



Suggestions for

GROWING and FATTENING HOGS

in Alabama

W. E. SEWELL,
Animal Husbandman

FARMERS WHO produce a surplus of such fattening crops as corn and peanuts can market them to advantage through hogs. Some of the general hog-raising practices that have been found successful by the Alabama Agricultural Experiment Station at its Main Station, Substations, and Experiment Fields are summarized here.

FITTING HOGS INTO THE FARM'S OPERATIONS

Hog production for market fits logically into the systems of operation on those farms that can economically grow more corn and peanuts than are customarily used by other livestock on the farm. On a large number of farms in the State, added cash income is made by marketing surplus fattening feeds through hogs. The possibility of increasing the income from this source, however, is indicated by experiments which show that the average yields of peanuts and corn can be increased con-

siderably by use of fertilizers or soil-improving practices, as well as by rotations in which hogged peanuts are followed by corn.

The number of hogs kept on a given farm should be adjusted to the amount of fattening crops to be used. Alabama Agricultural Experiment Station results show that, under a good system of management, a sow producing on the average two litters of six pigs each per year can be fed and the pigs fattened to market weight on about 170 bushels of corn or on 115 bushels of corn and 3,000 pounds of peanuts.

The acreage of fattening crops required annually for each sow and for finishing the 12 pigs she produces may be estimated on the basis of yield per acre. For example, where corn is the fattening feed and a yield of 28 to 30 bushels per acre is obtained, one sow and her pigs finished to market weight, will use the corn from 6 acres. If both corn and peanuts are to be used, 4 acres of corn and 2 acres of peanuts will be needed, based on per-acre yields of 30 bushels of corn and 1,500

AGRICULTURAL EXPERIMENT STATION
of the ALABAMA POLYTECHNIC INSTITUTE

M. J. Funchess, *Director*

Auburn, Alabama

pounds of peanuts. Results of this Station show that yields of 30 bushels of corn can be made in most areas of the State and 1,500 pounds of peanuts can be obtained in adapted areas, provided good practices are followed.

YEAR AROUND HOG MANAGEMENT

The most income from hogs is obtained from planned systems of year around operations. Such systems involve the timing of feed crops and litter farrowing. The proper number and size of hogs must be available to use the crops when they are ready. Likewise, planned breeding is important in order that the litters are farrowed when weather conditions are favorable for saving pigs. Management of this kind requires planning a year ahead.

When Corn Is Fed

Where corn is the chief feed, the sow is bred in the fall to farrow in March. When the pigs are about 2 months old, they are weaned and the sow is re-bred to farrow in September. Like the spring litter, the fall pigs are weaned at about 2 months of age, and the sow is bred to start another year.

The sow or sows and pigs are kept on grazing crops as much of the year as possible. The feed is so regulated as to have the sow medium fat when the pigs are born, and medium thin when the pigs are weaned. Between the time the sow is bred and the time of farrowing, she is fed 1 to 2 pounds of shelled or two to three large ears of corn per day. While suckling the pigs, the sow is given about 1 pound of shelled or two large ears of corn daily for each pig in the litter.

Both spring and fall litters are kept on grazing crops and are fed all the corn they will eat until ready for market. Pigs do better if some protein-rich feeds are fed until they weigh 50 pounds, but none is required thereafter if the grazing includes legumes. The fall-farrowed pigs will reach market

weight by March or April, the spring-farrowed litter by September or October. When it is necessary to wait for the new crop of corn to finish the spring pigs, they may be grown through the summer on good pasture and about 1 pound of shelled or two to three ears of corn per pig per day.

When Corn, Peanuts Are Fed

Where both corn and peanuts are grown for feeding hogs, the acreage of peanuts is divided into about one-third Spanish and two-thirds runner peanuts. Spanish peanuts mature early and runners late. Thus, a longer grazing period is obtained by the combination of the two. The sow and fall litter of weaned pigs are managed and fed the same as in the corn-feeding system. The weaned litter in the spring is grown during the summer on a good pasture and a limited corn ration (described under corn feeding) until August when peanuts are ready for grazing. At this time the pigs should weigh about 75 pounds. The shoats are first grazed on the Spanish peanuts, finished on runner peanuts, and sold about December.

Pasture Is Part of System

Such feeds as corn, peanuts, sweet-potatoes, shorts, and garbage are not complete rations. Deficiency troubles are likely to occur when hogs with no grazing are fed only these feeds in a dry lot, floored pen, or harvested peanut field. Under such conditions, young pigs become "runty" and grow off slowly. Weak, "knotty" legs sometimes occur, and the hogs become crippled or blind. Conditions referred to as "down in the hindquarters" and "down in the loins" are common. Sows sometimes fail to breed, and pregnant sows may "slip their pigs." Those that finally farrow may fail to give enough milk for their litters.

These troubles are usually the result of hogs not receiving enough minerals (bone-building foods), vitamins (health-building foods), and proteins (muscle-building foods). If these sub-

stances are given hogs in addition to corn or corn and peanuts, about half of the fattening feeds will be saved and troubles caused by unbalanced rations will be avoided to a great extent.

It is best to keep a mineral mixture constantly before the hogs. The other needed food substances (proteins and vitamins) can be supplied largely by permanent pasture and temporary grazing crops (see "Protein-Rich Feeds"). For each sow and her litter, about 1 acre of some locally adapted crop, such as crimson clover, bur clover, alfalfa (light grazing after first year), or oats, should be grown for winter grazing. One acre of permanent pasture made up of such legumes as white clover and lespedeza will usually furnish enough summer grazing for a sow and her pigs. If the permanent pasture is not composed largely of legumes, about 1 acre of alfalfa, kudzu, or other legume is needed for temporary summer grazing. These acreages are based on good pastures. All pastures, especially on thin lands, should be well fertilized.

Hogs grazing pastures should have rings in their noses to reduce damage to pasture plants by rooting.

Minerals for Hogs

A mineral mixture should be kept in a box before the hogs at all times. Leaching of the mixture by rain may be prevented by putting a roof over the box, or by placing the box under shelter.

A mixture of ground limestone, bone meal, and salt (equal parts by weight) has been found satisfactory. If bone meal cannot be bought, hardwood ashes or hardwood charcoal can be used in its place. Basic slag 3 parts and salt 1 part may be used as a mineral mixture. However, to prevent the slag from becoming hard, only a week's supply at a time should be kept before the hogs.

Protein-Rich Feeds

Protein-rich, or muscle-building, feeds are not needed by hogs when grazing peanuts in the field or when grazing legume crops. However, all pigs be-

tween weaning and 50-pound weight grow-off faster if fed protein supplement. Hogs fed corn without access to legume grazing crops will require protein-rich feed. Shorts and some similar feeds commonly fed with corn as protein supplement are better than corn fed alone, but they do not give the best results. Some protein feeds that have given good results, and the proportions in which they should be fed with corn are as follows:

MIXTURE No. 1 (by weight)

Shelled corn, 9 pounds; and tankage, 1 pound, or —

If fed separately (by measure):

Ear corn, 1 bushel; and tankage, 4 quarts.

MIXTURE No. 2 (by weight)

Shelled corn, 7 pounds; and tankage and cottonseed meal mixed in equal parts, 1 pound, or —

If fed separately (by measure):

Ear corn, 1 bushel; and tankage and cottonseed meal mixed in equal parts, 6 quarts.

MIXTURE No. 3 (by weight)

Shelled corn, 5 pounds; and peanut meal, 1 pound, or —

If fed separately (by measure):

Ear corn, 1 bushel; and peanut meal, 8 quarts.

Meat and bone meal, or fish meal may be substituted for tankage.

Peanut meal may be substituted for cottonseed meal.

A mixture of equal parts of peanut meal and cottonseed meal may be substituted for peanut meal.

While there are many commercial mixtures on the market, most of which are satisfactory for feeding with corn, usually they are more expensive than the foregoing home mixtures.

Hogs not accustomed to protein feeds may be slow in beginning to eat such feeds, particularly tankage. However, if the feed is kept before the hogs, they will start eating within a few days.

MARKETING TO GET TOP PRICES

Hogs finished to weights of 180 to 240 pounds usually sell for top prices

on the market. Monthly changes in prices are similar from year to year. The highest prices for hogs usually are paid in March and April, and in August and September. As a rule low prices occur in November, December, and January. Wherever the crops and methods used to finish hogs will permit, the farmer should plan to sell in those months of highest prices. In so far as possible, this principle of timing production to the periods of highest market prices was applied in developing the systems discussed in this publication.

SICKNESS AND OTHER TROUBLES IN HOGS

While the most common cause of unhealthy hogs is lack of proper feeding and management, there are other sources of troubles, such as diseases and parasites, which reduce the possibility of making economical gains and even cause death losses. Hence, affected hogs should have immediate attention.

Diseases

Common ways of spreading disease are: moving hogs from farm to farm or from sales points to farms, grazing hogs on open range, or allowing hogs the run of streams and creeks. Diseases also may be spread by people, trucks, or wagons passing to and from disease-infested farms.

By following a well-planned system of pasture and feed crops, the chances of sickness in hogs are greatly lessened. When hogs become sick from unknown causes, it is best to see one of the agricultural workers in the county, or local veterinarian as soon as possible.

Worms, Lice, and Mange

The three most common parasites of hogs are worms, lice, and mange mites. Practical controls are given here.

WORMS. Hogs are more likely to have worms when kept in muddy lots or in the same pastures year after year. For this reason the plan of handling

hogs on pastures and fields, as given in this publication, will largely prevent worms.

While there are several kinds of worms that affect hogs, the large round-worm causes the most damage. Most affected are pigs from suckling stage to 75-pound weight. Affected pigs have a general unthrifty appearance, the hair becomes wiry, and they develop pot bellies. Coughs are common and "thumps" usually develop.

Treatment consists of keeping the pigs off feed for 24 hours, and dosing them with a worm medicine. Ready-prepared worm capsules may be purchased from local stores or from mail order houses, or capsules may be prepared by local drug stores according to veterinary formulas.

LICE. Lice do more damage than is usually thought. They are present on most hogs, especially on the belly and between the legs where they are not easily seen. Rubbing or spraying hogs on the underside as well as on the top of the body with used motor oil will kill all adult lice. However, the treatment will not affect lice eggs. Thus, repeated treatments at 10-day intervals are necessary to kill those that hatch later. A herd of hogs may be kept reasonably free of lice by applying three treatments in the spring and repeating them in the fall.

MANGE. Although mange is not as common as worms and lice, it spreads rapidly among hogs and causes considerable damage. Mange is caused by a mite, which is too small to see with the naked eye. The mite burrows into the skin, causing the hair to fall out and the skin to become thick, rough, and scabby. Mange usually begins behind the ears and on the neck.

An effective treatment consists of applying used motor oil, which should be scrubbed vigorously and thoroughly into the affected areas of the skin with a brush. Two or three treatments at weekly or 10-day intervals are usually necessary to cure affected hogs.