

"CIVILIZATION BEGINS AND ENDS WITH THE PLOW"

THINGS TO PLAN TO THROUGHOUT COMING YEAR

- Poultry loading depot with facilities for grading eggs.
- An annual poultry show.
- Monthly livestock sales.
- Farmers' own line of delivery trucks.
- Purebred sires and seeds.
- Guernsey cattle association.
- A semi-annual seed exchange day.
- A Harvest Carnival one day of the bread and butter show.

Just About the Farm

A little study in the cost of high taxes would reveal some very startling information.

Just by way of starting the ball rolling here are some figures, the analysis of which will give a little insight into the state of affairs from an agricultural standpoint only.

There are 328,320 acres in Macon county. Of this amount 8,006 acres are not on the tax books. It is presumed that this land is taken up with public holdings such as roads, school lands, etc.

The Federal Forest Reserve has a total boundary of 105,867 acres.

This leaves a total in private ownership of 212,453 acres, only twenty per cent of which is cultivatable. That is 42,491 acres are producing the food and feed that are produced in Macon county. This leaves 169,962 acres that are not producing crops of any kind.

Assuming that one half of this acreage, that is, 84,981 acres, are not in timber of any value, or pasture.

At the rate of 76 cents per acre, which is the average tax per acre in Macon county leaving off all special

grand total of \$65,585.52 being paid property tax on land that is not returning any value to the owner.

This is indeed a gloomy picture, and what is the process by which it may be brightened up? Pastures.

With two acres to the cow, 84,986 acres will keep 42,490 head of cattle, which would be produced on land that is now nonproductive.

At fifty dollars a head the above mentioned number of cattle is worth two million one hundred twenty-four thousand five hundred dollars.

Is it any wonder that living seems hard when such enormous wastage is allowed to take place?

PASTURES

During this last week I have driven over a good part of the county, and though I have looked carefully I have failed to notice a single hillside field where winter grasses are beginning to turn the landscape green, and there are several species of winter grasses that are valuable as stock feed that grow luxuriantly here.

The value of pasturage per acre per year to the various kinds of livestock are as follows: Hogs, \$40.00, Poultry, \$30.00, Cattle, \$20.00, Sheep, \$15.00.

Poor pastures are worth—not the time it takes to rebal them.

WHEAT SMUT

We have a home-made machine rigged up out at the roller mill for treating wheat for smut if anyone cares to use it.

The miller will charge about 15 cents a bushel and furnish the chemical with which the wheat is treated.

It is not the bare smut or blast which we see on the heads that turn them black that does any material damage in this section, but it is the covered smut that works inside the chaff. And this causes a great deal of damage in this section mainly because it is not easily detected and people do not realize the damage.

BREAD AND BUTTER SHOW

It is hoped that every one who will take an active part in making this show a success this year.

Every effort is being made under the very limiting circumstances to put on a good entertainment as well as a good educational program.

Saturday will be the big day, and will probably be followed by a good old break-down dance that night.

We are also trying to have a Harvest Thanksgiving Ceremony a short time, probably Friday afternoon, with some rousing good singing and some

KEEP YOUR FARM AND IT WILL KEEP YOU AND YOURS

lectures by one or two of our local ministers.

It seems to me that this is particularly appropriate for Macon county this year when we look over the country and see the devastation that has been wrought in other sections by storms and cyclones.

It is probably a little unusual to have a ceremony on a fair program, but this is just ours anyway and we can do as we please.

In the language of Rudyard Kipling "Now is the time for a long pull and a strong pull by every bloomin' soul."

Macon county the land of super-farmers that think—maybe. LYLES HARRIS, County Agent.

OATS WILL HELP MEET SPRING FEED SHORTAGE

Feed will be at a premium on many southern farms next spring. Reports from a number of southern states indicate a smaller corn crop than usual. Fall seeded oats can help to meet the need for feed next spring.

As frequently grown, the oat crop is disappointing. It is too much to expect a profitable crop of oats when the seed are drilled in on a worn hillside and then forgotten until harvest time next spring. Many farmers have learned the value of fall oats and have made them one of the most profitable crops.

Date of planting and adequate fertilization are two of the most important points in producing a good yield, which is essential for profitable production. Experiments made in many southern states have clearly shown early seeding to be important.

Large quantities of available nitrogen are necessary for large yields of oats but most of the nitrogen should be withheld for application in the spring. A complete fertilizer carrying a rather high percentage of phosphoric acid is desirable for use on most southern soils at seeding time.

On sandy soils a fertilizer such as a 12-4-4 or 10-4-4 is desirable. On heavier soils a 12-3-3 may be used.

able nitrogen for good fall growth a fertilizer such as 12-0-4 is desirable. Superphosphate alone at the rate of 250 to 400 pounds per acre may be used on rich soil requiring neither nitrogen nor potash. Three hundred to five hundred pounds of mixed fertilizer at seeding time is a conservative amount to use.

Some readily available nitrogen should be applied to oats on almost all soils in the South. From 150 to 200 pounds of nitrate of soda, nitrate of lime, or sulphate of ammonia should be applied in the spring. Where needs for phosphoric acid and potash have been completely supplied, heavier spring applications may be made with profit.

FALL FRUITS THAT "JELL" WITHOUT ADDING PECTIN

Concord and fox grapes, tart apples, and sour quinces are among the best fall fruits for jelly making, because their juices contain two of the substances essential to the formation of a jelly—pectin and acid. When sugar is cooked with any of these fruit juices, usually in the proportion of three-fourths of a cup of sugar to one cup of juice, the "jelly test" will be obtained in a few minutes; that is, the sirup will flake or sheet off the spoon, indicating that the jelly stage is reached.

Specialists of the Bureau of Home Economics of the United States Department of agriculture say that it should not be necessary to add pectin to make good jelly from the above fruits. Added pectin may be used to make jelly from fruits which contain little or none of this substance such as strawberries or rhubarb. Added acid, in the form of lemon juice or tart apple juice, is sometimes needed even when sufficient pectin is present, as in the case of quinces which are not sour, or sweet plums, or blackberries.

A pectin is often made from apple and stored for later use in jellies, it is obviously unnecessary to add any pectin when making apple jelly from suitable apples, sufficiently tart in themselves. Many jellies offered for sale are made from a combination of apple and other juices because this insures a good firm jelly texture, and the apple flavor is seldom as pronounced as that from which the jelly takes its name.

Sometimes the unnecessary use of added pectin results in a jelly that does not keep well, because of insufficient cooking. It is desirable to cook any jelly very quickly and carefully, but if there is too much pectin present the jelly stage may be reached before the juices are thoroughly cooked, and fermentation will result.

To make good plain apple jelly, choose apples of a fairly tart variety that are not overripe, extract the juice from the entire apples—skins, cores, everything but the damaged parts, which should be trimmed out

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—and you will have the basis of a clear, sparkling, tasty jelly that will stand up well and cut smoothly.

SOME OCTOBER PRECAUTIONS AGAINST ANIMAL PARASITES

With the approach of cold weather, bright, mild days in October are a good time for dipping livestock. This is a timely reminder given in the "Calendar of Livestock Parasites," published as Miscellaneous Publication 25-M, for free distribution by the United States Department of agriculture. Dipping livestock on farms during freezing weather may cause chilling and be injurious. The introductory paragraph for the month also warns that October is time to "learn about trichinosis and reasons for cooking pork well." The text of the calendar devoted to the month of October says:

"Did you dip your livestock last month? If not, do it now, before cold weather. If sheep scab is dormant in your flock it will make trouble later. Consult Farmers' Bulletin No. 713-F. Clean up chicken lice.

"Beware of trichinosis. Now is the time for early fall slaughtering of pigs. Every year pigs are killed on the farm and made into sausage and other products. Every year the incautious farmer's wife tastes the raw sausage to see whether the seasoning is right and the farmer's family or friends eat some of the raw sausage or other pork products raw. And every year there are a number of deaths from trichinosis as a result of this proceeding. The disease is caused by worms, of microscopic size, known as trichinae, which live in the muscles.

"Most of our trichinosis arises from farm slaughtering of pigs and the eating of raw sausage from small, un-inspected establishments. Trichinosis appears to cause swine very little trouble or discomfort, but is a very painful disease in man and frequently

or treatment. Cook pork products well and thoroughly, and avoid eating them raw.

"When nature supplies your chickens and turkeys with 'free' feed in the form of earthworms, snails, slugs, and insects, there may be a cost to reckon with later. Many parasitic worms use these other small animals as intermediate hosts or carriers of some sort in getting from one bird to another. Thus earthworms sometimes transmit tapeworms to chickens; slugs and snails transmit tapeworms and nematodes (the round worm group) to chickens and turkeys. These small animals swallow worm eggs in the droppings or in contaminated soil and carry the eggs or young worms to the bird that eats the earthworm, slug, snail, or insect. It is sometimes necessary to control certain parasitic worms. The Bureau of Animal Industry will identify parasitic worms and furnish any available information in regard to life histories and control measures. Many life histories are not yet known, and control measures must await the results of scientific investigations such as those on which our known effective control measures are based."

TWENTY-SEVEN FIRMS FOUND SELLING ADULTERATED SEED

A number of seed dealers offering redtop seed for sale continue to handle adulterated or misbranded lots, according to the United States Department of agriculture. In examining redtop seed in 436 mail samples and 113 purchased lots, the seed laboratory of the Bureau of Plant Industry found the seed from 27 firms to be adulterated or misbranded. In all cases the seed was the principal adulterant, although some samples ran as high as 27 per cent dirt and chaff and as low as 39 per cent redtop.

Names and addresses of the offending firms are published in the service and regulatory announcements by the department, in accordance with the act of congress making appropriations for such investigations.

The Bureau of Plant Industry will continue to examine and report promptly as to the presence of adulterants and do so in any sample of seed of grasses, clover, or alfalfa, and lawn-grass seeds secured in the open market and submitted for such analysis. According to the location of the sender, these samples may be sent to the seed laboratory at Washington, D. C., or to any of the following co-operating laboratories: Co-operative Seed Laboratory, California State Department of Agriculture, Capitol Extension Building, Sacramento, Calif.; Co-operative Seed Laboratory, Oregon Agricultural College, Corvallis, Oregon; Co-operative Seed Laboratory, Purdue University Agricultural Experiment Station, La Fayette, Ind.; Co-operative Seed Laboratory, Missouri Agricultural Experiment Station, Columbia, Mo.

SOIL IMPROVEMENT CROP SHOULD BE FERTILIZED

Now is the time to lay plans for a more profitable corn crop next summer. Corn grows best on a rich soil well supplied with organic matter and moisture. Winter legumes grown and turned under help to bring about these desirable conditions.

Vetch and Austrian peas are quite promising winter legumes, although there are other winter legumes that are good. Either of these crops should be artificially inoculated to insure best results. Uninoculated vetch or peas may result in failure.

The benefit secured from a green manure crop depends to a large extent on the amount of material grown to be turned under. On thin land where the benefit of the soil improvement crop is needed most, the growth is usually weak, and little benefit is obtained.

Unless the winter legume is seeded on land where the summer crop was fertilized heavily, fertilizer should be applied for vetch or peas. On sandy land 400 or 500 pounds per acre of fertilizer carrying both phosphoric acid and potash, such as 12-0-4 will give good results. On heavier soils 300 to 500 pounds per acre superphosphate alone may be used.

A good crop of vetch turned into the soil may increase the yield of corn 20 bushels per acre. A good crop of vetch cannot be obtained on poor land without additional plant food.

Rats destroy about \$400,000,000 worth of property annually, according to the United States Public Health Service. If you want to stop contributing your share to this fund, observe the following pointers when erecting farm buildings:

Make continuous concrete foundations extend at least 24 inches below and 12 inches above the ground level.

When posts and piers are used as supports, have them raise the building at least 18 inches off the ground if it is 3 feet wide or less, and increase this height 6 inches for each additional ten feet in width. This discourages the rats from using the space between the floor as a shelter.

If the space between piers is well ed up, provide windows of screened openings as large as possible in order to admit light to the enclosure from at least three sides.

Completely close the floor joists at the wall with a 2-inch plank wide enough to lap over the lower edge of the sill. Fill the boxed space thus prepared with concrete.

Use concrete floors wherever possible. Protect all necessary openings with 1-4 inch mesh, 12 gauge wire screen.

Provide doors with spring hinges. Leave no doors, windows, or other openings unprotected.

YOUNG DEWBERRY BECOMING ESTABLISHED IN THE SOUTH

The Young dewberry, a comparatively new variety recommended by the United States Department of agriculture for trial wherever dewberries are grown, is rapidly becoming established in the South. George M. Darrow, a senior pomologist in the Bureau of Plant Industry, reports a considerable acreage already in fruiting in southern Alabama, one grower having as much as 10 acres. Growers there expect to plant several hundred acres this winter for carload shipments to northern markets.

In California, says Mr. Darrow, growers have tested the Young dewberry sufficiently to confirm their opinion that it is in every way superior to the Logan. More than 1,000 plants were set out there this spring. Larger plantings are to be made this winter.

Canning tests in California indicate that the variety is especially adapted to canning. The extension of the cold-pack industry opens in an especially large market to growers of this variety. The berries are put up in barrels with 1 pound of sugar to 2 pounds of fruit. Such fruit can be used by preservers, for the ice-cream trade, and if somewhat less sugar is put with the berries they can be used by pie manufacturers.

The Young dewberry is further appreciated by growers because it appears to be resistant to anthracnose and the common leaf-spot diseases. The berries are as large or larger than the Logan and are much sweeter. They are of a deep wine color, very attractive, and of exceptionally high dessert quality.

CHEMISTRY IS PARENT OF MANY NEWER SCIENCES

"Chemistry, when it first turned to the field of agricultural research, was expected to do great things for the farmer," says Dr. C. A. Browne, who is in charge of chemical research in the United States Department of Agriculture. "This opinion was so widely accepted that when the first directors of the state experiment stations were chosen chemists often had the preference, and chemists had almost a monopoly of agricultural research. This no longer seems to be the case.

THINGS TO PLAN FOR RIGHT NOW

- That cream check every two weeks.
- That cannery check every time you come to town.
- Bread and Butter Show next fall.
- Encourage the 4-H Clubbers.
- Big Farmers' day next fall.
- Local Curb Market.
- Breed sows so that the pigs will go on the market in March, April, August and September.

and the fact might be interpreted as meaning a decline in the appreciation of chemistry as a factor of science."

Doctor Browne does not believe this to be true. "What actually happened," he says, "was not a decline, but an immense extension in the application of chemistry to agriculture." The field grew so broad that specialization proved essential, and many of the specialties, although firmly based in the essentials of chemistry and dependent on chemical research, are now identified by other titles, such as agronomy, horticulture, plant physiology, and animal nutrition. The infusion of chemistry into these other sciences is so great that some of them might almost be considered as branches of chemistry, and investigators in these subjects require a most thorough training in the fundamentals of chemistry.

YEAR-ROUND WORKERS

Analyzing the reasons for the relatively good organization and management of the dairy industry, Dr. A. F. Woods of the United States Department of agriculture finds the following three of particular importance:

(1) Fertility largely goes back to the land through the manure. Feeds purchased in part probably add more

is useful if not entirely remunerative; (3) everybody on the dairy farm works the year round. Though the pay may be small it gradually accumulates.

"The dairy farm and the dairy family," said Doctor Woods in addressing a group of Ohio dairymen recently, "gradually become richer—not too rich nor perhaps rich enough, but improving all the time. This is true even though modern bookkeeping methods show a paper loss, based on going wages and sale values. These economic studies of the dairy industry have pointed out ways to reduce costs of production and other sources of loss and thus increase the margin of net profit."

Store Sweet Potatoes For Late Winter Sale

Raleigh, Oct. 6.—Nearly always, sweet potatoes bring a low price at digging time and a higher price in the late winter and spring because they are hard to keep unless properly cured and stored.

"The best method for curing and storing the crop is to use a well-constructed, modern sweet potato storage house," says Robert Schmidt, vegetable specialist at State College. "Where such a house is not available, some tightly-constructed building on the farm may be pressed into use. A tobacco barn may be used for curing but this house has no insulation against mid-winter cold and precautions must be taken against freezes. The old time earthen bank should not be used except for the home supply."

For sweet potatoes to keep best, it is wise to harvest them before frost. When the vines are killed by a light frost, usually the tubers are not injured. There is danger from cold injury, however, when heavy frosts occur. A potato hurt by cold will not keep, even under the best of conditions. Then, too, says Mr. Schmidt, a bruised potato is hard to keep, so it is necessary to use care in harvesting and to handle the roots as little as possible.

The three important factors in keeping stored potatoes are moisture, temperature and ventilation. When the crop is freshly dug, the potatoes contain excessive moisture. This moisture must be reduced and is accomplished by the curing process. The appearance of sprouts is a good indication that the roots are well cured. Plenty of ventilation is needed during this process and when curing has been accomplished, the temperature of the house may be reduced to about 50 degrees Fahrenheit and kept at that mark as long as the potatoes are in storage.

Since curing and storage needs to be done with extreme care, Mr. Schmidt advises sweet potato growers to get full information on the subject.

CONSULT YOUR COUNTY AGENT AS YOU WOULD YOUR DOCTOR OR YOUR LAWYER