7-1-1979

Raising a Few Hogs in Indiana

Vernon B. Mayarose

James R. Foster
RAISING A FEW HOGS IN INDIANA
Management Suggestions for the Beginning Swine Producer

Cooperative Extension Service, Purdue University, West Lafayette, Indiana
<table>
<thead>
<tr>
<th>CONTENTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Introduction</strong></td>
<td>3</td>
</tr>
<tr>
<td>Before you begin...</td>
<td></td>
</tr>
<tr>
<td><strong>Source of Pigs</strong></td>
<td>4</td>
</tr>
<tr>
<td>If farrowing your own pigs</td>
<td></td>
</tr>
<tr>
<td>If buying feeder pigs</td>
<td></td>
</tr>
<tr>
<td><strong>Facility and Equipment Needs</strong></td>
<td>5</td>
</tr>
<tr>
<td>The shelter</td>
<td></td>
</tr>
<tr>
<td>Shade</td>
<td></td>
</tr>
<tr>
<td>Fencing</td>
<td></td>
</tr>
<tr>
<td>Feeders and waterers</td>
<td></td>
</tr>
<tr>
<td><strong>Feeds and Feeding</strong></td>
<td>7</td>
</tr>
<tr>
<td>Feeding the pregnant gilt or sow</td>
<td></td>
</tr>
<tr>
<td>Feeding the pigs in dry lot</td>
<td></td>
</tr>
<tr>
<td>Feeding the pigs on pasture</td>
<td></td>
</tr>
<tr>
<td>Minimizing feed costs</td>
<td></td>
</tr>
<tr>
<td><strong>Management at Farrowing Time</strong></td>
<td>9</td>
</tr>
<tr>
<td><strong>Management from Farrowing to Weaning</strong></td>
<td>10</td>
</tr>
<tr>
<td><strong>Related Publications</strong></td>
<td>11</td>
</tr>
</tbody>
</table>
RAISING A FEW HOGS IN INDIANA
Management Suggestions for the Beginning Swine Producer

Vernon B. Mayrose and James R. Foster, Extension Swine Specialists
Department of Animal Sciences, Purdue University

For a family that has a few acres of land, raising hogs on a small scale can be an interesting and fun hobby, a good learning experience and a source of some extra income.

Pigs are relatively intelligent animals and can even become pets (Figure 1). However, they grow quite rapidly—from 3 pounds at birth to 225 pounds market weight in about 6 months. It takes only 10 months from the time the sow conceives until her pigs are ready for market.

Hogs when full-grown can either be sold at a livestock market or processed at a local slaughtering facility into various pork products for home use. The basic products from a hog are ham, roasts, chops, bacon and sausage.

The purpose of this publication is to outline and explain the minimum requirements and management skills for raising hogs on a small-scale, non-commercial basis. The sections that follow discuss: how to get started, needed facilities and equipment, what to feed and how, and basic management practices. At the end is a list of related publications that deal with various aspects of swine production in much more detail.

Before You Start...

Before investing money or acquiring any pigs, first talk with the agriculture agent at your county Cooperative Extension Service office. He can help you ‘size up’ your situation, provide helpful suggestions and is probably familiar with any local regulations on livestock raising that might affect you.

There are apt to be either community or county ordinances regarding livestock noise, odor, safety and/or sanitation. Check them out and be sure you can fully comply, for your sake—and your neighbors!!!
SOURCE OF PIGS

The two most common ways to get started in small-scale hog production are: (1) buy an already-bred gilt or sow and produce a litter of pigs, then either sell the litter as weaned pigs (called feeder pigs) or grow them out to market weight; or (2) buy feeder pigs and feed them to market weight.

If Farrowing Your Own Pigs

Although there are several breeds to choose from, the small operator should probably select crossbred gilts or sows (Figure 2). Crossbreeds are usually better mothers than purebreds. They tend to farrow more pigs and faster-growing pigs that are more vigorous, which means less death loss. Crossbred sows are also apt to be less expensive than purebreds.

The quickest way to produce a litter is to buy a bred gilt (young breeding female in her first pregnancy) or an old bred sow that has already produced one or more litters. A gilt will likely have fewer baby pigs than an older sow.

Most importantly, select an animal that has 12-14 well-spaced teats. The teats should be without deformity. Avoid breeding stock (males or females) with any teats or nipples that are inverted, “blind” (non-functioning) or extremely small (called pin nipples). Also, try to obtain a female that is herself from a litter of eight or more pigs. Her feet and legs should be structurally sound; and she should walk free and easy, exhibiting no lameness.

After a gestation (pregnancy) period of about 114 days, the bred female will farrow a litter of usually between 8 and 12 pigs weighing 2½ to 3½ pounds each. On the average, one can expect to lose about 25 percent of pigs farrowed before they are weaned. If certain diseases strike, losses may reach 100 percent. Mortality from weaning to market is usually less than 3 percent.

If raising only a few litters, it probably won’t pay to buy and maintain a boar. Instead, plan either to buy pregnant females, or to have your females bred by another producer’s boar or by artificial insemination (AI). AI is desirable for disease control but should not be attempted unless good technical help is available from an AI technician or a producer experienced with AI.

Figure 2. A crossbred gilt. A crossbred is one that has: (a) parents that are of two different pure breeds, or (b) parents in which one or both are crossbred.
If Buying Feeder Pigs

If you plan to purchase feeder pigs, obtain them from a reliable source that raises pigs under sanitary conditions. They should be healthy, weaned and already started on feed. Select pigs of uniform age and size, weighing between 35 and 60 pounds. Buy females or castrated males (barrows).

Avoid buying pigs that are lame, that cough or exhibit labored breathing, that have diarrhea (scours), have crooked noses or bleed from the nose. Pigs should not be rubbing or scratching themselves excessively, which may indicate a lice and/or mange problem. And do not buy pigs with abscesses or ruptures (hernias).

The first 10-14 days are critical for newly-arrived feeder pigs. So check on them several times a day during this period: Stress on pigs can be minimized by providing a dry, draft-free, well-bedded facility. Also be sure they can operate self-feeders and automatic waterers.

A separate hospital pen for sick pigs should be available where medication can be promptly administered.

FACILITY AND EQUIPMENT NEEDS

The place where the pigs are kept should be completely ready when you bring them home. You will need some type of shelter, a shady spot in summer, a good, hog-tight fence, a self-feeder or feed trough, and a waterer (Figure 3).

The Shelter

All or part of an existing older building or a small individual house will suffice as a hog shelter. The important thing is that it keeps out drafts, snow and rain, provides shade in hot weather, and has a dry floor.

The simplest housing is probably an A-frame type—i.e., a watertight roof which forms two sides of the building, and a rear wall (Figure 4). The front is usually open but can be fitted with a door. If movable, locate it at a spot where water won't puddle, and face it with the front away from the wind.

Keep the inside of the house dry, clean and well-bedded with straw, peanut hulls or wood shavings (Figure 5). Remove the bedding when it gets wet and dirty, and spread it on a field or pasture. If weather restricts the immediate haul- ing of manure, stack it in a convenient storage area, then haul and spread as soon as weather permits.

To avoid complaints about unpleasant odors, do not locate hog houses or haul manure within 500 feet of your home or a neighboring residence. Make arrangements with a farmer to spread manure if your acreage is too small.

Shade

In hot weather, hogs need protection from sun and heat. Hog houses should be made so they can be opened, preferably front and back, for ventilation. Keep the animals fenced out of airtight structures in hot weather.

Trees give good shade; however, livestock should be fenced away from valuable ones. Another method of providing shade is to place at least four posts in the ground, connect them about 4 feet above ground with a framework of poles, lumber or wire fence, and cover with material such as straw (Figure 6).
Fencing

Hog lots must be fenced 'hog-tight'. For lots several acres in size, use 32-inch high woven-wire fencing, with a strand of barbed wire at the bottom just above the ground.

For smaller lots, a temporary or permanent fence of 1-inch x 6-inch boards or wire panels about 35 inches high is easy to construct. Attach the boards or panels to steel or wood posts.

Feeders and Waterers

Pigs can be fed daily from a hog trough or pans. Provide enough trough space so all the pigs can eat at one time. If a self-feeder is used, provide a feeder hole for each four or five animals (Figure 7), and keep it in proper adjustment to prevent feed wastage.

Hogs should have access to plenty of clean water at all times. A 35-pound pig drinks about 1/2 gallon per day; a 225-pounder drinks about 1-1½ gallons; and a brood sow suckling a litter, about 5 gallons.

For your water supply needs, you can use either a heavy trough or pan that the pigs can't upset, a homemade waterer from a steel drum, or an automatic waterer or nipple unit (also see Figure 7) connected to a water line. Check daily (twice a day during hot weather) to make sure water is always available. Protect from freezing in winter.

Figure 3. Pigs need some type of shelter that is dry and well bedded. A portable wood platform can be used for feeding and watering the pigs.

Figure 4. A simple A-frame type hog house.

Figure 5. Provide pigs with a clean, dry bed free from chilling drafts.
FEEDS AND FEEDING

Feed is the biggest expense in raising hogs—about 70-75 percent of the total cost of production. Like humans, swine need a balanced diet each day. A complete ration, which can be purchased from a feed dealer, is one that contains the right proportions of energy, protein, vitamins and minerals.

Corn is the standard energy source for hogs; but barley, wheat, grain sorghum (milo) and oats also can be fed. The protein, vitamins and minerals are usually provided by feeding with the grain a complete protein supplement, which is available from feed suppliers. The grain and the supplement may be ground and mixed together as a complete feed, or they can be fed separately after the pigs reach about 75 pounds.

Another way to formulate rations is to buy separately the protein (such as soybean meal), a mineral mix and a vitamin premix, then mix them with the grain source.

Whichever method you use, be sure the ration has the correct amount of nutrients for the age of the pigs being fed. Always follow all mixing directions and any regulations noted on the feed tag. Get more information on feeding from your county Extension office.

Table 1 shows the different proportions of corn to various commonly available protein supplements (including vitamins and minerals) that will make 100 pounds and 1 ton of three complete ‘grower’ (16% protein) rations and three complete ‘finisher’ (14% protein) rations.

Feeding the Pregnant Gilt or Sow

During gestation, feed a complete ration at 4-5 pounds per day in summer and 5-6 pounds in winter. Do not let the breeding female get too fat. A gilt should be fed to gain about 75 pounds and sows about 30 pounds over the pregnancy period.
The rations can be supplied in a self-feeder, which allows access to them at all time. Or the pigs can be hand-fed all they will consume in about 30 minutes twice a day. A 40-pound pig will eat about 2 pounds of feed per day; a 100-pound pig, about 5 pounds per day; and a 200-pounder, about 7 pounds.

Feeding the Pigs on Pasture

Hogs do well on pasture. About 1/5 acre of good pasture will support a sow and litter or 3-5 growing pigs (Figure 8). Alfalfa and ladino clover are considered the best hog pasture, although red clover, alsike, white clover and lespedeza are also satisfactory. Rye, oats, wheat or rape can be used for temporary pasture.

Self-feed growing pigs on pasture the same rations they would receive in dry lot. Pregnant sows can get by with up to 30 percent less feed, depending on pasture quality. Putting hog rings in the noses of sows and pigs over 40 pounds will prevent them from rooting and destroying pasture. Sows and growing-finishing pigs should be kept in separate pens or pastures.

Minimizing Feed Costs

For swine, it takes 3½-3¾ pounds of feed to produce 1 pound of live pork. Therefore, a hog needs about 650-700 pounds of a complete ration to grow from weaning weight (40 pounds) to market weight (225 pounds).

You can lower feed costs by providing a good environment and selecting animals that gain fast and efficiently. To estimate potential profits, compare your total feed cost to the expected market price for live hogs. Besides feed costs, take into account any other production costs, such as buildings and equipment, utilities, veterinary expenses, bedding and miscellaneous supplies.

<table>
<thead>
<tr>
<th>16% Protein (Grower) Ration</th>
<th>Lbs. of Ingredients in ration weighing—</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ration 1</td>
<td>100 lbs.</td>
</tr>
<tr>
<td>Corn</td>
<td>74</td>
</tr>
<tr>
<td>36% protein supplement</td>
<td>26</td>
</tr>
<tr>
<td>Ration 2</td>
<td>77</td>
</tr>
<tr>
<td>Corn</td>
<td>40% protein supplement</td>
</tr>
<tr>
<td>44% protein supplement</td>
<td>80</td>
</tr>
<tr>
<td>44% protein supplement</td>
<td>20</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14% Protein (Finisher) Ration</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Ration 1</td>
<td>81</td>
</tr>
<tr>
<td>Corn</td>
<td>36% protein supplement</td>
</tr>
<tr>
<td>19</td>
<td>380</td>
</tr>
<tr>
<td>Ration 2</td>
<td>83</td>
</tr>
<tr>
<td>Corn</td>
<td>40% protein supplement</td>
</tr>
<tr>
<td>17</td>
<td>340</td>
</tr>
<tr>
<td>Ration 3</td>
<td>85</td>
</tr>
<tr>
<td>Corn</td>
<td>44% protein supplement</td>
</tr>
<tr>
<td>15</td>
<td>300</td>
</tr>
</tbody>
</table>

*For pigs less than 75 pounds, rations should be ground and mixed. From 75 pounds to market, rations may be ground and mixed or the shelled corn and supplement hand-fed or fed free-choice in a self-feeder.
Figure 8. An acre of good legume pasture can accommodate 15-25 growing-finishing pigs.

MANAGEMENT AT FARROWING TIME

The farrowing house or pen should be made ready well before farrowing time. This includes: (1) installing guard rails, if a farrowing crate is not used, to prevent the sow from lying on her pigs; (2) cleaning and disinfecting the facility; and (3) providing a straw, peanut hull or wood shaving layer of bedding.

The sow will farrow around 112-115 days after she is bred. On the 109th day of gestation, move her into the farrowing house or pen. If weather permits, wash her first with soap and warm water, particularly her teats. Washing removes worm eggs and other organisms that infest baby pigs.

Also at this time, to prevent constipation, substitute for some of the corn enough wheat bran or other bulky ingredients to comprise 15 percent of her ration, or feed the regular diet but include a tablespoon of Epsom salt or Glauber salt. Remove wet bedding and manure daily to keep the pen dry.

For 24 hours after farrowing, give the sow water but little or no feed. On the second day, start feeding about 3 pounds of 14-15% protein ration, and increase the amount each day until she’s on full feed (i.e., 10-12 pounds) when the pigs are a week old. Then she may be self-fed.

Healthy gilt and sows usually farrow without trouble. Farrowing normally takes 2-5 hours. If possible, be on hand to help. Remove immediately any membrane that covers the head of a newborn pig to prevent suffocation. If one appears lifeless, breathing can sometimes be started by rubbing or slapping its side. In cold weather, make sure the newborn pig has immediate access to supplemental heat.
MANAGEMENT FROM FARROWING TO WEANING

If the newborn pigs are piling on each other or shivering and have rough haircoats, they are probably cold. When possible, provide supplemental heat lamps or hovers to prevent chilling (Figure 9). However, make sure the sow or pigs cannot reach the lamp or cord, and that the lamp cannot touch bedding or other flammable material. Do not hang the heat source by its cord; fasten it securely.

Soon after birth, paint each pig’s navel cord, if still wet, with a tincture of iodine (USP 2% solution). And clip off the tips of the eight tusks-like needle teeth using a side cutters (Figure 10). If necessary, ear-notch for identification should also be done at this time.

If the pigs do not have access to clean soil, they will need iron, injected or given orally, during the first 3 days to prevent baby pig anemia.

Once they start eating (at about 2 weeks of age), the starter ration will provide enough iron. Male pigs that are not to be sold for breeding purposes should be castrated any time between birth and 4-weeks old.

Pigs can be weaned between 4 and 8 weeks of age. At weaning, cut the sow’s ration back to 4-5 pounds. She will soon come into heat, and then may be rebred 3-6 days after the pigs are weaned.

Internal parasite control begins with deworming the sow before farrowing. Then deworm the young pigs before 7-8 weeks of age. Also plan to control the external parasites, lice and mange. Follow all directions and heed all precautions on labels of products used.

Establish a written schedule or calendar of management and health practices to be followed—and stick to it!

Figure 9. Provide supplemental heat for newborn pigs to prevent chilling. Use either heat lamps or hovers, but be sure they are safe.

Figure 10. Soon after birth, clip the pig’s needle teeth.
RELATED PUBLICATIONS

Single copies of the following swine production publications are available free of charge to Indiana residents from their county Extension offices or from CES Publications Office, AGAD Building, Purdue University, West Lafayette, IN 47907:

"Baby Pig Management—Birth to Weaning" (PIH-18)
"Care of the Sow During Farrowing and Lactation" (PIH-46)
"Management of Newly-Purchased Feeder Pigs" (PIH-20)
"Pork Production Systems—Feeding Purchased Pigs" (PIH-17)
"Pork Production Systems—Low-Investment, Low-Intensity Confinement Systems" (PIH-15)
"Pork Production Systems—One Litter Pasture System" (ID-103)
"Pork Production Systems—Producing Feeder Pigs" (PIH-16)
"Swine Herd Health Management Practices" (VY-40)
"Swine Rations" (PIH-23)