FEED AND CARE OF THE BROOD SOW

by

A. W. Oliver

Federal Cooperative Extension Service
Oregon State College
Corvallis

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Wm. A. Schoenfeld, Director
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Breeding. The period of gestation in pigs is usually from 112 to 155 days. Where two litters a year are expected, the proper farrowing times are March for the first litter and September for the second litter. Fall pigs farrowed much after October 1st do not get a sufficient start before winter sets in and are usually unthrifty, unprofitable pigs. Spring pigs farrowed after April 1st will make thrifty pigs, but they will not be ready to market until after the period of highest prices. Also, sows which farrow after April 1st can not be bred for a fall litter without bringing the pigs too late. April is a good farrowing time, however, for pigs that are to be used to clean up the stubble fields.

Feed Before Farrowing. The chief feed requirements of brood sows are as follows:

1. Grain enough to keep them in the desired condition. This grain may be any of the common cereals, as wheat, corn, barley or oats, or a mixture of these. The amount will depend upon the kind of other feed and the condition of the sow, and will vary from none at all up to a full feed. The grain should be ground as finely as possible. One pound of a good grain mixture daily for each 100 pounds live weight will maintain a dry sow without material gain or loss in weight. A good rape or alfalfa pasture will do the same without the use of grain. If the sow is thin, additional grain is necessary. The judgment of the feeder must determine the amount.

2. Protein feeds sufficient to make up for the lack of protein in the grain should be provided. This can be supplied in any one of the following ways:

   a. One-fourth to one-half pound per day of tankage or fish meal.
   b. One-half to one gallon a day of skim milk or buttermilk.
   c. Plenty of good, succulent pasture, such as rape, alfalfa, or clover. If the pasture is dry and woody, or short, it will not supply sufficient protein, in which case tankage or milk must be supplied, although in somewhat lesser amount than where there is no pasture.

3. Vitamins. These may be supplied by good rape, clover, or alfalfa pasture, or by bright green alfalfa hay, in such amounts as the sow will consume. In the winter in western Oregon, alfalfa meal is fed.

4. Supply minerals in such quantities as the sow will consume. There are many good formulas for mineral mixtures. The following is in use at Oregon State College:

   Equal parts of: salt, ground limestone, bone meal.

Minerals may be mixed with the grain at the rate of one pound for each 100 pounds of grain or, after the pigs are accustomed to it, by feeding a small amount daily for a week. The mixture can then be put in a small self-feeder and the pigs given free access to it.
Exercise. Sows that get their feed without rustling for it will not take enough exercise to keep them in vigorous condition. Special precautions are, therefore, necessary in order to provide exercise, such, for example, as having the house at one end of the lot and the feed trough at the other.

Prevention of Roundworms in Pigs. The prevention of intestinal roundworms in pigs is much better than the treatment of them after the worms have developed. Most of the damage has occurred before the worms are developed in the intestines.

The worm eggs that cause the damage are found in hog lots which have been in continuous use. When these eggs are taken into the digestive tract they hatch into a very small worm that goes through the walls of the intestines into the blood stream to the lungs, where they cause the suckling pigs to cough and develop thumps. These small worms are coughed up into the throat and the pig swallows them. When they reach the intestines this time they mature into roundworms.

The prevention methods are to keep the small pigs away from places where the eggs are found. First, the pen where the sow is to farrow should be thoroughly cleaned and scrubbed with boiling water and lye. Second, the sow should be carefully washed with soap and water to remove all dirt and filth before she is put into the pen. After she farrows, the sow and the pigs are kept inside the pen until the pigs are about a week old, then they are taken to a clean pasture which hogs have not been using for a year, or where the field has been ploughed. It is essential that the sow and pigs are not driven out through the old hog lot, otherwise the pigs will pick up enough dirt which contains worm eggs to infest them, and the sow will get her belly, feet and legs dirty and the pigs will get eggs out of the dirt when they suckle. If necessary, put a crate on a stone boat that has been placed at the door of the pen and haul the sow and pigs to the clean pasture.

In some sections of Oregon sows can be farrowed in portable houses that have been thoroughly cleaned before they are hauled into clean pastures.

The pigs should be left in the pasture when weaned and not taken to the old hog lots. After they are four to five months old they can be taken back to the central barn as they are not materially affected by worms after that age.

Farrowing. A week before each sow is due to farrow, she should be separated from the herd and placed in a pen by herself so she will become accustomed to her new quarters and be more quiet at farrowing time. The farrowing pen need not be expensive. The essential features are dryness, light, ventilation, freedom from drafts, freedom from objects on which the sow can injure herself or her little pigs, and a rail to prevent the sow from mashing the pigs against the wall. The floor should be dry and clean and but lightly bedded with soft bedding so that the little pigs can walk around without difficulty and thus keep out of the sow's way.

About three or four hours before the sow is to farrow, there will ordinarily be milk in the teats, and she will usually show a great activity in making a bed, but neither of these signs is infallible. If the presence of anyone in or near the farrowing pen seems to annoy the sow, the attendant should keep out of sight. If after two or three hours of labor, no pigs have appeared, the attendant may insert one or two fingers in the vulva to determine whether a pig has yet appeared in the vagina. If the feet are felt in the vagina, they should immediately be
seized and pulled gently but firmly until the pig is removed - otherwise he will come dead. Unless a sow is immature, high in the pelvis, or has run considerably over time, there should be little difficulty in giving birth. Occasionally, however, a pig starts to come back first and must be pushed back and started feet first. As soon as a pig arrives, if he gasps and gets his breath, the only precaution is to remove the mucous covering from his body and nose and rub him vigorously to get him dry, and even this latter will not be necessary if the weather is warm. If the sow is quiet, it will not be necessary to remove the pigs from the pen. If any pigs fail to show signs of life when born, a few slaps on the sides or blowing in his nostrils will usually start respiration if he has any life in him.

The after-birth is usually passed in two installments. It should be immediately removed and buried or burned.

All the pigs should be placed with the sow to suckle, if they have not already done so. It is well to squeeze each teat a little to make sure that milk can be drawn from each one, and if there are more pigs than there are good teats, it is advisable to give some of the pigs to another sow, if this can be done, and if not, kill them or raise them by hand.

The above are only general suggestions and must be modified to suit the occasion. Much can be done with a quiet sow, while an irritable sow may save more pigs if left entirely to herself. One must use judgment and not be tied too tightly to any regular routine.

Feed for the Sow and Pigs. After the pigs come, the sow should be given very little feed for a day or two, and that mostly in the form of warm slop. From then on, however, the feed should be increased gradually. The rate of increase will depend somewhat on the condition of the sow and the size of the litter. Sows that are very heavy milkers and have small litters might be fed too much, but in the great majority of cases the pigs need all the milk they can get; hence we increase the feed of the sow so that by the end of a week or ten days she will get all the grain that she can eat.

Pigs make the most economical gains while suckling the sow, hence it is poor economy to skimp the feed at this time. If the sow is a good milker she will lose flesh no matter how she is fed. The general requirements of the sow with a litter of pigs are the same as for the dry sow, except for the increased quantity of feed necessary. A proper supply of protein, vitamins and minerals is absolutely essential. Lack of these causes weak pigs, small litters, rickets, and many other troubles. Lack of these is also the usual cause of sows eating their pigs. The sow with pigs will require twice as much protein as she needed before farrowing. Various grain combinations may be used. Probably the best is a combination made up of 50 to 60 per cent corn, wheat, or barley and the remainder of oats or middlings, all supplemented, of course, by tankage, fish meal, skim milk or buttermilk. Pasture will not ordinarily afford enough protein for a sow suckling a large litter.

A suggested ration for a sow with suckling pigs is:

- Ground wheat, ground barley, or corn ----- 60 lbs.
- Ground oats or middlings ---------------- 25 lbs.
- Tankage ------------------------------- 10 lbs.
- Alfalfa meal -------------------------- 5 lbs.
Skim milk can replace tankage, if available, and alfalfa meal can be omitted when the sow is on pasture.

When the sow and pigs are kept inside away from the ground, some dirt or soil should be put in the pen. This will prevent anemia of the pigs. A shovel full of soil from a field that hogs have not been using for a year should be put in the pen at least three times a week. Some people like to throw in bunches of sod, which is satisfactory.

Feeding Weanling Pigs. Pigs should learn to eat grain before they are weaned and after weaning should have all the grain they can eat, at least until they are well started. The grain ration may be corn, wheat or barley, but these grains will be improved by the addition of 25 to 50 per cent oats or middling. In the absence of pasture or milk, 7 to 10 pounds of tankage and 5 pounds of alfalfa meal should be added to each 100 pounds of grain mixture. With one-half to one gallon of skim milk or buttermilk a day for each pig, the tankage may be omitted, but not the alfalfa meal. With good pasture the amount of tankage or milk may be cut in half and the alfalfa meal, of course, omitted. After the pigs are well started, the amount of grain may be reduced to somewhat less than a full feed, providing it is intended to retard the growth of the pigs and hold them for a later market. Where the grain is reduced, it is not safe to reduce it to less than 1 1/2 pounds per day for each 100 pounds live weight, and when the pigs reach 100 pounds it should be increased to a full ration; otherwise the pigs will not get fat by the time they reach market size. Unless the pigs are on exceptionally rich rape or alfalfa pasture, there will be no economy in the long run in limiting the grain ration. In case the pasture is exceptionally good, limiting the grain ration from the time the pigs weigh 50 pounds until they reach 100 pounds may produce a slightly cheaper gain, but this may be more than offset by the lower prices which usually come at a later marketing date.

Average Monthly Top Prices of Hogs at Portland, Oregon for the period 1924 to 1937

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