

Agricultural Affairs

CULTIVATION OF WHEAT.

The farmers in the Piedmont and mountainous sections are familiar with the ordinary methods of wheat culture as practiced in the State. Usually, the crop follows wheat or peas which have grown on a wheat or other small grain stubble, or is sown on corn stubble after the crop has been removed. In the eastern part of the State cotton is sometimes all picked out in time to allow wheat to follow this crop. More generally wheat follows corn. Where level cultivation of the corn has been practiced, and where the land was well prepared for the corn crop, the wheat may be put in with a drill after the corn has been removed, by giving the land a thorough disking beforehand, going over it a sufficient number of times to make a good seed-bed two to four inches deep. Many farmers, however, prefer to give the land a light plowing before putting in the crop, even where corn has been grown. This latter practice is likely the best where there is much weeds and grass on the land, which should be cut with a disk harrow two or more times before plowing; but the plowing should be shallow. The disk harrow should be run over the land after it is plowed so as to further fine the surface, cut up the vegetation, and aid it in settling and becoming compact. If land is still somewhat loose a heavy roller should be run over the surface just before seeding. This will still further compact the surface and lift the moisture into the upper stratum of the soil where the wheat plants can utilize it. When we recall that every pound of dry matter in wheat requires over 300 pounds of water for its production, the necessity for so preparing the land that the greatest amount of moisture may be rendered available to the plant will become apparent. With a view to the conservation of moisture, the land intended for corn which precedes a crop of wheat should be well and deeply broken in the fall or winter and thoroughly disked in the spring before planting the corn. Where possible, a crop of green manure for soil improvement should occupy the land during the winter and be turned under in the spring to precede the crop of corn. Where practicable the cultivation of the corn should be level, as this is best, as a rule, for corn, and leaves the land in the best shape for preparation for wheat or other small grain.

Where wheat is to follow peas, wheat or other crops, the same principle as to seed-bed should be kept fairly in mind. Not infrequently wheat follows wheat or other small grain where weeds and grass have grown to a greater or less height during the interval between the harvest of the previous crop and seeding time. Where this growth is considerable it is the best practice to cut it a number of times with a sharp disk harrow, then plow it under shallow and disk once more with the disk set at a slight angle. Where the growth of weeds and grass is not very large, they may be turned under and disked once or twice after plowing, but in both cases the plowing should be done at least a month before seeding time, so as to allow the ground to settle. Disk and smoothing harrows should be used liberally in cutting up the soil to aid it in settling and becoming firm. A heavy roller may be run over the freshly plowed land soon after breaking to break the clods and lumps and compact the soil. It is well to follow the roller with a smoothing harrow, especially if seed-

ing time is near at hand, so as to form a mulch to prevent the evaporation of water.

On account of our dry falls, the wheat should be put in rather deeply, and the drill rows left open or undragged, in order to prevent winter killing by the heaving of the soil and be a protection from cold winds. One bushel is a fair seeding, though some use as much as one and one-half bushels with good results. The seed should be put in sufficiently early to allow the plants to attain sufficient size and hold on the soil before cold weather comes, to reduce, as far as possible, the bad effects of freezing and soil heaving. The best time will vary in different sections and in different seasons. Where the Hessian fly is troublesome it is likely best to delay seeding until after a good frost, but where it is not troublesome seeding may be made prior to this time to good advantage.

This bulletin contains all kinds of meat for the farmer who raises small grain. If it isn't on your reading table, write to the State Department for it.

SAVING MANURE.

Bulletin 143 Texas Agricultural Experiment Station — "Observations on European Farming."

No small part in the system for maintaining and increasing the fertility of European soils is played by the careful saving and application of manure. Not only are the solid and liquid excreta of the animals carefully conserved, but all farm waste which may contain fertility or which may add organic matter to the soil goes into the manure pile if it cannot be better utilized. Forest leaves, ashes, bones, etc., are all made useful.

The value of liquid manure is well recognized in Europe, but it is not so well recognized in this country. As a matter of fact, over half of the fertilizing value of the feed goes into the liquid excrement. In Bulletin 104 of the Texas Experiment Station it was shown that when a ration of cotton seed meal and hulls alone or with kafir, milo or molasses, was fed, about 42 per cent of the fertilizing value of the feed goes into the solid excrement. Thus, if a ton of cottonseed meal is fed, having a fertilizer valuation of \$30,000, the portion of its fertility which goes into the solid excrement has a valuation of \$12.60, and that which goes into the urine has a valuation of \$15.90. Both these values are often lost in American feeders, but in European feeders, cottonseed meal has a value of about \$20 per ton more than to such American feeders.

In Europe, it is considered that a part of the profit of keeping animals lies in the manure; sometimes, all the profit. If the animal sells for enough to pay cost of feed (care, and maintenance, then the manure makes the profit. It is considered as exceedingly poor farming for one not to save manure, both solid and liquid, as carefully as possible.

All the cattle sheds or barns which we saw had stone or concrete floors. The barnyard or shed in which the manure is stored, also had stone pavements. The liquid manure was either absorbed by peat, or else run through stone or concrete troughs into a stone tank. If run in a tank, at intervals during the year, the liquid manure is pumped into tank carts, and distributed, generally on grass land. The leaching from the manure piles run into the liquid manure cistern.

GRADUATED LAND TAX.

The evils of tenant-farming which afflict all parts of America no less than the southern States, must be corrected if ever the farmer is to arrive at his true possibilities as a citizen and an independent producer. Back of the prevalence of tenancy is land-monopoly, perpetuated by a host of what may be called "land-hogs," content to either keep their acres in "cold storage" or rent them out on usurious terms to a few indifferent tenants who often wreck the soil by their antiquated or indifferent agricultural methods.

It is the easiest matter in the world to overestimate the amount of available land in this country and to persuade one's self that there is plenty of acres to go around when surveying the impressive showing made by the federal census-bureau and the federal department of agriculture. As a matter of fact, the quantity of land in this country susceptible to profitable cultivation is already well established. To a large extent, it is monopolized by a limited few and the small farmer who could and would develop and safeguard it is unable to buy or lease it save on the most exorbitant terms.

I understand, of course, that there is a small element of farmers as of every other class, so lacking in management that if they were given farms on golden platters, they would speedily get rid of or be "done" out of them. But I am speaking now of the vast majority who would, if given the chance, profit by the advantage of land-owning upon reasonable terms.

I have studied the situation carefully in this country, and with especial reference to the southern States. At first glance, it may appear a radical suggestion, but I am really becoming convinced that there is but one sufficient remedy for this condition, and that is a graduated land tax.

We all know the theory of the income tax. It imposes a levy on all incomes above a certain figure—say, for purposes of illustration, all incomes over \$5,000 a year. From a minimum of 1 per cent a year on incomes over \$5,000 a year, the tax increases as the income increases, until those with the largest incomes pay the largest tax—a method against the justice of which no thinking man can raise complaint.

Now, assume—and the amount is only provisional—that we allowed each 100 acres of land to go untaxed, save by the ordinary processes of taxation essential to county and State maintenance. The man who owned more than 100 acres would pay a small tax per acre over and above that amount. His tax would increase as his acreage increased. When, finally, the procedure reached the man who is deliberately holding hundreds and thousands of acres either uselessly or rented out to improvident tenants, the tax would be so high that he would be compelled to sell, or rent in such manner as to lower the impost on himself.

I do not believe in confiscation. That is farthest from my thoughts. I would not deprive any man, however, derelict in his duties to his fellow men, of the just results of his labor or foresight. But I do balk at the spectacle of the idle parasite on the body-politic, keeping indefinitely huge tracts of land which might furnish homes and subsistence to thousands of honest, intelligent, and hard-working Americans. It is this class who would be reached by a graduated land-tax. I say: "land-tax." As a matter of strict accuracy, it is not so much a tax on land as it is a tax on avarice and selfishness. For, in the overwhelming majority of these instances, this individual is holding his acres for a big rise in value, that

he may profit by the activities of countless others in which he has no part and for which he has no sympathy.

The students of economics call this the "unearned increment." In other words, men in country and city who own large or small tracts of land are made rich by the enhancement in the value of that land, not through their own energy and public-spirit, but because of the collective and combined activities of thousands who may daily pass a street corner and increase its value; or by hundreds who may locate near a vacant country principality, and thereby make it valuable.

It should be understood that the man with the minimum number of acres such as 100—would not be immune from ordinary State and county taxes. He would bare his share of the burden of government. But the super-tax, would come on the individual who segregates huge quantities of land, letting them go to waste or be cultivated insufficiently by some of the most thriftless elements in the community.

I commend the idea to the Farmers' Union generally, and to those legislators with the backbone to legislate for tomorrow as well as for today, and who are not intimidated by the massed might of money.

CHARLES S. BARRETT.

Billings, Mont., May 31, 1912.

BRO. CROSBY EDUCATION AGENT

Mecklenburg Man Accepts Appointment From Officials of North Carolina Farmers' Union.

W. C. Crosby of this county has entered upon his duties as Superintendent of Education of the North Carolina Farmers' Union and during the summer he plans to travel over the parts of North Carolina where the organization has a firm hold and explain the purposes of the Union. Mr. Crosby was named for this position by Dr. H. Q. Alexander, President of the North Carolina division of the Farmers' Union and the State Executive Committee.

It is the purpose of the organization to promote interest in instruction in the art of agriculture in North Carolina, to interest the people of the rural districts in farm education and to plan a series of farm-life institutes to be held in every county in the State. The teaching of domestic science in the public schools of the counties will be urged.

Mr. Crosby is a teacher of experience and for a number of years he has been engaged as principal in a number of public schools of Mecklenburg. The officials of the Farmers' Union think he is amply qualified to fill the new office to which he has been appointed. Mr. Crosby hopes to organize his work so effectively during the summer that he will be able to return here in the fall and continue his work as principal of the public school at Carmel in Sharon Township. His duties will call him away from the county for the greater part of the time during the summer, but by using the machinery of the State Farmers' Union, he anticipates that he will be able to get the work in hand during the idle months of the summer so that it will run along smoothly thereafter.—Charlotte Observer.

The third commencement of the East Carolina Teachers' Training School at Greenville last week included sermon by Dr. T. H. Rise, of Richmond, and an address by Dr. P. P. Claxton, U. S. Commissioner at Washington.

It is a good thing to be rich, and a good thing to be strong, but it is a better thing to be loved of many friends.—Euripides.