

Soiling Crops.

Editor "The Farmer's Advocate":

Of the most neglected crops on the farm are the soiling crops for late summer and fall feeding. This is to be regretted. In my opinion, few, if any, crops pay so well. We have been growing these crops for many years. Perhaps the reason we started this practice before the average farmer was that we supply a city butter trade, and, therefore, had to keep up our supply or lose the trade. In growing our soiling crops, we take a piece of stubble land, work it well, and apply a light dressing of manure, or, if we have no manure to spare—which is often the case, as we have to manure from ten to twelve acres of hoe crop every year—we take a piece of sod land and cultivate it well to get a good seed-bed. Just here I might say that it is very important to have the piece of land in which you are going to sow your soiling crop as near the barn as possible. You will have no time to go a long distance for your load of green feed night and morning in the busy harvest time. The mixture we sow is the following: Oats four parts, peas one part, and vetches one part, sowed at the rate of about four bushels to the acre. This makes a very nice feed for the cows. We generally sow about three pieces of this mixture at intervals of ten days between each seeding. By so doing, we always manage to have our supply fresh and green. When starting to feed, we give the cows only a small amount at a time, as they will not eat very much at first, increasing the quantity gradually. Some farmers feed their green feed by throwing it over the fence to the cows in the pasture. This is a very wasteful practice, and the boss cows get more than their share, while some do not get enough. We always feed our cows in the stable, which I think is the best plan. The feed should not be allowed to get too coarse before starting to cut. Better to start early, even if you do not get as much feed. This mixture does very well up to, say, the last of September. After that we feed fodder corn till the frost comes. This kind of soiling crop is especially for milch cows. There is another kind, especially adapted for sheep, hogs and young cattle, e.g., rape. Everyone who has grown rape will admit that, for making the largest gains, with the least expense, rape stands at the head of the list. We have been growing it for a long time, and prize it more highly every year, and now we would as soon think of letting spring pass without sowing our grain crop, as neglecting to sow a piece of rape. We grow it mostly as a fall feed for our lambs, although it could also be grown to advantage as pasture for hogs. The preparation of the ground for rape should be the same as for turnips, as they resemble each other very much, the main difference being that in rape the strength of plant goes into the stalk and leaves, instead of into the root, as in turnips. Rape seed is exactly like turnip seed, and can be sown with the turnip-seed drill at the rate of 1½ pounds per acre. It must be sown more thinly than turnips, as the plants do not need thinning with the hoe. As rape is a gross feeder, and grows very rapidly, it is fit to turn the lambs on about two months after sowing. The first week of July is about the right time to sow, as it is then ready for the lambs by the middle of September, by which time they will have the clover aftermath well eaten off. In sowing rape, if you wish to give it a good start, after putting on a coat of farmyard manure, apply about 400 pounds of superphosphate per acre. This fertilizer contains plant food which is readily available to the young plants, which brings them on very quickly. The lambs should be turned on when the rape is dry, not when it is wet, or the lambs hungry, or they will scour or bloat, and left in for an hour each day till it is well eaten off, or at least till they are well used to it, when they can be left on all the time.

The advantage of growing so profitable a crop, and one that has neither to be cut, harvested, stored nor hauled to market, as is the case with grain, has only to be tried once to be appreciated.

It is hardly necessary to point out that the following crop off the rape ground is most gratifying. I trust these few notes will induce some brother farmer to grow these profitable soiling crops, and, by so doing he will increase the producing capacity of his farm and the profits therefrom.

W. R. C.

Prince Edward Island.

Bulk of Oats Grown in Northern States.

Practically four-fifths of the oat crop of the United States is produced in the thirteen States extending from New York and Pennsylvania westward to the Dakotas, Nebraska and Kansas, according to a recent bulletin by the U. S. Department of Agriculture. For the corn belt and the dry farms in the Great Plains and inter-mountain districts, this bulletin recommends the Sixty-Day and Kherson oats, two varieties which are practically identical, and both introduced from Southern Russia. The principal points in their favor

are said to be early maturity, heavy yield, low proportion of hull and resistance to lodging. Defects are the small size and yellow color of the berry. "Larger, later varieties," it is added, "usually give higher yields in the Northern States and in irrigated districts."

Ordinary Spring-tooth for Cultivating Corn.

Editor "The Farmer's Advocate":

Replying to your inquiry regarding our methods of summer cultivation of hoed crops, may say that we consider the question a very important one, and one regarding which there is still a great deal to be learned. We trust that there will be a very thorough discussion through the medium of your valuable paper of the different methods followed. I shall confine myself to our methods of cultivating corn. We grow about eight acres of corn for silage each year, sowing it with the grain drill in rows forty-two inches apart.

The objects we have in view when summer cultivating, in their order of importance, are: (1) To conserve moisture; (2) to liberate plant food; (3) to maintain a proper physical condition in the soil, so that the plant roots may be given air; (4) to destroy weeds. If we cultivate so as to minimize the quantity of moisture evaporating from our soil, we will usually secure the other objects. Although it may cause a little extra growth in the corn crop, we do not think it wise to cultivate any oftener than is necessary to prevent a crust from forming, because excessive cultivation not only costs money, but exhausts the humus content, and leaves our rather heavy soil in such a state that it is difficult to prepare for a succeeding crop. All we farmers with clay-loam farms know that our corn and root ground is always the hardest to work the following spring. To overcome this difficulty to some extent, we give the corn ground a deep cultivation with spring-tooth after the crop is ensiled, and then rib it up, similar to turnip drills, so that as large a surface as possible may be exposed to the winter frosts.



Jennie Bonerges Ormsby.

Two-year-old Holstein. Milk in 365 days, 16,849 lbs.; butter, 832.90 lbs., 80 per cent. fat, beating former two-year-old Holstein record by 70 lbs. butter. Owners, D. C. Platt & Son, Millgrove, Ontario.

In order to secure the above objects, we find that we have to cultivate every eight or ten days, and after every rain. We do not use a weeder, although we believe it a very good implement. Before the corn comes up, however, we give the field a stroke with the harrow, and also again after the corn is about a week old. This retains a surface mulch, and keeps weeds in check. After this we use the common spring-tooth cultivator, with a long axle, made for the purpose, to throw the wheels off the corn rows. By adjusting the teeth, and using two pieces of a cross-cut saw blade in the center for shields, two rows can be cultivated at one time easily. With this outfit we can cultivate from eight to ten acres per day. When corn is about two feet high, we resort to the regular corn cultivator and sculler, doing only one row at a time, and hence only about five acres per day.

At first we cultivate from three to four inches deep, or as deep as the cultivator will go nicely. During each successive cultivation we get shallower, until, at the last cultivation, when the corn has fully tasselled, we just break the surface. We also keep farther away from the corn rows as

the crop advances, so as not to cut any lateral roots. We always try to hoe the corn once, to cut off any weeds that may not have been cut or smothered with the cultivators.

We have never kept actual tab of the time spent in our corn field, but, as near as I can figure, it would require, for one acre, two and one-half days' work for a team of horses, and three and one-half days' work for a man. The extra day for the man is for hoeing. Weather conditions influence the time required to a very large extent.

B. J. WATERS.

Middlesex Co., Ont.

Effect of Adverse Weather on Wheat.

The frosty, unfavorable weather prevailing during the latter part of April and first of May was not without its effect on grain crops and meadows, as well as fruit. Between three and four weeks ago, some fall-wheat fields in Middlesex County, and, presumably, elsewhere, also, were observed to commence turning yellow, especially in the wet portions of the fields. It became rapidly worse, and fears were expressed that the crop would suffer as the oat crop did in 1909. This fear was probably unfounded. Mr. Dearnness, an expert plant physiologist, to whom we referred samples, explains it thus:

"The fast-growing, immature protoplasm was checked by the frosty, dry weather, and dies in the cells (in part). Warm, moist weather will bring about its recovery."

THE DAIRY.

Performance and Conformation in Judging Dairy Cows.

The last United States National Dairy Show introduced a new class into its premium list, which promises to become an important factor in the dairy-cattle world. This was the class, "Cows any age, having official yearly records." There

has been the feeling on the part of many that there are two classes of pure-bred dairy cattle, those which win in the show-ring, and which might or might not be profitable producers of milk or butter, and a class which are profitable producers, but could not hope to win in the show-ring, because they lack fancy points which the up-to-date judge must require.

Much as this dual standard has been criticised by some, and defended by others, there is a growing sentiment that the greatest good will come to the breeders who recognize both standards, and seek to develop large-producing animals having the desirable breed characteristics and attractive points.

While not satisfied that it had fully solved the problem, the management of the National Dairy Show made the start by including the new class in its premium list. It was judged according to the following rule:

"In awarding the premium in Class 12 (cow with official yearly record), the judge shall assign each entry a definite number of points for conformation, on the basis of 100 for perfect; to this shall be added one point for each twenty pounds, or fraction thereof, of butter-fat above 250 for a two-year-old, with an additional minimum requirement of one-tenth of a pound for each day the heifer is over two years old, up to a total of 360 pounds minimum requirement for the mature cow. Only such records shall be accepted as are certified to by the secretary of the registry association as having been made under the supervision of an experiment station or agricultural college, as required for official or semi-official tests. A cow scoring less than 87 on conformation shall not be awarded a premium."

In each breed, the respective score-card of that breed was used as a basis for judging conformation. In the judgment of the writer, the minimum score of 87 on conformation should be lower.

To the surprise and gratification of all interested, this class brought out a goodly number of entries in the Guernsey and Jersey breeds, there being 17 entries in the former, and 8 in the latter class.