SWINE UPDATE

Kansas State University Agricultural Experiment Station
and Cooperative Extension Service

Animal Sciences & Industry

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UPCOMING EVENTS

KDHE HB 2950 Certification Training Dates

Meetings will be held in these cities (exact location to be determined) on these dates beginning at 9:00 am and ending at 3:00 pm. Please contact your local KDHE district office for further details. Kansas HB 2950 requires KDHE certification of all swine operations with greater than 1,000 animal units. Certification tests will be given at the end of each session.

July 6 - Salina
July 7 - Hays
July 8 - Dodge City
July 13 - Wichita
July 14 - Chanute
July 15 - Lawrence

Getting a Picture of Feed Wastage

Feed wastage is a difficult criterion to measure on a swine operation. This is because of slotted flooring and different management and manure handling systems. There is very little conclusive research data to determine actual on-farm feed wastage figures. However, it is generally assumed that if there is feed approximately within an area 12 inches from the feeder, this represents approximately 10% feed wastage. Methods to reduce feed wastage include proper feeder management as well as the design of the feeder. Unfortunately, many overlook the importance of feed wastage in their production systems. For example, a 1% reduction in feed wastage would save approximately $.36 per pig, and on many farms, new feeders or improved feeder management could easily save more than 1% on feed wastage.

Old or worn out feeders contribute to excessive feed wastage on swine operations. This is despite the fact that new feeders will, in most instances, quickly pay for themselves based on improvements in feed efficiency. For example, a 5% improvement in feed efficiency may be expected when replacing feeders that are worn out or difficult to properly adjust. An improvement in finishing pigs feed efficiency from 3.1 to 2.9 will save approximately $2.20 per pig. At three turns per year (considering fenceline feeders with 25 pigs per pen), the savings would be $330 per feeder per year.

Reducing feed wastage also has a significant influence on reducing the environmental impact of swine production. A 1% decrease in feed wastage for a 500-sow farm represents a reduction of approximately 1,400 pounds of nitrogen and 400 pounds of phosphorus excreted per year. The importance of reducing nutrient output will increase as new environmental regulations and waste management plans are implemented.

While the greatest amount of feed is used in the finishing phase, proper nursery feeder adjustment should not be overlooked because these diets are the most expensive.

For the first few days after weaning, many producers place feed directly in the feed trough rather than in the hopper. Putting too much feed in the hopper leads to an increased incidence of fines and sorting which plugs the feed gate mechanism. When feeders plug up or feed flow is restricted, feed intake can be limited and result in decreased daily gains. We also have observed decreased

growth rate resulting from improper feeder adjustment (Table 1). This problem is remedied by management of the amount of feed flow in the pan to stimulate development of feeding behavior. Approximately 50% of the feeding pan should be visible in the first few days after weaning. As the pigs become more accustomed to the location of the feed and adjust feeding behavior, the amount of the feed in the feeding pan should be rapidly decreased to less than 25% coverage. Also, feed agitators need to be frequently tested to ensure that the build up of fines does not prevent them from working freely.

The data in Table 1 depicts growth performance before and after the institution of an aggressive feeder management strategy. Contrary to popular belief, reducing the amount of feed present in the pan did not reduce average daily gain. Feed efficiency and daily gain both improved due to decreased wastage and continual access to fresh feed. Our recommendations are to have feed accessible at all times in feeders for newly weaned pigs with feeders adjusted correctly to teach the proper feeding behavior.

Table 1. Comparison of pig performance before and after institution of an aggressive feeder management strategy in the first week after weaning.

Item	Before	After
Wean weight, lb	12.3	11.7
	Day 0 to 7 after weaning	
ADG, lb	.16	.22
F/G	2.15	1.27

A total of 3,360 pigs used in analysis. Each number is the mean of 2 (Before) or 3 groups (After). Each group consisted of 32 pens of pigs with 21 pigs per pen.

To assist producers in standardizing feeder adjustment, we recommend providing managers and employees with actual pictures of well-managed feeders. Having a picture of ideal feeder management in every barn will provide a quick and standardized reference to reduce feed wastage. Additional laminated color photos of properly adjusted feeders can be obtained for a small charge (to cover photo processing) by calling the K-State Northeast Area Research and Extension Office at (785) 532-5833. We have laminated the photos to increase their longevity for actual use in barns. We encourage producers to hang a photo in each room of the farm as a handy reference for proper feeder adjustment.

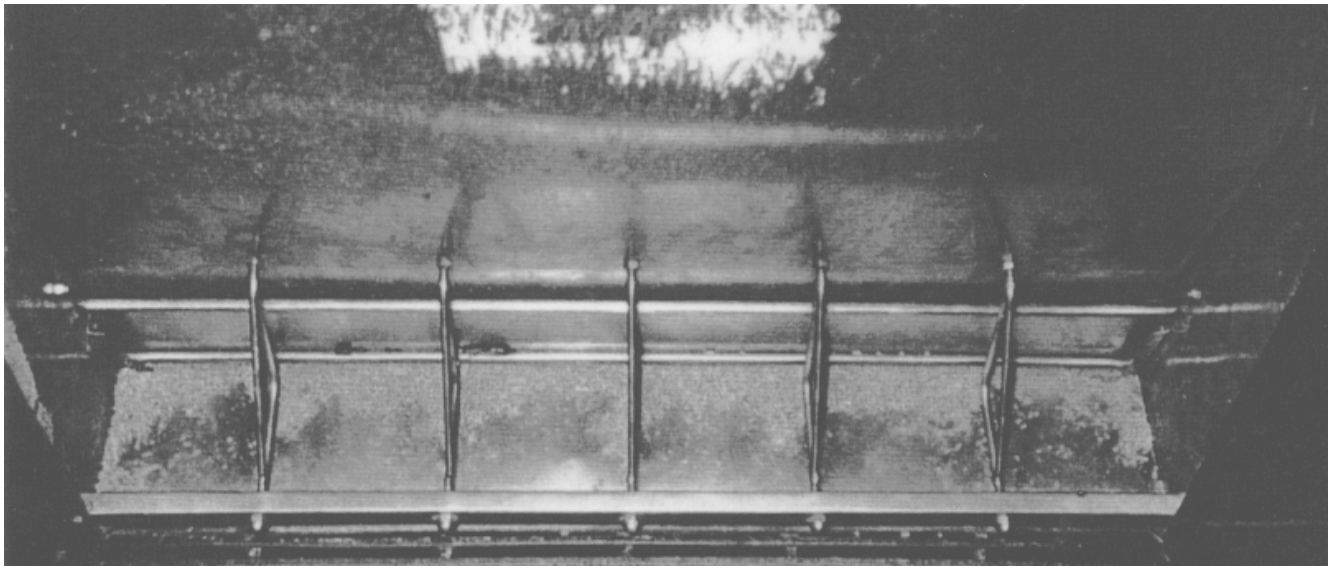

Photo 1. Recommended nursery feeder adjustment when using pelleted diets.

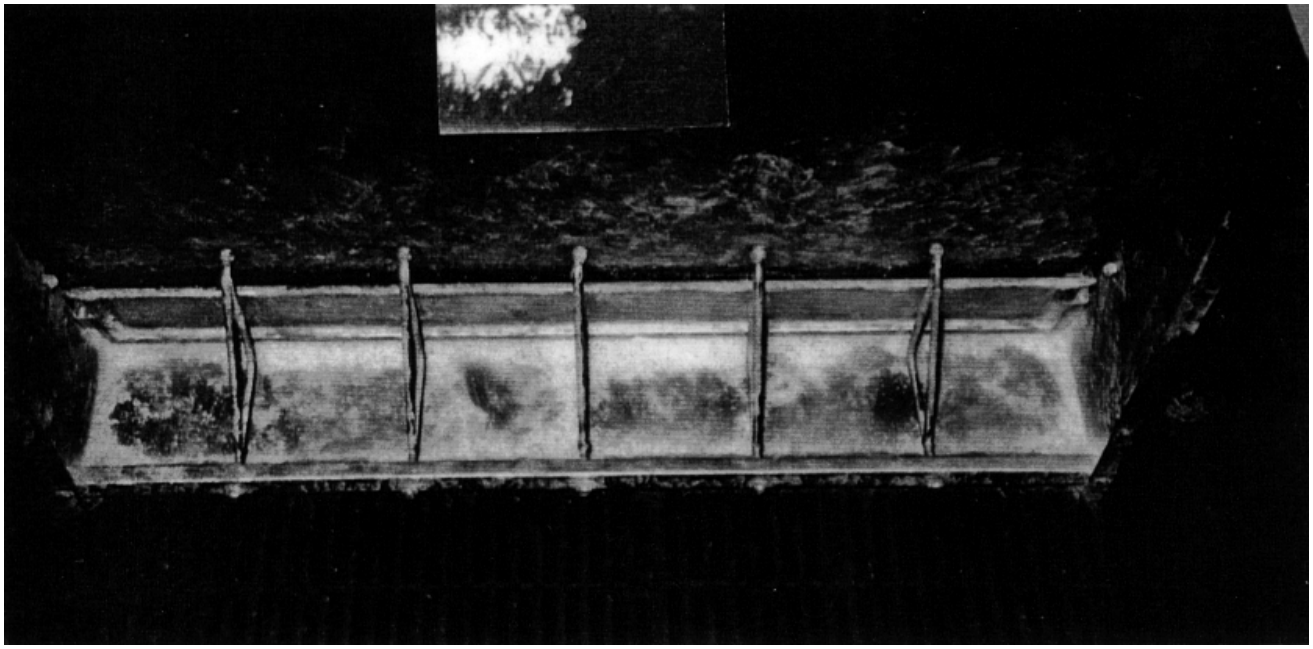

Photo 2. Recommended nursery feeder adjustment for pigs during the first week of meal-based diets.

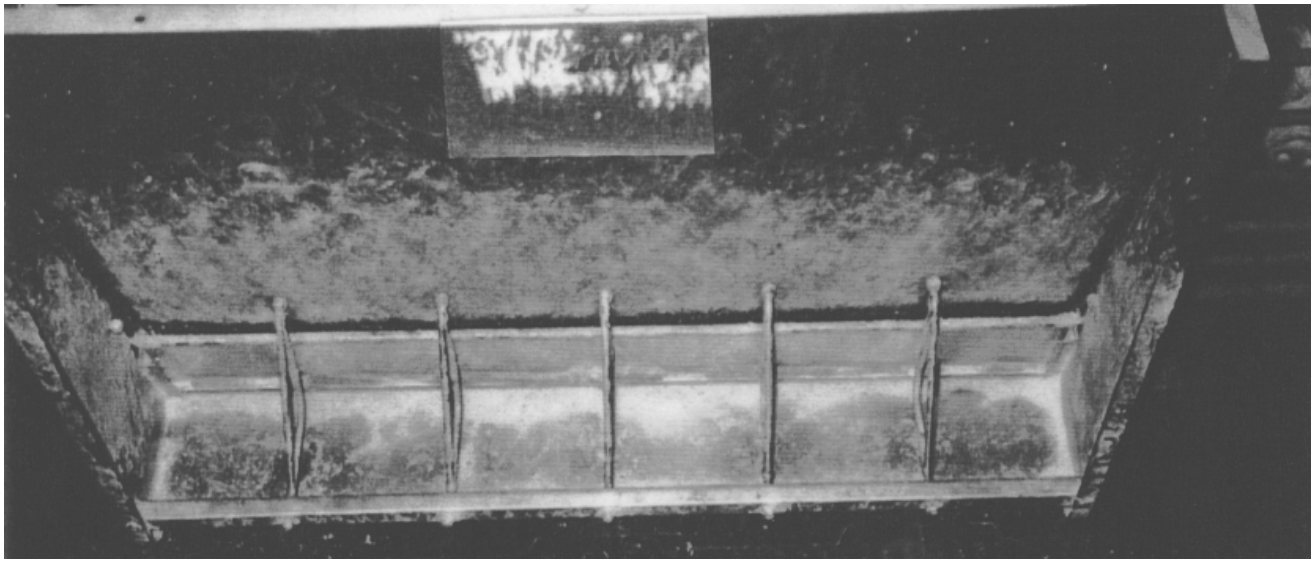

Photo 3. Recommended nursery feeder adjustment for meal-based diets after one week on feed.

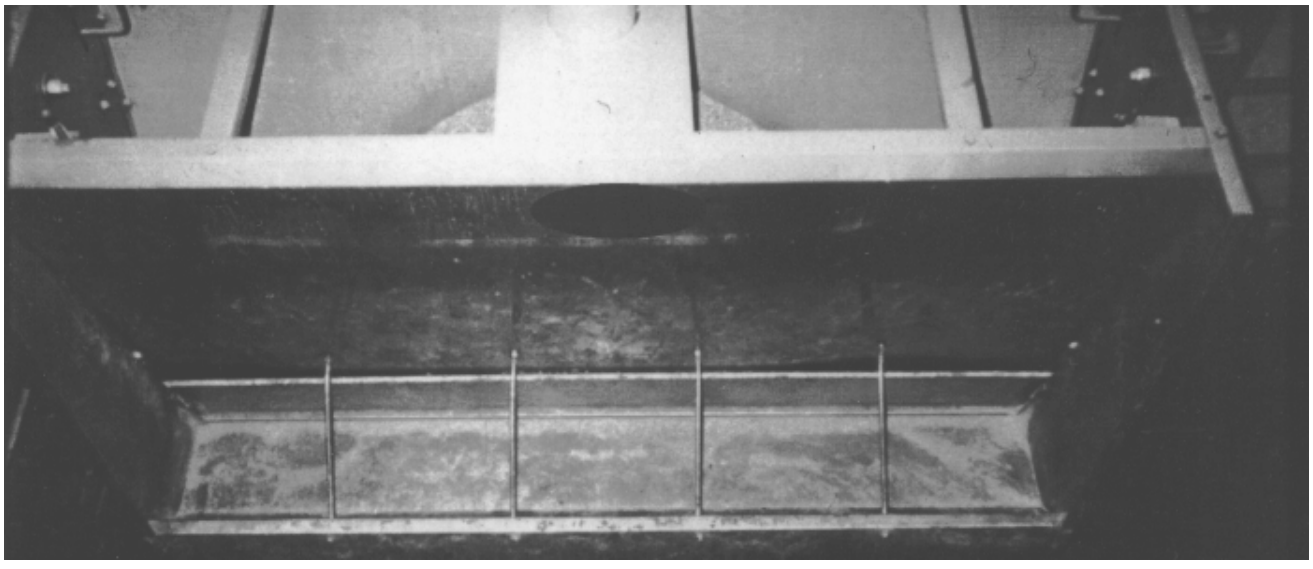

Photo 4. Recommended finishing feeder adjustment.

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PENALTY FOR PRIVATE USE $300

SWINE UPDATE

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