

UNIVERSITY OF KENTUCKY

COLLEGE OF AGRICULTURE

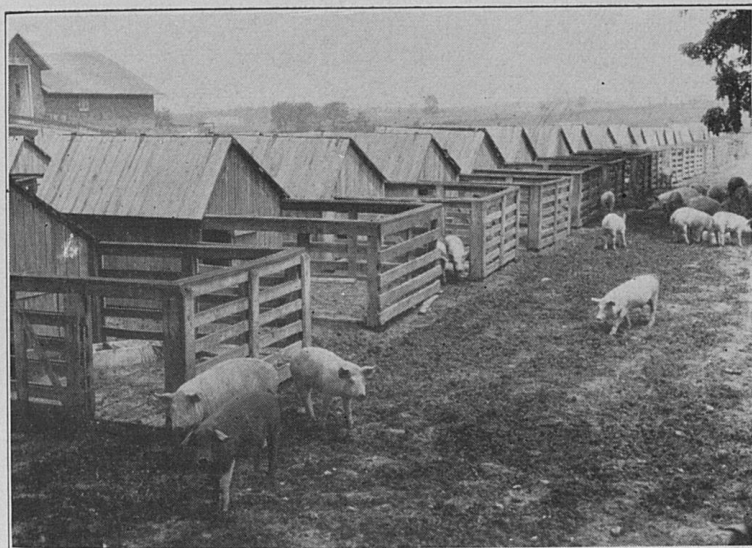
Extension Division

THOMAS P. COOPER, Dean and Director

CIRCULAR NO. 211

(Revised)

THE PIG FROM BIRTH TO MARKET IN SIX MONTHS



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THE PIG FROM BIRTH TO MARKET IN SIX MONTHS

By GRADY SELLARDS

This circular describes methods and practices that should be of assistance in producing "top" hogs five to six months from birth of the pigs. Two peaks in the price of hogs occur with regularity, one in March or April and the other between late July and early September. Hog raisers can take advantage of these peak prices by having their hogs ready for market within six months or less from birth.

BREEDING STOCK

The kind of breeding stock used is important. Purebred breeding hogs are preferable because they transmit desirable characteristics to their pigs, whereas grades and nondescripts often do not. If purebred hogs are broad in spring of rib, long and deep of body, full and plump in the ham, their pigs usually will be of similar conformation. The superiority of purebred breeding stock is due to many desirable characteristics, established by generations of rigid selection and proper mating. Always, a purebred boar should be used.

Characteristics of a good boar are:

- Appearance masculine, rugged, and characteristic of the breed
- Back high and well arched
- Body long and deep, smooth, symmetrical, of even width from front to rear
- Heart girth full, broad spring of ribs
- Underline straight and even
- Hams full and plump
- Legs straight, of medium length. Pastern strong
- Sound in all respects

A desirable breeding sow is like the boar in conformation except that she is feminine in appearance and has a well-developed udder with ten or more teats. Extremes in length of leg, size or other characteristics should be avoided. The pork packer wants a finished hog which will yield a high percent of medium sized cuts of good

quality, and a minimum amount of lard. The intermediate strain of the large type of hog is nearest to what is wanted.

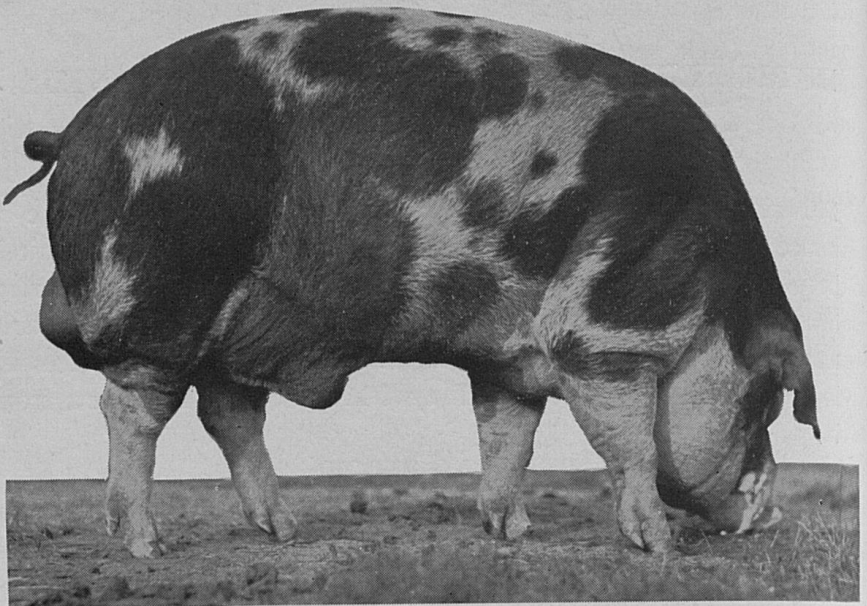


FIGURE 1. A good type of purebred boar.

CROSSBREDS OR PUREBREDS?

By crossbred is meant the offspring resulting when purebreds of one breed are bred to purebreds of a different breed. Many hog raisers consider the crossbred superior to the purebred animal in the feed lot but experiments do not uniformly confirm this conclusion. On the contrary, tests show that there is little difference in the feed-lot performance, either in rate or economy of growth, of crossbred compared with purebred hogs. As breeding animals, crossbreds are not so satisfactory as purebreds because on farms practicing crossbreeding, replacements for the breeding herd usually must be purchased from some breeder of purebreds, whereas on farms keeping purebreds, replacements may be made largely from the farm herd. Many farmers find it profitable to produce both breeding stock and market hogs, a double enterprise which increases income. If this is practiced, the breeding herd should be registered purebreds.

Frequently there is a difference between strains of purebred

hogs, even within a breed. This difference may be quite as marked as the difference between breeds. An illustration of this fact occurred in the Kentucky Ton Litter contest. Two purebred litters of eight pigs each and of the same breed were fed together. They received identical feed and care. When the pigs were 180 days old one litter weighed 2,185 and the other only 1,915 pounds, a difference of 270 pounds partly attributable to a difference in the two strains.

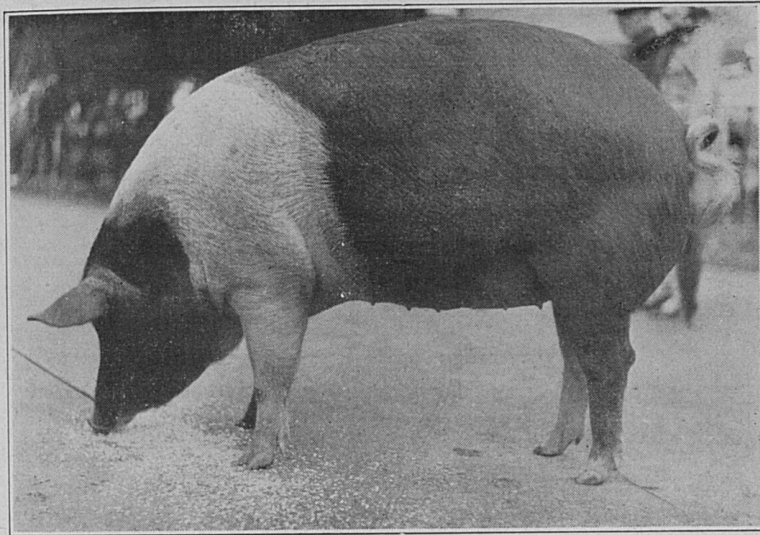


FIGURE 2. A good type of gilt.

BREEDING AGE FOR GILTS

A gilt weighing 200 pounds and in thrifty condition is large enough to breed, regardless of her age. Properly fed and cared for from birth she should reach this size within six months, but every effort should be made to have the sow farrow by the time she is a year old. The wisdom of this procedure is borne out by a study made by E. Z. Russell, of the Department of Animal Husbandry, United States Department of Agriculture. He found that sows one year old or less, farrowing their first litters, produced pigs that averaged 2.56 pounds each, at birth, while one-and-one-half-year old sows farrowing their first litters produced pigs that averaged only 2.47 pounds each, at birth. At 170 days of age the litters from the

yearling sows averaged 189 pounds, and those from the one-and-one-half-year old sows averaged 172 pounds. In other respects the performance of the older sows was inferior to that of the yearlings. Mr. Russell says, "The poor showing of the group indicates quite clearly that it is detrimental to a sow to let her go until she is some 14 or 15 months old before she is bred."

FLUSHING THE BREEDING SOW

Sows should be in thrifty condition at time of breeding. Thin sows should be fed generously on a well-balanced ration for at least ten to fourteen days previous to the time it is desired to breed them. This practice is known as flushing. Sows fed in this manner produce more and stronger pigs than sows not flushed. Sows on good pasture and getting a full feed of grain—usually corn—and one-half pound of tankage or one gallon of skim milk, and salt, self fed, usually gain satisfactorily. Fat sows may need little or no grain but should be fed the same amount of tankage or skim milk as the thin sows.

FEEDING THE BRED SOW

Bred sows should be given a properly balanced grain mixture and should have access to good pasture. Given a properly balanced ration, a bred sow usually farrows strong pigs; given an unbalanced ration, she usually farrows weak pigs. Just as a builder cannot produce a substantial structure without proper materials, so the sow cannot produce strong, active pigs without proper feeds. A protein supplement such as tankage or skim milk, should be fed with grain. The following procedure in feeding the bred sow has been found satisfactory by numerous producers of hogs:

1st 8 weeks after breeding, $\frac{1}{4}$ lb. of tankage or $\frac{1}{2}$ gal. of skim milk

2nd 8 weeks after breeding, $\frac{1}{2}$ lb. of tankage or 1 gal. of skim milk

Alfalfa hay or other legume hay of good quality should be self fed in a rack, or good pasturage such as green rye or alfalfa should be supplied. Either ground limestone or bone meal may be kept before bred sows or those suckling litters, to supply a possible need for more calcium. Salt should be self fed in a container protected

against rain or snow. Sufficient grain should be fed to produce a gain of $\frac{3}{4}$ pound to one pound daily, per sow, to offset the loss sustained in farrowing and nursing a litter. If the sow is fat, the grain allowance should be kept at a minimum but no change need be made in the quantities of the other feeds.

WEIGHT OF PIGS

At birth, pigs should weigh $2\frac{1}{2}$ pounds or more, each. Smaller pigs are likely to be weak. The greatest losses of pigs occur the first few weeks of their lives, hence the stronger the pig, the greater the possibility of raising it. In the table are given the weights of a ten-pig litter,* after weaning, taken at intervals of about a week. This record is typical of the rate of growth of purebred litters full fed a well-balanced ration.

Date	Weight of litter	Gain
May 31	690 lbs.	
June 4	748 lbs.	58 lbs.
11	813 lbs.	65 lbs.
18	940 lbs.	127 lbs.
25	1050 lbs.	110 lbs.
July 2	1170 lbs.	120 lbs.
9	1278 lbs.	108 lbs.
16	1400 lbs.	122 lbs.
21	1560 lbs.	160 lbs.
30	1700 lbs.	140 lbs.
Aug. 6	1808 lbs.	108 lbs.
14	2000 lbs.	192 lbs.
20	2124 lbs.	124 lbs.
27	2264 lbs.	140 lbs.
Sept. 4	2458 lbs.	194 lbs.
11	2638 lbs.	180 lbs.
21	2882 lbs.	244 lbs.

Four Daviess County litters, a total of 36 pigs, averaged a fraction more than 60 pounds per pig at 70 days of age, which suggests that results such as these are not exceptional.

THE HOUSE

The brood sow must have comfortable, clean quarters if she is to farrow successfully and raise large litters of pigs. The ideal house gives protection from bad weather, is properly ventilated without drafts, is dry, warm, comfortable, clean and free of disease germs

* Raised in Daviess County.

and parasite eggs, and so constructed that it admits sunshine. Well-drained ground covered by either sod or a forage crop is a desirable location for a house. In no event should the house be located on or near premises used by a large number of hogs. Such locations usually are heavily infested with worm eggs, and may harbor disease germs. Pigs are more susceptible to disease and worm infestation than hogs, hence the importance of keeping them on clean premises. This susceptibility decreases as the pigs grow older. The interior of the house should be arranged conveniently, since it is sometimes necessary for the caretaker to assist the sow at farrowing time.



FIGURE 3. A good farrowing house.

There is little difference in the cost of constructing a well or poorly arranged house. In a properly built house less labor is required in caring for sow and pigs and more pigs will be raised per sow. Satisfactory hog-house plans may be obtained at a nominal price from the Agricultural Engineering Department of the Kentucky Experiment Station.

A Straw House. Straw may be substituted for lumber in the construction of a hog house. This has been done on many farms. A number of straw houses 6 feet by 8 feet in size, have been constructed on one farm, at a cost of \$8.50 each. The walls are made of straw tamped between strips of woven wire fencing stapled to two sides of seven medium-sized posts, set solidly in the ground. A door may be made of lumber and hinged to a post or, in lieu of a door,

a burlap cloth may be suspended over the door opening. The house is $4\frac{1}{2}$ feet high on one side and 3 feet high on the other. It is covered with metal roofing nailed to a detachable wooden frame. Houses not in use may be dismantled, the straw burned, and the roofs stored under a shelter until needed. The roofs may be used satisfactorily to make shade needed in summer, on farms not having adequate natural shade.

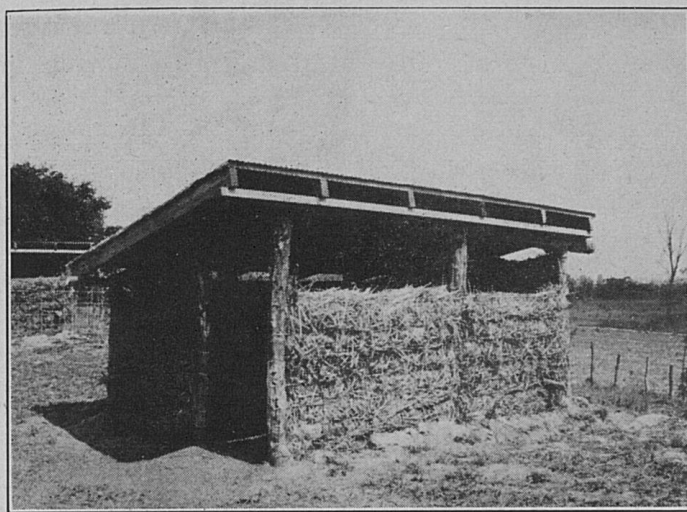


FIGURE 4. A straw house that cost \$8.50.

ROUND WORMS

Altho the majority of pigs become infested with worms, few die from them. Perhaps if the mortality were greater, preventive measures would be more widely adopted. Pigs heavily infested with worms are undersized, stunted and rough coated, whereas pigs lightly infested may look thrifty, yet prove to be unprofitable. Because of the enormous number of worm eggs deposited on much-used hog lots, worm infestation increases in each succeeding farrow of pigs. Worm eggs may live one to five years in the soil. Rigorous control measures are, therefore, imperative.

The adult round worm normally lives in the small intestine of the pig. It is unattached and may be found at any point in the intestinal tract. The adult worm is pinkish-white, 16 or more inches long, and about the size of a lead pencil. It has been estimated that

each female produces 25 to 30 million eggs. Treatments effective against worms have no effect on the eggs; hence treated animals become a menace if allowed to run on lots which are to be used later by pigs.

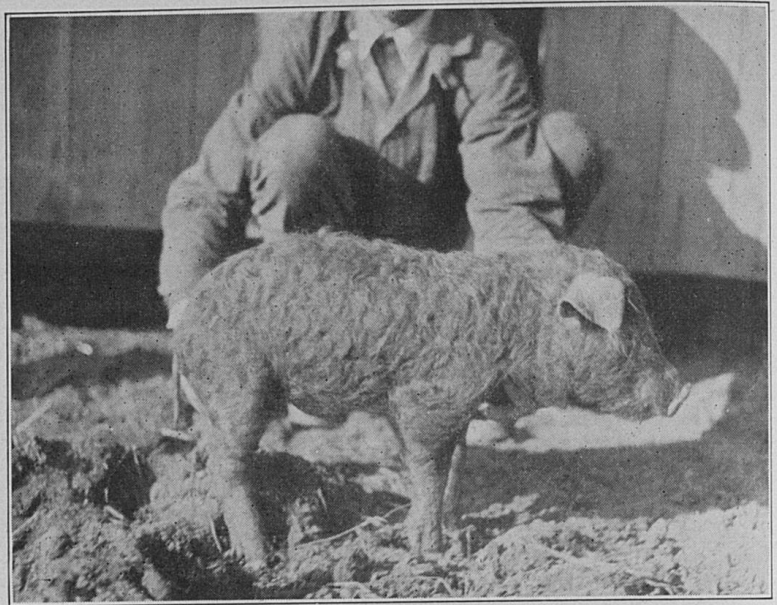


FIGURE 5. A pig suffering from worms and enteritis.

Usually within four to six weeks after it has been deposited with the droppings, the egg becomes infective—that is, a little worm develops within the microscopic egg. Protected by a three-layered, horny shell the infective egg is difficult to destroy. When swallowed by the pig the infective egg passes into the small intestine, where it hatches. The little worm passes into the blood stream; then on thru the liver, the heart and lungs. In the lungs the worm grows considerably and crawls into the air passages where it causes much irritation and coughing, and frequently causes thumps. After coughing the worms out of the lungs, the pig swallows them and they find their way again to the small intestine where they complete their growth. About ten days are required for the completion of the journey thru the bloodstream and back to the intestines.

Control of Round Worms. A plan perfected by the Bureau of Animal Industry is very effective in reducing injury from worm

infestation. When portable farrowing houses are used, as is done on most Kentucky farms, they should be cleaned thoroly and then scrubbed with boiling water to each five gallons of which has been added a 13-ounce can of lye. The house should then be placed on clean ground, that is, ground that has had no hogs on it for three years, or ground that has been plowed since it was used by hogs. The pigs should be kept on the clean territory until at least four months old or, better, until they weigh 100 pounds. It is advisable, but not absolutely necessary, to keep the pigs on clean territory until ready for market. Pigs weighing 100 pounds or more are somewhat resistant to worm infestation. Because it was tried first in McLean County, Illinois, this plan of parasite and disease control was called the "McLean system of swine sanitation."

If a central farrowing house is used, the steps of the plan are:

1. Wash the farrowing house thoroly with boiling water and lye (a 13-ounce can to 5 gallons water).
2. Wash the sow's sides and udder with soap and water before she is put into the clean farrowing quarters. Remove all mud and dirt. It may contain millions of worm eggs and germs.
3. When the pigs are a few days old, haul (do not drive) the sow and pigs to a clean pasture—a field which has been cultivated since last used by hogs, or one on which no hogs have run for 3 years.
4. Confine the pigs to this pasture until they are at least 4 months old, after which they may run in old hog lots without risk of serious injury from worm infestation.

OTHER PARASITES

Other worms commonly found in Kentucky hogs are the thorn-head, the whipworm, two species of stomach worm, two species of lung worm, the nodular worm, the kidney worm, and the tongue worm. All these may be controlled successfully by use of the foregoing procedure. The use of the "McLean System of Sanitation" also largely prevents filth-borne diseases such as necrotic enteritis.

Results from demonstrations in this and other states indicate that the following advantages result when the "McLean System of Sanitation" is used in raising hogs: more pigs are raised per sow; about 20 percent of the feed is saved; the usual number of pigs are raised from one-fourth to one-third fewer sows, and the pigs reach market weight sooner.

EXTERNAL PARASITES

Lice. Lice cause constant irritation and rubbing. Hogs heavily infested with lice are unprofitable. In her short lifetime of one month, each female louse produces about 100 eggs. The eggs hatch and mature in about a month. Obviously, lice increase in number at a rapid rate. What, therefore, may be expected of a hog supporting a heavy infestation of these bloodsuckers, especially when it is known that the louse punctures the skin anew each time it feeds?

Mange. Mange is caused by a small mite, almost too small to be seen by the naked eye. It burrows into the skin and lives there, causing great irritation, and the skin of the animal forms in heavy wrinkles wherever infested. Unless control measures are used the infestation spreads.

A satisfactory remedy for both lice and mange is crude oil. Pen the animals in an enclosure of such size that they are crowded. Then spray each animal thoroly with the oil. Left in the pen a while after treatment, the animals in moving about become fairly well saturated with the oil. Crankcase oil may be used but not on white or partly white hogs because it may cause irritation.

FARROWING TIME

A week before the sow is due to farrow, she should be put into the farrowing house so she may become thoroly acquainted with her new surroundings. Usually, if a sow has made her bed elsewhere before being put into the farrowing house, she is discontented and may break out and return to the place where she first made her bed. The sow should receive kind treatment at all times and should be visited frequently by her attendant, since she may need assistance during farrowing. If she is afraid of her master, she may not permit him to handle the pigs or assist the weak ones in nursing for the first time. It is next to impossible to assist a wild, vicious sow. It is advisable not to attempt to assist the sow at farrowing time unless absolutely necessary.

FEEDING

Three or four days before the pigs are due to arrive, heat-producing feeds, such as corn, should be reduced to a minimum in the sow's feed. In fact, some hog men leave out the grain entirely and substitute wheat bran. If wheat bran or a similar feed is not

available, reduce the grain allowance and feed $\frac{1}{3}$ to $\frac{1}{2}$ pound of linseed oil meal daily to each sow. This reduces feverishness in the sow and wards off constipation. If the sow is on pasture, linseed oil meal may be unnecessary. If constipation develops, give a dose of 4 to 6 tablespoons of Epsom salts or 6 to 8 tablespoons of castor oil in the feed. On the day she farrows, unless the sow is very hungry, she should be allowed no feed but should have access to an abundant supply of pure drinking water. The following plan is a good one to use after the sow farrows:

Ration for a 300 lb. sow

- 1st day—No feed. Plenty of water.
- 2nd day—3 pints wheat middlings or shipstuff.
- 3rd day—6 pints wheat middlings or shipstuff.
- 4th to 8th day—9 pints wheat middlings or shipstuff.

On the eighth day add corn and tankage (or skim milk) to the grain mixture. Gradually increase daily the amount of each of these feeds until the sow is receiving daily $4\frac{1}{2}$ quarts of middlings (or similar feed), 1 pint of tankage or $1\frac{1}{2}$ gallons of skim milk, all the grain she will eat, and salt. A full feed should not be reached before the pigs are $2\frac{1}{2}$ or 3 weeks old. A common mistake is to overfeed the sow while the pigs are too young. Sows fed heavily before their pigs are $2\frac{1}{2}$ or 3 weeks old may produce too much milk for the pigs, which causes scours. For this reason the sow should be brought up to a full feed gradually, so that her milk flow does not overfeed the pigs.

The Creep. As soon as the pigs begin to eat (which will be when they are about 3 weeks old), a creep should be prepared for them in which they can eat, unmolested by other hogs. A supply of shelled corn, tankage, and salt should be kept before the pigs at all times. A creep may be made of slats nailed on rails nailed to posts. The top of the enclosure is covered with poultry wire. The pigs enter thru an opening protected by a door hung so as to swing in and out. This style of creep protects the pigs from chickens as well as from older hogs. Whatever type of creep is used, the entrance should be such that the pigs can go thru without bending their backs. Pigs that continually exercise their backs in this manner may become swaybacked and undesirable in appearance.

Full Feeding. From the time the pigs reach $2\frac{1}{2}$ or 3 weeks of age, a full feed should be supplied to the sow and pigs. This should be done regardless of whether the litter is intended for breeding or for market. A 300-pound sow on full feed eats about 8.1 pounds daily, or 2.7 pounds of grain for each 100 pounds of her weight. But after the pigs have begun to eat, the amount of feed needed for her and the pigs increases rapidly.

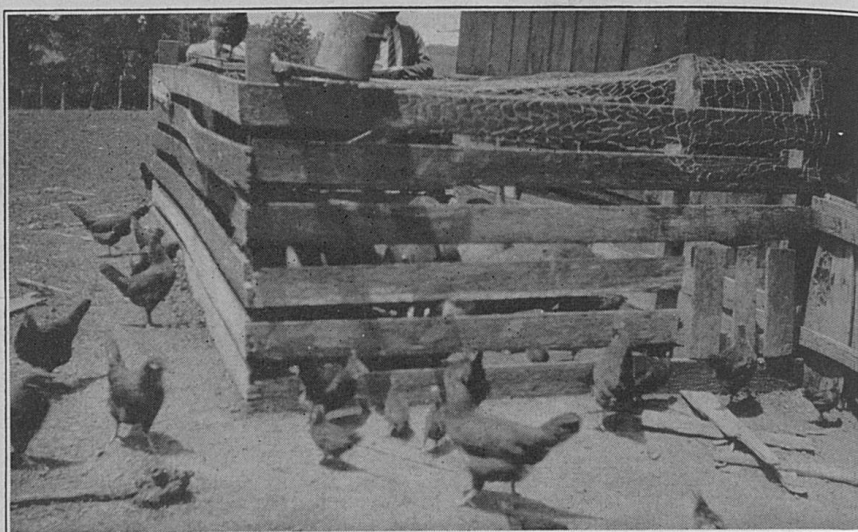


FIGURE 6. A pig creep which protects against hogs and fowls.

AGE TO WEAN PIGS

Pigs should be weaned at 8 weeks of age if the sow is to be bred for a fall litter. It is especially desirable for spring litters to arrive early in March so they can be made ready for the late summer or early fall market, when prices usually are the highest of the year. Fall litters should arrive in September so they can be given a good start before cold weather sets in, and be weaned in time for the sow to be bred for an early spring litter. When pigs are allowed to nurse longer than 8 weeks the sows may fail to breed in time to farrow early in the spring. A satisfactory method of weaning is to remove the sow from the pigs, since she can more readily adapt herself to new surroundings. Three or four days before removing the sow, put her on a much-reduced allowance of corn alone. This rapidly

reduces the milk flow, because corn alone does not supply the elements necessary to produce a large flow of milk.

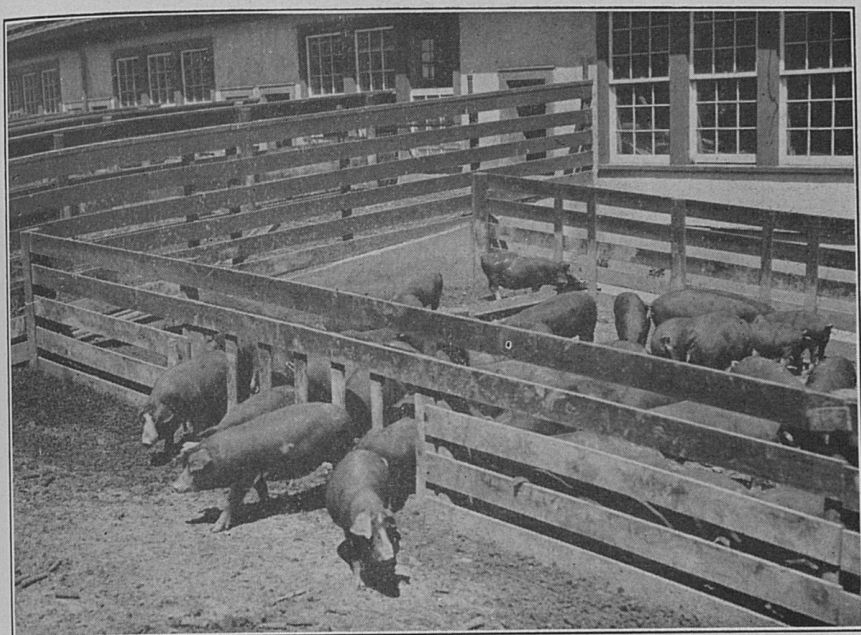


FIGURE 7. An ideal pig creep. (Courtesy Breeders' Gazette.)

THE USE OF SELF FEEDERS

Self-feeding consists in keeping feed constantly before the hogs. Many farmers use the self feeder for feeding weaned pigs. Self fed pigs in dry lot make more rapid gains, on less feed per pound of gain, than hand-fed pigs, and less labor is required in self feeding. Pigs waste less feed when self fed than when hand-fed. The saving is more marked if the self feeder is set on a floor from which scattered grain may be removed. Grain tramped into mud or dirt is not relished.

The proportion of protein feed needed is greatest while pigs are young, the requirement decreasing gradually as they grow older. Protein feed is more expensive than grain. As they grow older, self-fed pigs eat relatively less protein feed and relatively more grain. Frequently, when pigs are hand fed, the proportion of protein feed to grain is not varied according to their needs, thus increasing

somewhat the cost of production. The labor requirement can be reduced by two-thirds when self feeding is practiced.

FULL FEEDING

Full-fed hogs are ready to market thirty days or more, sooner than hogs grown to 100 or 125 pounds on a small allowance of feed, during the summer, and finished on new corn in the fall. In contrast with slowly developed hogs, full-fed hogs usually are ready for market early in the fall, when prices are at the peak. Other factors favoring full feeding are smaller risk of loss, less overhead expense, less interest on investment, less labor, and less use of equipment.

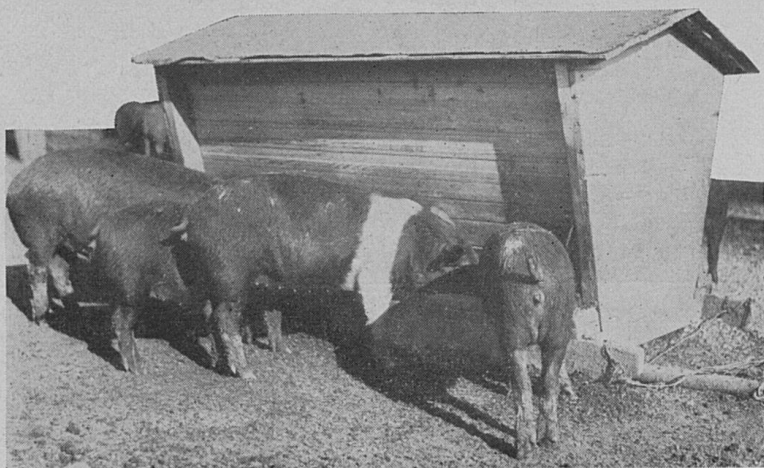


FIGURE 8. A self feeder for shelled corn.

Rarely are pigs given a full feed unless self fed, from a feeder. The pig eats at frequent intervals, both day and night. Hand feeding twice or three times daily all the feed that the pigs will eat does not ensure a full feed. Pigs are full fed only when feed is kept before them. If this were attempted without a self feeder much waste would result.

Types of Self Feeders. Self feeders for shelled corn and for ear corn are the two general types.* Altho the former can be built cheaper than the latter, the expense of shelling the corn is avoided

* A blueprint of either the ear-corn or shelled-corn self feeder may be had for ten cents from the Agricultural Engineering Department of the Experiment Station.

when the ear-corn feeder is used. But the ear-corn feeder is suitable only for ear corn, whereas the shelled-corn feeder is suitable for a variety of feeds. The shelled-corn feeder should be divided into compartments in which grain, ground grain, concentrates such as tankage, and shelled corn may be fed separately. Dividing the feeder into compartments is indispensable if "free-choice" feeding is to be practiced, wherein hogs are allowed to eat of each kind of feed the amount dictated by appetite.



FIGURE 9. A self feeder for ear corn.

Slopping. There is a lingering belief that slop stimulates feed consumption when given as a supplement to hogs on full grain feed self fed. It is not stimulating nor profitable to feed it.

Protein Supplements. The two protein supplements most used in Kentucky are skim milk and tankage. Immediately after weaning, the pigs need as much protein as is found in 4 to 6 pounds of skim milk for each pound of grain consumed. This is more milk than they can take when on full feed of corn. If with the corn a small amount of standard wheat middlings or tankage is fed, the pigs will take three or four pounds of the milk for each pound of grain which furnishes all the extra protein they need. A satisfactory

plan is to keep corn and tankage continuously available in separate compartments of a feeder or container, and give the pigs two or three feedings of skim milk during the day. They should be given only the amount of skim milk they will clean up. Troughs in which skim milk is fed should be kept clean by washing at frequent intervals.

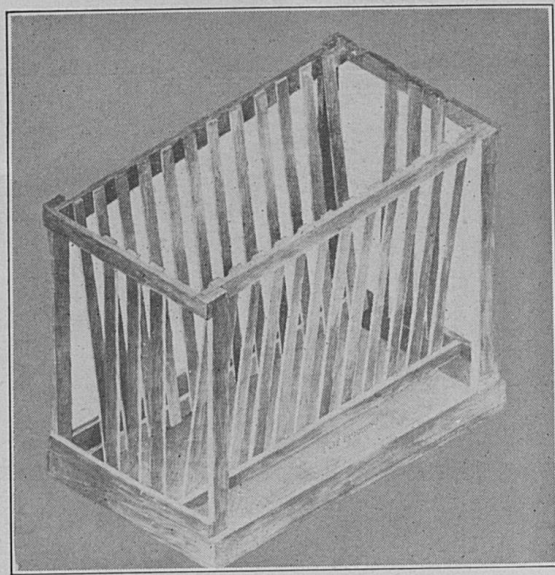


FIGURE 10. An alfalfa rack for pigs.

As pigs increase in weight their need for protein to balance the grain feed decreases per pound of grain fed. The following table indicates the proportion of milk needed as the animals increase in weight. More milk fed than is indicated in the table is usually not an advantage in fattening hogs. If pigs are on pasture instead of a dry lot they will only use to advantage half as much milk as given in the table.

Weight of pigs pounds	Pounds of skim milk to feed with each pound of grain
30— 50	4 to 6
50—100	2.5 to 3
100—150	2 to 2.5
150—200	1.5 to 2
Over 200	1 to 1.5

EFFICIENT GRAIN MIXTURES

1. Corn, self fed
A mixture of tankage, 50 pounds; linseed oil meal, 25 pounds, and alfalfa leaf meal, 25 pounds (or alfalfa hay self fed in rack)
Salt, self fed
2. Corn, 5 pounds
Middlings, 4 pounds
Milk, 2 to 3 pounds per pound of grain
Salt, self fed
Legume hay, in rack
The corn and middlings may be self fed or the corn self fed and the middlings and milk fed as slop.
3. Corn, self fed
Skim milk (1 pound to each pound of grain)
Pasture
Salt, self fed
4. Corn, self fed
Tankage, self fed
Pasture
Salt, self fed

Middlings is an excellent feed for sows and suckling pigs, and should always be included in their rations. It stimulates milk flow in the sows and rapid growth in the pigs. Also, the efficiency of corn and tankage as a growing and fattening ration is increased by the addition of middlings; pigs gain more rapidly on corn, middlings and tankage than on corn and tankage. But gains produced on corn, middlings and tankage are more expensive than gains produced on corn and tankage. For this reason, many feeders discontinue feeding middlings after the pigs are 3 to 3½ months old.

Because it is less palatable than most grains and protein supplements, it is advisable to mix middlings with the grain at the rate of 1 pound of middlings to each 2 to 4 pounds of grain. Otherwise, pigs eat very little of it. Middlings fed as slop is more palatable than the dry product, especially when mixed with skim milk. In buying middlings, effort should be made to get a grade containing as high a percentage of protein and as low a percentage of fiber as possible. First-grade middlings should test 16 percent or above in crude protein and not more than 6½ percent in fiber.

After the hulls have been removed, oats are an excellent feed for hogs. Oat hulling machines are available. The cost of hulling is about 20 cents a bushel. In a test in which hulled oats were fed at the rate of 1 pound to each 2.3 pounds of corn, they were worth

62 percent more than an equal weight of corn. Whole oats may be fed successfully to open or bred sows.

Dry-lot rations in winter or in summer can be properly balanced if supplemented by legume hay, preferably alfalfa, in a rack. Sun-cured legume hay supplies proteins, minerals, and vitamin D, all of which are obtained by pigs from pasture in summer.

PASTURES

Pastures are a valuable aid to economical hog production. If grazed continuously by spring-farrowed pigs from weaning-time until ready for market, "each acre of good pasture should save approximately 800 to 1000 pounds of corn plus 500 pounds or more of tankage in comparison with dry-lot feeding."* The saving in corn is from 14 to 18 bushels.

When hogs are grazed, there is a saving of manure which is distributed by the grazing animals, in contrast with the waste of this valuable product incident to dry-lot feeding.

Despite their importance in hog production pastures are coarse and of little value during the latter part of the summer. In order that good pasturage be continuously available, many hog raisers grow Dwarf Essex Rape and Sudan grass, in addition to mixed grasses, clovers and alfalfa.

If kept closely grazed, practically all pastures are satisfactory for hogs. If the supply of hogs is insufficient to keep a pasture reasonably short, mowing should be resorted to.

Temporary Pasture Crops. Of the temporary pasture crops, rape is superior for hogs. In habit of growth and soil requirements it is closely akin to the cabbage plant and requires a soil similar to that necessary for a good cabbage crop. The soil must be fertile and contain abundant humus. The seed bed should be well pulverized.

Rape should be seeded at a liberal rate. Altho many recommend 5 pounds of rape seed per acre, the observation of experienced hog raisers is that 8 pounds of seed is preferable. From the heavier seeding, smaller plants are produced. The seed usually sells at 8 to 10 cents a pound. So the cost of a heavy seeding is not prohibitive. Rape should be seeded March 1, or later, after the danger of freez-

* Feeds and Feeding, L. B. Morrison, p. 895. The Morrison Publishing Co., Ithaca, New York.

ing is past. It should be grazed heavily but not too closely. It is not advisable to graze rape below five leaves to the stalk. When this stage has been reached, hogs should be removed to another pasture until the heavily-grazed rape has added some growth.

Sudan grass is another satisfactory temporary forage crop for hogs. Unlike rape, it thrives during hot weather and, consequently, must be seeded later than rape. In central and Southern Kentucky, it should be sown from May 15 to July 1. In the mountains it should be sown as near May 15 as possible. It is a vigorous plant and grows rapidly on fertile soil. Prepare the seed bed the same as for rape. Sudan grass should be seeded at the rate of 20 to 25 pounds of seed per acre.

Methods of Feeding on Pasture. On good pasture, pigs fed corn alone do fairly well when only a small amount is fed; but on a full feed of grain, a small amount of some protein supplement, such as skim milk or tankage, is necessary to balance the ration. The reason for this is that full-fed pigs do not eat enough of a forage crop to balance the grain. Numerous experiments have shown that full-fed hogs on pasture produce gains at less cost if fed a protein supplement. A number of experiments indicate a saving of 415 pounds (7.41 bushels) of corn for each 100 pounds of tankage fed. In the tests tankage was fed at half the rate necessary in dry lot feeding (or about 5 percent of the total grain fed).

MINERALS

Pigs fed balanced feeds while running on alfalfa, clover, rape or lespedeza pasture need no mineral supplement except salt, which should always be kept before them in a self feeder sheltered from rain and wind. If in the dry lot the grain feed is balanced with tankage, skim milk, or fish meal there will be no need of a calcium or phosphorus supplement. If the grain feed is supplemented by protein feeds entirely of vegetable origin, or if the pigs are hogging off corn or corn and soybeans, it is well to allow them ground limestone in addition to salt, kept in separate containers.

The mineral requirements of a brood sow are heavy because of the drain on her system for these substances, before and after farrowing. Therefore, she should be allowed free access to salt, bone

meal and ground limestone kept in separate compartments of a container.

SALT

Salt is essential to the normal growth of hogs and should be kept before them always. Caution should be exercised in getting hogs up to a full allowance of salt, especially if they have received no salt for a while. Start with a small amount and increase it gradually until the animals are getting all they will eat. Hogs allowed no salt for a long interval are likely to poison themselves by over-

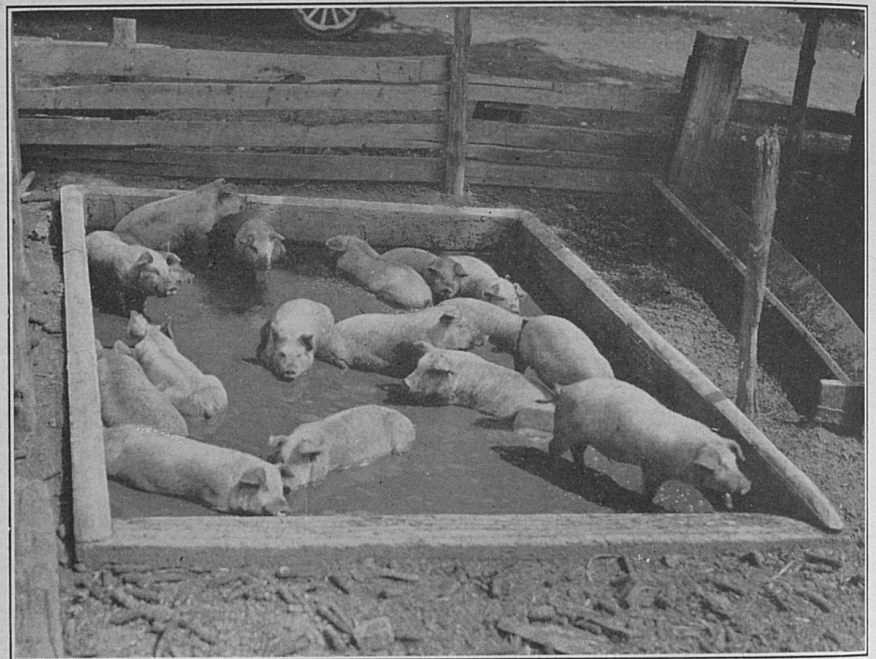


FIGURE 11. A concrete wallow. (Courtesy Breeders' Gazette.)

eating, if allowed immediate access to an unlimited supply of it. Poisoning is more likely to occur if the salt is in solution.

WATER

Pure, clean drinking water should be supplied continuously. Dirty ponds, frequently, are the medium thru which disease infections and worm infestations are spread. For this reason, hogs should not be permitted to wallow in the drinking water. Automatic waterers attached to barrels keep the drinking water clean.

THE HOG WALLOW

Evaporation of moisture thru the pores of the skin is nature's way of keeping an animal comfortable in summer. Because practically all the pores of the fattening hog are covered by fat, few of

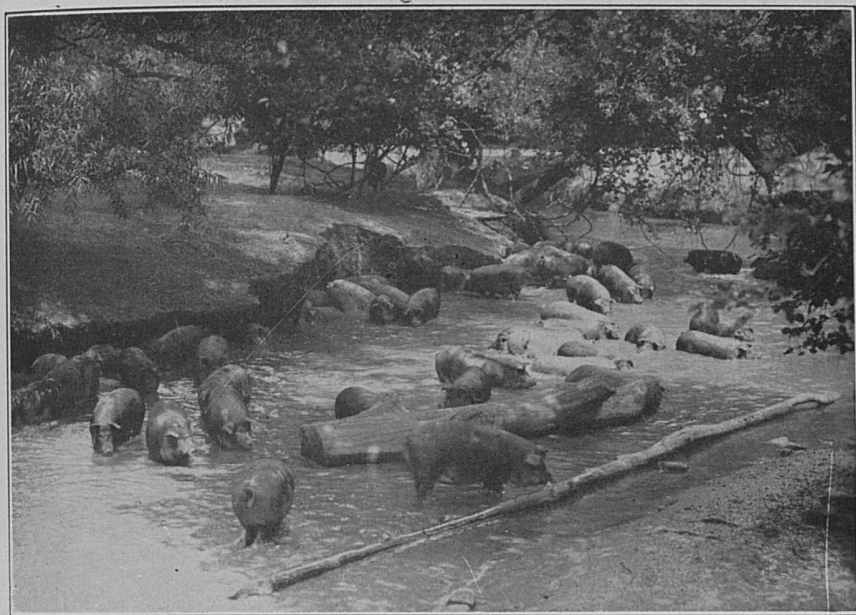


FIGURE 12 Both shade and wallow supplied here. (Courtesy Breeders' Gazette.)

them function. Since little evaporation takes place thru the skin of the fattening hog, the animal, when uncomfortably warm, resorts to artificial means of keeping the skin moist. It is well to supply hogs a clean wallow for use in the hot months.

IMPORTANT SUGGESTIONS

Don't use tonics except on advice from a competent authority.

Don't treat for worms or ailments unless animals show signs of lack of thrift.

Remember that several days are required to get animals back on feed after they have been treated for worms.

