REPORT OF

ACTIVITIES OF THE OFFICE OF SWINE EXTENSION

LOCATED AT WEST RALEIGH,

N. C.

FOR THE FISCAL YEAR ENDING

JUNE 30, 1920

WITH

SUPPLEMENT TO

OCTOBER 16, 1920.

W. W. SHAY, IN CHARGE.

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REPORT.

Demonstrations.

The problem in this state as we see it is not so much one of increasing rapidly the number of hogs on farms, as it is of bringing about a better understanding of the economical and profitable production of pork.

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This end can be attained only through improvement in housing tp protect young pigs from cold, storms, buzzards and the various ailments to which they are subject, and which are caused by exposure.

More attention should be given to sanitation, a lack of which causes a high rate of mortality among hogs, and especially is this true in the case of pigs.

More liberal feeding is necessary to greater profits, and the liberal and nearer constant use of grazing crops which are essential to any profit at all. A better understanding of what constitutes a good grazing crop as compared with broomsedge and pine woods, and an better conception of the economy of very liberal feeding of supplemental concentrates.

These matters and their resultant profit must be made clear through actual demonstrations, conducted as far as possible on farms in various neighborhoods.

Considerable difficulty has been experienced in locating such demonstrations. This is partly owing to the fact that care must be exercised in the selection of a demonstrator; He should be a man who is sufficiently interested to set aside a portion of his farm for the purpose, (four acres has been settled upon as a standard) to be governed by the plans outlined by the project as best adapted to his locality, and to give attention to necessary details promptly.

Such men, suitably located, are rather difficult to find, and it is believed advisable to "make haste slowly." in this respect, as a failure owing to lack of interest would be more than merely a failure, and much worse than if no start had been made.

Two such demonstrations are under way in the state, one in Chowan County, and one in Bladen, the latter has been delayed owing to loss of fencing in transit, the wire is now on the ground however,

and the a gent is expecting to go ahead with it as rapidly as possible.

Editor Clarence Poe of the Progressive Farmer has very kindly set aside seventeen acres of his farm for this purpose, and we expect great benefit from this demonstration and its attendant publicity.

Demonstrations in building colony houses and self-feeders have been given at several points in the state, both at meetings and on farms where they have been built for use, as well as demonstrations of a lighter nature such as judging, building rubbing poles cleaning up for exhibition, ringing, crate building, a picture showing the demonstration at the Farmers' Convention at West Raleigh last year is attached.

This exhibit shows a partially completed self-feeder, a colony house, and method of attaching a commercial waterer.

There is also attached a picture of a lesson in crate building, given to the Pig Club boys at the short course,- the boys themselves have just completed the crates, each group building one.

Perhaps one of our best demonstrations was in connection with our educational exhibit at the State Meeting at Goldsboro. It was donducted jointly with bheofflice of Swine Investigations, assistance being rendered by the Home Demonstration Offlice of the local District Home Demonstration agent and some of her force.

It consisted of a demonstration in making first class pork sausage, a small mandwich being served to each visitor, the meat of which was hot sausage, served on a circular giving directions for its making. Indeed so well did this demonstration take that the Chief suggested that he would approve the purchase of 40 Food Choppers similar to the one used in the demonstration, to be loaned to the Home Demonstration agents for use in similar demonstrations, and later did approve such purchase and loan which has resulted in great assistance to the Home demonstration agents, not only in sausage making, but many other demonstrations such as hash, vegetable and salad making demonstration.

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Assistance in Buying Stock.

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As formerly stated more attention has been given to better methods and better stock rather than a great increase in the number of hogs.

This plan has been followed in some instances to the extent of recommending the disposal of half the hogs owned, and as much feed as was formerly given, fed to the remaining half,-frequently it is advised that much more than twice the amount usually fed be given.

The Pig Club work of the state has resulted in a wide distribution of pedigreed pigs of no especial merit.

There appears to be a well sustained effort to acquire a strain of hogs that will make good under the adverse conditions prevailing on the average farm, one breed failing in this, a change of breed is often resorted to, but more frequently a cross is sought which will develop the desired end.

Where it is believed that stock purchased will be given an opportunity to show their worth, assistance is given in the selection or purchase of breeding animals, and advice given as to their care and feeding.

Stock has been personally selected and frequently bought as agent for quite a number, as shown by the attached classified report of activities.

These hogs have been bought for organizations, associations, counties, firms, individuals, and in no case, so far as I am aware, has dissatisfaction resulted.

Three public sales have been promoted by the office during the year, one a consignment sale as reperted under the head of "Selling" and two by the American Poland China Record Association.

Assistance in Selling.

A list of owners of animals of known merit is kept in the office, and parties asking for such animals are referred to them and a personal visit to their farm for the purpose of making selections is recommended.

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A consignment sale was staged at the State Live Stock Association meeting at Goldsboro in December. This was done with a view to making an outlet for bred gilts of March farrow owned by Pig Club members, but as only a few were forthcoming from this source, other nominations were accepted, and, after inspection, listed up to fifty head and sold.

Club Work.

Owing to the lack of time, not sommuch attention as desired has been given to Club Work. Assistance has been given by this office in the purchase of pigs of known merit through themaintainance of a "For Sale" and "Wanted" list. Pigs lacking in merit are excluded from this list.

Instructional letters, copies of which are submitted, were sent until the publication of a club paper was commenced in the Spring, since shich time copy is furnished for that.

We also have a considerable personal correspondence, some of which is with members of the Pig Club.

A study of circulars 89 plan of colony hog house and circular 97 score card, both of which were gotten out by this office, has been made by correspondence, in classes where possible, and on farms of members, the latter being attended by members in the neighborhood.

4000 copies of line drawings of a home made automatic waterer . were printed and many of these have been furnished to members.

County Agentas

As much as possible the above work is done in co-operation with the county agents, and in addition to that, they are given as far as possible all other help requested, both at meetings, and where deemed of sufficient importance, on individual farms, but there being 100 counties in the state, only those agents showing an active interest in swine work can be assisted.

Organizations.

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Assistance has been given in the formation of five breed associations, and the selection and purchase of stock for them; in one case all of their stock was personally selected and purchased by this office. Their meetings are attended as often as possible.

Plans have been furnished for, and assistance will be given in the erection of a modern central hog house at the Charlotte Hawkins Brown School(colored) in Guilford County.

State Fair.

Assistance has been given to the State Fair Association through acting as Superintendent of the Swine Dept. The pen capacity will be nearly doubled this year.

The rules have been changed, the premium list revised, several classes being added, and the total amount of premiums offered increased 77%.

Work With Farmers.

Owing to lack of Help, not sommuch field work is possible as is desirable, especially in the cotton belt as a preparation for the coming of the boll weevil.

Where time will allow, Aco-operation with the County Agent, in meetings of farmers are addressed at night and the farms of those present, and apparently most interested, are visited during the day, but it is believed that much more can be accomplished by time spent in the office arranging data for the use of agents and utilizing the press.

The Press.

connected Articles bearing on subjects/with pork production, are prepared for the press from time to time.

Bulletins and Circulars.

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To Abasea

Copy for a "Swine Growers Calendar" was too late for publication last year and will no doubt be revised and published during November or December.

A score card, circular 97, has been issued, as have blue prints of a colony hog house, self-feeder and automatic waterer. Plans for a central Hog house were requested by citizens of 18 states, from Maine to Oregon and Texas.

Nearly the entire month of January was spent in studying conditions in the boll weevil infested sections of Georgia and Alabama. Over twenty-eight hundred miles were covered during this trip. Many interested men were interviewed and pictures taken.

Data thus secured have been arranged in the form of copy for a bulletin which will doubtless be issued during the first of the next fiscal year, as will a bulletin of "Farm Fencing", copy for which is about complete, in the preparation of which this Office has been interested as one of the Committee of four appointed for that purpose by the Chief.

Appended may be found copy of various articles, etc. prepared on as well as a condensed "List of Activities."

COPIES

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OF PUBLISHED CIRCULARS, BULLETINS, DRAWINGS

New Contract and

AND PHOTOGRAPHS, AND SAMPLE CLIPPINGS.

BLUE PRINTS OMITTED.

ANNUAL REPORT OF

OFFICE OF

SWINE EXTENSION, WEST RALEIGH, N. C.

CIRCULAR LETTERS TO COUNTY AGENTS. 40

FISCAL YEAR 1920.

COOPERATIVE EXTENSION WORK AGRICULTURE AND HOME ECONOMICS

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STATE OF NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE OF AGRICULTURE AND ENGINEERING, NORTH CAROLINA STATE DEPARTMENT OF AGRICULTURE, ND UNITED STATES DEPARTMENT OF AGRICULTURE, COOPERATING

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Home and Farm Clubs

ALLON VO

West Raleigh, N. C. May 24, 1919.

Dear County Agent :-

It will be the policy of this office to bring to your notice from time to time matters relative to swine production. These matters are considered as being of interest to you, and still may easily have escaped your attention owing to the rush of other matters. We in turn should like occasional information from you concerning matters in your county. This, we believe, is one of the times when we can benefit each other through such an exchange of information.

The price of hog tankage has dropped from \$110.00 to \$90.00 per ton. It is our cheapest heavy protein carrier.

The increase in meat production including lard for 1918 over 1917 was approximately 4,000,000,000 pounds. Three fourths of this increase, or approximately 3,000,000,000 pounds was made by hogs, and one fourth by cattle. The figures are for dressed meat. Exports of hog products increased 71.7 per cent during 1918 over 1917.

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We are making a survey of the pork production of the state. Will you please answer the following question, and return same to me?

What was the number of car loads of hogs shipped from your

More) County last year cooperatively? More

Very truly yours,

W. W. SHAY.

In Oharge Swine Extension Office.

Animal Industry Division.

West Raleigh, N. C. August 5, 1919.

Dear County Agent :-

The Assistant State Agent advises me that there are approximately three thousand five hundred Pig Club members in the State. What is the average quality of these pigs? I believe that it may safely be assumed that at least ten percent of the owners of these pigs would be glad to sell their stock at a fair figure next December.

Why not get together and put on a sale at the next State Live Steck meeting at Goldsboro? If we could (and we can) hold a sale of really worth while pure bred club pigs, it would prove the best thing that has occurred so far in the club work of the state.

In order to assure the success of such a sale it would be necessary to nominate the animals to be shown and sold. We would not want to offer and chuffy little dumplings, but nice size stretchy, well grown out gilts - real foundation stock - choice animals of early spring farrow, ranging around two hundred fifty pounds, of good conformation and color, and bred to good registered boars.

Any of the breeds so hong as they are registered would in be eligible for such a sale, and it being a sale of mixed stuff, I do not think that fifty head would be too many to offer. If this sale proved as popular as "feel assured it would, we could hold semi-annual or quarterly club sales, or even oftener.

What do you think of the idea? Surely, this state ought to be producing its own foundation stock. The only reason it does not is that we do not FRED WELL ENOUGH. We have as good blood lines as there are anywhere.

I am going to ask you to answer just two questions and shall be pleased to have a ltter from you giving your view of the subject.

What should be the limit of the number sold?

How many pigs do you nominate from your county?

Nominations close September 1st. Other things being equal, earliest nominations will have preference.

Remarks:___

You will be at Goldsboro, why not send a gilt?

Yours for a corking good sale, I am

Very truly yours,

W. W. SHAY, In Charge Swine Extension

COOPERATIVE EXTENSION WORK

AGRICULTURE AND MOME ECONOMICS

STATE OF NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE OF AGRICULTURE AND ENGINEERING, MORTH CAROLINA STATE DEPARTMENT OF AGRICULTURE, AND UNITED STATES DEFARTMENT OF AGRICULTURE, COOPERATING,

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Animal Industry Division

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West Raleigh, N. C., September 9, 1919.

Dear County Agent :-

We find that the Pig Club members are unable to supply enough good bred gilts for the sale at Goldsboro December 9th.

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I want to say that I think it much better not to put in ordinary stuff and am very glad that you agents look at the matter in the same light.

Now, several of the agents have advised that they can furnish bred sows and gilts owned by farmers in their counties, and in that case we may be able to get up 50 head for a combination sale.

Sows for this sale should be bred not later than November and safely pass a period and must be guaranteed bred.

Certificate of registration should accompany each animal.

All hogs nominated for the sale will be inspected by a competent swine man as soon after nomination as possible, and the best 50 head selected 5 per cent of the sale price will go to the State Association for advertising.

Other expenses for auctioneer, etc. will be deducted pro rata.

Let us put this over as a demonstration of what has been done and for use in our next campaign. All breeds eligible.

I nominate..... wo for the sale at Goldsboro, December 9th, 1919.

autionAgent.

Very truly yours,

W. W. SHAY,

In Charge Swine Extension Office.

Animal Industry Division.

16.17

West Raleigh, N. C. September 11, 1919.

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Dear County Agent :-

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There are several questions, the answers to which are needed in this office, a nd I am therefore sending out this questionaire.

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The outlook is for a very good demand for young service boars this fall and if you will send the names of any of your farmers who have GOOD INDIVIDUALS of this class for sale we expect to be in shape to help you dispose of them.

If you will furnish us with a list of your Pig Club members, giving BREED OF PIG in each case, the breed paper will be sent them occasionally, and if you will give the name of the LOCAL CLUB LEADER a year's subscription will be sent to him.

Also, an award card for one year's subscription to certain of the breed papers will be furnished to the member winning first at a county or district fair.

The information as to breed of pig will enable us to get a line on percentage of the various breeds in the state, and will be useful in many ways.

Thanking you in advance. I am.

Very truly yours,

W. W. SHAY.

In Sharge Swine Extension Office.

Nov. 11, 1919.

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Dear County Agent :-

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What about the price of pork? Even with a net drop of nine dollars per hundred from the high prices of 'ulyd those farmers who produced in quantity commensurate with their preparation in the way of grazing crops, can easily break even and in most cases realize a little profit through curing their meat before selling. t appears to me that this is the time to strongly advocate the practice of home curing of pork. This not only enables him to hold for a satisfactory market, but at once places him on a level with the butcher with whom he may either deal at leisure or compete as appears most profitable. In my opinion this subject should be prominent on the programs of community Clubs, Farmers Unions and the various rural organizations, it might also with profit be advocated through the press.

6 16

As you are aware good bulletins giving very complete directions for the killing of hogs and curing of meats on the farm as well as excellent recipes for the making of sausage, surapple, headcheese, etc., are available for distrip bution at such meetings as well as otherwise.

I shall be pleased to send as many as you can use.

Sincerely yours.

In Charge Swine Extension Office.

Nov. 17, 1919.

Secretary Board of Trade. Marion. N. C.

Dear Sir:-

Due to the un precedented and unjustified drop in the price of pork on the hoof, farmers cannot realize the cost of production unless the meat from the present crop of hogs is cured at home. In order that this condition of the market may not result in discouragement to the famers, causing them to discontinue the present increased production, with a consequent unduly high price in the future, I am asking your cooperation in giving publicity to the following:

6 1

During the winter of 1916-1917 the Office of Swine Investigation killed 18 hogs, 9 of which were sold on the market fresh at llicents per poind. After selling the lard, ribs, heads trimmings etc., fresh, the balance of the meat consisting of hams, shoulders and sides from the other nine hogs of equal weight was cured before selling. This action resulted in additional returns of \$66.92 or 44% more for the meat cured at home over that sold fresh. Under the present prices the difference would be much greater. The following table gives a summary of the experiment which was conducted by Mr. Earl Hostetler at the Pender County Test Farm;

	Meat Cured.			Meat Sold Fresh.	
	weight I	Price per 1b.	Weight	Price per 1b.	
Whole Hog Hams Shoulders Sides Trimmings	1187.6 234.8 166. 5 124.4 644.0	27¢ 23¢ 23¢	1300	1124	

Total Returns

\$216.42

\$149.50

Home curing will be much more largely practiced during the coming winter than ever before. Bulletins on the subject may be had of the U.S. Department of Agriculture or the Office. of Swine Extension, WestRaleigh, N.C.

Thanking you in advance for any assistance which you may render, I remain,

Dear Professor:-

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Papers graded in this office for the various students judging contests indicate, to some extent, a lack of understanding of the change of type undergone by some of the leading breeds of hogs during the last few years.

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In some cases students have given as reasons for placing one four months old animal over another such as: "Lower and more blocky build": "More symmetrical" and "Compact."

As you are aware, the first and last reasons quoted above, when applied to an animal of that age, indicate that the person giving them is not when considering mature size sufficiently.

I am requesting some of the Record Associations of the breeds in mind to send you pictures of outstanding animals for use in the class room.

D am also enclosing you a drawing of a home made automatic waterer. There are available for study in the manual training class if desired.

> Cordially yours, W. W. Shay. In Charge Swine Extension Offices

PLATE.

Dear County Agent :-

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Blue print plans of a central hog house, also of a self feeder are now available for these who request them. We also have small plans of a home-made automatic waterer for distribution to Fig Blub members. The latter will doubtless be mailed in the near future. This is a very handy and easily constructed device, which makes use of a five or ten gallon oil can such as is used as a container for lubricating oils, warnish, etc. and usually discarded when empty. The building of such a waterer furnishes useful occupation for a club member, and its use insures a constant supply of water throughout the day for the pib, a condition not always present in the absence of a stream running through the pasture lot.

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We are in receipt of **accasional inquiries** from the record associations, as well as parties owning pure bred hogs, asking about sales in this State. If you believe that such a sale would be benefidial and successful in your county, and will notify this office of the breed of hogs, and date of sale desired, we shall be pleased to render any assistance possible.

Very truly yours,

W. W. SHAY.

In Charge Swin eExtension Office.

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COOPERATIVE EXTENSION WORK

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STATE OF NORTH CAROLINA

BORTH CAROLINA STATE COLLEGE OF AGRICULTURE AND ENGINEERING, BOINT CAROLINA STATE DEPARTMENT OF AGRICULTURE, AND UNITED STATES BIPARTMENT OF AGRICULTURE, COOPERATING,

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Animal Industry Division

(B)

West Raleigh, N. C., March 16, 1920.

WHITE SCOURS IN PIGS - TREATMENT.

Dear County Agent:

During this and next month you will find pigs sleeping in wet beds; following the sow through mud; nursing from an udder caked with mud and filth. You will also note the results of these and other abuses, such as overfeeding the sow during the first two weeks after farrowing; sudden changes in feed, and allowing feed to ferment in a dirty trough. Usually the first indication of trouble is scours in the pigs.

About the best recommendation, and one available to the average farmer is: Keep charcoal and wood ashes before the sow at all times; decrease her feed and add a heaping tablespoonful of flowers of sulphur; correct the cause; wash and disinfect the udder; clean and disinfect the pen; provide for plenty of sunshine, and avoid draughts.

Feed parched or scorched shorts or meal to the sow, also to the pigs if old enough to eat.

Plans made this month will to a great extent determine whether this year's pork production is to be profitable or otherwise - without forage crops there can be no profit.

Cordially yours,

W. W. Shay, In Charge Swine Extension Office. CIRCULAR LETTERS

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TO

6 47-19 N 6

CLUB MEMBERS.

FISCAL YEAR

West Raleigh, N. C. | September 10, 1919

Dear Club Member;-

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As you perhaps know, the State Fair Catalogue is ready for distribution. If you expect to exhibit your pig at this fair you should write a card to Mr. Jos. E. Pogue, Secretary, Raleigh, N. C. asking him for this catalogue, and when it comes, study the premium list and rules.

I am enclosing you a small circular giving "Basis m of Award" in Pig Showing Contest.

There will be contests for Pig Club members only, and there is no reason why you should not compete for all prizes for which your stock is eligible as there is no rule to prevent.

If you are sending a pig, why not also send a ham or strip of bacon for the Cured Meat Contest? We should have a nice display of cured meat, and, of crurse, I should like to see a club member win.

Now, if you are going to send a pig by all means study this little circular, and if you do not expect to send one this year it will still pay you well to study:

"The Judge Will Consider" and govern your work ac-

cordingly.

It is possible for a boy with one pig to win \$35.00 in prize money and the medal in addition to what he may win at local fairs, and the advertising he receives will be worth many times that. ^Bring out your pig and show how good it is. See your County Agent about this matter.

Very truly yours.

W. W. SHAY.

In Charge Swine Extension Office.

West Raleigh, N. C. September 10, 1919.

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Dear Club Member:-

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As you perhaps know, the State Fair Catalogue is

ready for distribution If you expect to exhibit

and there is no "late will be contacts for Big Gub members only. and there is no remain way you about not controls for all prizes for which your glouk is eligible as there to no rule to prevent.

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soudy this little circular, and if you do not argent to suid one this year it will atil pay you wall to study!

-on stor more serving him "making Life mutic self."

in price manay and the model in addition to wish one pig to win 035.00 ani fair, and the advertising be receiver will be worth many times that. Fring ont your oir and show her good it in. dee your founty advert about this matter.

"Annas Strait Anna

AN GRAZED OWING EXAMINATION, OFFICE, OF

Please answer the following questions and mail to me in the enclosed envelope which requires no postage:

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Menber's Hane------

-----County Agent

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Nov. 11, 1919.

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Dear Club Member:-

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If you have made good use of grazing crops, and properly fed your pig you are now the owner of a hog which can be killed, the meat cured and sold at a profit, even tho the price has dropped below what it was during the summer. This illustrates the soundness of the practice of economical pork production.

10.00

If you have a gilt which you wish to breed for a spring litter, besure that she is in a nice growing condition when she is bred as this will, in a measure, insure a good litter providin you keep her gaining nicely until she farrows.

Early March is a good time for spring litters to be farrowed, and in order to accomplish this she should be bred the latter part of this month, any time after the loth, in fact. If you have a fall farrowed litter I hope that you have arranged a nice winter pasture for them, as well as good warm sleeping quarters. It will also be advisable to make certain that all lice are killed by the use of either crude oil or Ford cylinder oil, change the bedding frequently so that neither dampness or dust is present.

For the benefit of members who contemplate the home curing of meat we are enclosing Extension circular No.4 and even though you expect to sell your meat it will pay you well to first nicely cure it, as in this way it will payo you better.

Very truly yours,

In Charge Swine Extension Office.

Cooperative Extension work

AGRICULTURE AND HOME ECONOMICS

STATE OF NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE OF AGRICULTURE AND ENGINEERING, NGSTY CAROLINA STATE OFFAITHENY OF AGRICULTURE, AND UNITED SYATES DEPARTMENT OF AGRICULTURE, COOPERATING.

Animal Industry Division

West Raleigh, N. C.

November 4, 1919.

Dear Club Member:-

There is to be a judging contest for Pig Club Members at the Moore County Fair and Southern Berkshire Congress, to be held at Pinehurst November 19-20. The judging contest will be held on the 20th, at 2 P. M. and four individual prizes will be given as follows:

CASH PRIZES.

1st Prize \$10	0.00
2nd Prize	7.50
3rd Prize	5.00
4th Prize	2.50

Those members who reside in Moore and adjoining counties should compete for these prizes.

Write your County Agent about it at once and ask him to enter your name for the contest, then go to Pinehurst on the 20th, and judge hogs.

Hoping to meet you there on that date and with

best wishes, I am

W. W. SHAY,

In Charge Swine Extension Office.

Pig Club Letter No. 1

Nove 15, 1919

1 10 11

To 1920 Pig Club Members:-

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Your name has been given to me as a member of the State Pig Club for 1920. Right in the beginning I am going to give you a Club motto:

IT IS WHAT YOU FINISH THAT COUN TS.

I hope that every Club member will think often of this motto.

Every year there are a great many boys and girls who join the Pig Club then fall behind a little at first, perhaps they begin by neglecting to get a pig until all of the best early farrowed pigs are chosen by others. Your pig should if possible, be from a good size litter farrowed by a well developed purebred sow and sired by a first class registered boar of the same breed.

Where possible, it is much better to personally select the pig and see the sow. If this is not possible your County Agent will help you get one farther away.

I am enclosing a meore card and hope that you will ask your mother for a drawer that you han have for your very own in which to keep your score card, record book, certificate of registration and correspondence. Now I trust that you will study this score card, notice that No. 8 back and loin is given the important value of points. Turn the card over and notice that Nos. 12 and 13 in outline are back and loin; study this outline as it is made from a photograph of a Workis Champion hog. When you select your pig get one farrowed by a now and sired by a boar with backs approaching this ontour as closely as possibly. Next in importance with Wo. 12 more closely than you would suspect.

If the animal has "a good back" there is no sign of a depression back of the shoulders undedine, if there is a "tucked up" appearance back of the forward leg, you will have deficient heart girth.

In our next letter we will study the score card

further, so put it where you can find it. In the meantime hook closely at all the hogs and pigs you see and note the back and heart-girth. You might also begin now asking anyone of whom you might later buy a pig if their sows are already bred. Buy a pig farrowed as soon after March 1st, as possible, for show dates are figured from March 1st, and September 1st, so if you want to show your pig next fall, and it was farrowed before March 1st, it would have to go in the "over six months class" and compete with pigs much older, on the other hand if if tws farrowed during the early part of March it will have an advantage in age over all later farrowed pigs and none farrowed before March 1st can compete with it in the same class.

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I am very glad that you have joined the Club now let us watch out and finish well.

Very truly yours,

In Charge Swine Extension Office.

PLATE

10. 10

Dear Club Leader :-

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Your name has been given me as Local Pig Club Leader, and I know from this fact that you are recognized as having considerable influence in your neighborhood, more perhaps than you realize. I an writing you to request the exertion of this influence in behalf of the Pig Club.

Almost entirely upon the Leadership will depend the success of the Club work, and herein lies an opportunity for your personally to pave the way to better things in your community; better homes, better schools, better methods. Did you ever stop to consider how very much the good things of rural life depend upon the methods employed by the farmer in doing his daily tasks? Sugcess hinges upon method

It is the future farmer in a plastic state for which we bespeak your cooperation in the moulding. I would suggest a regular monthly meeting of the Club, at which time a study of some subject relating to Fig Club work should hold a prominent place on the program, and active participation so far as possible, from each member, should be obtained. Proper preparation for the economical raising of the pig would furnish timely topics for discussion. Among these I might mention; Pastures, Housing; Feeding and Watering. The Office of Swine Extension will, upon request, furnish you with suitable bulletins bearing on any subject you may elect for discussion. Remember your County Agent is always available, and I wish to sincerely solicit your hearty interest and cooperation in this worthy and far reaching cause, and assure you of his and mine. I shall be pleased to hear from you at any time.

Very truly yours,

W. W. Shay,

In Charge of Office Swine Extension.

\$ 15 11

January 3rd, 1920.

6 4

Plate.

Dear Club Member :-

10 GIN V D

Enclosed you will find a blank form to be filled in by you in case you used nothing but a pure-bred sire, and do not own or use a scrub male.

Read this Enrollment Blank over very carefully, and if all of your males, if any are owned by you, stock are pure-bred, fill it out and sign on page No. 2 giving your complete name and address.

Sign in the same manner on page Ho. 3, and have your County Agent also sign it on page 3. In case it is not convenient for you to see him personally, you can mail it to him in the enclosed envelop which requires not stamp.

If there is no County Agent in your County, you may have two of your neighbors sign it, and then mail it known to the Office of Swine Extension, West Raleigh, N. C.

We want every Pig Club member in the State to enroll for the "Better Livestock Crusade." An emplem printed in two colors and bearing your name and address will be mailed to you from Washington, if you use nothing but pure-bred sires.

Very truly yours,

In Charge Office of Swine Extension.

18 19 14

Dear Club Member:-

12 Della & Ch

In my last letter to you we were studying the score dard. Please get your card now and turn to No. 11, Ham and Rump. Read the description of what it should be and turn your card over.

PLATE

Letter No. 2

1. 19 10

You will notice that if the "arch" or curve in the back started from a depression back of the shoulder and reached a higher point right over the hip, there would be a sudden drop to the root of the tail, what is known as a "steep" rump would result. I wonder if you have noticed this in any of the hogs you have seen lately? Now notice the width of the ham from 17 (flank) hack. This outline does not give a rear view, but the ppinted matter under No. 11 tells what if should be.

Next turn to No. 12 Feet and Legs. The next time you see a hog of any age keep this printed description of Pasterns in mind, and see how very many you find with poor crooked or long sloping pasterns. (When you buy a pig for a breeding animal be very sure that he "stands well up on his toes" for a sloping pastern will "break down" under the weight of a well developed mature animal.)

This is a good time of the year to build a hog house or trough, put up fence, and plan pastures to be sown next month.

You see that in order to produce pork economically you must plan ahead and have grazing crops coming on.

I am going to ask you to fill out the enclosed card and mail it to me without stamp, and you should ask in the blank space for any information you want.

Very truly yours,

In Charge Swine Extension Office.

Enclosure Cir. 89.

(Postal Card.)

n e di

18 10 (1)

What	one word describes what No.	7 shoud be?
What	two words describes what No	. 8 should be?
What	breed of pig are you going	to raise?
Have	you a house ready for it?	
Have	you a good trough ready to	feed your pig in?
Name		Address
		Rt
Club	Leaders name	AddressRE

County Agents Name

4 4 10 × 60

PLATE.

Dear Club Member:-

1 6 80 0 6

Enclosed please find a plan for making an automatic waterer for your pig. We are sending this early in order that you may have it made and ready for your pig whan you get it. You can use a discarded fivegallon can in which has been shipped lubricating oil or varnish.

10 10

It is a mistake to mix feed for a pig in a thin slop and depend upon that as a drink to last him until the next feed. Pigs do not naturally drink very much at a time, but where it is possible for them to do so, they drink a small amount frequently. It is much better whem slops are fed to make them thick and rich, and allow the pig to govern the amount of water taken by making use of the constant and easily accessible supply, such as is provided by this waterer.

In making use of a self feeder for the best results, it is imperative that a near and constant supply of pure water be maintained adjacent to the feeder.

You will notice that a hinged lid, through which are two six-inch holes, allows the animals to drink, but prevents them from making use of the trough as a bathtub. I think that pigs enjoy taking a bath fully as well as do boys. De You?

In building this waterer I would let the four 2"x2" corner posts extend two inches above the can, and place a wide, light board cover on them to shade the can of water.

I would appreciate the favor very much if you will write me if you build one of these waterers, and if there is anything about the plan that you cannot understand, write and ask me and I shall be pleased to explain it.

Very truly yours.

W. W. SHAY.

In Charge Office of Swine Extension.

8 5 (1)

9

Fill Out And Mail This Card.

What breed?......Sex?.....Age when bought?....

County?......

UNITED STATES DEPARTMENT OF AGRICULTURE STATES RELATIONS SERVICE OFFICE OF EXTENSION WORK IN THE SOUTH PENALTY FOR PRIVATE USE TO AVOID PAYMENT OF POSTAGE, \$300

8-3563

OFFICIAL BUSINESS

OFFICE OF SWINE EXTENSION, WEST RALEIGH,

NORTH CAROLINA.

COOPERATIVE EXTENSION WORK

1 K .

STATE OF NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE OF AGRICULTURE AND ENGINEERING. RORTH CAROLINA STATE DEPARTMENT OF AGRICULTURE, AND UNITED STATES DEPARTMENT OF AGRICULTURE, COOPERATME,

the charge of the

Farmers' Cooperative Demonstration Work

trace in

West Raleigh, N. C., May 11, 1920.

Dear Club Member:-

This fall there will be prizes offered to Club members. These prizes will come from various sources, some of them will be given by Breed Record Associations and some by Breed Publications.

In the case of prizes from both the above sources, in order to receive such prizes it will be necessary that we know the breed of your pig, besides we believe that you would like to know how many other Club members have animals of the same breed as yours, and how many of other breeds.

I am enclosing a card, and as soon as you buy your pig please write in the answers to questions and mail it; no stamp is necessary.

Read the Tar Heel Club News for instructions about caring for your pig and see how fast you can make it grow. I should enjoy a letter from you.

> Very truly yours, W. W. Shay, In Charge Office Swine Extension.

PUBLISHED BULLETINS,

a state of the paper the

CIRCULARS AND PHOTOGRAPHS.

1920.

COOPERATIVE EXTENSION WORK

STATE OF NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE OF AGMCULTURE AND ENGINEERING, NORTH CAROLINA STATE DEPARTMENT OF AGRICULTURE, AND UNITED STATES DEPARTMENT OF AGRICULTURE, COOPERATING,

Farmers' Cooperative Demonstration Work

A SUGGESTED ARRANGEMENT AND ROTATION OF CROPS TO GIVE GRAZING FOR HOGS THE ENTIRE YEAR IN PIEDMONT AND MOUNTAIN, N. C.

- 64

Permanent Pasture.

Grass and Clover Mixture for 1 acre.

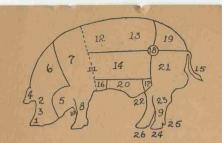
Orchard Grass	14	lbs.
Red Clover	6	lbs.
White Clover	3	lbs.
Japan Clover	10	lbs.
a thig migture and N	0	That an

For direction in sowing this mixture, see N. C. Extension Circular No.17.

And the second se			
Field #1.	Field #2.	Field #3.	Field #4.
First Year:	First Year:	First Year:	First Year:
Plant an early va-	Sow in spring	Plant a mediumly	Plant corn in 6
riety of Soybeans	oats and rape.	early variety of	ft. rows when
(Haberlandt Virgin-	Graze at inter-	soybeans 2 1/2 to 3	frost is over.
ia, Black Eyebrow	vals. Plant	ft. rows, after	Plant row of soy-
or Wilson Black) in		danger of frost.	beans between
2 1/2 to 3 ft. rows	in 2 1/2 to 3	Cultivate few times	each row of corn
when frost is over.	ft. rows.	Graze when lower	at second culti-
Graze when lower	Graze off, sow	pods are filled or	vation. Turn
pods are filled or	rye and crimson	before leaves begin	hogs in when corn
before leaves begin	clover.	to shed. Sow rye	reaches roasting
to shed.		and crimson clover.	ear stage. Sow
Sow rye and red	Second Year:	Inoculate crimson	rye and crimson
clover. Inoculate	Graze clover	clover if grown on	clover. Inoculate
clover if grown on	and rye as late	land for first time	clover if grown
land for first time	as profitable,		on land for first
	then plant same	Second Year:	time.
Second Year:	as field #1 the	Same as field #4	
Graze red clover	first year.	First Year.	Second Year:
and rye at inter-			Same as field #2,
vals.	Third Year:	Third Year:	first year.
mlad and Manage	Graze red clo-	Same as field #2,	
Third Year:	ver.	first year.	Third Year.
Graze red clover at intervals. Turn	Fourth Year:	Downth Verset	Same as field #1,
clover sod. Sow rye	the second se	Fourth Year:	first year.
		Same as field #1, first year.	Fourth Year.
	Turn clover	TTIPC YEAL.	Graze red clover
Fourth Year:	sod.		and rye at inter-
Same as Field #4.			vals.
First Year.			V Col D +

Note: Alsike Clover may be substituted for Red Clover.

	dates for seeding the above - Soybeans Red Clover Crimson Clover Spring oats and rye	May 15 - June 1. Aug. 15-30 - March 1-15. Aug. 15-30.
Piedmont Section	- Soybeans Red Clover Crimson Clover Spring oats and rape	Sept. 15 - March 1-15. Sept. 15.



1.	Snout	6.	Neck		Chestline				Ham
2	Eye	7.	Shoulder	12.	Back	17.	Hind Flank	22.	Stifle
	Face	8.	Foreleg	13.	Loin	18.	Hip	23.	Hoek
4	Ear	9.	Hindleg	14.	Side	19.	Rump	24.	Pasterns
	Jowl	10.	Breast	15.	Tail	20.	Belly		Dewclaws
								26.	Foot

(Names of different parts as marked and numbered in outline)

A study of the above outline chart will enable the student to locate the various parts by name. A "scoit" is a spot usually on the back or of a whirlpool in water. The "Twich" is that part on the inside of the hind leg between the hock and ham. All other parts mentioned in the score are shown in the chart.

OBJECTIONS

- HEAD—Too large; coarse; narrow between the eyes; too long or too short, or exceedingly dished. *Exception:* Berkshires in the last mentioned point.
- 2. EYES-Small; deep set; surrounded by wrinkles or overhanging fat.
- EARS—Too large; coarse; round; too swinging or flabby; unequal in size; not under control; erect. *Exception*: Berkshires in the last mentioned point.
- 4. NECK-Narrow; thin; long; not extending down to breast bone.
- 5. JOWL-Rough and deeply wrinkled; too large and loose or flabby; not carrying fullness back to shoulders.
- SHOULDERS—Deficient in width or depth; extending above line of back; width beyond line of sides and hams; shields on boars too coarse and prominent.
- CHEST-HEARTGIRTH-Pinched appearance at top or bottom; tucked in back of forelegs; too narrow between forelegs; not sufficient depth back of shoulders; brisket too narrow or not prominent.
- BACK AND LOIN-Swayed; humped; narrow; creasing back of shoulders; uneven width.
- SIDES—Shallow; creased; shrunken at shoulder or ham; not carrying proper width from top to bottom; ribs too short; not well sprung.
- BELLY AND FLANK-Narrow; sagging; flabby; flank tucked up; much less than heart-girth.
- HAM AND RUMP—Hams narrow; short; not projecting well down to hock; too much cut up in crotch or twist; rump steep; narrow; peaked at root of tail.
- FEET AND LEGS—Legs extremely long; too short; alim; coarse; crooked; not nicely tapering; pasterns long; crooked; slim; hoofs long; crooked; spread.
- 13. TAIL-Too long and ropey; extremely light or heavy; straight.
- 14. COAT-Bristles; swirls; hair coarse; thin or standing; not evenly distributed over body except belly.
- 15. CLOB-Durse-Jeney: Very dark red or shady brown: very light or pair red; black or white spots or flocks. PCANTO-CHINA AND BREASTREE: White and black hair mixed, making a grizdy appearance. CHISTER WHITE: Blue spots in hide (freekles). Red or black spots disquality. HAMPSITHE: White on hind legs, or extending more than one-fourth length of body: solid black.
- 16. SIZE-Undersized; rough; coarse; lacking in feeding qualities.
- 17. ACTION AND STYLE-Dull; sluggish; awkward; testicles not easily seen or of unequal size or carriage, only one showing.
- CONDITION—Hair harsh to touch; unthrifty; scales, sores, mange; unevenly fleshed, lumpy.
- 19. DISPOSITION-Cross; restless; quarrelsome; wild or vicious; not easily handled or driven.
- 20. SYMMETRY OF POINTS-Lack of proportion.

For information about Hogs (bulletins, breeding stock, care, grazing, crops, houses, prevention of diseases, lice and worm control, etc.), consult your County Agent or write the Office of Swine Extension, West Raleigh, N. C.

SEPTEMBER, 1919. EXTENSION CIRCULAR No. 97 C. State College of Agriculture and Engineering C. State Department of Agriculture C. Agricultural Experiment Station, and S. Department of Agriculture, Cooperating Agricultural Extension Service B. W. KUGORE, Director Raleigh and West Raleigh SCORE CARD FOR LARD TYPE HOGS Instructor A B C D 5 AGE AGE AGE AGE MARK POINTS DEFICIENT ApWt ApWt ApWt ApWt HEAD AND FACE—Broad between the eyes; neat; dished according to breed, moderately in all breeds except Berkshires...... 2. EYES-Large, bright and open; free from wrinkles or overhanging fat. -EARS-Not too large or coarse; drooped or erect, according to breed. 9 NECK-Short; deep; wide and nicely taper-ing to shoulder 2 5. JOWL-Smooth; full; firm; neat; carrying fullness back to brisket and point of 1 SHOULDERS—Moderately broad; deep; full; not extending above line of back; carrying thickness down to belly line...... R 7. CHEST-HEARTGIRTH-Large; wide; deep; full; wide between the legs; at least flush with back and belly lines; large heartgirth. 12 BACK AND LOIN—Broad; arching; carrying full width from shoulder to ham; evenly fleshed; smooth 14 SIDES AND RIBS—Full; smooth; deep; long; carrying even width of ham and shoulder; free from wrinkles; ribs well sprung and 10 12. FEET AND LEGS-(a) LEGS-Medium length straight and strong; nicely tapering; good sized hone; well muscled. (b) FEET—Pasterns nearly upright; short; hoof short; tough; straight; animal well up on toes . 5 13. TAIL—Nicely fleshed at base; tapering; not extreme light or heavy..... 14. COAT-Fine; smooth; straight; free from swirls; covering the body evenly..... 3 15. COLOR-According to breed, either cherry red or black and white 9 ret or once and while. B SIZE-Listre for age. Boars two years and over, not less than 500 pounds; sows same age, 460 pounds. Eighteen months: Boars, 400; sows, 550. One year old: Boars, 350; sows, 300. Six months old: Boars and sows, not less than 150 pounds. These weights are minimum except for Hampshires..... 17. ACTION AND STYLE-Graceful; easy; good carriage; testicles well developed and evenly 3 18. CONDITON - Healthy and mellow; evenly 2 19. DISPOSITION-Quiet; gentle; easily driven

STATISTICS.

20. SYMMETRY OF POINTS—Adaptation of all the points; nice proportion of all the points 3

Indicate the number of points deficient, total and subtract from 100. Total score.....



FIG. 1. A Berkshire Sow in Show Condition.



FIG. 2. A Poland-China Sow in Show Condition.



FIG. 8. A Duroc-Jersey Sow in Show Condition.

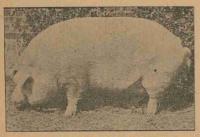
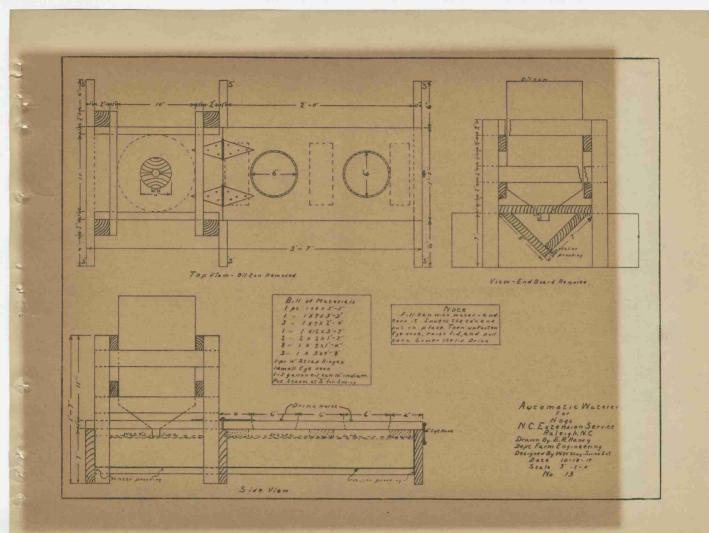
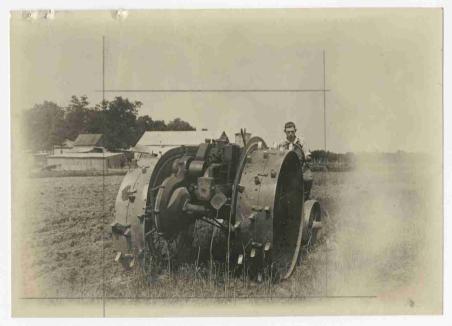


FIG. 4. A Chester White Sow in Show Condition.

Placing Letter Second. Reasons : Name Address





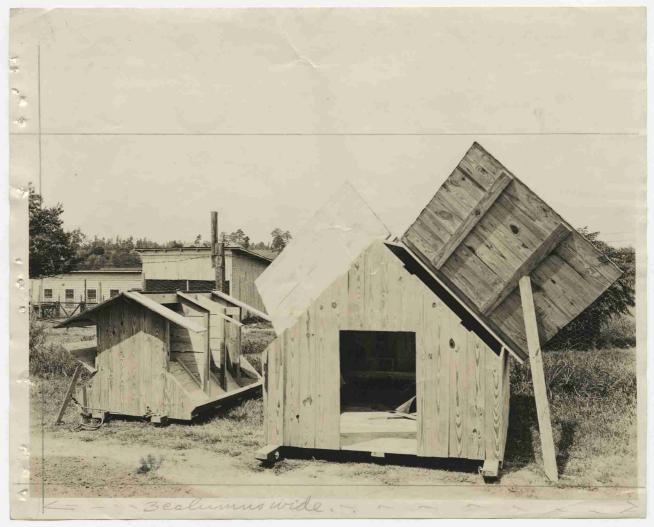
David & Harth, Raleigh, W. le, Rante 2, # 2325 6-11-219, OFFICE OF SWINE EXTENSION. WEST RALEIGH, N. C. 33/15 07 2 columnswide, cut Special Junes ashby



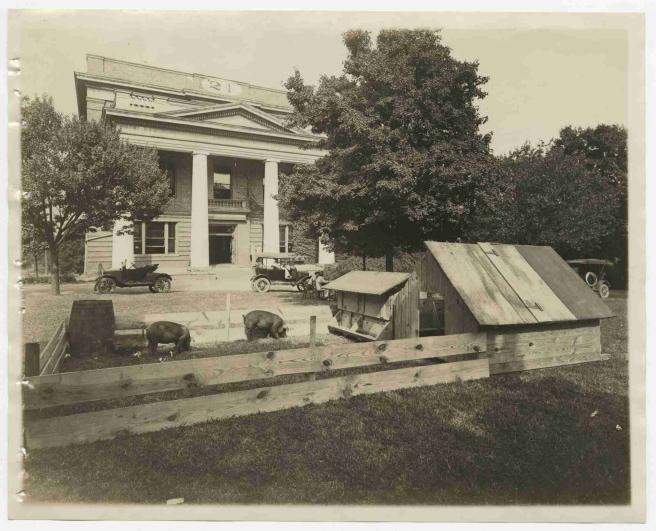








J. Ersid ar Rig Club "Short course "andy Farmens convention, Thest Raleigh ? n. le. 1919, In a demonstration # by the Swine Extension Office, D'One side was left off the nethod of construction. and when they leave, it automatically closes, this profecting the contents from rato chickens be. The colony house is easy and ineppenaise to build, allows free accels to amphine, furnishes a condiment box and nar finder combined, and one horse can easily move it's malike the Ashaped house, a large hog may stand erection any fait of it, and it rains no mon timber



CLIPPINGS.

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COPY FOR THE PRESS.

1920.

Omitted.

<u>CONDENSED REPORT OF ACTIVITIES.</u> For Fiscal Year Ending June 30, 1920. Office of Swine Extension.

1. 8 18

I WAA

		Travel		Letters	Circular		arms Lectures Atten-Hogs Copy for sited delivid dance PlacedBuls.&Cir			
Date	Ra11.	Auto	. Total	Written	Letters	Visited	delivid	i) danc	e Pla	icedBuls.&Cir
July	501	406	907	65	1	53	5	143	35	Plan for concrete D
Aug.	1010	475	1485	54	0	6	28	659	8	Model of Self feeder
Sept.	375	405	780	92	1	7	12	592	1	97
Oct.	1843	333	2176	182	2	14	l	10	0	99
Nov.	1742	235	1977	31	1	21	l	16	17	Automatic Waterer
Dec.	465	10	_ 475	221	2	2	1	500	50	Swine Calendar
Jan.	2741	65	2806	72	1	24	0	0	7	Georgia & Alabama
Feb.	1214	101	1315	113	1	10	l	10	7	Bul. Hog in Boll Weevil terri
March	861	6	867	272	4	0	0	0	5	Revise pre- mium list.
Ap ri 1	912	296	1208	130	0	6	5	520	9	Auto. Water- er for cent- al hog house
May	162	46	208	185	2	4	0	0	0	Model of Breeding Crate
June	0	0	0	192	1	3 .	0	0	15	Bul. Farm Fencing.
Total	11826	2378	14204	1609	16	150	53	1950	154	7

Demonstrations given 16. Attendance 5857. Bulletins Mailed 700 "Delivered 4797) Total 5497

Articles wirtten Copy for Bulletins & Circulars 7

SUPPLEMENT TO ANNUAL REPORT

OFFICE OF SWINE EXTENSION FOR FISCAL YEAR ENDING

JUNE 30, 1920

- 16 6°

10

October 16, 1920. W. W. Shay in Charge.

6 . . "

DESCRIPTION OF WORK.

01 10 -----

Owing to the unsatisfactory comparison of the prices of pork and feeds, during most of the period covered by this report, and the very general lack of understanding of proper and economical feeding methods, no special effort has been made to increase the number of hogs on North Carolina farms during the last year.

An attempt has been made to prevent, as far as possible, a general reduction in the number of hogs raised, except in cases where too many are kept as compared with the amount of feed and forage produced on the farm, in which case a reduction in number has been advised.

This action has, no doubt, been instrumental in bringing about the present condition, which finds the state at the beginning of a decided upward trend in prices, the profit of which is decidedly enhanced by a material reduction in feed prices, with a lower percentage of reduction than the average for the United States and with condition as follows:

North Carolina 92.% United States 92.3%

IMPROVEMENT.

101 Purebred hogs have been placed by this office, many of which have been personally selected; 4 Sales of pure bred hogs consisting of 140 head have been put on and fostered; and addresses where reliable stock may be found furnished in many other cases.

Statistics show that something over 75 per cent of the hogs of the state are pure bred, as follows:

Berkshires	17.0)	
Cheshire	.1)	
Chester White	4.2)	
Duroc Jersey	32.4)	
Hampshire	3.4)	77.9
Yorkshire	.5)	
Poland China	19.2)	
Tamworth	1.1)	
	- 7.2	
Razorback	7.3)	
Other	.4.4)	22.1
Nondescript	10.4)	
	100.0	

There is reason to believe that some high grades have been reported as pure breds in the above table.

Replies to a questionaire addressed to the 1081 Pig Club members of the state, indicate the following as to breeds:

Duroc Jersey	51.
Poland China	19.
Berkshire	8.
Hampshire	8.
Chester White	2.
Guinea	1.
Grædes	11.
	100.

Owing to the lack of help the work has been handicapped, both in the field and the office, as there is very much more in either than one man can do justice to, and following the advent of the boll weevil in the cotton growing sections of the state, it is of imperative importance that instruction and demonstrations along lines of better care and feeding of hogs be given.

There is little doubt that we are now at the beginning of a very decided change and improvement in the character of the farming operations of the state, this is a critical period in our agriculture, and upon the intelligence with which it is met will depend its success. If conducted understandingly, diversification in farm crops and live stock is an assured fact for the fubure, if failure follows, lack of understanding and preparation, the economical and civic loss will be appalling.

Time has been about equally divided between the office and the field, and the following summary of activities gives, in a condensed form, the operations of the Office of Swine Extension for the period covered.

As an indication of increased interest in swine, we submit the fact that it was necessary to double the housing capacity for hogs at the State Fair this Fall. Those who have retained their hogs can finish them on corn at present ptices with gratifying profit.

Considerable attention has been given to improvement in equipment as well as stock.

W. W. Shary

In Charge, OFFICE OF SWINE EXTENSION.

CONDENSED REPORT OF ACTIVITIES

OFFICE OF SWINE EXTENSION, WEST RALEIGH, N. C.

	,	Travel		Letters	Circular	Farms	Lectures	Atten-	1 TTO CHE	Const Para
Date	Rail	Auto	Total	Written	Letters	Visited	Delivered	dance	Hogs Placed	Copy for Buls. Cirs.
1919 Dec.	465	10	475	221	2	2	1	500	50	& Plans dar. Swine Growers Calen-
1920 Jan.	2741	65	2806	72	1	24	0	0	7	Spent in Ala. & Ga.
Feb.	1214	101	1315	113	1	10	1	10	7	The Hog in Bol Weevil Terri-
Mar.	861	6	867	272	4	0	0	0	5	Revise Pre- mium List.
April	912	296	1208	130	0	6	5	520	9	Plan for Auto Waterer for Cen- tral Hog House.
May	162	46	208	185	2	4	0	0	0	Model of Hog Breeding Crate
June	0	0	0	192	1	3	0	0	15	Help on Bulletin Farm Fencing. (6
July	1352	449	1801	158	0	26	0	0	8	
Aug.	789	94	883	91	0	7	6	864	0	
Sept.	494	65	559	74	2	5	2	280	0	
Oct.	1128	31	1159	93	0	3	0	0	0	
Nov.	-	a na manaria	2 4 9 4 4 4 4							
Total	10118	1163	11281	1601	13	90	15	2174	101	

Demonstrations 12.

11 1/2

Attendance 10,400. Bulletins Mailed 570. Delivered 5012

5487 Total

Articles Written 14.