



Pork Prose

by
Kenneth B. Kephart

Penn State Extension Swine Specialist

Feeding The Breeding Herd

The cost of feeding the breeding herd amounts to a quarter of the total cost of producing the market hog. That alone makes it important. But just as critical is the fact that feeding a sow is not as foolproof as feeding a hog.

With hogs we formulate a ration, put it in the feeder, and essentially turn the hogs loose. Not so with sows. After formulating a sow ration, it's then up to you to feed the correct amount for the conditions on your farm.

Typical Feeding Levels

Sows in gestation normally need about 4½ pounds of feed per day. But the producer must watch for changes in body condition and performance to decide if this level is right for his herd. For example, if you sows are out running around on a hillside, or it's winter, 4½ pounds won't be enough. Or, if you keep sows in gestation stalls 4½ pounds may be too much.

Some producers increase the feeding level during the last month of pregnancy to about seven pounds. This increases birth weights and under some conditions it improves baby pig survival. But for this scheme to work, the feeding rate during the first 90 days should be no more than four pounds a day. And still, you'd need at least .30 more pigs per litter to pay for the extra feed. Many operations won't get that kind of response.

During lactation, 12 pounds of feed per sow per day is about right for sows with litters of eight to nine pigs. For smaller litters, use the rule of six pounds for the sow and one-half pound for each pig. For example, a sow with a litter of four pigs should receive eight pounds of feed. $6 \text{ lbs} + (.5 \text{ lb/pig} \times 4 \text{ pigs}) = 8 \text{ lbs. per sow per day}$

Heavy milking sows, very thin sows, or those with litters of 10 or more should be full fed.

Boars can be fed five to six pounds of the sow ration each day when not in use and up to eight pounds per day when used frequently.

Interval Feeding

Since sows are limit fed during gestation, aggressive sows often get more than their share, while timid sows receive less. Interval feeding is an alternative to daily feeding to help keep intake uniform. Interval feeding methods include: 1) feeding two times as much (about nine pounds) every other day; 2) feeding three times as much (about 14 pounds) every third day; 3) allowing sows access to a feeder for six to eight hours every two or three days. With the third option, the ideal time on the feeder depends on the number of sows and number of feeding spaces. With any of these methods, the aggressive sows aren't able to overconsume as easily as they would on a daily feeding system.

Fiber

I recommend high-fiber diets for gestating sows. This ensures that constipation is not a problem when sows enter the farrowing house. Alfalfa, bran or oats are good sources of bulk for the pregnant

sow. An alternative is to add 15 pounds of potassium chloride per ton or 20 pounds of magnesium sulfate per ton during the last month of pregnancy.

Bulky ingredients should be limited to no more than 200 pounds per ton during lactation to maximize energy intake.

Adding Fat to Sow Diets

Some producers add fat to lactation diets, particularly during the summer months to maintain adequate energy intake. Fat generates less heat during digestion than other feed ingredients, especially those with a high fiber content. The result is that during hot weather, sows on diets containing added fat consume more energy than they would on a conventional diet. But before you go to the trouble of adding fat to a lactation diet, be sure the level of fiber is low. It's usually cheaper to pull out the fiber than it is to add fat.

Feeding Replacement Gilts

Replacement gilts can be fed the gestation ration and left on the self-feeder until about 250 pounds, the optimum weight for breeding. Pregnant and non-pregnant gilts weighing more than 250 pounds should be offered approximately five pounds of feed per head per day.

Common Feeding Problems

Here are the most common feeding problems we see in sow herds:

1. Inadequate feeding space. Sows become non-uniform and injuries increase.

2. Overfeeding through gestation. This is expensive and can prolong farrowing time and stillbirths.

3. Low feed intake during first lactation. This leads to slow return to heat and/or depressed litter size with second litter.

4. Errors in formulation. When using commercial supplements, an additional vitamin-mineral package is normally recommended for gestation diets. It's often omitted by producers, which causes mineral deficiencies.

5. Small feeder size for the farrowing crate. Most farrowing crates are mounted on raised slotted flooring. With small feeders, feed is often spilled, which falls through the slats.

6. Waiting until the last few days of pregnancy to alleviate constipation. High fiber diets should be fed throughout pregnancy to maintain muscle tone in the gut and avoid constipation.

Remember that feeding the sow herd takes a lot of common sense and close observation. Give it the attention it deserves.

LIVESTOCK LATEST



Midwest To Test New Pseudorabies Vaccine

WASHINGTON — Limited field trials to test a genetically engineered vaccine to control pseudorabies in swine will begin in early June in Illinois, Indiana, Iowa, Minnesota, Missouri and Nebraska, a U.S. Department of Agriculture officer said recently.

The new vaccine was developed using recombinant DNA technology to delete two genes from the genetic makeup of the virus. The vaccine allows vaccinated animals to be distinguished from those that are naturally infected or vaccinated with other types of vaccines for pseudorabies.

Each of the six states has given written permission to the Upjohn and the Diamond Scientific

Companies, developers of the vaccine, to conduct the field studies.

"The decision to approve the limited field trials was based on a thorough review of the genetic engineering procedures used to develop the vaccine and an in-depth analysis of the virus's biological and safety characteristics," said Bert W. Hawkins, administrator of USDA's Animal and Plant Health Inspection Service. "This review included preparation of an environmental assessment that found no significant impact on the human environment.

Pseudorabies is a contagious disease that occurs primarily in swine. Death occurs in newborn

pigs within a few days after exposure. Older hogs may survive infection but become carriers of the virus for life. Stress or other conditions may trigger the virus out of its latent state.

All veterinary biological products, such as vaccines, toxins and toxoids, must be field tested to ensure they are pure, safe, potent and effective. After these requirements have been met, USDA may issue a license and the products can then be marketed.

Copies of the environmental assessment may be obtained by writing to the U.S. Department of Agriculture, APHIS, Veterinary Biologics Staff, Room 829, 6505 Belcrest Rd., Hyattsville, Md. 20782.

Sheep Shearing Is Sheer Work

BY CAROLYN GILLES

Crawford Co. Correspondent
SAEGERTOWN — Mary's Little Lamb may have caused a stir when it followed her to school, but sheep were not against the rules at the shearing school held recently at the Miller Farm in Saegertown, Pa.

Eight men and women braved the cold and rain to participate in the two-day event where they began by learning the care of combs and cutters and how to assemble them on the shear-master.

Under the tutelage of Mercer County Agent Bob Calvert and Crawford County Agent Blaine Schlosser, they got hands-on training in how to catch and set up sheep as they sheared the 50 sheep of Ron and Mollie Miller, hosts for the event. Participants were also instructed in trimming hooves and deworming.

Calvert estimated that probably only one to two percent of the sheep shearing graduates will go on to do custom shearing. But 60 percent or



Mercer Co. Extension agent Bob Calvert (left) and Crawford agent Blaine Schlosser assemble combs and cutters while class members practice shearing.

more will use the experience gained here to shear their own sheep.

Said Schlosser, "At the very least, they learn it's hard work.

They have a lot more respect and may very well decide to pay someone else to do the job for them."

Entries Due For Lamb And Wool Festival Contests

STATE COLLEGE — Are you a shutter-bug or creative painter? If so, the Pennsylvania Lamb & Wool Festival has several amateur contests for you.

The Festival is sponsoring a Sheep Photography and Sheep Fine Art Competition July 10-11 at the Ag Arena, State College. More than \$150 in prizes will be awarded for these two events.

All mediums will be considered in the Sheep Fine Art Competition. Art work can be a maximum of 48 inches in any direction and should be the artist's personal interpretation of the subject-sheep. A junior and senior division will be judged and artists may sell their work.

The Sheep Photography Contest features the theme "Cover Photo," utilizing sheep as the central theme. The contest offers color and black-and-white competition.

The third annual Pennsylvania Lamb & Wool Festival—An American Event boasts more than 45 commercial and craft exhibitors featuring sheepish items ranging from sheep skins to pottery enlivened by sheep. Many

demonstrations, including lamb cookery, sheep dog trials and spinning and weaving will intermingle with lots of American lamb sandwiches, kabobs and barbecue.

In addition to the festival, the Keystone Stud Ram & Ewe Show and Sale, featuring more than 500 sheep from flocks across the East Coast will be held.

To receive entry blanks for the

Sheep Art or Photography Contest, write: PA LAMB & WOOL FESTIVAL, Room 303, 2301 N. Cameron Street, Harrisburg, PA 17110 or, call 717-787-5086. Entry Deadline is June 15. The Festival is sponsored by the Pennsylvania Sheep and Wool Growers Association in cooperation with the Pennsylvania Department of Agriculture and the Pennsylvania State University.

Charolais Junior National Scheduled

KANSAS CITY, Mo. — American-International Junior Charolais Association members and their families from across the nation will come to Stillwater, Okla., June 15-19 for the 1987 Charolais Junior National. The Payne County, Okla., Fairgrounds and the Oklahoma State University campus are the sites for this event. The week of fun will include the 12th National Junior Heifer Show, a National Junior Steer Show, educational seminars and tours, the annual public speaking contest, a beach party dance and a quiz bowl.

The steer and heifer shows kick off the event at 9 a.m. on Monday, June 15. Junior exhibitors from throughout the United States will compete for the coveted championship and showmanship awards. This year's entries number more than 140. Each year the show is dedicated to a supporter of the youth program. The 1987 honoree is Alex Stauffer, owner of Silver Creek Farms in Blue Mounds, Wis.

The annual leadership conference officially opens Monday night with a general membership meeting. Educational workshops ranging from nutrition to a live animal evaluation begin on the following morning. The juniors will travel to M&M Charolais in Perry, Okla., for a ranch tour. Fitting contests and hands-on experience with computers are just a couple more of the educational opportunities in store.

The high point of the conference comes Friday night with the annual awards banquet. During the banquet, the juniors will honor Don and Ruth Phillips of Stone-Del Farms in Hartsville, Ohio, as the dedicatees of the leadership conference. Recipients of junior scholarships will be announced also, and National Junior Merit Awards will be presented.

For more information regarding the AIJCA or the Charolais Junior National, contact Julie Wilcke, Director of Youth Activities, P.O. Box 20247, Kansas City, Mo., 64195; or call 816/464-5977.