

More Letters About Temiskaming.

The following additional replies to our letters asking for information about the agricultural possibilities of Temiskaming District, have been received. Several, it will be remembered, were published in our issue of June 28th.

G. W. SLADE.—I have been eleven years in the district. I have grown or seen grown in succession hay, potatoes, oats, spring and fall wheat, barley, peas, clover, rye, flax, turnips, mangels, sugar beets, carrots, and all small fruits.

What rotation of crops and manuring do you advise? Seed down to mixed clover and timothy, and let remain as long as it will give a crop; then pasture, and then usual rotation, and plow green crops under.

How does the land appear to wear under cultivation, judged by the quality and quantity of the crops produced? There has not been sufficient time elapsed since clearing to speak definitely on this subject. In case of hay, however, the successive crops have been satisfactory.

Is it improved in most localities by drainage? Nothing done along this line except surface drainage, which is necessary.

What do you consider a fair estimate of the cost per acre of taking off the bush, and preparing for the first crop, deducting the value of the timber? Entirely conditional as to what is done by fire in a dry season, and whether high or rolling land, or flats, etc., also timber. To chop, log and stump, leaving ready for machinery, ranges from \$20 to \$60, or more, per acre.

What problems in the clay belts would an experiment farm be useful in helping to solve? Several, namely, drainage, depth of sowing, time to sow, best ways of cleaning, and especially testing suitable varieties (early and otherwise) of grains, grasses and vegetables.

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JOHN F. PECKOVER.—I will try to answer your questions to the best of my knowledge. I have been in this district seven years 2 months (Dymond Township). I found the bush quite different from what I expected. All along the Wabbi Valley is an evergreen bush, and, of course, the land is kept wet all the time. There are no leaves to fall, to enrich the soil. But still, the clay land is here, which can be made good. I have grown timothy and clover on the same ground four years, but it does not look so good this year as it did last; I think two years is long enough for hay to stand. I believe that the four-course rotation would be all right here as soon as a man gets sufficient land cleared; but it is hard to say which is the best at present, the country is settled so thinly; that is to say, there are so many owning land who are not living here, and making no improvements on their places. The holes are so small in the bush we do not get the right current of air blown through, so we are bothered quite a bit with summer frosts. Bigger clearings will improve the crops. The land requires plowing deep in the fall, and I believe it would be a good plan to ridge it up; I think it would give the water a better chance to drain away in the spring. I have not seen any land underdrained here yet, but I feel sure it would wonderfully improve it. I would very much like to underdrain five acres myself. I would thank anyone to tell me what it would cost. I have a ravine which would be a good outlet. I would only need a straight drain from one end to the other, outlet at both ends. After a heavy rain the land bakes together. My land is flat, and has been hard to clear. I think it cost me thirty dollars an acre before I could put a crop in, but there is high land only about a mile from me which I believe did not cost more than \$5.00 an acre to clean up pretty well. Much depends upon what kind of a burn one gets. So far as the timber is concerned, one does well if he makes good wages in getting it off; I have always managed to make wages. Some men have made quite a little more, and some have gone behind. Of course, the timber is very handy for our own use, but so far as timber is concerned round here, it will soon be a thing of the past. What we want now is the experimental farm, to show the easiest way to clean the land up, and what kind of crops to grow. I think they should take a farm right out in the bush, and make it into a farm, as it seems a difficult matter to get new land into right shape, and, besides, we are bothered with a great many insects, such as cutworms, grubs and flies; these seem to be a great pest. The gardens are bothered with these pests. I would like to see an experimental farm right in this district.

Dr. James Fletcher, Entomologist and Botanist, Experimental Farms, Ottawa, Ont., makes the following suggestions to all who are troubled with injurious insects attacking their crops:

1. Find out, by rearing some of the moths from the caterpillar or chrysalis form, exactly what kind of cutworm has done injury, then try to ascertain how much of its life-history is known,

and add to it from your own careful observations.

2. If any moths are reared, send these to Ottawa for identification.

3. Keep an accurate record of all the facts relating to an outbreak of injurious insects.

THE DAIRY.

All Sorts of Cheese.

Professor Melick, of the Kansas Agricultural College, enumerating the various articles made from milk, gives a list of the varieties of cheese as used, with their names, by which they are designated in the countries where made.

SOFT CHEESE.

Brick cheese.
Cottage cheese.
Romatour cheese.
Limburger cheese.
Brickbat cheese.
Slipcoat cheese.
Fromage blanc (white cheese).
Cream cheese.
Double cream cheese.
Coulommier cheese.
Fromage de Marseilles cheese.
Pon 1 Eveque cheese.
Void cheese.
Cantal cheese.
Livarot cheese.
Gerome cheese.
Mont d'Or cheese.
Brie cheese.
Camembert cheese.
Neuf-chatel cheese.
Brinsen cheese.
Mascarpone cheese.
Fromaggio fresco di Pecora cheese.
Bondon cheese.
Vaclievin cheese.
Bellelay cheese.

HARD CHEESE.

Pineapple cheese.
Cheddar cheese.
Stilton cheese.
Blue Dorset cheese.
Gex cheese.
Roquefort cheese.
Gruyere cheese.
Gorgonzola cheese.
Cacio cavalo cheese.
Emmenthaler cheese.
Schweitzer cheese.
Danish export cheese.
Schabzieger (Sap Sago).
Zieger cheese.
Edam cheese.
Gouda cheese.
Whey cheese.
Blunder cheese.
Old (Norwegian) cheese.

Cow-testing Associations.

The cows in the thirty-days' test in the St. Camille test, ending June 20, 1906, average about the same as those in the other Quebec Associations, but a speedy improvement could be made if some of the animals with low production were eliminated from the herds. Comparing herds Nos. 19 and 16, we find one averaging considerably less than half the other. The number of cows tested was 151; the average yield of milk, 582 pounds; the average test, 3.5; and the average yield of fat, 20.9 pounds. The highest individual milk yield was 990 pounds, the lowest 266 pounds; the highest butter-fat test 4.9, and the lowest 2.8.

In the table giving the result of the first test this season at Lotbiniere, Que., for the 30 days ending June 16th, we find that all herds except two have individual cows testing 4.0 fat or over. There is a striking contrast between the averages of herds Nos. 8 and 20, the one more than double the other. The number of cows tested was 145; the average yield of milk, 615 pounds; average test, 3.8; and the average yield of fat, 23.5 pounds. The highest individual yield of milk was 1,140 pounds, testing 4.4, and the lowest 305 pounds, testing 3.3. The highest individual test was 5.0, and the lowest 2.5. The highest average of a herd was 860 pounds milk, testing 4.5, and the lowest for a herd 398 pounds, testing 4.3. Several herds showed an average test of only 3.4 to 3.6.

The record at St. Armand, Que., for the fourth period of thirty days, ending June 23, shows a marked general improvement. In only one herd is there a cow testing under 3.0 per cent. fat, and there are several cows giving over 1,000 pounds milk for the thirty days. Attention is drawn to the good showing of herd No. 18, which, with 35 cows, averages 31.3 pounds of butter-fat. The number of cows tested was 355; the

average yield of milk, 661 pounds; average test, 3.9; average yield of fat, 26.2 pounds. Highest average for a herd, 869 pounds milk, testing 4.6; lowest average for a herd, 531 pounds, testing 3.9. Highest individual milk yield, 1,110 pounds, testing 5.4; lowest milk yield, 750, testing 6.6; lowest individual test, 2.6.

The St. Edwidge Association is the Quebec one with the largest number of members. The average herd test for this period of thirty days, ending June 10th, is good, only one testing as low as 3.5, and the largest herd (No. 1, with 28 cows) averaging 4.1. The number of cows tested was 288; the average yield of milk, 651 pounds; average test, 3.8; average yield of fat, 24.9 pounds. The highest average milk yield for a herd was 863 pounds, the lowest 474 pounds; highest herd test, 4.4, lowest 3.6; highest individual milk yield, 1,100 pounds, lowest, 515 pounds; highest individual test 6.2, lowest 2.7.

Butter Tests at the Royal Show.

In the butter test at the late Royal Show at Derby, for cows any breed or cross, over 900 lbs. live weight, the first prize and special prize of £20 went to Mr. R. Shelton's 10-year-old Short-horn cow, Lady Mainstay, whose milk yield in the one-day test, 37 days after calving, was 70 lbs. 6 ozs., and butter yield 3 lbs. 4 ozs. The second prize went to Dr. Watney's Jersey Cow, Red Maple, 8 years old, whose milk yield, 84 days after calving, was 52 lbs. 10 ozs., and butter yield 2 lbs., 9½ ozs. In the class for cows under 900 lbs. only Jerseys and one Guernsey competed, the first going to Major Tenant's Daisy (Jersey), whose milk yield was 36 lbs. 8 ozs., and butter 2 lbs. 8½ ozs.

POULTRY.

Hopper Feeding.

Hopper feeding is not an entirely new method of feeding poultry. The system as practiced to-day is not unlike, in some respects, at least, the methods in vogue years ago. At present there have not been enough experiments conducted to prove that the method is superior to other methods commonly practiced by poultrymen.

The great advantage of hopper-feeding lies in reducing the amount of labor. If it is practicable to feed birds once in two weeks or once a week, and have them do as well as by feeding three times daily, the sooner this method is adopted the better.

Hopper-feeding consists in feeding the grains, both whole and ground, from hoppers or troughs in fairly large quantities, or at least sufficient to feed the flock for some days. The hopper is constructed in such a manner that only a small portion of the supply is available constantly. There can be no doubt but that the method would be better adapted to the growing chickens than to fowls, as the older birds might become excessively fat.

If the plan can be worked satisfactorily it will give better results, or at least as good results on the farm as in the yards of the poultryman. The objections to the method are the lack of exercise of the birds so fed, and the waste of food. One would think, also, that the birds would become more or less sickened by the almost constant sight of the feed. We have, during the past season, been trying the plan to a limited extent, more particularly with growing stock. We have also a few ex-students who are feeding their chickens by this method. As yet we have not purchased or constructed a hopper which prevents all waste of food and at the same time allows all kinds of grain to feed freely without clogging. The rain sometimes wets the food at the bottom of the hopper, but this is not a very serious defect. The method also gives rats a splendid chance to get full meals at will. These defects in the construction of hoppers I have no doubt will soon be met, and even at the present are not very serious, as the fowls usually must be watered twice daily, and by running a stick through the ground grains, they feed freely for a time. Wheat and corn feed well out of almost any box when one or more sides are slanting. In time we hope to be able to give a plan of a hopper that will feed dry ground grains satisfactorily.

As to results up to date, I cannot see but that little chicks, especially hen-hatched chicks, do just as well with food constantly before them as by feeding three or more times daily. This applies only to the natural hatching season, or, say, April, May and June birds. Chicks hatched in winter, or raised indoors, have not done well with us when the feed was left constantly in front of them.

We also find that the chicks eat the dry ground grains freely; in fact you can see almost any hour during the day some chicks eating the dry, ground grains from the hopper, while others will be eating whole wheat, cracked corn or beef scrap.