Field Crops

CLEANING A WEEDY FIELD

I am a farmer in the southern part of Saskatchewan and of course have all the common weeds to contend with and it seems as if there was always a few extra ones thrown in besides. One piece of land which had been broken about 2 years, up to the year 1912, was badly infested with weeds. When I came to this farm in 1904, this field was supposed to be summerfallowed, but I afterwards found out that it had been burnt off, disced and harrowed down. I sowed it to wheat and it yielded five and a half bushels per acre of No. 2 wheat, and bushels of every conceivable kind of weed seeds. Well, that didn't pay, and as I was green as a western farmer, I did not know just what to do with it.

In 1905 I spring plowed the land and sowed to wheat again and got eight and a half bushels per acre of No. 1 wheat, also, another crop of weeds. During the summer, the weed inspector came along and ordered us to either cut out the worst patches of wild oats, stinkweed and blue blurr with the mower or to go through the field with scythes and just lop off the weeds with the point of the sythe. Well, all hands and the cook turned out and we went over half the field in that manner, but of no avail, as the weeds were too far matured to kill the seed which had already formed on some. We plowed, cultivated and cropped that field off and on until in the opening of 1912, I got a couple of English lads, one 19 and the other 20 years of age. Well, those boys did the trick. When it came time to plow this weedy field, I told them just what was the matter with it, and that I wanted every weed turned under the furrow, ridges clean and straight and furrows well cleaned out.

Well, they entered right into the spirit of the job, and did it well. One of my boys kept the harrowing done behind them when he got home after school and on Saturdays. They plowed it five inches deep. There was 85 acres and they started plowing about May 28. The land was light loam, with some clay and some sand, to say nothing of the stones. After plowing and just as soon as the weeds began to show above ground they went over the field with two 9-tooth duck foot cultivators.

There were eight crops of weeds and, of course, eight courses of cultivating. It kept me busy sharpening teeth and straightening foot arms, as those cultivators turned up weeds, stones and subsoil. We had several good rain falls which made the weeds sprout quickly and the land packed pretty solid.

Next spring, 1914, that land was so solid that the horses walked on it like ordinary prairie sod. I sowed No. 1 Red Fife wheat, one bushel and one peck per acre, two inches deep with the single disc drill, which left a pretty good seed bed. It yielded 26 bushels per acre that fall, but best of all, there were no weeds to be seen. Wild oats, pigweed, tansey mustard, sow thistle, and Canada thistle, also blueburr had been completely destroyed and are unto this day. The stinkweed came again next year and has continued to grow and spread but the wheat yield does not seem to diminish, even though the stinkweed does come. I believe it can be destroyed, but since then I could not seem to get time to give it special attention.—Prairie Farmer, Sask.

THE FARM INVENTORY

An inventory is an itemized list of all property connected with the farm business, with its value. It will of course vary from year to year so it is necessary to take an inventory every year. The amount invested in different parts of the business will vary as stock and crops are being raised and sold at various times. An inventory is worth many times the effort it requires since it enables one to know the amount he has invested in livestock, buildings, machinery, feed, land, etc., year after year.

The time to take the inventory is largely a matter of choice but by all means it should be taken some time between January 1 and May 1. A tenant may want to take his at the time he is changing farms, which would be about March 1. Most of the feed has been fed and the marketable livestock sold by March so this would doubtless be as good a time as any and work is usually slack at this time of the year.

CONSERVE SPRING MOISTURE

In most districts throughout the West the supply of moisture in the soil this spring is limited. The rainfall last year was low and the snowfall this winter light. If the season turns out to be a good one with plenty of seasonal rains this will not be a serious matter. It is best, however, to prepare for a dry season. The first precaution that can be taken is to prevent as far as possible the loss of moisture already in the ground.

As soon as that thin crust begins to form on the surface of the soil it is an indication that soil water is being wasted. It should be immediately broken up with the cultivator, disc or drag harrow. The implement to use will depend on the nature of the soil but the choice can be left to the judgment of the experienced farmer. The operation should in no case be commenced while the soil is still wet on the surface. Neither should it be delayed after the soil is dry enough to work. Especially the land that will be sown to oats and barley which may lay exposed to the sun and wind for another month or more, should be loosened on top to form a mulch.

SMUT TREATMENT

Almost every season we see some samples of wheat, oats and barley infected with smut, some so bad as to be unsaleable. The owners have different excuses. Some treat their wheat only, others every second year, many take a chance on it being a certain amount of trouble. An occasional farmer will doubt the efficacy of either bluestone or formalin. One farmer recently remarked to me, "It's all in the season." My experience shows that it is well to take the advice of our experimental farms and I treat my seed yearly whether smut appears on not. I have had satisfaction with both bluestone and formalin. I now use the latter for all grains and seldom see a smutty head in my crop. I use the ordinary mixture, one pound formalin to 40 gallons of water and treat the grain with an automatic machine which does perfect work and saves two-thirds of the hardest work. Care is taken that all the grain is moistened, and in the case of oats and barley the solution needs to be applied in greater quantity, 40 gallons doing about 45 bushel of wheat or 30 bushels of oats or barley. Many people have poor results with oats and barley. If the grain is well moistened and left in a pile closely covered with sacks or blankets for a few hours the formalin treatment is always successful.

In the case of the seed being badly infected, a way that permits of no chance of failure or further infection is to immerse the seed from two to four minutes in the solution, using two half barrels, one having a plug hole to drain off the used solution. Sacks should also be immersed or grain may become re-infected by contact with them. We sometimes hear of germination in oats and barley spoiled by formalin. This may happen if the seed is of low vitality or the solution too strong. In such cases it is better to use 50 gallons of water to one pound of formalin and wet the grain twice at an interval of two hours. It is equally important that such grain should not be let go untreated, because a seed low in vitality is easily affected by disease in the early stages of growth.

I have seen farmers sow their breaking with untreated seed and lose 15 cents a bushel the wheat was so smutty. New land and good seed are no safeguard against smut as some may imagine. Many sources of infection are possible that we do not consider, and