

# PROGRESSIVE FARMER

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

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## Agriculture.

### COW PEAS.

Progressive Georgia Farmer Urges the Importance of the Crop.

Correspondence of The Progressive Farmer.

The season is now on for planting forage and feed crops of many kinds. Among these, few, if any, surpass in possibilities the cow pea. These peas grow over a wide extent of latitude and longitude. They produce in the pea valuable food for man and beast. If ground, or if fed with the hull on, they constitute almost a complete ration. If the vine be added, they furnish both hay and grain to cattle. They are equally adapted to flesh-producing in beef cattle and to milk and muscle production in the dairy cattle. They can be grazed by cattle, or mules, or hogs, or by all three at once. Or they may be cut with mower or blade, and cured and fed with the pods on. Or the seed may be picked and the vines fed alone. Or they may be cut green and put in the silo.

In any of these ways they can be fed with success. They give health and strength and flesh, and milk and butter. Again, the whole growth is valuable for food, roots, vines, pods and leaves. Not only is this true, but the plant has wonderful value as a manure crop, whether considered directly or indirectly, or both. If plowed in, the vines are worth five or six dollars per ton for manure. If permitted to die on the land and remain all winter, they manure the soil. If cut and fed to cattle, and the manure properly handled, it is equal in feeding value to any other plant, unless it be cotton seed meal. The peas are the very best manure for sugar cane.

But while growing, the pea vines have the power of gathering ammonia from the atmosphere and fixing it in the roots, so as to greatly increase the fertility of the soil. It helps to feed and enrich the farmer and his stock, and at the same time feeds and enriches the soil. Because the cow pea gathers food from the air and enriches the soil, many conclude that the pea does not need any fertilizing assistance. This is a mistake. The more vigorous you make the pea plant, the larger and stronger will be the roots, and hence the greater benefit will result to the soil on which they grow. But we must use discretion in fertilizing them. They need phosphoric acid and potash to make them vigorous and strong and full fruited. An average application would be 300 pounds of acid phosphate and 300 pounds of kainit, broadcasted and worked well into the soil before planting. We thus see how we can help ourselves doubly by applying fertilizers to peas. We will get a heavier crop of hay and peas, either or both, and while doing so, will store away more fertilizer for the next crop of corn, wheat, oats or anything we wish to plant.

Peas not only add to the fertility of the soil, but they greatly improve the mechanical condition of the soil. They make it porous, so that it holds the rain water and fills the soil with humus, which aids the solution of the plant food already in the soil.

We will do well to plant large crops of peas. Put some in rows, and cultivate, and sow some broadcast after grain crops. Sow them broadcast in the corn when laying-by. The Whippoorwill are a good variety for this purpose.

You can rapidly build up your farm by judicious planting of cow peas. This should be done not only on poor lands, but on our best lands. They not only increase the fertility of worn and exhausted lands, but of all soils. A continued use of peas will give renewed fertility to all soils, and constantly improve the tilth of the soil and continually yield larger and larger crops of hay and peas. We get two profits, each increasing from year to year. If we feed them to our own cattle, we get three large profits. Do not plant too many per acre. A few vigorous vines are better than many small weak ones.

J. B. HUNNICUTT.

Fulton Co., Ga.

### THE BLACK GRAIN WEEVIL.

An Insect That Does Damage to Stored Grain Described and Means of Preventing This Damage Given.

Correspondence of The Progressive Farmer.

A reader of The Progressive Farmer sends a sample of wheat infested with weevil, with this statement: "I send you by this mail a wheat pest that has damaged, if not ruined, thousands of bushels of wheat in this county in the last six months. We have had the things before, but never in such numbers. I had something over 500 bushels in one house, put up in bins of from 50 to 75 bushels in a bin. All but one bin has been more or less damaged."

The black grain weevil (*salandra oryzae*) is a native of Europe, but has spread to all parts of the world as a result of the commerce in food stuffs. It is now found in every State of the Union, Alaska, and Canada. It was originally known as the rice weevil, but as it attacks other grains as well as rice, the name here given is now coming into use, and seems to us to be more appropriate. The adult insect is a small, dark brown, snout beetle, belonging to the same natural family with the bill-bug, that is now such a pest to corn in the eastern part of this State. A letter received yesterday, states that some farmers in the eastern part of the State believe that this grain weevil in the barns is the young of the bill-bug, and will take to the corn fields when the corn comes up. This is entirely erroneous, and in an article in The Progressive Farmer a short time ago, we explained that with beetles, all growth is accomplished while the insect is in the grub stage. If the bill-bug and the grain weevil were the same, the problem of their control would be easy enough, for this weevil that infests the grain in the barns is very easy to manage. We will come to that in a moment.

The female beetle bores a little hole into the kernel with her snout, and in the puncture, she deposits an egg. This hatches into a grub, which when full grown, is about one eighth of an inch long, and of a white color. It is thick and clumsy, and without limbs of any description. Indeed, it has no need of limbs while it is in this stage, as it lives in the kernel, and is thus entirely surrounded by an abundant supply of food. This is a curious and interesting illustration of how the habits of an insect may affect its structure. In most cases, those grubs and caterpillars which live in such situations that they are surrounded by their food, are without limbs, and consequently with very limited powers of locomotion. Familiar examples of this are the grub of the plum curculio, and the round headed and flat-headed apple borers. These same insects have limbs in the adult stage, however, as they must then seek their mates, and deposit eggs.

After attaining full growth, the grub of the grain weevil transforms to the pupa stage, a state of the insect that was described in an article in this paper a short time ago. This stage lasts for a week or more, when the adult emerges.

The samples of infested grain at this office have been of wheat, but the insect is more fond of corn.

#### REMEDY.

Have the grain in a tight bin and treat it with carbon bisulphide. This is a very foul smelling liquid which evaporates rapidly, and is deadly to the insects. It may be purchased from druggists at about 15 cents per pound. It may be thrown directly on the grain, but if the bin is large, it should be thrown on in several places, so that it will not be all in one place. Use 1 1/2 tablespoons full to each 100 pounds of grain to be treated, and cover the bin with a piece of canvas or a heavy blanket. As the fumes are heavier than air, they will sink, permeating through the wheat, and destroying the insects.

This is the universal remedy for insects affecting stored grains, but there is one caution that must be observed. No fire of any kind, not even a lighted cigar, cigarette, or pipe, can be brought near while the

operation is going on, as the fumes of the material are highly inflammable.

We are glad to answer inquiries regarding insects. Inquiries must be accompanied by specimens when possible.

FRANKLIN SHERMAN, JR.  
Entomologist Dep't of Agriculture,  
Raleigh, N. C.

Rural mail delivery hinges on good roads. Daily mail, the telephone and electric cars will move the city to the country. They will enable the farmer to keep in touch with the world. Rural delivery has been extended by degrees and good judgment, and wherever it has reached has been attended with success.—Subscriber, Richland Co., O.

### HOW TO AVOID SECOND PLANTING OF CORN.

A Prominent Illinois Corn Grower Gives Some Points Worthy of Attention.  
Correspondence of The Progressive Farmer.

The best growers of corn rarely have to make a second planting of their crops, and it is more rare when this work pays. There are seasons, of course, when a very late cold wave makes it necessary to replant in order to secure a crop. But in most cases the replanting is the result of lack of proper forethought and good judgment. If the work is not done properly the first time there will always be the possibility of a second planting, and some farmers seem to plant upon this theory. It is much better to burn your ships behind you and make up your mind that there is nothing to fall upon. Then good work will be given, and every step in the process will be thorough. That is the best way to avoid the necessity of replanting corn.

In order to secure a good stand of corn from the first planting the soil must be put in the proper tilth at first, and no attempt should be made to take advantage of an abnormally early warm wave to get the seed in the ground. These warm waves are invariably followed by a cold wave which does more damage than the warm one does. We ought to know enough about our fickle climate not to trust any unseasonable weather in early spring. Of course one can utilize such an early spring by plowing and working the soil thoroughly, and in this way its mechanical condition is improved for all time. The soil is bound to be cold and damp after the long winter, and if we can plow it up and turn over to the warm sun of an early spring wave of hot weather we secure a distinct advantage. The soil bed is then rendered warm and moist for the corn when it is time to plant. My experience has all tended toward late rather than too early planting of corn, but always toward early plowing and harrowing of the soil.

The next essential thing is to secure good seed that will germinate quickly and surely when the right conditions are supplied to it. This seed corn should be soaked in warm water before planting to increase its rapidity of germination. You plant fine, soaked seed in land that has been turned over to the spring sun for a week, and it will produce a better and quicker stand than the inferior seed planted a week or two earlier. The latter also runs the risk of being nipped by a cold wave and necessitating replanting of a part or all of the crop. In sandy soil I always plant the corn deeper than in loamy or clayey soil, both to keep it warmer in early spring and to provide it with more moisture. In sandy soil the moisture is apt to dry out much faster than in heavier soils, and by mid-summer the stand will be badly affected if the roots of the plants do not extend down to a considerable depth.

W. E. EDWARDS.

#### Illinois.

Mr. C. B. Hatch, the well-known excursion manager of Mount Olive, was here yesterday. He says that the strawberry season this year will not open before the first of May, which is about fifteen days later than in 1900. The crop is short, but the prospect is for a very fine quality of the fruit.—Wilmington Star.

### AS AN ALAMANCE FARMER SEES IT.

Capt. White Points Out Some Remedies for Evils Referred to in His Previous Letter.  
Correspondence of The Progressive Farmer.

The evils complained of in my last communication are very great and it will be difficult to correct them, because the landholders will not unite on any given plan to benefit their condition or advance their interests. I am thoroughly convinced both by experience and observation that in most cases the landlord should furnish the stock and farming utensils to work the land, then enter into a written agreement with a bond to secure the performance of the agreement. The agreement should particularly define the method by which the land for any given crop should be prepared and how the crop should be worked. An agreement without a bond to enforce its performance is worthless. This agreement should be renewed every year, for when a tenant finds that he is established for a number of years, he soon begins to claim the premises and act as though he were lord of all he surveys. The landlord on his part should furnish his tenants with comfortable houses to dwell in, give them vegetable gardens, and see that they cultivate them.

Thousands of acres in all this up country have been exhausted by the six-furrow cultivation in corn and the shallow one-horse plowings made in the preparation and cultivation of the corn crop. Nothing but the top soil is stirred. The rain leaches it and the sun dries it out.

No land should be cultivated in corn that will not in a fairly good season produce from 20 to 25 bushels per acre. Yet in North Carolina, according to crop reports, about one half this quantity is raised. A good plow boy or young man with a good mule or horse should be able to cultivate in all crops—corn, oats, wheat, potatoes, truck—twenty-five acres in the red lands or thirty acres in the light sandy lands. By using the gang plows in breaking land and then cultivating with the harrow and cultivator, a great many more acres could be cultivated. Tenants should, where there are a number of them on the same farm work, together under either the supervision of the landlord or of one of the most reliable tenants.

Where the land will not produce fifteen bushels corn per acre it should not be planted. Better commence in time. Leave off one-half the number of acres to be planted. Run out the furrows to be planted, fill them with scrapings from around the lots, fence corners, cleanings from under barns and negro quarters; ridge upon this. At planting use a sack of suitable fertilizer. Plant an early variety of corn and also with it plant peas. The pea vines will be worth as much for hay as the fodder. Enough peas can be gathered to pay for the fertilizer and to buy another sack for the wheat, which should be sown after the corn is gathered. Clover should be sown the next spring, and be allowed to occupy the land for a year.

The farmers in all this section should raise more clover, grass, and peas, save more provender, keep more cows, raise more pork, make more manure, cultivate what land we cannot work grow up in old field pines and cedar.

How many people have heard that cedar posts are being shipped from Alamance to Indiana? Within the next twenty-five years every post grown will find ready sale for fence posts and telephones?

The farmers in the red lands of Alamance and Orange are forging ahead of those in the sandy lands. Why? In the sandy land tobacco has not been a paying crop for several years. Wheat and corn have been bringing fair prices for several years; more attention is being given to stock raising.

B. F. WHITE.  
Alamance Co., N. C.

The question now is, "What size crop will be 'pitched' in the South this year? We hazard the guess that it will be about the same acreage as in 1900.—Southern Tobacco Journal.

### NEWS FROM FRANKLIN COUNTY.

Correspondence of The Progressive Farmer.

Farmers are well up with their work; more plowing has been done up to this time than in any other year so far as I know. Corn planting has begun. The acreage in wheat is the largest in a long time; it is looking very well, considering the winter. A large crop of oats has been sowed this spring. The corn crop in this county will be large, cotton about the same as last year, tobacco crop smaller.

The Farmers' Alliance is on a boom in Franklin. A new lodge has recently been organized near here with 25 members.

C. T. PERRY.

Franklin Co., N. C.

Try some rape for your stock this year.

### GOOD FARMING.

Where progressive systematic farming is carried on, which includes a regular rotation of crops, and thorough drainage, in ordinary loamy soils deep breaking will prove highly advantageous. Increase your depth of breaking as you add to the fertility of your soil, but do not go in advance of it. If a soil is naturally fertile, and draining and loosening are only required to render that fertility available for plant food, I would unhesitatingly break deep. When the subsoil is a retentive clay, use the subsoil plow. Better lay in bed than break your land when too wet. If the soil crumbles when turned over, go right on. Break a clover sod shallow.—John P. Bowie, Beaufort Co., N. C.

### HARRY FARMER'S TALKS.

#### XXI.

Correspondence of The Progressive Farmer.

Here are some accounts from a merchant's ledger which can be duplicated in any country or village store. It tells the reason why so many farmers fail to do as well as some others working under same conditions:

JOHN J. SMARTER.

1900.			
Jan. 1.	To coffee, sugar and cheese.....	\$ 7.95	
"	By sausage, eggs and potatoes.....		4.72
" 13.	To quilt calico and kerosene.....	2.58	
"	By eggs and seed oats.....		11.42
Feb. 2.	To g'd'n seeds, plow castings.....	3.78	
"	By 2 pigs 45 and 55 lbs @ 6c.....		6.00
Mar. 6.	To 2 tons fertilizer.....	49.00	
" 13.	To seed potatoes.....	3.50	
" 20.	By chickens.....		5.00
" 27.	By sweet potatoes and cabbage.....		2.35
Apr. 5.	To white dress goods and one hat.....	4.25	
" 12.	To 1 bbl. flour and \$1 cash.....	4.90	
" 19.	To plow bolts, milk pans and shoes.....	7.82	
May 1.	By eggs and hay.....		13.00
" 8.	To straw hats summer clothing.....	11.40	
June 3.	To flour and order John Hay.....	9.50	
" 17.	By 1,000 lbs. sheaf oats.....		5.00
July 2.	To dress goods, nutmegs, etc.....	13.40	
" 2.	By corn.....		8.00
" 15.	To sugar, coffee, flour.....	13.00	
" 15.	By watermelons.....		9.00
Aug. 1.	To orders of Jos. Smith and others.....	13.50	
" 3.	By watermelons and Irish potatoes.....		6.50
Sept. 1.	To medicine, lye and soap.....	2.50	
" 15.	To orders Peggy Jones and others.....	10.00	
" 25.	By 1 bale cotton.....		46.45
Oct. 3.	To 1 suit clothes.....	9.00	
" 10.	By beef and eggs.....		14.37
Nov. 5.	To ladies' dress and bonnet.....	11.00	
" 15.	By 2 bales cotton.....		81.40
Dec. 1.	To school books, &c.....	4.05	
" 10.	By pork and eggs.....		11.45
" 22.	To Xmas goods.....	4.00	
" 28.	By cash.....		1.00
" 29.	To one plow.....	3.00	
" 31.	By pork and eggs.....		6.40
			\$173.13 230.06

1901.  
Jan. 1. By balance to credit..... 53.93  
Notice that this farmer sold something every month in the year. Now let us look at another farmer's account and see what he is doing.

JACKSON DOONUFF.

1900.			
Jan. 1.	To tobacco and snuff.....	\$ 1.40	
" 10.	To coffee, sugar and soda.....	.90	
Feb. 3.	To seed oats.....	3.00	
" 20.	To flour, lard and meal.....	9.50	
Mar. 1.	To Fertilizer.....	42.00	
" 15.	To shoes, sugar and coffee.....	7.00	
April 1.	To g'd'n seeds and Irish potatoes.....	2.10	
" 8.	By eggs and chickens.....		3.30
" 20.	To cotton seed.....	4.00	
May 11.	To orders cotton hands.....	7.50	
" 18.	To plow fixtures, calico and hat.....	4.42	
" 31.	To plaids and sheeting.....	3.92	
June 6.	To coffee, salt and tobacco.....	6.45	
" 17.	To rice, sugar and molasses.....	5.40	
July 1.	To 1 suit clothes and suspenders.....	6.55	
" 10.	To watermelons and soap.....	.75	
" 15.	To meat and meal.....	6.71	
Aug. 1.	To orders of Jane Smith and others.....	8.65	
" 11.	To tobacco, snuff and medicines.....	1.40	
" 23.	To shoes, calico and fruit jars.....	9.49	
Sept. 2.	To meat, lard and baking powders.....	10.75	
" 15.	To cash for cotton pickers.....	3.81	
" 27.	To cash for cotton pickers.....	2.43	
Oct. 1.	By 1 bale cotton.....		41.72
" 13.	To meat, shoes and plaids.....	7.46	
" 29.	To flour, sugar and butter.....	5.89	
Nov. 3.	By one bale cotton.....		43.61
" 17.	To cash paid sheriff for taxes.....	6.93	
Dec. 1.	By chickens.....		2.40
" 8.	To flannel and bedtick.....	1.35	
" 19.	By seed cotton.....		23.42
" 24.	To Xmas goods.....	3.30	
" 29.	By peas and corn.....		31.00
			\$145.45 173.06

1901.  
Jan. 1. To balance due..... 27.61

At the end of the year we find something on the wrong side of this farmer's account. Nothing sold excepting some chickens and eggs one time and that sold in the spring until the cotton crop in the fall. Harry Farmer's account stood like the above until he saw that it would ruin him. So he commenced to sell something every week and tried to make this his motto: "No day without a dime."

The farmer farms for the purpose of making a living and laying aside something for a rainy day. There are markets for everything used on the farm. The people who live in the village towns and cities want some of everything that you raise and are willing to buy if they only can get it. Now this spring there are farmers in this county who have gardens full of collards and turnips who would like to have some money and there are lots of people longing for a chance to buy but don't know where to go. Now what is the remedy? Let the farmer advertise what he has to sell.

Columbus Co., N. C.

HARRY FARMER.