

90 on the first of June, and 94 July, 1909. North Dakota has been damaged most by heat and drought in all crops, and 1910 will go down in that state as one of the most serious drought years on record.

Save The Moisture

Save the moisture and increase the crop. Enough is now known of the principles of soil moisture conservation that each one can be in possession of the secret. Then again there is nothing difficult or mysterious about it. It is common knowledge that anything wet dries on being exposed to the air. The housewife makes use of this principle in hanging out the clothes to dry. It is as well known that oil moves up through a wick, and that if the wick is cut the oil can not pass over the gap. Water will act the same as the oil and it moves through the soil in the same way that it does through the wick. Keep in mind that a wet soil exposed to the air will give up its moisture to the air; that water moves from the wetter portions to the drier soil if the soil is compacted, which condition compares to the lamp wick; a loose soil compares to the lamp wick that is cut, and so the moisture can not move through it.

The plant needs the moisture in the furrow slice, as that is where it does most of its feeding. Notice the plant growing in the dead furrow. It has its roots in the subsoil. The moisture conditions should be better there than in the surface soil, yet the plant does not do well, and due to a lack of available plant food. This means that a deep furrow slice will offer more feeding room for the roots than a shallow one. The furrow slice should be packed firm against the bottom, so as to furnish the means for the moisture to pass from the subsoil to the surface soil as the plant needs it. To keep the moisture from passing to the surface and evaporating, the surface soil should be kept loose, a condition known as the soil mulch.

Another reason for the deep plowing is to furnish a large reservoir to take up the rainfall readily. Shallow plowing can not take in rain as fast or as much of it as deep plowing, so the result is more run off.

How are these conditions to be met? Deep plowing has been mentioned. The proof of its value is brought out by the fact that it produces larger yields.

The soil mulch can be produced by the common harrow. Crops are harrowed after they are up, grain can be harrowed till five or six inches high, and some are trying to harrow till it heads out and with good results. The harrowing of grain or corn should only be done on bright, sunny days and not before the sun has been up three or four hours. The plant when wet and in the morning and on cloudy days is more crisp and breaks up easier. The mulch should be made as soon as the land is plowed. If it is not, considerable evaporation will take place at once. In plowing, do not leave the field before harrowing what was plowed that half day. A plow attachment is now on the market that loosens up the surface at the same time the plowing is done. Another way is to hitch an extra horse to a section of harrow when plowing; this does it all at one operation too. In the case of spring plowing it may be necessary to pack it so as to get the bottom of furrow slice compact. The subsurface packer is good for this purpose, though going over with the harrow two or three times packs pretty good and is coming more into favor. Fall plowing should be harrowed as soon as possible in the spring, as moisture will escape fast from the surface that has been compacted during the winter.

Humus adds greatly to the moisture-holding capacity of the soil, acting like a sponge or blotting paper. The plowing under of green crops or weeds when green adds humus. Applying manure is one of the best ways of adding it.

Weeds are large users of soil moisture. They are at work all the time. As soon as a crop is taken off the weeds go right on pumping out moisture; so that a grain field that would plow nicely at harvest will be too dry to plow well in

a month or two and all due to the weeds. Weeds growing in the grain also rob the grain of moisture and the result is so much less grain. One way is to disc as soon as the crop is harvested. It is necessary to have the land free from weeds and this can be done if a crop of corn and a crop of clover is grown every four or five years. Manuring will also help in that it will make the crops grow stronger and so be more capable of smothering weeds, and it also holds moisture.

The best way to insure crop failure is, grow grain year after year, to let the farm get weedy, let the weeds pump out moisture both when crop is growing and after it is cut, plow shallow, and not to harrow right after plowing and if it is fall plowing not to harrow early in spring. To make it still more effective do not apply any manure or plow under any green crops or rotate the crops. The drier the season the smaller the crop.

Now is the time to think of saving soil moisture, to think of insuring a crop even though the season be dry. So plan to kill out weeds, if the field is weedy; disc as soon as the crop comes off; plow deep and follow plow with harrow; harrow early in spring; apply manure; plow under green crops and rotate the crops. There is nothing difficult about this, and it will double the crops, and in a dry season make a difference between a crop and no crop.—W. C. PALMER, North Dakota Agricultural College.

Give People More Power

EDITOR FARMER'S ADVOCATE:

I consider the farmer's place in politics should be commensurate with the position he holds in the commerce of the country. He is not only the largest producer of wealth, but also the greatest consumer of manufactured products. When agriculture is prosperous all other branches of trade flourish. When crops fail, as they did in 1907, every other industry in the country is crippled. The bad effects of that season was felt from tide water, to tide water. For the want of a market for lumber on the prairies a number of sawmills in British Columbia were closed down. The banks gave it out that the stringency in the money market was due to a scarcity of ready money; but the actual shortage, in Saskatchewan at least, was due to the partial failure of the money-making crops. If such be the potency of agriculture, how vastly important it is that it should at all times receive the very best consideration, at the hands of our legislators.

Do I think that our representatives in parliament should all be farmers? Well, no, not entirely. But a very much larger proportion than obtains at the present time should be, unless the farmer is content to remain a "hewer of wood and a drawer of water" for the rest of the population. The average farmer knows pretty well the sort of legislation that is needed in the interests of agriculture; but when it comes to choosing a candidate to put his views into execution, he generally makes a mess of it. This choice of a candidate is more often influenced by some silly sentiment, than by the much more important interests of agriculture.

Having treated the first query as briefly as possible I come to the second: How can the farmer best use his influence for the good of the agriculturist in particular, and the people in general? Some advocate doing away with the present political parties, or rather creating a new party composed entirely of farmers, and to be conducted solely in the farmers' interests. With that view I take issue. I think the most of us have our party leanings, and I think it is best so; but think we have placed too much power in the hands of our representatives. We all know that there was a time, and not so very long since, when we did not have representative government in Canada, when our forebears wrung from the hands of an unwilling oligarchy the great boon of representative government. While I do not for one moment wish to detract one "jot or tittle" from the value of that inestimable privilege, I think in many instances we have merely exchanged oligarchies. I believe the truth is beginning to dawn upon a good many minds that wealth is no, the only thing that is badly divid d.

I think power is equally so. The people should through the initiative and referendum, reclaim part of the power that our forefathers unwittingly surrendered to the representatives, and thereby have a certain amount of control in parliament over their representatives. Under the initiative the electors are empowered to initiate and bring before parliament any measure they deem advisable for the welfare of the country.

The referendum will allow the electors to kill any vicious legislation. The people, by petition, can demand that a referendum be taken on any bill before it becomes law. By this proceeding the voice of the people is secured, and if they say the bill must not become law, it never goes with force. I know of no other plan whereby the farmer can best use his influence for the good of agriculture than through the present parties, with such aid as the introduction of the initiative and referendum would afford.

Sask.

A. W. McCURE.

Form a Farmers' Party

EDITOR FARMER'S ADVOCATE:

To my mind the question of politics is one of the most vital to the farmer today, and I feel sure it will call forth the attention which its importance demands within the next few years. The present system is not satisfactory. We have our organizations and conventions; we pass resolutions and send delegates, with the result that sometimes after years of agitation we are given what we demand—but just as often it ends in promises. But why should we have to beg of anyone what rightfully belongs to us—particularly when we are in the majority? Whatever measure or law will benefit me must necessarily benefit my neighbor; then why should we destroy each other's influence by him voting for one party, while I vote for the other? In most electoral districts the farmers are greatly in the majority; then why not the farmers vote for and elect their own independent farmers' candidate?

Now, I am not advocating anything particularly original; in British politics there are several parties, and anyone who reads British politics at all knows what a powerful factor the Irish party is. Then why should we not have a third party? Probably someone will say: "Oh, the farmers will never agree on politics." But won't they? Our organizations are new, but they are flourishing, and these together with our agricultural papers offer convenient means for education along political lines. And I believe we are ready for the change. Probably some of the older men will still vote for their old party, even if the candidate is of the "yellow dog" variety, but we who are younger are not so prejudiced, and many will admit that both parties are equally "rotten." And though interest in politics is almost dead, I believe it would quickly revive if we knew we were working for our own man and for our own interests.

Probably someone will ask: "Why not elect farmers as the parties stand now?" But why should farmers whose interests are identical sit on opposite sides? And somehow farmers when they do go down seem to entirely lose their identity and simply vote as the whips tell them. Electing independent farmers' candidates would I believe, be the best means of helping the farmer as well as the country at large. Business of all kinds is so dependent upon the farmer that what helps him must help everyone else. The farmers' party would lessen the amount of graft a great deal. At the present time when the opposition demands an inquiry into some dishonest business it simply goes to a division, and the government followers, like well trained puppies, vote it down. The farmers' party, together with the opposition, could force the inquiry, and the government would have to keep "clean." The farmers' party could demand important concessions in return for their support, and if in time they became strong enough to assume the government, I would like to know, Mr. Editor, where could be found more common sense, sound judgment and honesty—even if a little less "hot air"—than among farmers.

Sask.

CHAS. N. LINTOTT.