

THE FARMER'S ADVOCATE
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THE DOMINION.

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**The Necessity of Thoroughly Working
Summer-fallows.**

I have not seen any of the work of the subsoil packer, consequently can hardly give an opinion on it. The idea seems all right. Am inclined to think, however, that there are methods we might adopt which might obviate the necessity of such an implement. A farmer with a good-sized piece of Brome sod to break up and backset each year would not be likely to bother himself much about it. That is still some time in the future, however, and present conditions are what we have to figure on.

I notice a marked change around me this season in summer fallowing, and which I am afraid is in the wrong direction. Noticing that their late-plowed fallows last year, which received no after-cultivation, did not drift this spring like early-plowed and well-worked ones, and that the crop on them, on that account, is the best this year, many have left plowing till now, July 23rd. Some will not be through for some time yet and will not touch them afterwards. Now, there are some conditions which should not be overlooked in this connection. Last year was a moist one, with lots of snow and rain in the fall before it froze up, but late fallowing has not always this advantage. Again, the season is two or three weeks earlier than usual, and many weeds have now shed their seeds, and as a consequence many are plowing down future trouble for themselves. Surely a dry fall this year, with no harrowing or cultivation to start these seeds, will mean a dirty crop next year.

From what little experimenting I have done I have about come to the conclusion that our best method at present is to plow our fallows early, keep them thoroughly clean afterwards, and then take two crops off before plowing again. My best crop this year, a pretty severe one to test the plan, too, is on such ground. I am well aware this is rather a dangerous doctrine to preach to the average farmer. Many have no idea of what keeping a fallow clean is, and very few have the right implements. It is almost impossible to do so without a cultivator with broad shares to cover all the ground. Even many of the best farmers think that it is enough to keep it clean till harvest, expecting that the frost will kill anything that sprouts after that, forgetting that some of our worst pests are perennials, or winter annuals, which need only make a very slight start in the fall to damage the crop very seriously next year.

Many object to putting so much work on a fallow, and say they can't afford to do it. While the fact is, there is the least work of any in the method. For example, allowing plowing to cost \$1.50 per acre, harrowing 10 cents, and cultivating 20, the fallow would cost for one plowing, two harrowings

and four cultivatings, which would be ample, \$2.50. This would give two crops without further plowing, while by the other method the two plowings alone would cost \$3.00; while using the subsoil packer, as is advocated, would cost still more, and I doubt very much if the crop by the latter method would equal the former.

Fallow worked as I have indicated has no need for a packer. JAMES FLEMING.
Morton Municipality, Manitoba.

Milk Test at the Winnipeg Industrial.

The milk test at the Winnipeg Industrial is an event of annual interest to the breeders of the special purpose dairy breeds. Cash prizes of \$50 each by the Industrial Association and the Canadian Holstein Association are hung up, the first prize being \$50. Seven cows were entered this year—four Holsteins and three Jerseys—and the rivalry was keen. The test was conducted under the supervision of Dairy Superintendent C. A. Murray. In justice to Glennie's record-making Holstein, Daisy Teake's Queen, it is but fair to explain that for the three months she had been in milk prior to the test she had been milked three times a day, and her owner had been given to believe that this might be continued through the test, but the rules were specific that the milking be done twice a day at set hours, and the other competitors declining to allow any departure from the rules, Daisy Teake had either to submit or stay out. Under these conditions, it will be seen she did wonderfully well. Below is a tabulated statement of the standing of the competing cows:

Name of Owner	Address	Name of Cow	Breed	Age	Days in Milk	Lbs. of Milk	Lbs. of Fat	Lbs. of Solids not Fat	Fat, 20 points for each pound.	Solids not fat, 1 point for each pound.	Days in milk, 1 point for every 10 days after first 30 days; limit, 10 points.	Total points scored.
1. J. Herrhoff	Souris	Tempest IV	Holstein	7	68	1031	3.63	6.11	72.00	36.56	3.80	112.96
2. Jas. Glennie	Langhurn	Daisy Teake's Queen	Holstein	9	88	115	3.98	6.71	67.60	38.84	3.80	112.21
3. W. V. Edwards	Souris	Yankee Rosebud	Jersey	5	76	781	3.13	7.67	68.00	28.28	1.00	101.18
4. J. Webster	Parage in Prairie	Parage	Jersey	3	28	701	3.30	6.40	66.00	25.00	...	91.50
5. Jas. Glennie	Langhurn	Stable Teake's Beauty	Holstein	3	130	71	2.25	6.10	15.00	21.40	10.00	76.40
6. W. V. Edwards	Souris	Baby Malone	Jersey	3	36	61	2.68	5.14	33.60	21.76	2.00	72.96
7. Jas. Glennie	Langhurn	Ploesie Teake	Holstein	3	117	621	1.80	5.16	37.80	20.64	10.00	68.11

It Pays to Treat Stock Kindly.

I have known a great many free-going horses of nervous temperament kept in a continual worry by the rough words and ways of their drivers. They would fret and sweat and grow poor doing the work they would thrive while doing under mild-mannered, considerate control. I have seen a great many heifers and cows in a tremor of excitement while some ignorant or brutal fellow was milking them. I never knew them to be made quiet and willing to be milked by scolding, kicking or pounding; but they might have been made docile by early and gentle handling. It is safe to say that rough usage of cows often occasions the loss of half of their milk. They refuse to "give down,"

and that dries them up very rapidly. Boys, dogs and heedless men worry them when driving from the field. Irregular feeding and milking, and everything out of the regular order, disturbs and therefore damages them. Change of residence frequently causes cows to shrink their milk for a year. A noted Holstein butter cow, taken to the fair to test her buttermaking qualities, made only a pound of butter from 4 lbs. of milk, while in the quiet of her home she made a pound of butter from 21 lbs. 3 ozs. of milk. Likely she was extra nervous; but all cows have nerves enough to require that their treatment be gentle and regular.—Hugh T. Brooks in *Our Dumb Animals*.

Some Lessons from a Dry Season.

BY S. A. BEDFORD, EXPERIMENTAL FARM, BRANDON.

Even an unfavorable year may be made profitable if we only take to heart and apply the lessons to be learned from the experience of a season similar to this. With almost a total absence of rain during the three spring months, crops in any place but Manitoba would have proved an utter failure. It is quite noticeable, however, throughout the Province, that some farmers have good prospects for an average crop even under the present trying conditions. This points to the fact that the yield depends largely on the system of cultivation practiced. In nearly all parts of the Province the grain has failed to a greater or less extent to germinate on backsetting. This is unfortunate, not only because of the reduced yield, but also from the fact that weeds have taken the place of grain, and this new land is liable to become infested from the very first. In some exceptional cases backsetting is promising, and the reason is not difficult to find. For the best results, breaking should be done early in the season, say between May and June. The grass is then full of sap, and the sod decays quickly and thoroughly. If broken late the grass is dry, and instead of the sod rotting, it simply dries out and the undecayed matter is a source of injury in future years. The backsetting should be done before harvest. If an inch or two of additional soil is thrown up it is a great advantage, as it provides a seed-bed. If the land is thoroughly disked before winter, the seed-bed is perfect and a good crop can be reckoned on, even in a dry year. Where the breaking is done late and the backsetting shallow, there is very little soil to form a seed-bed, and germination is necessarily slow, and the weeds occupy the land instead of the grain. Deep sowing has also proved to be of great benefit this year. Owing to the almost entire absence of snow last winter, the soil was very dry and loose, and germination only took place in the damp soil. With the soil warm and dry, as it was this spring, it is safe to plant deep. Some of the fields on this farm which were intentionally sown shallow failed to germinate altogether until the June rains.

In previous years I have frequently called attention to the great advantage of summer-fallowing in a climate like ours with so little rainfall. The difficulty has been intensified this year. Where fallows were plowed early last fall, harrowed at once to retain the moisture, and then cultivated on the surface during the rest of the season, it proved so full of moisture that the seed germinated at once and promises a fair return, while fallows plowed late, say the end of July or August, after the weeds had drawn all the moisture out of the soil, the soil was very little better than unfallowed land. The principal advantage in summer-fallowing in this climate is to collect and retain the moisture for the coming crop. This can only be accomplished by early plowing and frequent surface cultivation, so as to form a dust blanket to retard evaporation.

In the early days scrub land was very much discounted—in fact, few homesteaders would take scrub land at all—but of late years there has been a change in this direction. It is found that this class of soil, if properly cultivated, retains the moisture even better than prairie land, and very large areas have been broken with scrub plows this season, particularly in Southern Manitoba.

A great deal of complaint is made this year regarding the weeds on intended summer-fallow not sprouting, the spring and early summer being too dry to start germination of the weed seeds on the surface. This was avoided on the Experimental Farm by disking in the fall of the year. This covered the weed seeds sufficiently to start germination early in the spring, and enabled the summer-fallow to be done during June.

It is quite interesting to note the different grasses in a season like the present. With us timothy has made no growth whatever, even on the more moist soils; it is not high enough to be worth cutting. Western rye grass has been more satisfactory, while new Brome grass on moist land has given us a decent yield of from one to two tons of excellent hay. Brome grass two and three years old has, however, failed to give any hay whatever, but some of the fields have a fair amount of pasture. The advantage of growing oat-sheaves, millets, etc., in a year like this is very noticeable. Late-sown oats promise a fair crop of fodder. The same may be said of millets, and corn will give an average return of from fifteen to twenty tons per acre. We find, however, that all three of these plants require the land to be well prepared in a year like the present, for unless the soil is thoroughly pulverized by harrowing, etc., germination is uneven and growth slow. In addition to this, corn requires frequent scuffling.