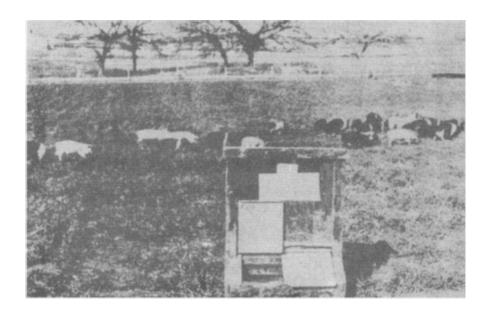
Oklahoma 4-H PIG CLUB MANUAL

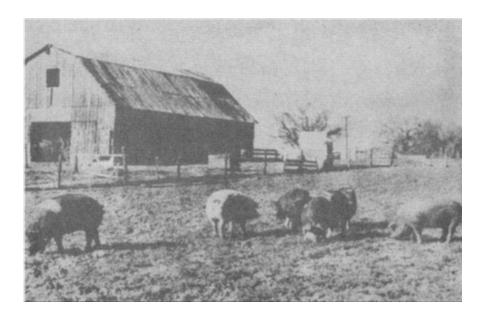


CIRCULAR 445 EXTENSION SERVICE

OKLAHOMA A. & M. COLLEGE
SHAWNEE BROWN, Director
STILLWATER, OKLAHOMA



Use a self-feeder to feed the protein and mineral supplements in; growing pigs like these can be fed their grain ration from self-feeders, too. Note the excellent growth of green pasture. This cheapens grain and speeds up growth.



Oklahoma 4-H PIG CLUB MANUAL

bu

FRED AHRBERG

Extension Animal Husbandman

(The characters in this story are: DAD, the father of a 4-H Club member; P. C., a 4-H Club member enrolled in the pig club; C. A., the County Agent; and various numbers and kinds of pigs.)

"Dad, I enrolled in the pig club project at our 4-H Club reorganization meeting today. C. A. told us there are several ways to go in this pig club work."

"What do you mean there are several ways to go, P. C.?"

"Well, C. A. says the simplest and cheapest way to start is to buy a good type, well-bred barrow at weaning time and feed, develop and finish him for the fair this fall. It's too late now to get one ready for the spring show. C. A. says to get the pig in April or May, feed him the way he will advise me, and try for a prize at the fair in September. Either win or lose, I can sell him and have my money back in five months with a profit, I hope."

"P. C., I've raised some hogs in my time. Sometimes I've made some money on them and sometimes I haven't. But mostly the hogs I've made money on are the ones I raised most of my own feed for. Usually the profit on one hog was not enough to get me very far. If you want to feed hogs, why not feed several?"

"Gee, Dad, C. A. told us about a deal he calls the Farm-to-Market project. I would need a sow for it. When she farrowed this March or next September, I would feed all these pigs until we could pick out the best boar and maybe one or two gilts. I'd sell the boar and keep the gilts to enlarge the herd, then the rest of the litter. C. A. says there should be five to seven more I could feed out for the market. There are five more boys in our Club planning to do this. C. A. says we could get a whole truck load of our Club's pigs ready for market at once and join in with a couple of other counties. Then take them all to market at once where C. A. says the stockyards people, the commission men and the packers will show us how stock is bought and sold at a big market. We can see our hogs graded, sold and weighed. We can see them slaughtered and in the big coolers the next day. C. A. says that while we are in town the market

people and the Chamber of Commerce will show us a swell time. What do you think about that plan, Dad?"

"That's a pretty interesting sounding deal, P. C. You should get something really worthwhile out of that, but you mentioned keeping two gilts out of that litter—at that rate you will soon have the place covered with hogs."

"Well, Dad, C. A. says there is a need and a place for lots more hogs in Oklahoma. That is, if they are the right kind, produced under a well planned program using good quality breeding stock, home grown grains, as much good pasture as possible, and a careful sanitation and disease prevention program. He says he will work with each of us pig club members. He'll tell us how to select the right type, what and how to feed our pigs, how to prepare our pigs for show, and how to take care of the gilts before farrowing. He'll furnish us plans for pens, farrowing houses, pastures and everything. He sure is keen on our having the best county group in that Farmto-Market project. What do you say, Dad, may I join up on an all round hog production program?"

"P. C., you get C. A. to help you locate the right kind of a barrow now so you can get a little feeding experience. Then we'll get him to help you select a real good bred gilt in June. And be sure to get all that information on pastures, feeding and selection."

OKLAHOMA AGRICULTURAL AND
MECHANICAL COLLEGE AND
UNITED STATES DEPARTMENT OF
AGRICULTURE, COOPERATING

EXTENSION SERVICE COUNTY AGENT WORK

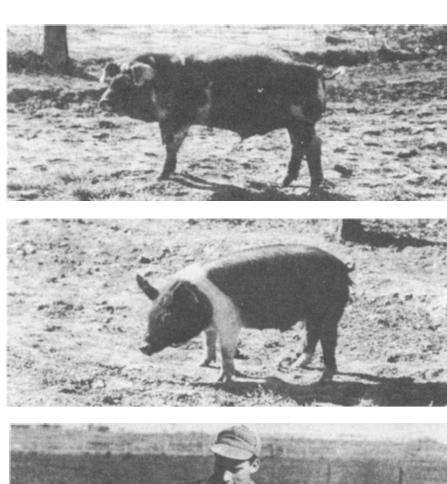
COOPERATIVE EXTENSION WORK IN AGRICULTURE
AND HOME ECONOMICS
STATE OF OKLAHOMA
STILLWATER

County Seat, Okla.

Dear Pig Club Member:

Here is some information I want you to be thinking about before we go to Mr. Good Breeders Saturday to select pigs for fattening and show barrow projects. We are going to Mr. Breeders because his hogs for many years have been recognized for their approved type and quality. They have proven their practical value by meeting the approval of the best judges in the swine shows. Their production records show that their pigs make rapid and economical gains.

Before we go, fence off a corner of the alfalfa or other good rich pasture. If alfalfa is not available use some rich temporary pasture





Typical type and sized pigs for 4-H Club barrow feeding projects.

where other pasture plants can be seeded so as to keep a continuous pasture available. About one-fourth acre will be sufficient. Get your shed and feed and water troughs ready.

I am enclosing some pictures of good type feeder pigs, sheds and feeders, provide yourself with equipment of this type—it is essential to profitable pork production.

Very truly yours, C. A.

P.S.

I'm including some material on selection, feeding, fitting and showing barrows from the State Extension Office. There is also some material on general hog production that you will be able to use in your pork production program.

Feeder Pig Selection

Select pigs from sires and dams of proved desirable type. If possible select pigs that weighed 2½ pounds or more at birth. They gain faster on less feed and are stronger and more resistant to disease.

By desirable type in fat barrows, we mean the conformation or over-all outline of the pig that gives him the shape or pattern and balance of construction that makes him most valuable on the market. A desirable feeder pig should be vigorous, thrifty and sleek in his appearance. He should be smooth and strong over the back with an oval arch of back with the high point about midway of his length. He must have spring of rib to give him width. Length from the hip to the tail setting is desirable—this gives him length in the ham. The ham as viewed from the rear should be deep and wide with the width extending down toward the hock. The sides should be moderately long, deep and smooth. The pig should be uniform in his depth of body—not shallow from the top of his shoulders down through his chest or cut up in the flank. He should have a reasonably short neck, neat trim jowls and ears. The nose should not be too long or narrow. The legs should be straight, of moderate length, of strong smooth clean cut appearance.

Keep in mind that the most valuable parts of the carcass are the loins and the hams. Select pigs that show the best evidence of developing smooth, broad, deeply fleshed loins—long, deep hams that hold their width well down toward the hock. They must be smooth in the shoulders, trim in the middle, and free from excessively heavy jowls, wrinkles or coarseness when finished out. Breeding, type,

and quality in the pig to start with are the best assurance of a profit winner at the close of the project.

A good way to start a weaning age pig that is being fed for the market and show is to place him on good pasture.

ECONOMY OF GAINS OF GROWING AND FATTENING PIGS ON PASTURE

The following table shows the average results secured during six years with pigs self-fed corn and tankage on good pasture. In these trials a total of 320 pigs were fed from weights of 50 or 60 pounds to market weights of 200 pounds or more.

GAINS OF PIGS OF VARIOUS AGES ON GOOD PASTURE

	Weight of pigs	Actual Average	Concentrates per Head	Daily	Concentrates for 100 pounds gain		
	Wording or bigs	Weight Daily		Gain	Corn Tank		
*************		lbs.	lbs.	lbs.	lbs.	lbs.	
50	to 75 lbs	64.5	3.2	0.90	333	26	
75	to 100 lbs	88.5	4.2	1.15	340	29	
100	to 150 lbs	127.1	5.7	1.50	363	26	
150	to 200 lbs	175.8	6.9	1.55	443	20	

This table shows about what may be expected of pigs self-fed well-balanced rations on good pasture. It will be noted that the amount of feed required for 100 pounds gain increased in each period, but that there was no very rapid increase until the weight of 150 pounds was reached.

RATIONS SHOULD BE STUDIED CAREFULLY

Rations for weaning age pigs on good alfalfa, small grain or rape pasture. Keep the mineral mixture always available for hogs of all ages—equal parts of salt, steamed bone meal and ground limestone.

		Weaning, to 50 lbs.	Not on pasture, 50-100 lbs.	Not on pasture, over 100 lbs.	On pasture, 50-100 lbs.	On pasture, over 100 lbs.
		LBS.	LBS.	LBS.	LBS.	LBS.
1.	Corn or grain sorghum	76	80	85	88	92
	Tankage, meat scraps or fish meal	14	10	5	6	4
	Linseed meal, soybean oil					
	meal, or cotton seed me	al 5	5	5	6	4
	Legume hay	5	5	5		
	Total	100	100	100	100	100

2.	Barley or wheat 80 Tankage, meat scraps, or fish meal 10	84 6	89 3	94 3	98
		U	Ü	O	2
	Linseed meal, soybean oil meal, or cottonseed meal 5	5	3	3	
	Legume hay5	5	5		
	Total100	100	100	100	100
3.	Corn or grain sorghum 63	68	70	74	77
	Wheat middlings 15	15	20	20	20
	Tankage, meat scraps or fish meal 12	7	5	6	3
	Linseed meal, soybeans or				
	cottonseed meal 5	5			
	Legume hay5	5	5		
	Total100	100	100	100	100
4.	Corn or grain sorghum 62	67	66	73	75
	Oats	15	20	20	20
	Tankage, meat scraps, or fish meal 13	8	5	7	5
	Linseed meal, soybeans, or cottonseed meal 5	5	4		
	Legume hay 5	5	5		
	Total 100	100	100	100	100

These rations will be satisfactory for growth and development.

POINTS ON FINISHING, GROOMING AND SHOWING HOGS

Fat barrows are shown by weight classes, usually there is a light weight class where the barrows may weigh from 180 to 200 lbs.—middle weight, 221 to 260 lbs.—heavy weight, 261 to 300 lbs.

Barrows show best at the peak of finish for their class. They must, of course, be of the best *type* possible to produce. In the light weight classes somewhat thicker pigs may be used than in the heavier classes. They should be brought along through the feeding period so as to have as deep and smooth a covering of firm flesh over the back loin, with as fully developed hams as possible. Smooth

deep sides, straight legs, strong feet and pasterns are important, as are neat trim jowls free from excessive fat. Trimming the feet occasionally helps keep them stronger and the legs better balanced. A sleek, smooth coat of hair is important. The hair should be clipped and shaved from the ears and tail just before showing. Washing once a week for three to five weeks before showing helps condition the hair. A thorough application of light clean oil rubbed into the skin with a rag helps to give the hair and skin a better, cleaner, brighter appearance. Clipping the hair off the legs a few days before show time adds a neat clean appearance that appeals to the eye. The day of the show have the pigs absolutely clean. Pigs with rough coarse or curly hair are more difficult to dress for show. The condition of the hair on hogs can be improved by brushing and if the hair is extremely coarse and stiff it can be made more pliable and pleasing over the shoulders, back and sides by rubbing it with sandpaper, making the strokes with the hair. Not many barrows will be good enough to justify this work.

All breeds except the white ones should be lightly oiled just before the show, but be careful to wipe off the excess oil. White pigs must be thoroughly cleaned so the pink skin shows through the clean white hair. White pigs are never oiled at show time, but many showmen do dust them liberally with white talcum powder to make them as white as possible.

PIGS IN THE SHOW RING

Work with the pig during his growing and fattening period so he will mind you perfectly when you take him into the show ring. Teach him to walk at your will, to stop at the signal or touch from you—use a cane or light whip while training and showing him so that he will be accustomed to canes and whips used by other exhibitors. Be ready to show when the class is called for. When you enter the show ring keep your pig out of the corners; move him quietly and slowly about. Do not get pocketed between other exhibits, but do not rush your pig around crowding other exhibitors or the judge. Do not keep crowding your exhibit in front of the judge. Keep one eye on the judge and the other eye on the pig-never let the judge catch your pig dropped behind his shoulders or standing on three legs. If your pig has a strong back do not keep his nose too close to the ground. Keep his hair properly brushed, but it is not advisable to try to attract too much attention to the pig's back, loin or ham by patting or otherwise indicating these points. If the judge directs you to a corner or pen move there directly and quietly. If he asks for information, such as age, weight, etc., be ready with a courteous answer. If you receive an award accept whatever it may be with a spirit of good sportsmanship.

THE FARM-TO-MARKET PROJECT

This program of swine production ties in all three phases of 4-H Club work with swine. It lays the foundation for both commercial production on a genuine market value basis and the development of registered breeding stock if the Club member is interested in becoming a breeder.

To start this program, the Club member needs a good quality well-bred gilt of his breed choice. Use great care in selecting this bred gilt; be sure she is from a large litter of pigs that have a line of breeding in their ancestry recognized for their desirable type, thrift and vigor. Before the gilt is purchased, prepare a pasture program for her and the litter. Alfalfa pasture is first choice but adjoining it have some land that can be used to produce small grain pastures and use at least a three-lot rotation of pastures. This is necessary in order to keep down worm infestation. The combination of alfalfa, small grains (wheat, oats, barley) in winter and early spring and Dwarf Essex Rape and Sudan grass in the summer will keep a nearly constant supply of palatable green pasture. These various lots of pasture can be rotated so that worm infestation can be kept to a minimum by natural means.

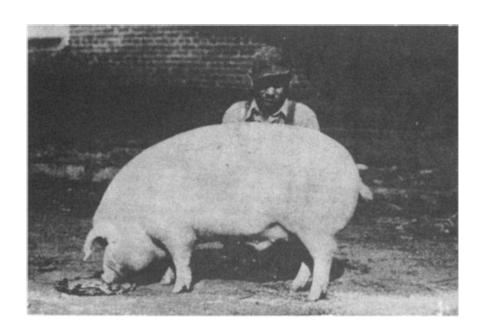
A farrowing house is necessary. Many types are acceptable—the A house is cheapest but difficult to get in and out of at farrow time. The shed type house with a south front and hinged section in the north side that can be opened in the summer to provide ventilation is practical and can be used as a shelter for growing pigs or fattening hogs more satisfactorily. This house, whatever type is used, should be equipped with a guard rail 10 to 14 inches above the floor and 12 to 14 inches out from the wall. Farrowing houses with a sloping floor affords greater protection to the pigs. Sows habitually lie down with their backs uphill and this gives the pigs a better opportunity to slip out from under the guard rail, at the lower side of the house where they will naturally be most of the time, and nurse without so much danger of the sow lying on them. Use of a pig brooder such as pictured in this manual will be helpful in damp cold weather. Keep the sow out of the farrowing house until two or three days before farrowing time-an open shed on the pasture area will provide all necessary shelter for her until this time. farrowing house out with a good disinfectant (1 lb. of lye in 5 gallons

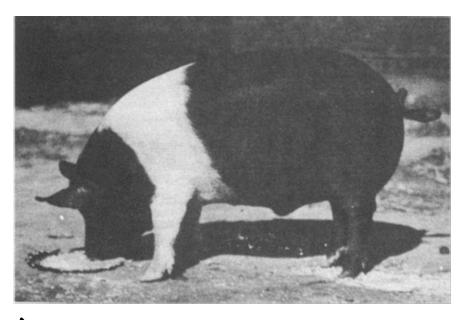
of hot water is good), rinse it out thoroughly, and after it is dry put in a small amount of dry bright straw bedding. Have the sow clean when she is put in the farrowing house and then wash her udder thoroughly—this is to remove the roundworm eggs that are generally present around hog lots, and if they are on the sow's nipples at farrowing time the baby pigs get infested with this parasite with their first nursing.

Feeding and care the sow gets during the time she is pregnant will determine to a great extent the size, strength and possible growth of the pigs. Pigs that weight 2½ pounds or more at birth grow much faster, reach market weight at an earlier age on less feed, and are healthier than pigs weighing less at birth. The pregnant sow should have access to good, tender palatable pasture, clean fresh water and a good mineral mixture at all times. She should be fed a mixture of grains that will provide some bulk, such as ½ whole or ground oats, 1/4 corn, barley, cracked grain sorghum or wheat and 1/4 bran plus 3% meat scrap or tankage. Three weeks before farrowing time begin gradually reducing the amount of corn, barley or grain sorghum in the ration replacing it with more oats and bran. Maintain the 3% meat scrap or tankage in the ration. See that clean fresh water is always readily available. Do not feed the sow anything except the fresh water for 24 to 36 hours after farrowing. Then feed her light, bulky feeds such as ground oats and a little bran. After the 4th day gradually add a little corn, barley, or grain sorghum to the oats and bran. Many sows have developed congestion of the udder or milk fever because they were fed too rich a ration (that is, one containing too much corn, wheat, shorts, or grain sorghum at and immediately following farrowing).

Suggested rations for brood sows while suckling pigs:

1.	Corn or grain sorghum	On Pastu	re Not on Pasture
	Tankage, meat scraps or fish meal	4	4
	Linseed meal, soybean oil meal or cotton-		
	seed meal	4	4
	Legume hay		10
	Total	100 ll	os. 100 lbs.
2.	Barley or wheat	98	87
	Tankage or meat scraps	2	3
	Legume hay	Market Williams	10
	Total	100 lt	os. 100 lbs.

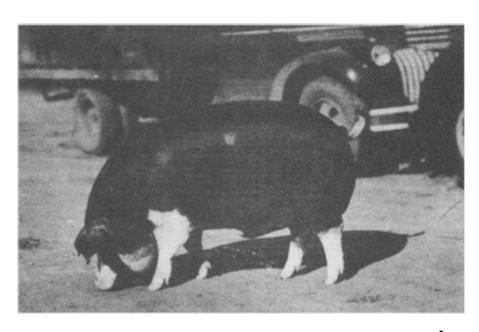






These barrows are examples of winning types in their breeds in in all of them. Thick, broad loins; long, deep, plump hams;





16. Note the smoothness, the quality and freedom from wasteness sides; clean jowls and trim middles are desirable in all these breeds.



		On Pasture	Not on Pasture
3.	Corn or grain sorghum	72	67
	Wheat standard middlings	25	20
	Tankage or meat scrap	3	3
	Legume hay		10
	Total	100 lbs.	100 lbs.
4.	Corn or grain sorghum	71	61
	Oats	25	25
	Tankage or meat scraps	4	4
	Legume hay		10
	Total	100 lbs.	100 lbs.

PRODUCE MARKET HOGS PROFITABLY

There is no limit to the number of pigs a Club member may feed out in this project. A litter or the remainder of a litter after the choice pigs have been selected out for breeding purposes is a logical basis for the first enrollment in this project. The objective is to produce market hogs profitably and to learn about marketing on a central competitive market such as adult hog raisers do. At the same time club members learn at market the difference in values of hogs for slaughter purposes on a basis of their finish, dressing percentage and yield of most valuable or "primal cuts." Where there are a sufficient number of hogs marketed from a single county or several counties at the same time, a very thorough and interesting opportunity for Club members to observe these things at the market center can be arranged.

In the Farm-to-Market pork production project Club members engage in the serious business of producing hogs for market without the incentive of probable prizes and premiums. Since several head are involved the best methods possible must be used in producing hogs to guard against financial loss.

Starting with the sow and litter that have been handled as outlined earlier in this manual the fullest possible use of good rich palatable pasture must be made. By the time the pigs are two weeks old, a creep should be provided where they can have access to a well-balanced ration to promote growth. It is practical to permit the sow and litter to run to the self-feeder if the litter has sufficient pigs in it to keep the sow suckled down and not allow her to become excessively fat.

Boar pigs not to be kept for breeding purposes should be castrated at from two to four weeks of age. All pigs should be vaccinated to prevent hog cholera. Use the simultaneous or serum and virus treatment. Use as much or a little more serum than is recommended for pigs of the weight you are vaccinating. It is a good idea to vaccinate two to three weeks before weaning time. Wean the pigs at 8 to 10 weeks of age. Keep them on the self-feeder and add skim milk or buttermilk to the ration if it is available at a reasonable price. Milk added to any ration will keep pigs growing and more thrifty than any ration without it. (Use rations on page 4.)

It is usually most profitable to market hogs that are finished enough for slaughter when they weigh from 180 to 225 lbs. When they reach a marketable weight and finish do not attempt to excessively "fill" them just before going to market. Withholding feed. water, or salting, or feeding unusual feeds with the idea that the hogs will eat or drink more at the market frequently results in unnecessary death losses or actual heavy shrinkage of the hogs at market and if the "filling" is accomplished the buyer will observe it and rightly "dock" or discount the price on such hogs. Some marketing costs and losses can be reduced by marketing as nearly as possible a full load (not over-crowded) of hogs at a time. Properly bed the truck or car with sand (wet in the summer), seeing to it that there are no nails or other sharp objects in the loading chute or the truck. Use broad flat canvas slappers with which to drive the hogs, and do not use sticks or clubs to beat or punch them. Move them slowly and avoid bruising in every way possible.

FEEDING AND DEVELOPING BREEDING STOCK

Pigs that are to grow into breeding stock should be started and grown to weaning age as described in the "Farm-to-Market Program." They should be vaccinated against cholera before weaning time. At weaning time, the boars should be separated from the gilts. They may be fed alike. It is frequently desirable to get more growth on breeding stock and not have them fatten as fast as hogs being produced for the slaughter market.

Save only the healthiest, most vigorous pigs that are oustanding in their breed type and quality. Utilize pasture as much as possible; it is rich in vitamins, minerals and growth producing qualities. It also greatly cheapens the cost of growing and developing breeding stock. Follow careful rotation of pastures and sanitary practices to keep down parasite infestation and disease. If the pigs become wormy, lousy or mangy, treat them at once as recommended else-

where in this manual. Keep a mineral supply and fresh clean water always available. The same rations as used for growing and fattening pigs may be used except replace ½ of the corn, grain sorghum or barley with oats or bran.

JUNIOR PRODUCTION OF BREEDING SWINE FOR SALE

By far the greatest supply of breeding stock of purebred hogs in Oklahoma are now being produced by 4-H Club and other junior swine producers. This is true because these young livestock producers find it necessary to use top quality breeding stock to produce barrows that do well in the shows in which they participate. While raising hogs to produce show barrows, they naturally produce some outstanding breeding stock. There is an excellent opportunity for these junior livestock producers to render a very worthwhile service to the state and to increase their own profits by a well defined program of producing breeding stock for sale to other club members and to adults in counties where there is considerable volume of swine production carried on by club members and other junior livestock producers. There appears to be an excellent opportunity to develop a more complete marketing program for this surplus breeding stock.

We believe that it will be found profitable to club members to develop an annual or semi-annual consignment sale of both bred and open gilts and a limited number of choice boars of the six most popular breeds in this part of the country. These county or district sales will bring the hogs to be sold closer to adults and other juniors who wish to buy good breeding stock than our one or two state sales are to most people. The nearness of people who need hogs will increase the number of buyers and will reduce marketing expenses for the producer and we believe will enlarge the demand to the ultimate profit of the producer and improved service to the purchaser.

This program should only be undertaken under the guidance of the County Agent and experienced swine breeders within the county. It should only be undertaken by junior swine producers who have had some experience in the feeding and developing of hogs before entering into the production of breeding stock.

It is important that foundation stock of the very highest quality and type of the breed or breeds produced be used, and that the very best practices in growth and development of this stock be carried out so that anything offered for sale can be expected to give satisfactory performance to the purchaser.

Naturally, a considerable amount of this breeding stock will

enter into competition in the breeding classes in the state and out-ofstate shows. It should be kept in mind that the breed associations and the state fairs have recently approved some new classes and some new ages for breeding stock in the shows.

There is now a class of senior pigs which must have been farrowed on or after August 1 of a given year and before February 1 of of the following year. There is a class for *senior spring pigs* which must have been farrowed on or after February 1 and before March 15 of a given year, and a class of *junior spring pigs* which must have been farrowed on or after March 15 of a given year. The "given year" referred to is the spring or fall preceding the show being considered.

Reference to the breeding table and farrowing dates given in this manual will help you to breed your sows so as to take full advantage of change in age classes.

PRACTICAL POINTS FOR PROFITABLE PORK PRODUCTION

Use pasture—good thick tender palatable pasture for as much of your feed as possible, but *always* keep market hogs growing and gaining by the full use of a well-balanced grain and protein ration while the hogs are on pasture. Follow a rigid sanitation program. This means keep your hog pens, pastures and houses clean. Rotate the hogs from pasture to pasture frequently. Keep clean fresh water always available. There are two kinds of hog wallows that are acceptable. The first is a stream of running water that begins and ends on your place. The second is a concrete basin that can be and is emptied and cleaned often and regularly. These cost too much unless you are going to stay in the business a long time. A hog is naturally clean if you will help him to be, and it is absolutely necessary for continued success with hogs.

Select the best breeding stock possible to start with, then work constantly for improvement. Never coast, you're sure to slide back before you know it. Good fences and good feeding keep hogs at home. This keeps down losses, disease and keeps friends. Large litters of strong healthy pigs are produced from good parent stock—sows that are properly fed while carrying the litter and at farrowing time. If the pigs scour during their first two weeks after birth reduce the sow's feed about ½ for a few days. Change the bedding; protect the pigs from damp cold quarters and winds. Many lame, knotty-legged and stiff-jointed hogs are lacking in mineral in their ration or are kept in damp drafty houses and sheds. Keep a mineral mixture before them all the time. Keep the sheds and houses dry and clean. Keep them out of the dust, too.

If you do your own vaccinating be sure the syringe and needles are clean. Boil them for 20 minutes before using. Disinfect the points of injection and don't spill any virus. Burn the empty or half empty bottles. Use only fresh serum and virus that has been stored at the proper temperature until taken out for immediate use. Use a clean sharp knife with which to castrate; make the incisions low on the scrotum. Be clean and smear the wounds with Smear 62 or 882; immediately place the pigs on clean ground to avoid infections.

Provide dust free shade for hogs in summer and dust free and damp free shelter in the winter.

Sows normally farrow 112 to 114 days after breeding. Use this table and know when your sow will farrow.

Date of Service	Date Sow Is Due to Farr
January 1	April 25
January 11	May 5
January 21	May 15
January 31	May 25
February 10	June 4
February 20	June 14
March 2	June 24
March 12	July 4
March 22	July 14
April 1	July 24
April 11	August 3
April 21	August 13
May 1	August 23
May 11	September 2
May 21	September 12
May 31	September 22
June 10	October 2
June 20	October 12
June 30	October 22
July 10	November 1
July 20	November 11
July 30	November 21
August 9	December 1
August 19	December 11
August 29	December 21
September 8	December 31
September 18	January 10
September 28	January 20
October 8	January 30

October 18	February 9
October 28	February 19
November 7	March 1
November 17	March 11
November 27	March 21
December 7	March 31
December 17	April 10
December 27	April 20

LOUSE TREATMENT FOR HOGS:

DDT, used at the rate of three pounds of a 50% DDT powder to 25 gallons of water will control hog lice. This mixture may be used as either a dip or a spray. Bucket pumps or the compressed air type of sprayer will give satisfactory results as long as the entire animal is thoroughly saturated. All animals in the herd should be treated.

MANGE TREATMENT FOR HOGS:

Hog mange can best be controlled by using a hot lime-sulfur dip. There are several commercial lime-sulfur mixtures on the market that are prepared especially for mange eradication. The dip should be kept at a temperature of 95 to 100 degrees F. while the hogs are being treated, and four or more treatments, at five to six day intervals, will be necessary to clean up an infestation. Since mange is highly contagious, all hogs in the lot must be treated.

Both lice and mange are effectively controlled by dipping, spraying or applying by hand, crude oil or crankcase oil. Whatever method is used be sure and thoroughly oil the under parts of the hog's body. It is best to avoid oiling hogs in extremely hot or cold weather. Do not oil white hogs in hot weather; they burn easily from oil.

THE SODIUM FLUORIDE TREATMENT FOR ROUND WORM CONTROL IN HOGS:

Recently the United States Department of Agriculture and various Experiment Stations have approved and are recommending sodium flouride as a means of eradicating and controlling round worms in swine. It is effective, cheap, and practical, but the feeding directions must be followed carefully.

In treating swine with sodium flouride for round worms separate the hogs according to size into groups where the hogs in the group will be uniform in size. Mix one pound of sodium flouride with ninety-nine pounds of a good dry palatable grain mixture that hogs like to eat. Some users have found that a good rich dairy feed or a good laying mash makes an excellent base to mix the sodium flouride in. Feed the hogs as much as they will eat in one day. Do not mix it in a slop or wet the feed. Do keep plenty of fresh water available all of the time for the hogs to drink. If you do not have enough hogs to eat 100 pounds of the feed in one day, mix a smaller batch in the same proportions—that is if you have only hogs enough to eat 25 pounds of feed in a day, mix one-fourth of a pound of sodium flouride in 24¾ pounds of the dry feed. Do not have the hogs excessively hungry on the day you put them on this treated feed. Just have them in a normal well-fed condition.

JUDGING HOGS

Judging is largely a matter of having a certain type fixed in mind and then selecting the animals before you on a basis of the order in which each of them approaches this type. For this reason it is important that before we begin to select or buy hogs on our own judgment we have a thorough understanding of the type or pattern that long established breeders and recognized judges agree is the desirable and practical type of hog to use as the standard.

Type does change somewhat according to the market demand for leaner meats or for more lard so it is not practical to make too definite a statement on this subject. Generally, the preferred type is what might be called intermediate, that is, they are not too leggy or excessively long. Leggy long hogs have been found to be slow in maturing. They require more grain and more time to take on enough finish to top the market. Neither do we want the extremely "chuffy" or short type. Hogs of this type usually have too much lard in proportion to the lean meat which usually is of much higher value. They yield a lower percent of the more desirable and more valuable "primal" cuts, and from a breeding standpoint the extremely short type hogs generally produce smaller litters and are not as good mothers as hogs with more length and depth.

The intermediate type is a hog with sufficient length and depth of body to provide a place for the development of a well balanced proportion of lean meat covered with an even but not excessively thick layer of fat. They should have natural width across the back, loin and width and depth of ham as these are the parts of the carcass that are most valuable. Straight strong legs, with closely set toes and short strong pasterns are absolutely essential in breeding hogs. Smooth deep sides and smooth neatly laid shoulders are essential to a well-balanced high yielding carcass. A short neck, blending

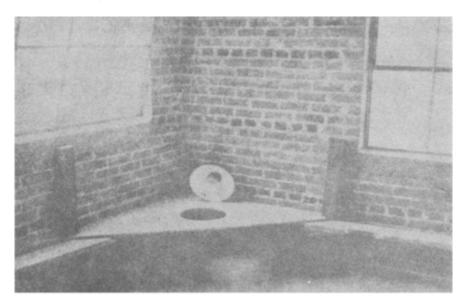
smoothly onto the shoulders and heads showing refinement and the characteristics of the breed are important in breeding stock.

Cooperative Extension Work in Agriculture and Home Economics, Extension Service, Oklahoma A. & M., and U. S. Department of Agriculture Cooperating. Acts of Congress of May 8, and June 30, 1914.



RULES OF THE OKLAHOMA 4-H CLUB

Any boy or girl who is ten years of age and has not reached his or her twenty-first birthday at the time the exhibit is made is eligible to membership in the 4-H Pig Club. The club member must enroll with the County Agent. Pigs should be weighed at the beginning and at the close of the feeding period. The Pig Club members will be expected to keep an accurate record of their work and submit the report of their work to the County Agent at the close of the project.



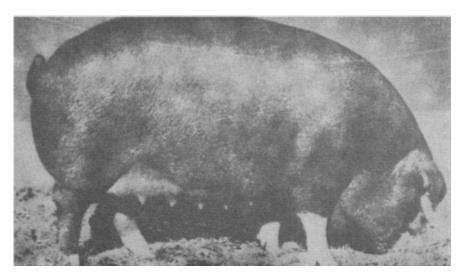
Electric pig brooder in place in corner of farrowing house, resting on top of guard rails. Two 1x4's should be nailed to the two unright 2x4's to keep the sow from climbing on top of the cover board.

1—triangular piece of ½-inch plywood or other material 4½ feet long on the long side.

1—reflector—14 inches in diameter, electric

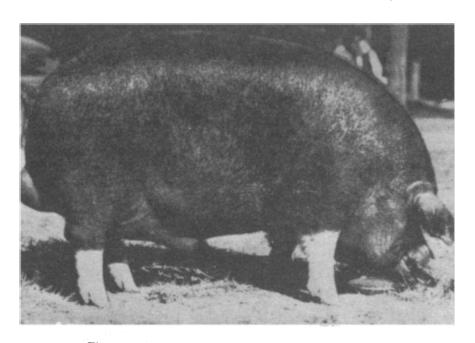
bulbs according to temperature.

2—2x4 uprights—14 inches long. 2—1x4's—4½ feet long.

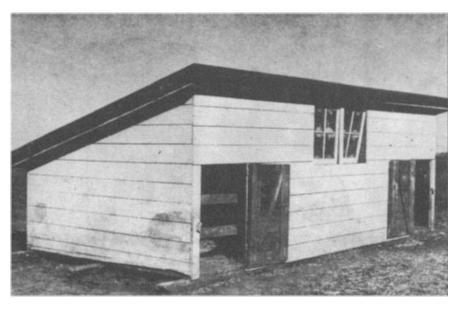


This sow is an excellent example of type, quality and smoothness.

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This Poland China boar is an outstanding example of the right type in the modern Poland Chinas.



This type of farrowing house is most practical and convenient. It is suitable for one or two sows and makes an excellent house for growing hogs, too. Note the runner type skids, these make it easy to drag from one pasture to another.