time in propounding a theory for the guidance of new and inexperienced settlers, that in the older districts would brand him as a faddist, a dreamer or a crank.

Before the commencement of judging in the Standing Grain Competitions, the judges meet at some central point and spend a day or two in arranging and becoming familiar with a system, and this, as nearly as possible, is followed out in their individual work.

Why could this plan not be worked in connection with the Institute Meetings? If a man had to submit the speech he intended to make at the meetings on his route to the criticism of the Hon. the Minister of Agriculture, the Superintendent of Institutes and the other speakers, there would be less chance of the substance being deserted for the shadow; or of a Manitoba Fall plower being turned loose in a section of Saskatchewan that must naturally depend for its very existence on summer-fallowing.

There are some other matters of importance to new settlers, such as the treatment of seed for smut upon which the "Authorities," differing very materially, might easily come to an agreement if the importance of so doing were brought home to them, but this letter is already much too long.

Sask. FARMER.

The Eradication of Wild Oats in Saskatchewan

EDITOR FARMER'S ADVOCATE:

Before going into the question of eradication, it might be advisable to impress upon every reader of the FARMER'S ADVOCATE the absolute necessity of, at the earliest possible moment, becoming familiar with this, the worst of all weeds with which the western farmer has to contend. Once recognized, the wild oat can hardly be mistaken, and if it is found growing on one's farm, or in seed secured from any source whatever, the action with regard to it cannot be too drastic.

When tumbling weed was discovered in the western provinces it was said that it would, if allowed to spread, mean the ruination of the country, and of stink weed much the same was said. The former, however, was easily handled by intelligent cultivation without any change or interruption in the cropping to wheat; the latter, also, can be kept in check, if not entirely eradicated, without the cessation of wheat growing; but with wild oats it is entirely different.

At the present moment I do not believe that there is any plan on earth that will permit the growing of wheat and the eradication of wild oats to go on at the same time.

That something must be done, and done at once, there can be no question. In some districts, wild oats are just making their appearance, while in others, which were practically clear a few years ago, the pest has taken possession of some of the best farms, and it is now a case of do something or quit.

On account of wild oats ripening in considerably less time than wheat, it will readily be seen that wheat growing on the wild oat infested land must cease until the wild oats shall have been attended to, and to provide something, that will in a measure make up for the loss, must be one object of any plan for the eradication of the weed.

With this in view, it is submitted that where wild oats have spread over any considerable portion of the farm, the growing of an early variety of six-rowed barley, in conjunction with the system of cultivation described below, will prove the most profitable crop that can be grown during the treatment.

There are a number of varieties of six-rowed barley that may be depended upon to ripen in from 90 to 95 days in an average season. The two-rowed barley usually requires from 100 to 105 days, and wild oats, under ordinary circumstances, will not mature under 115 to 118 days.

PLAN

1st year—Summer-fallow the land. That is, plow from 6 to 7 inches deep during May or June, and cultivate as often as a crop of weeds appears. By this means, a large proportion of the wild oats within three inches of the top of the soil will be sprouted and killed in the first year.

2nd year—Cultivate during the last week in May, and sow 2¼ bushels of six-rowed barley per acre. By the cultivation before seeding the first sprouting of wild oats will be killed, and the barley, which should be ready to cut by the last of August, will be from ten days to two weeks ahead of the second sprouting. If, however, it is seen that the wild oats will mature at or about the same time as the barley, there is no alternative—the crop must be cut for hay. (It must be remembered that the main object of this plan is to absolutely prevent a single wild oat from going to seed on the plot and to ensure this, no chances should be taken with the crop). Disc the field immediately after the crop has been removed.

3rd year—Disc or cultivate 3 inches deep during the last week in May, and sow 2 bushels of six-rowed barley per acre. Watch the wild oats very carefully, and cut for hay if there is the least chance of kernels being formed before the barley will be ready to cut. Cultivate the land as soon as the crop is off.

4th year—Summer-fallow again. This should complete the eradication, but if there is any doubt of it, barley should be again sown in the fifth year, after spring cultivation, and the plan for the second year repeated.

In the meantime, every care must be taken to prevent the introduction of new wild oat seed. Separators should be carefully inspected before they are allowed to pull in, not an ounce of seed containing wild oats should be used, implements should be cleaned when changing from one field to the other, cattle, swine or horses should not be allowed to roam over the land under treatment, making trails across the field should not be permitted; in fact, every possible precaution should be taken to prevent the introduction of fresh seeds after the first year of the treatment.

It does not seem necessary to go into the question of sheep, swine or cattle as an adjunct to this plan. The value of sheep in keeping down weeds, and the value of barley fed to swine are too well known to require comment, and it would be impossible to even touch on the raising of either without going into the question of buildings, fencing, etc., which would make this article altogether too long.

Sask. FARMER.

(This contribution was received too late for a place in our last week's competition, but as the winners were from Manitoba, we submit this plan as applying particularly to Saskatchewan. What about Alberta? ED.)

How Can Wheat Escape Frost

In your February 3rd issue, a writer claims that high land is not so liable to be caught by frost as is low land. My homestead is situated in the valley of Birch Creek, Quill Plains district. Most of my neighbors on both sides of me, but on higher land, have been frozen out these last two years whereas, a few of us have not suffered at all. I have asked some of those who were frozen out if they could give any reason, and they told me that their grain was in the milk stage, whereas, those of us who escaped the frost sowed our grain later, making it not so far advanced and so escaped. Last year the frost came on August 13, and then we did not get any more frost for about a month. Many theories are advanced by old-timers on how to escape frost. Some advocate high land; others land having a slope to the north; then, again, some claim that water on the north side will draw away the frost. In regard to the latter, those of us on the south side of the Quill Lakes are certainly more fortunate than those on the north side, as we did not suffer but little. The first prize oats (for the northern division) at Regina, this year, came from the south side of the Little Quill Lake.

To give my own opinion of frost, I have noticed that it is very similar to hail, in that it goes in streaks about two miles wide, and also, I have observed that crops on old land will not freeze as quickly as those on new land. After the frost, last year you could drive perhaps two miles, and the potatoes were not even touched, not even the blooms; then, perhaps, for another two miles the potato tops were frozen to the ground.

Three years ago, I had potatoes planted on old land, and some on backsetting. There was no division between the two until the frost came, and then those on the backsetting froze black, and those on the old potato land were not touched, the division was complete, as if someone had laid a straight edge on the field between the two kinds of land.

Our Scottish Letter

We have the Canadian curlers here, and so far they have given our devotees of what is called the "roaring game" a series of very severe drubbings. It is evident that our men cannot drive the stones at all to compete with the Canadians. Now that we have an artificial rink in Glasgow, where the game can be practiced irrespective of Jack Frost, our men may pull up; but, in the meantime, they make a poor showing against the representatives of the Dominion. It is several years since we had sufficient frost here to enable our curlers to enjoy their sport in the open air. We had a terrible blizzard during the last week of 1908, and one of the worst snow storms on record. But it did not last more than a week altogether and the frost disappeared just as the curlers were getting ready to enjoy themselves. We had, also, a short spell of hard weather during January, without the snowfall of December, but the frost again rapidly disappeared. Hence, curlers and skaters feel bad, but the farmer, as such, is, on the whole, happy. His work has seldom been as well advanced at this date. The short turns of frost have enabled him to get his cattle-courts cleaned out, and plowing has not been much delayed at any time on account of frost. The season of 1908, financially, is proving to have been a very unremunerative one in general for the Scottish farmer. He cannot make ends meet at all, and, as if to mock him altogether, while mutton is at a ruinously low price, his turnips have given out, so that he is compelled to throw his sheep upon a market which does not in the least want them. The astonishing thing is that, while the farmer has been producing the mutton at a dead loss, the consumer has been getting no abatement on the retail price. The inference is that the butchers are lining their pockets to purpose, and saying nothing.

SCOTSMEN'S IMPRESSIONS OF CANADA.

Quite a number of those who visited the Dominion during last autumn have been giving an account of their travels at gatherings of farmers. Amongst these are Messrs. William Barber, R. B. Greig, James Dunlop, Harry Hope and Ian Forsyth. Those who, like the writer, have visited Canada, and been in touch with the leaders in her agriculture, can hardly pretend to be greatly enlightened by what the travellers have to relate. Truth to tell, the writer feels that, without travelling over the country at all when it is at its best, as did the visitors in question, he obtained at Guelph and Amherst as good an idea of the resources and capabilities of Canada as they have done who spent six weeks in the Dominion, and visited all her Provinces, from Nova Scotia and Prince Edward Island to British Columbia.

The two most exhaustive addresses have, so far, been delivered by Mr. Barber and Mr. Hope. These gentlemen kept their eyes open, and discriminated what they saw. Perhaps what strikes one most in the addresses is the impression made upon the visitors by the possibilities of the Maritime Provinces and Ontario. So much has been said and written about the Northwest that men are apt to forget the older portions of the Dominion. That a most excellent livelihood could be made in these older parts of the Dominion, goes without saying.

It goes without saying that all the reporters so far have indicated their high appreciation of the possibilities of the Northwest. They do not indiscriminately advise men to emigrate and homestead there. They admit the chances which may come to a man who goes out with nothing but a good character and what may be on his back. They indicate that, for such a one, who is willing to work, plenty of work will be obtained during the working period of the year, at rates which will enable him to lay past enough to keep him during the non-working months, should he not succeed in getting an all-year engagement. But in the main, the recommendation of your recent visitors is that the Canadian Northwest presents the best opportunities to a man having perhaps £200 of capital and a healthy wife and family. Such a one will do well to go out, not as a homesteader, but husbanding his resources for a couple of years, and then taking up the investment in land which promises best to his practiced eye. This is very much the result at which the writer arrived after his sojourn at Guelph and Amherst, six years ago. And this was the advice which he gave to many after he came home, at that time. A young fellow, with health in his body and mind, a sound moral character, and willingness and ability to work, who finds himself cribbed, cabined and confined in the Old Country, will find prently of room and a hearty welcome in the great Dominion. The writer believes in Canada, and in the certain success in the Dominion of every man of the type described. "SCOTLAND YET."

How Frost Effects Seed Oats

EDITOR FARMER'S ADVOCATE:

"Are frosted oats damaged for seeding purposes? If so, how is it that the wild oat grain grows after being frosted?"

Alta. W. T. K.

The damage done to oats by being frosted depends entirely upon the stage of development of the grain when the frost occurs, if complete maturity of the grain has been reached very little detrimental effect is produced on its germinative vitality, but should the frost occur before maturity has been reached the germinative value of the crop will be damaged in ratio to the immaturity of the crop at the time of freezing.

There is no means of arriving at the damage done to the germinative value of a crop by frosting, except