

PROGRESSIVE FARMER

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Agriculture.

THE SMALL FARMER.

Some of the Difficulties That Beset Him; Also Some Pointers on the Road to Success. Correspondence of The Progressive Farmer.

The writer is a small farmer, and knows from many years of hard experience the trials and troubles of the small farmer. With poor land and but little capital, and a family to support, he starts out burdened with tears and many misgivings. All around him are examples of failures of long standing—whole families giving up the struggle in despair of ever doing any better, selling out and moving to some mill or factory. He sees on every hand wrecks and dilapidated farm buildings, neglected orchards and run-down fields. He hears the old false hood, that "farming don't pay," repeated over and over until he is sick at heart. He calls to mind that nearly everything he plants is subject to the early and late frosts; that dry weather or destructive floods threaten him all along the way; that his wheat may be destroyed by the fly, rust, smut or the chinch bug; that his orchard may be invaded by some scale or blight or bug and ruined, his hogs die of cholera, his sheep be killed by somebody's beloved dog, and a thousand and one other ills face him and follow him in every step and turn he makes.

Notwithstanding all of these perplexing conditions, the small farmer may fight his way through all of these difficulties and find serene peace and plenty smiling on field and flock, on herd and home.

How can this be done?

Cultivate but few acres.

Plow deep and put in fine order every foot of land intended for any crop. If the land is rolling and inclined to wash, terrace or hillside ditch so as to surely control the surface water and thereby keep soil, manure and crop on the field where it belongs. Don't get in a hurry and slight this foundation work at any point. When everything is in good shape, the season, the condition of the soil, select seed, etc., ready at hand, begin to plant and stick to it regardless of the moon until a first-class job is finished, never forgetting for a single day any crop you may plant, whether it be corn, wheat, cotton, tobacco or any other crop. Go and look it over and study its needs; cultivate shallow and often; feed it with affectionate care and attention from planting to harvest.

Put a few acres in cotton if you must, but be sure you make a bale and a half to the acre; this may pay, but less will not.

Send every energy to make big yields to the acre. Ten or fifteen bushels of corn to the acre will not pay, but from fifty to seventy five will. More than double of this latter number of bushels have been made per acre time and again.

The corn crop is a very important one in the struggle the poor man is making to get on a better footing. He must have an abundance of corn the year round. It is the best and cheapest feed he can raise and will always be a sure standby in emergencies, as it will feed and sustain everything on the place. Study the corn plant and make much of its needs and possibilities, as no man has ever found out yet what it can do.

There is another very important crop the small farmer can raise to great advantage and profit—the Irish potato. They are so easily grown, always good for home use and generally sell for good prices the year round. Northern grown potatoes are now selling in my neighborhood for one dollar and a quarter per bushel. What a bonanza for our farmers, if they would only learn how to raise them and keep them in good condition! Every small farmer in North Carolina, it makes no difference whether he lives in the middle, eastern or western part of the State, ought to plant as many potatoes this spring as he can do justice by, and when fully matured dig and store away in some dark, cool place, and then prepare,

right away, the same land or some other suitable place for the second crop to be planted about the first of August. Cultivate this late crop with special reference to saving all the moisture possible, as dry weather is the only serious drawback in making this crop. Just before cold weather sets in dig and bank up in hills right out in the field where grown. Then dig a trench around the hill, so as to keep surface water from the potatoes and they will keep plump and nice until late spring.

We must have an orchard of carefully selected fruit trees. The varieties set out, the preparation of the land, the after care and cultivation, are all important factors in having a thrifty, paying orchard. If these requirements are not fully met, we need not look to the orchard for either pleasure or profit.

We must also have a good cow or two and a few pigs; they will demand our loving care every day in the year. The very best of cows and the finest pigs obtainable, if turned out on the public or put into poor pastures to make a living for themselves will surely fail to bring in any profit to the owner.

There is not one farmer in a thousand, big or little, who makes and saves feed enough to do full justice by all of his stock. The more feed, the more stock; the more stock, the more manure; the more manure, the better the crops; and as the circle widens and grows, the man himself looks better and everything about him takes on a brighter and more thrifty appearance. Of course, we do not expect to get vastly rich all of a sudden, by such small farm work, but we do contend that the great majority of the small farmers in North Carolina can, by proper management, grow comfortably fat and independent.

There are many other things that must be done along with the foregoing; these will be considered in some future articles.

J. EDMOND SMITH.

GREAT VALUE OF LEGUMES.

Correspondence of The Progressive Farmer.

Perhaps no discovery has been made during the century just closed which is of more importance to farmers generally than the fact that leguminous plants, (peas, beans, lupines and the clovers,) not only draw the most important and expensive parts of their food from the atmosphere, but have the power to store away the nitrogen so gathered, into the soil in which they are growing, through small nodules on their roots, so that instead of impoverishing the soil of its fertility, as do most other plants, they leave it actually richer in the most costly element of plant food. Thus the great problem of quickly and cheaply restoring the lost fertility to old and worn out soils has been practically solved.

Instead of purchasing a costly fertilizer, rich in nitrogen, it is now found to be only necessary to apply a cheaper grade, containing phosphoric acid, on which can be grown a heavy crop of cow peas, or clover, which will complete the balanced ration by collecting and storing the more costly element, nitrogen, with which grass and grain crops will make a heavy growth. Ordinary grass and grain crops are very exhausting upon the soil, as they draw therefrom their entire food supply, while the legumes add to the soil the most valuable and costly element, thus leaving it richer instead of poorer. Like some men, they leave the earth better for having lived upon it. At the same time the leguminous plants make better hay and grazing than grass plants. The herbage of the legumes is in respect succulent, more digestible and richer than that of grass. Legumes will grow and thrive upon soil too poor, or deficient in elements required, to produce or support a stand of grass, and will yield a heavier crop than most grasses. Nothing but custom and prejudice favors the continued growing of grasses in meadow and pasture to exclusion of cow peas and clover.

ISAAC F. TILLINGHAST.

Wyoming Co., Pa.

HARRY FARMER'S TALKS.

XXII.

Correspondence of The Progressive Farmer.

"Is it too wet to plow?" is the question often asked after a rain. We want to push our work and are anxious to be in the field. The high places around the home do not seem to be wet, there is some water in the holes about the yard, and we are at our wits' ends to know what to do. Where the land is high and rolling or is sandy with a porous subsoil, the water sinks very rapidly and the soil is in a condition to plow, but if the land is flat and with a clayey subsoil only 6 to 12 inches from surface, it takes a good while for the soil to dry enough to plow without injury. To overcome these difficulties drain the land as well as you can, then get a rain gauge and place it in an open place so that it will catch what rain falls and no more. A tin can such as are used for oysters, tomatoes, etc., will do, or, still better, get a glass jar, (such as are used for peaches, cherries, etc., when put up in brandy,) and you can measure the depth and note the effect of each rain has on the soil and in a short time tell exactly how wet the soil is. Our soil is made too wet by 1½ inches of rain in 24 hours. One-half inch rain is a very good season. Three inches falling inside of as many hours will make a fresher here unless it has been very dry. We ought to have said that land broken very deep will hold more water than that which is plowed shallow.

Complaints of scarcity of laborers is being made now and will be heard more and more as the season advances. The wise farmer will plan to do more of his work with horse power. There are people who think so much of their horse that they will actually do the work themselves to prevent the horse from doing it, let the horse stand in the stall and let their wives and children go out in the woods and carry the cook wood a long distance. The women do it gladly sometimes in order to have a pretty horse, not thinking how it will affect their own appearance. Of course, such instances are not common. Harry Farmer is very anxious to try to get this false sense of cruelty to animals out of our people. He does not believe in being cruel to human beings or the brute creation either. Man has been given dominion over the whole creation, and a chance to use it for his advancement and he will not be doing his duty if he does not do it. It is not wrong to sit on a plow and have an umbrella stretched over you and the horses doing the work. At night when a man comes in who has plowed this way can he sit up and read or go to the post-office after his mail and do various little jobs and lie down and sleep without having his legs or feet paining him so that he feels tired next morning. People sometimes follow a plow all day and at night are more fatigued than the horse. If our Southern farmers ever succeed, they will have to use more horse power and do less work with their hands.

Keep the surface of the land well stirred where you expect to plant potatoes (sweet). It will keep the grass down and save moisture.

HARRY FARMER.

Columbus Co., N. C.

Let us lay aside all prejudice, plow and cultivate in the best way. Ask all that live in the dry belt to subsoil one acre of upland—do not turn the clay on top—cultivate upon a level, and see how you like it.—B. F. White, Alamance Co., N. C.

All that the farmer raises has a true market value. The best paying market is often the home market—that is, full supplies for all the consumers that are at home. This is the first market that should be well supplied. Buying and selling should be carefully considered. In a poor farming country no grain should be sold for money, but all should be disposed of in the form of flesh of some kind and then let the refuse go back to the land.—R. R. Moore, Guilford Co., N. C.

A NEW AGRICULTURAL YEARBOOK.

The Agricultural Department of the University of Tennessee has recently issued a second agricultural yearbook devoted entirely to subjects of interest to the farmer and fruit grower. About a year ago an agricultural handbook appeared in the Record series and its success warranted the University in devoting one issue a year to agriculture.

The present yearbook is a copiously illustrated pamphlet of eighty-three pages and the pictures are well chosen and helpful to the reader. In the initial article President Dabney discusses education as related to production from the standpoint of the political economist. This is followed by an article on "The Progress of Agricultural Education" by Prof. Soule, in which is embraced a strong plea for the teaching of agriculture in the public schools. Other matter bearing on education relates to the short course in agriculture now in progress at the University. Prof. Soule contributes interesting articles on Horse Breeding, The Sanitary Production of Milk, Computation of Rations, Management of Ensilage Crops on the University Farm, The New Dairy Hall, and the Permanent Agricultural Exhibit, a perusal of which cannot but be beneficial and useful to the farmer. Prof. Moores discusses fertilizers for Tennessee, and Prof. Keffer writes on pruning the grape and peach and on underplanting in orchards.

After a careful examination of the volume it would seem that no Southern farmer should be without this useful addition to his fund of agricultural knowledge, and especially so in view of the fact that the yearbook can be obtained free of cost on application to Prof. Andrew M. Soule, Department of Agriculture, University of Tennessee, Knoxville.

THE VALUE OF COTTON SEED.

Here are some facts regarding this subject which will surprise most Progressive Farmer readers. But however surprising, they are true:

"Cotton is not only king among the Southern export crops, but the cotton seed is a commodity of great and growing importance. Cotton seed was once a waste product that around every gin became a nuisance. There was no known use to which the huge fermenting piles could be put. A crop of 12,000,000 bales will furnish 6,000,000 tons of seed, one-fourth of which will be required, by present wasteful methods for planting, which leaves 4,500,000 tons for manufacturers' uses. The product of a ton of seed varies, the average being 37 gallons of oil, 725 pounds of oil meal or cake, 820 pounds of hulls and 180 pounds of linters. These products, at present prices, are worth about \$24 for the products of a ton of seeds. But there is no necessity for using 1,500,000 tons for planting. This would give 155 pounds per acre to 25,000,000 acres. Of carefully selected seed, properly prepared and planted, one-fourth that amount is ample. This would leave for manufacturing purposes more than 5,600,000 tons of seed, worth when manufactured, at least \$132,000,000. The oil alone would bring more than \$30,000,000—the equivalent of 20,000,000 bushels of corn, or half that amount of wheat exported. A noted statistician stated a few years ago that if Yankee farmers could grow cotton in the North they would become rich raising it for the seed alone, and of this wonderful commodity the South has a practical monopoly. All attempts to break this monopoly have failed. It is the granest source of wealth ever possessed by any agricultural country. All that is necessary is to handle it judiciously, produce no more of it than the world must have, utilize the seed to the best advantage and the treasures of earth are at the Southern farmers' feet."

Be careful of one thing. Do not get into fields too quickly after the showers. Stirring the soil when wet will do much harm. Dust, not mud, is what you want. Run around your corn and cotton with the one-horse subsoil plow. It will pay you well.—J. B. Hannicutt.

VALUABLE FARM BOOKS.

Bearing upon this important subject we give the following editorial from a recent issue of Colman's Rural World. Any book mentioned in this article will be furnished by The Progressive Farmer upon receipt of price:

A reader of the Rural World asks: "What do you think is the best work on farming and stock raising; what is the cost and who are the publishers?" This comes to us, in one form or another, very often, and we have to answer that there is no one book covering so broad a field that we can conscientiously recommend as a text-book to one who wants to get information covering the field. When one stops and considers what is included in the word farming he will soon come to understand that it includes too much to be put between two covers, and he does not have to study the subject a great while until he concludes that not one book but many are required if one expects to get from such sources information of much worth regarding farming. Take, for instance, the subject of soils. It will be readily conceded that this is a basic subject. All farming operations begin with the soil.

But stop for a moment, brother farmer, even you who have been working with soils every year during the last half century, and tell how much you know of that substance from which you have produced your corn, clover, wheat, oats, fruits, flax and other crops, some of which you have worked into beef, milk, butter, pork, wool, horse power, flowers and physical and mental energy.

You know there are many different kinds of soils and perhaps you have a half dozen or more on your own farm of a quarter section; and in the years you have been handling those different soils you have learned so much about them as to what crops are best on the different ones, and how each should be handled for best results that if you attempted to put in writing all you know about them for the guidance of a man to whom you were selling the farm and who had little knowledge of farming, you would cover a good many sheets of paper. And yet were you to examine yourself carefully you would readily admit that what you did not know about the soils of your own farm would amount to far more than what you did know. And the knowledge you do not have could have been turned to very useful account if it had been possessed. And thus it appears that there is much to learn about soils, far too much to be condensed into a chapter in a book that attempts to cover the whole subject of farming. The subject of soils calls for a book all by itself, and such a one is available. It is entitled *The Soil*, was written by F. H. King, Professor of Agricultural Physics in the University of Wisconsin, and is published by the MacMillan Company, at the price of 75 cents. This book tells how soils were made; nature, functions, origin and wasting of soils, texture, composition and kinds of soils, and a vast deal more that every farmer ought to know, and which but few do.

But this is only one of many important divisions of the subject of farming, and you begin to see that it will be necessary to recommend the best books rather than the best book. In addition to the book on soils mentioned we would like to recommend one entitled *The Fertility of the Land*, by I. P. Roberts, Director of the College of Agriculture, Cornell University, and published by the MacMillan Company. Price \$1. Other books are published by this company in this same Rural Science series. Among which may be mentioned *The Principles of Fruit Growing*, by Prof. L. H. Bailey; *Principles of Breeding of Animals*, by W. H. Brewer, and *Feeding of Animals*, by W. H. Jordan. A work which we must recommend to all who have animals to feed is *Feeds and Feeding*, by W. A. Henry of the University of Wisconsin, Madison, Wis., and published by the author. Price \$2.

STONE SILOS.

Correspondence of The Progressive Farmer.

Wherever possible, and that is whenever stones are abundant, I would advise the construction of stone in place of stave silos. The reasons for this are numerous, but the most important is that of durability. A well built stone silo is practically indestructible provided one is willing to keep it in fair repair each year. The wooden silo must begin to decay before a great many years in spite of all the labor put on it to preserve the wood, and just as soon as the decay begins trouble follows. That is, air is let in at different places and the ensilage is spoiled in spots. Of course a good plank stave silo well built and well preserved will last a good many years, and it will pay any one to construct such a building. If stones are plentiful, however, it will be more economy to build the stone silo, and make it circular in form to prevent waste and make it more convenient to fill and empty.

One fourteen to sixteen feet in diameter and twenty two to thirty feet deep, running a few feet below ground, will make a good size. The inside of the silo should be well plastered so that no air can get through the walls at any time. This inside plastering will have to be renewed more than anything else, and wherever the cement between the stones in the wall has loosened any, more will have to be put in. The annual repairing should consist of this. With a little mortar ready beforehand it is an easy matter to go around the silo every summer and repair all weak places before the ensilage is put in. Every part of the wall should be kept impervious to the air, and upon this will depend to a large extent the success of the work. Another important point is that the silo must be cleaned thoroughly each year before the new crop is put in. If the ensilage is taken out and the inside walls are not thoroughly cleaned, decay and fermentation will begin at different points. Corrupt matter will adhere to the walls or lodge in little crevices, and this will form the foundation for extensive fermentation later. The germs of decay placed in the silo before it is filled cause the destruction of more ensilage than any other thing. Many a farmer who has failed with his silo could trace the trouble back to this lack of cleanliness. It is very much like failing to clean out the dairy utensils after each milking. If we fail to do this trouble is bound to come. With the walls perfectly airtight and free from all taint of previous filling, the chances are all in favor of preserving successfully the year's crop of ensilage.

C. T. WHITE.

GOOD PRICES FOR BERRIES.

The last issue of the Mt. Olive Advertiser, published in the heart of the berry region, contains these timely points for growers:

"Present conditions assure very good, if not fancy prices, for North Carolina berries, and it behooves our growers to be on the alert when disposing of their fruit in order to receive its true worth.

We caution the shippers to be careful about selling to buyers, lest they accept the "Buyers Bait" and not the market price. It is a well known fact that last year one buyer made a net profit of \$1,200 on four car loads of berries. Does it take many such arguments to convince growers that they must exercise care and judgment? We know of a local buyer who did not invest one cent of his own money, who made \$600 in about two weeks—can you imagine what the man who put up the money made?

It is the buyer's privilege to make money out of the grower if he can do so it is the duty of the grower to get every cent possible out of his crop, but when a buyer makes a clear profit of one dollar per crate out of the grower, it is evident that the latter is having his leg pulled to no small extent.—Mt. Olive (N. C.) Advertiser.