

Brood Sow Management

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The hog producer's profit is often made or lost before pigs are born, because the key to profit during most seasons is in the satisfactory production of his brood sows. Good production is measured by the number and weight of the healthy, vigorous feeder pigs weaned.

Usually five pigs sold at market time will pay all costs on the litter, including the sow's share. Larger litters are necessary for profit.

Your brood sow will have certain abilities to produce. It is your job to feed and manage her in the way that will help to do the best possible job.

Three factors influence the number and size of pigs you can raise. These are—first, the inherited ability of the sow; second, your management, or handling, of the herd; and third, the kind and amount of feeds you will use.

Selecting the Sow

Swine breeders and feeders have learned, through experience, that certain features of conformation or shape can be used in picking brood sows. Length, depth, and smoothness of body, breed and sex character, soundness, and udder de-

velopment are features which indicate constitution, breeding and feeding capacity, and possible carcass quality.

Such an appraisal of the live gilt, however, does not tell us anything of her inherited ability to produce. To know more of the production history of the parents, some marking and record keeping must be done. A commercial producer should mark and keep records on enough litters to furnish his annual quota of replacement gilts.

Here are points which rate "A plus" in the history of all gilts kept for brood sows:

1. Her dam raised at least eight pigs to weaning, unless the pigs were lost through herdsman's mistakes.
2. Her dam needed no assistance at farrowing time and was not cross and nervous at farrowing time.
3. Her dam always produced pigs that weighed at least 2½ pounds at birth.
4. Her dam was a good milker, whose pigs averaged at least 30 pounds when weaned at 8 weeks of age.
5. Her dam was not late and irregular in settling to service.
6. Her dam was of acceptable confor-

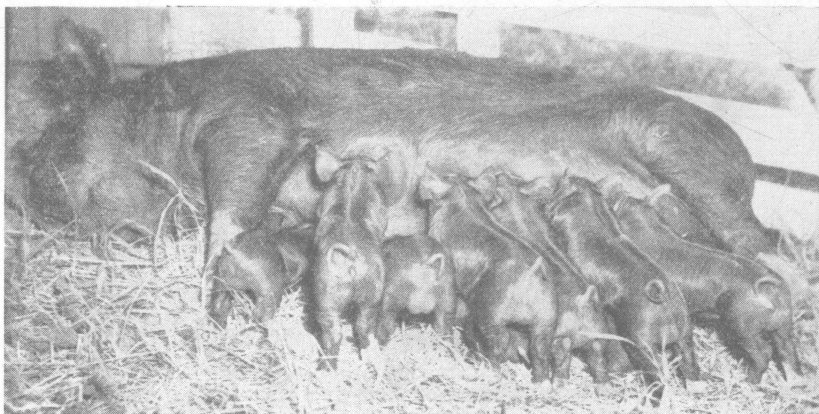


Figure 1.—"Good Luck" comes from careful selection and management. This litter of ten pigs averaged 4 pounds each at birth.

mation or type. The main points in the type are:

a. Sows should be smooth and free from wrinkles; deep bodies; long, roomy middle with a moderate arch of back; wide in the chest; level underline; and with full, deep hams.

b. Sows should be feminine as shown by a trim head, neck, jowls; and with a good udder development, having 12 or more teats prominent and evenly spaced. Discard any sow with inverted or "blind" teats.

c. Sows should have straight legs of medium length, strong pasterns, and an easy walk.

d. Mature sows should weigh from 500 to 700 pounds when in good flesh. Very large sows are clumsy and their pigs are often late in maturing. Sows too small and fine-boned very often produce pigs that make slow gains.

Summer Feeding Management

Feeding and management greatly influence the number of live pigs born, as well as their size and vigor. Recent experiments show that baby pigs may die 2 or 3 weeks after breeding time and be missed in counting those lost at farrowing. Therefore, good management and feeding for your sow herd is a constant

problem. Most careful feeding during the last month of gestation will not repair mistakes made earlier.

Summer feeding is quite simple. It is made so by the rich legume pastures that are available then. Any cropping plan that lengthens the pasture season is good for your swine enterprise. Good legume pasture is a rich, yet inexpensive, source of readily available protein, vitamin, and mineral elements. Good pasture, with ample shade and clean water, needs only to be supplemented by limited feeding of a balanced ration.

Winter Feeding Management

Problems of feeding and management become more complicated during the cold winter months. As a result many sows have poor litters, although inherently the sows are good.

Your job is to provide conditions as nearly identical with summertime as you can without creating high expenditures in money or labor. You will need to see that pregnant sows obtain plenty of exercise, as they do when on pasture in the summer. You will need to see that they receive the vitamins, minerals, and proteins that good legume pastures contain. Reasons are simple and reasonable for these precautions. A little pig is largely composed of muscle, bone, and



Figure 2.—Our best-fed sows are those that enjoy the best pasture for the longest season. These sows, shown on a ladino-grass pasture 6 weeks after weaning their litters, were hand-fed about 3½ pounds of corn daily. They paid little attention to supplement and mineral mixture provided in a self-feeder. Note how well the legume is grazed.

water. Protein is needed to build muscle, minerals are needed to build bone, and some of the vitamins help in the digestion and assimilation of the other nutrients. In addition, there is a need for some energy feeds, such as grain, to supply the energy for the sows themselves.

Importance of exercising the brood sow often is overlooked. Brood sows have a tendency to become lazy, and as the pregnancy period passes, the more lazy they become. Exercise helps eliminate body wastes, and a pregnant sow must not only eliminate her own wastes, but also those produced by the developing fetus. If she becomes constipated, poisons or toxins build up to cause weak and dead pigs.

For a system of winter feeding and management that has proven very good under Ohio conditions, include the following practices:

1. Keep sows on clean winter range so that they will get plenty of exercise and, in addition, will not be so likely to be contaminated with parasites.
2. Feed alfalfa or other good legume hay. You may feed this in racks, or ground and mixed with the other feed. There is no set amount of hay required for winter rations, and amounts may vary from 12 to 40 percent of the total ration. The higher the amount, the less the need for additional protein and minerals.
3. When the amount of alfalfa hay is limited, supply additional quantities of protein and minerals.
4. It is better to feed a mixture of grains than corn alone, but this is not absolutely necessary.
5. Hand feed grain and concentrates so that sows do not become too fat. Hand feeding also permits you to work with the sows so that they do not become cross and nervous at farrowing.
6. Supply plenty of clean drinking water. This is difficult in cold weather unless you have an automatic waterer with a heater to use.
7. Feed sows at some distance from their shelter so that they must take exercise or go hungry.
8. If sows have a tendency to become constipated, cut down on the corn and increase bulky feeds such as alfalfa, oats, or bran.

Rations for the Brood Sow

The ration for an animal includes the kinds and amounts of feeds necessary to provide the nutritive requirements for one day. However, the word ration also is widely used to include the formula for a mixture of feeds prepared in volume. Choice of feeds to be used depends largely on the types that are produced at home. Rations may vary in their grain ingredients and still be equally successful.

1. Summer gestation.

- a. High quality pasture, with grain to keep them in medium flesh. Protein supplement to be fed at the rate of $\frac{1}{4}$ pound per head per day.
- b. 70 pounds corn
25 pounds oats
5 pounds of a 40 percent protein supplement mixture

Feed 3 to 6 pounds per head daily, depending on size and condition.

2. Winter Gestation. Legume hay is the foundation of the winter ration mixture. It is used to try to bridge the gap between pasture seasons. Little is known about the use of grass silage in this period. Some practical Ohio hog producers, however, are getting good results by feeding up to $1\frac{1}{2}$ pounds per head daily. They advise caution because silage will tend to be laxative.

- a. Good leafy alfalfa hay in racks free choice.
1 bushel oats + 1 bu. corn
10 pounds mixed protein supplement
1 pound of a mineral mixture
- b. 50 pounds corn.
25 pounds oats, or wheat middlings
14 pounds alfalfa meal
10 pounds mixed protein supplement
1 pound mineral mixture

Foregoing mixtures must be handfed. Gilts need $1\frac{1}{4}$ to 2 pounds of feed daily for each 100 pounds they weigh. Sows need $1\frac{1}{4}$ to $1\frac{1}{2}$ pounds of feed daily per 100 pounds body weight.

Corn may be fed on the ear. To do this, grind other ingredients and feed required amount in the morning. Feed corn portion in the evening.

- c. 30 pounds corn
30 pounds oats
30 pounds alfalfa meal
9 pounds mixed protein supplement
1 pound mineral mixture

This ration is designed for self-feeding. Not all self-feeders are satisfactory for sows, and a light bulky mixture may not feed down smoothly. Check the opera-

tion of the feeders and the condition of the sows daily.

Protein supplement recommendations above are based on the use of home-mixed or commercial 40 percent supplement. Protein and mineral supplement formulas are in Bulletin 235, "Swine Feeding."

Farrowing Time Management

As farrowing time approaches, your chores increase. Most of your visible losses will occur at this time. Thus, your skillful handling of the sow in the farrowing pen will pay you directly in pigs saved.

Summer farrowing is much easier, because you have the advantages of better weather and pasture. However, in Ohio it is profitable to farrow and raise early spring pigs in order to have them finished to sell on the August and September high markets.

This list of chores will help you to help your sows to save more pigs.

1. Know when your sows are due to farrow. If you record the breeding date, you can plan the farrowing operation.
2. Starting a week or 10 days before farrowing, put more bulky materials in the ration. Substitute ground oats, rolled oats, or bran for the corn and supplement in the mixture. Make these changes gradually. Do not reduce amount of feed for the sow daily.
3. Prepare the farrowing pen or individual house by scrubbing and scalding. Then make it dry and draft free and bedded lightly.
4. Wash the sow with soap and water. Weather and facilities may prevent a complete washing. But carefully wash the udder and hind parts at least.
5. Pen the sow 2 or 3 days before farrowing. Watch her closely for signs of constipation. Give her plenty of water to drink.
6. If the sow is quiet at farrowing, do not disturb her unless it appears she needs help. Usually, she will be finished in 2 or 3 hours.
7. If the sow appears to be having difficulty in farrowing, or fails to "give down" her milk for the pigs, consult a veterinarian.
8. Give the sow water when she gets

up after farrowing. If she searches for feed and acts hungry, feed her lightly.

9. On the day after farrowing, begin full feeding the sow. Gradually replace the corn and supplement in the ration and take out some of the bulky materials. Be cautious with the protein supplement, for a rapid increase may cause scouring, especially if you have enteritis infection in the herd.

10. At 10 days after farrowing, feed the sow all she will eat of a ration similar to this:

- 60 pounds cracked corn
- 20 pounds coarsely ground wheat or finely ground oats
- 20 pounds 40 percent supplement

11. Move the sow and pigs to clean pasture lots as soon as possible. One acre is enough for three sows and their litters. Usually it is best to have no more than six sows and their litters in one lot.

Weaning Time Management

A good brood sow may reproduce her own weight in the milk she gives during the 8 week nursing period. Her milk flow reaches its peak at the fifth week after farrowing, then declines gradually and allows weaning the litter at 8 weeks. Ohio producers find it necessary to wean at this age in order to keep on schedule with their system of two litters per year.

At weaning time two problems occur. These are how to dry up the sows smoothly and avoid udder troubles, and how to "flush" the sows so that they will come in heat and settle promptly.

Most sows will dry up easily after the eighth week. Full feeding of a rich ration, such as the nursing ration, then makes the sows gain in weight and flushes them. Flushing is the practice of putting the sow in a rising condition of nutrition. This increased feeding of a balanced ration stimulates the body functions. You will want activity and efficiency in the reproductive processes at this time.

Remember, too, disease and parasite problems must be avoided. The advice of your veterinarian on how to keep your herd healthy is as important as his help in treating a sick herd.

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