

that will abolish the summer-fallow, but it can be done, is being done now, and it pays. Whatever plan we adopt and whatever system we follow, be it remembered that posterity has a claim to this country, so that we have absolutely no right to impoverish our farm, leaving it dirty and useless for the rising generations.

YOUNG MANITOBA FARMER.

"Sabbath" System on the Land

EDITOR FARMER'S ADVOCATE :

Not being satisfied with the results of summer-fallowing I started off on an inspection tour for my own benefit. I visited and examined in detail over one hundred pieces of fallow, ranging in size from ten acres to two hundred acres. They had been plowed some time after seeding and disced and harrowed. Fifty of the fallows were poorly plowed and very little better disced and harrowed. The balance were better plowed and cultivated, shading down to a very few that were well done. Fifty of them had a fine stand of every weed in the catalogue, from a Canada thistle down to a creeping wheat weed. These crops had matured and ripened hundreds—yes, thousands—of bushels of weed seeds. The fifty pieces would aggregate two thousands acres. No effort whatever had been made to destroy this vast amount of seed. It was simply returned to the ground. Thirty of the remaining plots had been a little more carefully looked after, yet there was more seed matured and returned to the soil than was destroyed by the fallowing. Ten of the remaining fallows had received a later attention, and for all that had grown a lot of weeds that could not help but mature as much seed as had been destroyed by the time frost came. Five of the ten lots had been heavily covered with weeds, but cattle had been herded thereon before the seed matured in any perceptible quantities. Three plots had been so constantly cultivated that weeds could not be observed at a distance. No seed had matured, but the owner complained that the weeds had been destroyed at the expense of a poor crop the following year, as the straw would be so heavy that it would lodge and not properly fill with grain. The two remaining lots are really under experiment. They were plowed the first time when the weeds, grass and trash had made as large a growth as possible without danger of ripening seed. Chains were put on the plows, and the whole well plowed, and the weeds well covered. The fifty-acre lot had been fed off by cattle, and had not been touched with disc or harrow. The ten-acre lot was not fed off, but allowed to grow a second crop of green and again chain-plowed, but not touched with any implement except the plow. When it froze up not a living weed could be seen. The soil of the last two lots seems to be well filled with plant moisture.

Now, the question is: Is the above system at all universal in Northwest Canada, or am I in a shiftless summer-fallowing district? Is summer-fallowing of any value to farmers as a whole? Is it a system of either replenishing the soil or of keeping the land at all clear of weeds? On the above block of fallows it would be putting the matter very mildly in declaring that summer-fallowing thus carried on is worse than useless, outside of the fact that some land is partly ready for the seed drill the following spring. I would not like to disparage summer-fallowing, but unless it can be carried on on a very different system from what is in use at the present time it would be better for the country that it be abandoned.

Summer-fallowing has been carried on for many generations in many countries, but it has not been continuously popular or continuously practiced. It becomes a fad or rage for a few years and then almost vanishes. It is now a well known fact that it does not really enrich the soil. It is a well known fact also that a field kept naked during a season dissipates, destroys almost the whole bacterial life so necessary to the breaking down of any material containing plant food, fertilizers, and committing it to the ground for feeding plants.

Is there not a better system of accomplishing our objects than fallowing? There must be. Not that there are no conditions and circumstances in which summer-fallowing is of immense value (dry farming, for instance), but as a universal practice it seems to be out of place.

Of all the systems of renewing the soil and of keeping up its vitality yet discovered and practiced by men, the system that may be called the "soil Sabbath," as practiced by the Jews for hundreds of years, looks best. Were a return to that old system made I am satisfied that our land would never exhaust and that weeds would be more easily kept in control. Crop a field for six years to our heart's desire, but give it an *absolute rest the seventh year*. Return the whole of the seventh crop to the soil; do not allow it to be plowed, cultivated, or fed off by animals; if cut to prevent weed seeds maturing leave all on the ground. Bacterial life would multiply, and the work done in preparing the soil to grow its heaviest crop that year, would so enrich and vitalize the land that it would yield up bountifully for all time to come—it would grow fat. I do not know of any other system, on a large scale, that will accomplish what we desire to do by fallowing; and it is admitted that fallowing is not an economic method of fulfilling our purposes, except it be a return to the above, and well tried system, the soil Sabbath.

Sask.

J. E. FRITH.

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When the crop is up well try a light harrow on at least part of a field to kill weeds and form a surface mulch to conserve moisture.

Alfalfa Growing Competition

The following practical hints for growers of alfalfa have been sent out by the Saskatchewan department of agriculture:

As the plot to be entered in the provincial competition for cash prizes, totalling \$6,300, must consist of at least 10 acres and must be sown not later than 1912, persons who intend to take part in the contest must soon begin their preparations. It would be well to begin with a small plot this year and the experience thus gained will be invaluable at a later date when the competition is on in earnest. The year 1912 will soon be here, so farmers should get busy and be among the 1,000 progressive ones who will take up this competition.

While alfalfa is adaptable to a variety of conditions and is found in all countries where agriculture is practiced it has certain well defined characteristics which must be kept in mind if the greatest degree of success in growing it is to be attained. Alfalfa thrives best on a well drained loamy soil with a porous subsoil, as it is a deep-rooted plant and sends a large tap root to a depth of five to fifteen feet. While it utilizes a large quantity of water during its growth, it is essentially a drouth-resistant plant and kills out when sown in fields that are subject to flooding. In land that is not too heavy but inclined to be sandy its root system is better able to penetrate and draw the required supply of soluble plant food.

The soil should be well cultivated and firm. Alfalfa thrives when grown on land which was planted in the previous year with potatoes or some other hoed crop. For the same reason a piece of summer fallowed land is very suitable for alfalfa as, if it has been properly and intelligently worked, the growth of weeds will have been checked, moisture will have been conserved, the soil will be firm and in a good state of tilth so that the tiny rootlets can obtain a foothold and be able to develop for the support of the plant at a later date. This crop, however, should never be sown on a summer fallow that is subject to drifting, as the seed may be uncovered or blown away. If other suitable land is not available, a piece of stubble should be prepared early in the spring. The preparation of spring plowed land involves early plowing to a depth of about five inches, followed at once by harrowing and packing or rolling. Plowing should be done as early as possible in May and seeding about the end of May.

Weeds are among the worst enemies of alfalfa and are a serious menace to the young crop, but if the land is well worked the weed seeds within germinating distance of the surface will have grown and been killed by frequent cultivation, and the young plants will thus have a chance of developing without the competition of weeds. The cultivation necessary to secure these re-



HOME OF WM. SHEPHERD—TREES AND SHRUBS BEAUTIFY THE SURROUNDINGS.

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