

PROGRESSIVE FARMER

THE INDUSTRIAL AND EDUCATIONAL INTERESTS OF OUR PEOPLE PARAMOUNT TO ALL OTHER CONSIDERATIONS OF STATE POLICY.

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Agriculture.

SWEETENING THE LAND.

A Correspondent Makes Some Suggestions as to the Use and Misuse of Lime.

Correspondence of The Progressive Farmer.

The use of lime as a soil sweetener should be far more general than is the case, especially in some localities where the composition of the soil is naturally such as to create a sour tendency. The attempt to make lime appear as a fertilizer had a bad effect on its use, and many today refuse to use it at all. There are many cases where direct injury to the soil is being done through refraining from dressing the land with this soil-sweetener occasionally. Lime is not a fertilizer in any sense of the word, and the farmer who applies it for that purpose will be disappointed. That is, he will be disappointed unless his soil happens to be full of organic matter in a state of congestion which the lime will suddenly relieve. Many a farmer who has dressed his land with lime has concluded from this sort of experience that the lime added positive manurial ingredients to the soil. Instead of adding anything of actual benefit to the land, it merely loosened the imprisoned fertilizing elements and gave the plants a chance to digest and assimilate them.

This is one of the great functions of lime, and it should be so understood. I have seen farmers spreading their fields regularly with a lime dressing in the belief that it would increase the fertility, but they did not realize that in time it would cease to have any good effect unless more organic material was added to the soil also. On the other hand a prejudice against lime is apparent in localities where the land is sour and so full of undigested organic matter that is a difficult matter for the plants to find anything to feed on.

Our soils on heavy lands are very apt to get sour, and we must spread lime over them regularly to keep them in the highest productive condition. Heavy soils are rendered much lighter by an annual dressing of lime, and light sandy soils are sometimes benefited also. In the latter case the lime binds the fine particles more closely together and prevents fertilizers from leaching away so rapidly. Some soils do not seem to be able to take much organic matter without getting congested and fermenting. Lime is the only remedy for such lands, and it should be applied as faithfully as the fertilizer or seed. A little more discretion and intelligence in the use of lime would make us all friends of this soil sweetener.

Hoping that many farmers will exchange experiences, views and opinions through The Progressive Farmer,
C. S. WESSELS.

In Switzerland the price of farm lands is from \$600 to \$1,600 an acre, and farming pays in spite of these high values. Switzerland has no pauper class, no slums in the cities, and no tramps. The roads are almost perfect, the streets are clean, and there is little need of police or soldiers. It is a country of universal education, and the best house in any village or town is the school house. Effect and cause.—N. C. Journal of Education.

EXPERIENCE WITH CORN.

I will try to give you my experience with corn fodder. In 1892 I cut up forty shocks, fed some and wasted more of it, with not much satisfaction. In 1893 I cut one hundred shocks and had about the same experience. In 1894 I cut ten acres, got me a feed cutter and cut it all up, fed it in the barn and was well pleased with results. In 1895 I put up a small silo and cut up about ten acres, besides, and have increased my acreage of stock corn as my stock has increased until I now use my entire crop for ensilage and fodder. Now, let me say right here that I think one acre in the silo is worth one and one-half or two acres in the shock and it don't take the work to put it in the silo that it does to care for it dry.—C. M. Stewart.

WHEAT CULTURE ON THE SOUTHERN FARM.

A Successful Grower Tells What Experience Has Taught Him.

Correspondence of The Progressive Farmer.

Why is it that the wheat crop is so much neglected all through the South? It is not because it cannot be grown profitably, because all who have ever tried it on the proper lines have made a success of it, but I suppose the real reason is that the Southern farmer generally has got so wedded to his corn and cotton as staple crops, and being generally of a very conservative nature, is afraid to try any other crop off the old-time routine that he is used to for fear of failure.

Another reason is that it is generally supposed that the soil in the Southern States is too thin and sandy to grow wheat profitably. This is a great mistake, for the proper rotation of crops, and intelligent use of the proper fertilizers, the wheat crop can be made really a far more profitable crop than corn.

The key to successful farming is in the proper rotation of crops and the judicious use of commercial fertilizers to supplement the ordinary fertility of the soil, and the sooner the Southern farmer recognizes this fact the sooner he will get on the highway to prosperity. If our cotton fields, that are year after year completely denuded of all vegetable matter in the clean cultivation of these crops, were planted to cow peas, or velvet beans, at the last plowing of the cotton, and after cotton is picked plowed under and wheat planted, we would soon see a vast improvement over present conditions generally. In the Northern States they always get better crops where the rotation is following a clover crop. In the South the same results can be obtained by following cow peas or velvet beans.

My favorite rotation for wheat, however, is to follow sweet or Irish potatoes, or both, turnips, carrots, cassava, etc. One thing that must not be overlooked in preparing for a wheat crop is to put the soil in perfect tilth for receiving the seed, for if there is one crop more than any other that must get the most of the work done to it before planting, it is wheat. After everything in the shape of vegetation is completely turned under with the turning plow, then the cultivator, harrow, weeder, and roller must all get their turn at putting the land in the best possible condition to yield a profitable crop.

But the most important point of all is to have the proper grade of fertilizer applied a few weeks ahead of planting-time, and incorporated well into the soil in the processes already alluded to. To apply this fertilizer in the most judicious manner, is where the intelligent and methodical man gets ahead of his slipshod and careless brother. The one studies his soil, knowing just what it can do, and what it lacks for each respective rotation of crops. The other goes ahead anyhow and trusts to luck or something else to bring him out at the end. The one makes his calling a success, the other makes it a failure. On our ordinary pine lands of the South a very good fertilizer for wheat should analyze about 8 per cent. potash, 8 per cent. phosphoric acid, and about 2 per cent. of nitrogen. Six hundred pounds per acre of this mixture is about right. But in the spring when the crop begins to lengthen out, a couple of hundred pounds of nitrate of soda per acre should be broadcast just before a rain. This if worked over with a weeder (which will not hurt the crop one bit) and then rolled, will add considerable to the yield. The best time in my experience to sow this crop is in October or very early in November. About two bushels of seed to the acre is little enough; if the land is stiff and in a good state of fertility, another half bushel can be added profitably.

There are several varieties of wheat that are well adapted to our climate. The principal one is what is called "Turkish Red;" it is proof against rust and all the ailments peculiar to the crop, and will certainly come through the most severe weather all O. K.

C. K. McQUARRIE,
De Funiak Springs, Fla.

FROM THE PALMETTO STATE.

Topping Cotton, Building Silos and Other Farm Matters.

Correspondence of The Progressive Farmer.

I write to inform you that there are many South Carolina farmers who appreciate The Progressive Farmer and who are glad to see such a farm weekly building up in the South.

The cotton crop will not be more than three-fourths of a good crop here. Corn is better than last year. I notice some of your readers are asking whether it pays to top cotton. My experience leaves me in doubt as to its advisability. When cotton has nearly done its work, when the last crop of bolls it can grow which will mature before frost are started, topping may do good by checking growth and throwing the energy of the plant into this crop of bolls. But if wet weather sets in just after topping, and new growth begins, as is apt to be the case, the labor of topping is lost. In any case it is useless to top cotton early in the season.

I hope your readers will build silos this year. They cannot use their time to better advantage. The following from the July Southern Planter contains some good advice:

"If you have no silo, it is time to make preparation and build one, if intended to be used this year. A silo is the most useful building on a stock farm, and no stock farm is complete without one. It is the most economical barn a man can build. We have repeatedly published directions for building a silo, and would advise any one contemplating the erection of one to send for Bulletin No. 83, recently issued by the Wisconsin Experiment Station, which contains the most recent information on the subject. The great point to be aimed at is to build so that the structure is air-tight, or as nearly so as possible, and that the depth shall be not less than 20 feet, but as much more as practicable. There are four important reasons in the storing of silage for making the silo as deep as practicable: (1) The largest amount of feed per cubic foot can be stored in this way; (2) There is less loss at the surface during slow feeding, and because the silage packs more closely, there is less danger of the entry of air; (3) The spoiled silage at the top is less in proportion to the whole silage stored; (4) The stronger lateral pressure forces the silage so closely against the walls that, if they are at all open, it tends to exclude the air and the silage keeps better. The best form of silo is a round one, and this may be either built up of staves like a tank, or be framed like a building."

Our South Carolina State Fair is to be held at Columbia, October 29th to November 2d. I hope many of your Tar Heel farmers will come and see what kind of farmers and what kind of State we have. R. A. S.
Chester Co., S. C.

AN INEXPENSIVE SILO.

The silo has become a necessary adjunct to a large proportion of farms, especially dairy farms. Various styles of silo are constructed, but a very simple stave silo within the means of almost anyone is described by the Virginia Experiment Farm. A circle 16 feet in diameter is marked on the ground and covered with short pieces of plank. Four pieces of plank 16 feet long, 6 inches wide, and two inches thick are then set on end on the circle at equal intervals. These are held in an upright position by braces in various directions. An iron band is placed about one foot from the bottom of the silo and held in position by nails driven into the plank and bent up and over the band. A second band is placed about one foot from the top. The rest of the staves are then set in place, a nail being driven into each to support the bands. The latter are then tightened somewhat and three more put on, the distance between the bands being about four feet. Instead of hoops of round iron ordinarily used, bands made as follows are recommended: Procure (as can usually be done) partially-worn tire iron from heavy wagons.

Get a smith to rivet, not weld, these together, so that two bands will go around the silo. Rivet to the ends of these bands short pieces of iron one-half inch thick by two inches wide. Turn up three inches of this thick iron and punch three-quarter inch holes in the turned-up portion. For each band procure two bolts a foot long and three-quarter inch diameter. Have threads cut on bolts nearly the entire length, and place these bolts through the holes in up-turned ends; put on nuts, and tighten the silo. These are stronger, cheaper, and easier to work than the round bands and considered a great improvement over the latter.

THINGS IN WHICH WE EXCEL.

We quote the following paragraphs from President G. T. Winston's address to the N. C. Banker's Convention to which we have already referred:

There is a portion of our State which is independent of the agricultural conditions named above as prevailing elsewhere. Nature has placed Eastern North Carolina at a point in the trucking zone where, if it keeps pace with other trucking regions in industrial education, in industrial knowledge and in the employment of industrial machinery, it must command absolutely, for a certain portion of each year, the trucking markets of the United States. This is a fact in nature which cannot easily be overcome, and our Eastern truckers are beginning to understand its significance. But only a beginning has been made. The growth of large cities and towns in our State, and the multiplication of transportation facilities must in the near future tax to the utmost the truck-producing capacity of Eastern Carolina, and convert into rich garden vast areas now devoted to the unremunerative production of corn and tobacco.

Other sections of our State are peculiarly adapted to the production of fruits. But a beginning has scarcely been made in this direction. With growth of population, increase of transportation facilities and better knowledge of fruit growing and fruit marketing derived from experience and from industrial education, no one can doubt that fruit growing will become one of our largest and most productive industries.

The possibilities of stock raising as a source of wealth in North Carolina are exceedingly large. In the process of raising beef and fattening it for the markets, as practiced in the West and Southwest, there are three steps.

1. Herds of cattle turned out to pasture without food, water or shelter, except what nature supplies, struggle through the winter, as best they may. Probably a dozen times each winter one-half the cattle in these pastures are within 48 hours of death from cold, hunger or thirst. When the winter is over, and the calves are big enough to graze, everything that can stand on four legs and be pushed into a cattle car is brought up and shipped to be fattened elsewhere. 2. Then begins the next stage: In an enclosure containing from 500 to 10,000 cattle, an unlimited supply of cotton seed meal, hulls and water is furnished, until the cattle have hidden their bones and taken on as much flesh as can be had from such food, when they are again sold and shipped to cattle dealers in the cities for final fattening. 3. The third stage is one of fattening with grain, which continues until the beef is ready for the butcher.

There is no reason why the first two steps in beef-making should not be taken in North Carolina. Vast areas of land in the east are admirably suited to this purpose, and our mountain section furnishes pastures in many respects superior to those of Texas.

If you wish more than one paper write for special rates. For instance, we send twice-a-week Courier Journal the weekly Progressive Farmer, the semi-monthly Home and Farm and the monthly American Queen all one year for only \$2.15.

Live Stock.

FEEDING THE SHEEP.

Correspondence of The Progressive Farmer.

Sheep are naturally heavy feeders, and a healthy animal will consume more feed to the hundred pounds of live weight than steers, if both are fed to their full capacity, but at the same time the sheep will gain far more in weight in a given time. A sheep that will eat forty or fifty per cent. more feed than a steer will gain from sixty to seventy-five per cent. more in weight. Consequently we do not begrudge the sheep their good appetites and their remarkable capacity for storing away food. Indeed, at this ratio we would be willing for the sheep to increase its appetite if the gain was proportionately increased. There is no animal on the farm that shows the results of poor or slack feeding more than the sheep. You will notice it both in the fleece and in the conformation of the body. The loss is thus twofold. The fleece becomes poorer in quality and less in quantity, and the body of the animal becomes thin and lank. The actual thinness of a sheep sometimes is not very noticeable until sheared, because of the heavy layers of wool that seems to bulge out the sides. The condition of the animal can be determined, however, if the hand is run over the sides, flanks and back.

Sheep have to hustle more or less in summer and fall pastures and it is a good thing that they do. Sheep that have everything their own way are much like chickens that are never exercised. They become weak, lazy and fat, but not altogether healthy. A little exposure might cause their death. We do not want sheep on the farms that cannot hustle a little and hunt out food when the feed on the farm is low. Nevertheless, we cannot afford to let our supply of feed run too low summer or winter. It is slack management that fails to provide ahead of time for every season of the year, and many a farmer has been forced to sell a good many of his sheep in the fall or winter simply because he has not saved sufficient food to winter them. When food is scarce and high priced and sheep are low it is a heavy loss to either winter the sheep or to sell them for a nominal sum. There is rarely any good reason why a man should find himself in such a quandary.

It takes but little calculation to figure out how much food is required for a given number of sheep for a winter or summer. Sometimes the mistake is made of trying to carry a heavier line of stock than the conditions justify, and then the feed disappears so rapidly that before one realizes it there is not enough for half the flock. It is better to sell the sheep now, and raise just enough to consume all the food that can be prepared and stored for winter use, than to let the flocks go ahead, trusting that later you may be able to dispose of them to advantage, and thereby run the risk of falling short of provisions for the number that could otherwise be easily and satisfactorily carried along.

E. P. SMITH.

CATTLE SCARCE IN GEORGIA, TOO.

The scarcity of cattle in Georgia, and especially in this section of Georgia, would indicate that this industry would also be profitable. Beef cattle have not been scarcer than they are at present for many years. Thousands and thousands have been shipped to the West during the past two years, and market men in this section cannot get home-raised beef enough to supply the demand. There is no reason why the people of Georgia should not raise all the beef cattle that may be wanted, and besides have large numbers to ship to other sections at a good profit. Besides horses and cattle, it would be a profitable business for Georgians to engage in hog, sheep and goat raising also. There is good profit in all these properly managed, and the enterprising, energetic, wide-awake farmer will find it so if he will try it.—Columbus Enquirer-Sun.

CATTLE QUARANTINE IN NORTH CAROLINA.

The following are interesting extracts from the report of Dr. Cooper Curtice, State Veterinarian, to the Board of Agriculture:

"Statistics just received from the United States Department of Agriculture show that there were in this State January 1, 1900, 243,298 milk cows, valued at \$4,428,024, worth an average of \$18.20, and 274,843 other cattle valued at \$3,383,726, worth an average of \$12.31. The total value is \$7,811,750 for the 518,141 cattle. It is a conceded fact by all cattlemen that the difference in price in our own State between the two sides of the line is at present at least 1 cent per pound, and the fact is that there is no market for certain classes of animals that formerly went out of the State in large numbers. These easily represent a 25 per cent. difference and in fact 50 per cent. easily expresses the truth on young animals. To add one-fourth the present valuation of cattle to this State means to increase the taxable property by two millions of dollars. When the quarantine is once changed there needs be no more outlay. The change is one of education; personal work with each owner of infested cattle.

"Sixteen counties are already exempted and have the favored rates. Over forty others can be fitted for exemption by the expenditure of less than \$2,000 each. Should the cattlemen be slower to grasp the situation an outside limit of \$5,000 may be assumed. Assuming according to the government statistics that our counties average 5,500 cattle each, with an average value of \$15, the value of the cattle in each would be \$80,000. Five thousand dollars invested in moving the quarantine line will yield \$20,000 and the increase is not entirely measured by the value of cattle, but by improvement in farm lands, which thus get a greater earning value.

"The work so far done by the board has assured to the sixteen western counties this improved market, which keeps for them more than \$330,000 of value over what the adjoining counties possess, allowing for each set otherwise the same conditions. It is well known that the cattle interests of the mountain counties far out-value those of the piedmont and that their business is practically saved from destruction by the board.

"The saving of the mountain cattle industry has been effected at a cost so far less than \$4,000 paid out in salaries and traveling expenses. In addition to the saving for the mountain counties work toward preparing piedmont counties has far progressed and must be credited to the money already expended. The information disseminated regarding the tick disease is daily bearing fruit and all of the counties of the State are benefited already to a greater extent than the entire outlay, although the foregoing credits be not considered. While it is difficult to ascertain all the facts regarding distempered animals that died last year, it is safe to say that over \$4,000 were lost to the State within the quarantine area. It seems that this year the greater part of this should be prevented. No large outbreak has yet been reported.

"As reported at the last meeting the lands of the exempted counties are more saleable than those of the quarantined for cattle-raising and this fact holds the prices of lands higher in exempted counties than they would otherwise be. It has already determined the settling of men in the counties who otherwise preferred to purchase in the adjoining counties.

"That the cattlemen of the exempted counties appreciate the work that is being done for them by the board is evidenced by their extreme interest, by their hearty co-operation and by their expressed words, your veterinarian having been the recipient of thanks by acclamation at the meetings for the work that was being done for them."

Send your renewal, please.