upon you, so I shall merely speak of such ground as is already in such condition as will yield a good crop of hay, and has the constituents, aside from barn yard manure, necessary to produce wheat.

Many plough the lea land, or sod, in the spring, top dress with barn yard manure, rich compost would be better, scw the wheat and harrow in, and have a fine yield. In fact where the soil is loose and friable this is all the treatment necessary. A better crop, however, is secured from the second ploughing of sod land. That is by taking a crop of some other kind of grain off the first year, and the second year ploughing the stubble under, and top dressing liberally.

The third course is,—a crop of oats, then a root crop, and then a crop of wheat, to be succeeded by a crop of hay. This last used to be considered the only orthodox way of preparing for wheat, but of late years the stubble land has supplanted it in favor.

There is a decided preference for spring ploughing in all cases, some even laying stress upon the advantage of sowing as soon after ploughing as possible. A great deal, I think, depends on having the ground well ploughed, and in that condition when sowed that it will harrow nicely.

With everything else favorable, we may yet be disappointed in our wheat crop if we have not the right kind of seed, that which does well in one locality often proving a complete failure in another. At present in this district the "Lost Nation" bears the palm, being a strong feeder, with little or no liability to rust. The "Golden Drop," when not affected by rust, has yielded well. The "Rio Grande," introduced here last spring, promises to be a good wheat. The "Lost Nation" requires to be sown as early as the ground can be prepared for it, as it takes about a fortnight longer to mature than most other kinds.

In writing as I have done on wheat culture, my desire has been to show that no fancy cultivation is necessary to secure a good wheat crop, in some instances a fancy crop; and that it is within the reach of every farmer, able to handle a plough and spread manure, to raise his own bread. What may be obtained by fancy cultivation, I won't undertake to say. Sufficient for the present is that method which is within the reach of every practical farmer.

In reply to the fifth question, "What work on agriculture would you recommend?" I would in addition to Col. Laurie's recommendation of "Waring's Book of the Farm," and "Dr. Dawson's Agriculture," recommend "The Farmer's Advocate," a monthly magazine published in London, Ontario, price \$1.00. A want is supplied by a periodical of this kind which no published work on agriculture can fill.

JOHN McKEEN.

Mabou, C. B., March 6th, 1880.

In an article in the *International Review* Hon. Professor Lyon Playfair advocates technical education as the logical and necessary supplement both to Free Trade and to Protection. He expressed essentially the same view as that presented some time ago in an address to the Technological Institute of Halifax, that the real basis of progress in a country is not its natural resources, nor learning, nor even political institutions alone, but the suitable education of its people. The working men of the country are not to be treated and spoken of as so many "hands," but as "heads." This is an old notion in Germany and in Scotland, where John Knox insisted that a portion of the education should be directed to "those studies which the people intend chiefly to pursue for the profit of the commonwealth." Scotland and Scotchmen have reaped and are now reaping great practical benefits from what John Knox insisted upon, and the most advanced educationists in every civilized country at least see the necessity of suiting education, like everything else, to the different kinds of work which it is expected to perform. Fifty years hence people will wonder how the world could move when farmers, doctors, sailors, statesmen, miners, lawyers, builders, artists, soldiers, clergy, distillers, fishermen, bakers, iron workers, were all run through the same educational mould.

THE Ellesmere Pig from Lucyfield Farm, that took first prize at the Provincial Exhibition, and also Alderman Fraser's Condiment Prize, was sold to Mr. Burratt, Mount Uniacke, and yielded, when dressed, 650 lbs. of excellent pork.