

# "CIVILIZATION BEGINS AND ENDS WITH THE PLOW"

**THINGS TO PLAN TO  
THROUGHOUT COMING YEAR**  
The Farmers' Day at the test  
farm at Swannanoa on May 17,  
1928.

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.

A "Bulletin of Immediate Information" issued by the Storrs Agricultural Experiment station gives the following information relative to a new method of control of the stomach worm disease of sheep.

Nicotine has been successfully used as an adjunct to the copper sulphate treatment of this condition in both sheep and cattle, but the work done at Storrs indicates that nicotine sulphate alone in the dosage prescribed is not only more effective but that its use considerably decreases the work of treating the flock since the treatments are repeated at three months intervals instead of thirty days intervals as in the copper sulphate treatment.

A. G. G. RICHARDSON.

The experiments in the control of the stomach worms of sheep carried on for the last three years have culminated by finding that nicotine sulphate is an effective vermicide for this parasite. Nicotine for a long time has been found to be efficient when given in the food, as tobacco stalks, stems, leaves, and dust. Tobacco dust has been steeped in water and the decoction made has been found to kill the stomach worms. The tobacco dust, however, varies greatly in respect to the nicotine content, and for this reason a staple standardized solution has been sought. It has been found that nicotine sulphate, when given in the food, made a solution of uniform strength. This has been found to act more efficiently than the copper sulphate treatment in the experiment at Storrs. It was easy to procure, easily made, it was cheap, and did not have the prolonged after-effects that the copper sulphate and some other vermicides showed.

The nicotine sulphate can be used in one of three strengths, namely by adding one teaspoonful of "Black Leaf 40" to a quart of water and giving four ounces of this to an adult sheep, and two ounces to a lamb over three months old; or adding two teaspoonfuls to the quart; or three teaspoonfuls to every quart. One teaspoonful strength is used only for weak animals. Two teaspoonfuls could be used for the average sheep and lambs, while three teaspoonful could be given to strong animals. In the instances where three teaspoonfuls have been used, few if any worms have been left alive in the stomachs of sheep and lambs. Where two teaspoonfuls to a quart were used, it was found that the efficiency was high. One teaspoonful to a quart was sufficient to kill a very large number of the worms, and prepared the animal to gain strength so that later stronger solutions could be given a month or two thereafter. Treatments cost less than a half cent a dose.

Animals were drenched in the same manner as with copper sulphate and were kept without food twelve hours previous to drenching. In order to have the dosage most effective, it is well to have them go at least eight hours after drenching without food or water. The treatment should be repeated every three months to an advantage in the average flock. Dosing the sheep with one ounce of Epsom Salts and keeping them confined two days after dosing, then placing them on a new pasture, greatly reduced the chance for heavy new infection. Over a thousand sheep have been drenched with nicotine sulphate, and only five weak animals have died from the effects of the drenching. One hundred and sixty-five stomachs have been opened and inspected to determine the efficiency of these tests.

G. H. LAMSON, Jr., Zoologist.

**BOBWHITE AND PLOWMAN  
ARE MUTUALLY FRIENDLY**

The bobwhite has always been a favorite throughout the United States, both for sport and because of the cheery call of the male, which has enlivened those who have had opportunity to listen to it.

As Americans went west and got beyond the regular range of the bobwhite, there were efforts to transplant it to the newer regions. The farmer is a good friend of the bobwhite, for cultivated fields are more favorable than virgin territory for the bird.

In a recent pamphlet issued by the

## KEEP YOUR FARM AND IT WILL KEEP YOU AND YOURS

United States Department of Agriculture the author says that in trying to estimate how much the introduction of bobwhites into western Kansas and Colorado has had to do with their spread westward, one meets with difficulties. It seems to be rather commonly supposed that there were no birds west of central Kansas before agriculture began. There is no doubt that they increased rapidly in numbers all over western Kansas, as well as eastern and south-eastern Colorado, as soon as farming operations commenced.

"In Kansas the most interesting feature of the history of the bobwhite," says this author, "is the rapid increase in numbers after the oil fields west of the hundredth meridian. This wonderful increase went hand in hand with the increase in cultivated ground, or prairie chickens. It seems more plausible, however, to suppose that a few birds did really exist in favorable spots all over western Kansas, enough to make a rapid response as soon as food became plentiful. It must be remembered that in this region for many years after the advent of man, small game was scarcely shot at all; which gave the game birds unusual opportunities to spread."

### MAN DEFEATS HIS PARASITES BUT ANIMALS SUFFER MORE

Mankind has a good chance of getting rid of most of the parasites that once affected him, says Dr. Maurice C. Hall, of the United States Department of Agriculture, but in the animal world the tendency at present is in the opposite direction. Medical science has paid attention to human parasites, and if it had not, the cook, the barber, the plumber, and the veterinarian in an advancing civilization would have reduced the dangers from many of them.

"Civilized man over the temperate zone," says Doctor Hall, "has already become too sanitary for his parasites, and the Tropics are following suit. The case is different for our livestock, however. Our domestic animals, especially our pasture animals, must eat uncooked food and drink from ponds and streams to a large extent. Their hairy or woolly hides

dant food, shade and cover for lice, mites, and ticks; their bathing habits are those of a small boy—compulsory baths only as a rule—and shaving is strictly an adjunct to surgical procedures.

"One may ask: If the limitations of sanitation have always applied to livestock, what reason is there to suppose that matters are getting worse in the highly civilized United States? The history of the livestock industry is one of gradual transition from the pastoral conditions of the open range to the farm conditions of fenced inclosures. Free, open range implies light stocking—few animals to the square mile. As the free range goes, range areas are restricted to large holdings, not free, but cheap. Ultimately we have the small farm flock or herd under fence and crowded to the carrying capacity of the land. Pure bred animals replace the scrubs. Meanwhile, what have the parasites been doing? Under the laws of chance the parasite egg that had to pursue its host to a new bed ground 5 miles away was out of luck. As livestock was concentrated on smaller and smaller areas, parasite stock went up. What happened and what is happening today is that in the absence of control measures our livestock are succumbing in large numbers to these parasites, is losing enormously in wasted production from unthriftiness and the farmer and stockman are taking this loss with the unconcern which follows from the fact that what you don't know doesn't hurt you."

### BIG MEN LOVED THE COUNTRY

Your county agent wishes he could reprint every word of an article in the SOUTHERN AGRICULTURIST under the heading, "When Great Men Lived in the Country." It is too long, so all he can do is to scribble a short introduction to a couple of most convincing paragraphs.

Undoubtedly the great barrier to a bigger and finer country life lies in the fact that people generally prefer life in the city. In fact, many of our leading farmers and their families hope to move to town because of the advantages offered. This is a new viewpoint because Washington, Jefferson, Monroe, Jackson and all the leading men of their day preferred rural life. They even looked down upon the man who had to live in town.

Here is a portion of the article: "More than relief in material things, rural civilization needs a leadership based on love for and appreciation of rural life. The country needs preachers and school teachers who are capable of seeing the big things in country life, and who show their faith by their works. The church and the school are in large measure responsible for this repudiation of country life. Practically all the preachers have moved to town who could get there. Even the country preachers

The farm pages of The Press are edited by the county agent in collaboration with the editor.

have become town gentlemen. In all of their thinking and activities the emphasis is on the church in town. More and more they regard the rural sections as missionary territory. It is looked upon by them as a field of hardship and sacrifice. Since country people appreciate religion, this attitude of the church has been a serious blow to country life. The church needs to be converted. There is no sort of adequate justification for the attitude ministers have assumed toward the country church.

Educational leadership centers in town. Our school system is pre-eminently of the city for the city and by the city. It is imposed on the country from without with little consideration for the specific needs of the country. In practice the system tends to interfere with the training of boys and girls for life in the country and instills in them the desire to leave the country and go to town. The system gives no recognition to the training of the world's greatest educational institution—the country home. As a matter of fact, the school is demanding so much of the child's time that he has small opportunities for home training in productive work. This theory may be all right for the city child who has no home school, but in the country it tends to destroy the school that is chiefly responsible for our great leadership in every sphere of life—the country home.

### COWS BRING CONTENTMENT

No matter where the county agent goes in the South these days, the farmers, the merchants and the bankers are talking cows. Cows, clovers, corn and cotton, all on the same small place, will solve any number of farm problems and bring a substantial and lasting contentment. This statement is borne out by what has taken place in many sections of the Southland.

The SOUTHERN AGRICULTURIST has this to say on the subject

of its editorial pages: "It would be well for every rural community in the South to consider seriously at this time the development of the milk industry. No other industry is so potential as a constructive force in community building. It enables the worker to remain at home on the farm; it enriches the land without cost; it supplies lucrative work for the children who are old enough to work the year round without interfering with school duties; it makes the home an important producer of wealth, and is an uplifting force for the community. It brings in money every day in the year, and there is practically no danger of an over supply of the products. It is a business with few risks. Prices vary very little, and they are always such as to guarantee a profit to those who work intelligently. The business can be conducted profitably on a large scale or on a small scale. It is a business that the man of small means may enter with no serious handicaps. The dairy business may be carried on in connection with regular farming, and thus will relieve the farmer from sole dependence on the 'crop' that is always extremely uncertain. This industry gives greater promise of solving the farm problem for thousands of farmers in the South than all the legislation that may be enacted by Congress for the next fifty years.

Milk plants and cheese plants can be made available wherever there is a demand for them by the farmers. It is for the farmers in the South to say whether they want them. Operators of these industries are ready to call for the milk and pay the market price for it where farmers in sufficient numbers in any community are ready to supply the milk. Communities in the South should be quick to take advantage of this new opportunity. Tennessee rural communities are already very active and they are getting results.

### PLANT DISEASES CAUSE HEAVY ANNUAL LOSSES

Disease of plants in the United States reduce crop yields to growers, often to a serious and sometimes to a disastrous degree. Pathologists of the United States Department of Agriculture are now collecting the statistics and making the estimates for last year which will be the eleventh annual report of such losses. The severity of diseases varies from year to year, but the record for 1926 gives something of a suggestion of what may be expected in the 1927 report.

In 1926, diseases, estimated to have caused a reduction in yield of the wheat crop of more than 7 per cent with blight as the most damaging single disease. Damage to rye from all diseases amounted to only about 1 per cent, but barley suffered worse with nearly 6 per cent reduction in yield, and with covered smut the worst disease. About 10.3 reduction

in yield of oats is estimated with stem rust and loose and covered smut responsible for most of the loss. Corn diseases accounted for nearly

13 per cent reduction in yield with ear rots responsible for more than half the damage. Tennessee growers lost about 30 per cent of their crop largely through root and ear rots, and Missouri, Pennsylvania, and South Carolina losses ranged from 28 per cent to 21 per cent.

In the truck crops, potatoes are seriously affected with a large variety of diseases, but late blight caused injuries estimated at more than 6 per cent of a total reduction in yield of more than 18 per cent. With sweet potatoes the loss amounted to more than 10 per cent and with beans nearly 6 per cent.

Cotton, seriously injured by insects, also suffered a reduction in yield due to diseases of nearly 15 per cent. Grapes, with the exception of a few states, suffered only comparatively slight losses, but the apple crop reduction amounted to more than 10 per cent, and peach and pear reductions in 1926 were about 8 per cent each.

Department of Agriculture scientists are constantly studying these diseases with a view to devising methods of cure or control or to eliminate losses by the discovery or breeding of resistant varieties. In some of the most seriously affected crops ways have been devised by which farmers can prevent or minimize these losses.

### ROOM FOR IMPROVEMENT IN HAY-HARVESTING

Some farmers in the United States store an acre of hay with four hours of labor. Other farmers use more than eight hours of labor for the same job. Such variations of efficiency in hay production indicate, says the United States Department of Agriculture, that much room exists for improvement. An example is the fact that many farmers are still using small, one-horse rakes, which are economical only on small acreages. Farmers growing 40 or more acres of hay should use 10-foot or 12-foot rakes.

Investigations made by the department

show that the use of a side-delivery rake and a hay loader commonly effects a saving of about 1 1/2 hours per acre of man labor and a half hour per acre of horse labor, as compared with the cost in human and animal labor when the dump rake and animal labor when the dump rake and hand loading from the windrow are employed. This saving, with wages at 40 cents an hour, represents a saving of 60 cents per acre in man labor alone. That would amount on 30 acres of hay to more than \$18, or the interest on approximately \$375 at 5 per cent, a sum more than sufficient to pay the interest and depreciation on the necessary investment in a side-delivery rake and hay loader.

When a loader is used a hay-making crew can handle considerably more hay in an easier manner than they can do so by hand. Slings will unload hay in about two-thirds the time required by the use of the double harpoon or the grapple fork. It saves labor to take two or more wagons to the field, especially when the haul is long.

It is economical to use large-sized mowers on farms where a sufficient acreage is to be cut. In the East the 5-foot mower, which will cut 10 acres in 10 hours is the size most commonly in use. But a 6-foot mower will cut 12 acres in 10 hours and a 7-foot mower will cut 14. Usually the additional power required for the larger implements is available on farms where the acreage to be cut justifies the use of such machines.

### FOUR-H CLUB MEMBERS ARE WELCOMED TO WASHINGTON BY EXTENSION DIRECTOR

Champion farm boys and girls representing 39 states in the second national 4-H club camp, Washington, D. C., were welcomed on behalf of the United States department of agriculture in the auditorium of the National Museum, by C. W. Warburton, director of extension work in the department. Director Warburton pointed out that 620,000 boys and girls are now enrolled in the 4-H clubs for the purpose of training in more efficient farming and home making methods and in the responsibilities of citizenship.

Director Warburton said: "The 4-H clubs give the farm boys and girls an opportunity to meet together, work together, and play together. The 4-H clubs are regarded by the department as being one of the most helpful agencies for improving agricultural conditions and farm living. Congress has expressed its approval of this work through substantially increased appropriations provided at its last session. This appropriation will make possible a larger development of 4-H club work through the 3,000 co-operative extension agents now working in counties throughout the United States both with adults and young people on the farms. Although there are now about 620,000

### THINGS TO PLAN FOR RIGHT NOW

That cream check every two weeks.

That cannery check every time you come to town.

Fat hog sale in June.

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.

boys and girls enrolled in 4-H clubs work there are fifteen times as many boys and girls who have not been afforded this opportunity. The substantial support given the work by Congress should enable the department and the state agricultural colleges to extend the influence of the 4-H clubs in improving farm life."

### ON TO ENGLAND

Nebraska's champion dairy-judging team are even now doing some last-minute brushing up on technique and packing their bags for England, where they will compete with British boys and girls at the International Junior Dairy-Judging Contest on July 5. The boys will sail from Montreal June 10 after spending June 12 and 13 in Washington. While in Washington, they will meet the President and the Secretary of Agriculture and visit the points of interest in the National Capitol.

The American team has won five of the seven contests in which they have competed, but for the last two years the English team has managed to keep the cup at home. Our boys will win against stiff competition if they succeed in bringing home the

cup this year. These famous Nebraskans are Jesse A. Bilyeu, who ran up highest individual honors at the National Dairy Show last fall; Joe King, a veteran club member of 10 years' standing, who last year was one of the boys to represent Nebraska at the first national 4-H camp in Washington, and Russell D. Hughes, a young farmer living near Albion.

The boys are members of the Holstein dairy-calf club of Albion. They will be accompanied on the trip by M. L. Flack, state extension agent in dairy husbandry, and C. C. Girardot, the local leader.

### HOW TO PLAY

John Bradford, a representative of the Playground and Recreation Association of America, 315 Fourth avenue, New York City, for the last year has been co-operating with different states to introduce detailed training in methods to recreation to extension leaders. From May 1, 1927, to April 30, 1928, through meetings arranged by the state extension directors, he has visited 22 states, teaching recreation methods to representatives at these meetings from 35 states and 3 Canadian provinces.

In the training classes, he has taught over 4,000 leaders so that they may go out and teach these methods in their own communities. He has attended state 4-H camps to train groups of leaders who could take the work to their county camps and to their community clubs; county short courses where he gave instruction to county workers in principles of community song leadership, technique of game leadership, indoor and outdoor active games, indoor and outdoor quiet games, social recreation activities, and source material from which to build programs; and institutes for the training of volunteer lay workers and other leaders such as rural teachers and church workers.

Anyone in the community who desired to take advantage of the opportunity to come and have a good time was welcome. In this way, Mr. Bradford has introduced new play methods to some 5,400 residents in communities which he has visited.

State College Station, Raleigh,

June 19, 1928.

To All County Agents:

July 30 to August 4 is the date for the 4-H Short Course. We are expecting the largest attendance we have ever had, and we hope to make this the best Short Course we have ever had. The courses given and the general program for the Short Course will be about the same as last year, with the exception of the recreational features which will be under the direction of Mr. Walter J. Cartier, superintendent of the Charlotte Park and Recreational Commission of Charlotte, N. C.

Each county agent may bring or send as many boys as he cares to as long as they are bona fide club members. (Continued on page three)

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