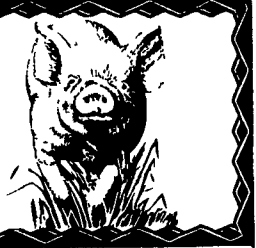


Swine Management News



By Richard Barczewski
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As I sat in my office this morning pondering what topic to tackle in the column this week, I noticed a recent copy of the quarterly "National Agricultural Statistics Service Hogs and Pigs Report" on my desk. Often, when I receive this report, I glance over it to see if there are items of interest or something I should know about, and then I discard it.

Why in the world do you think we spend so much energy in keeping track of hog inventories in this country? Actually this effort is worthwhile. For instance, knowing the inventories of swine across the country provides some indication of slaughter quantities in the upcoming months. In addition, it offers an idea of hog prices, depending on weather the demand remains constant.

An interesting aspect of this report is that it gives an indication of the number of pigs per litter being produced in the major pork-producing states. The average in the United States for pigs produced per litter is 7.83 during the period of December 1989 to February 1990. This figure was up from 7.77 in 1989, and the new figure is a record high. It's a shame that this figure is as low as it is, considering that the reproductive potential of the sow is so great.

We definitely have a long way to go when it comes to achieving maximum sow productivity, but 6 states out of 16 reported in the survey had met or broken the 8-pig mark: Ohio, North Carolina, Minnesota, Kansas, Michigan, and South Dakota. These reports vary from time to time and states go up and down from one reporting quarter to the next.

What states are considered the largest hog producers in the United States? Based on the number of sows farrowing between December 1989 and February 1990, Iowa is ranked number one with 650,000 sows farrowing. Next in line is Illinois with 255,000, Minnesota with 235,000, Indiana with 210,000, and Nebraska with 200,000 sows farrowing. Other states in the top 10 include Missouri, North Carolina, Ohio,

South Dakota, and Kansas.

According to the report, the inventory of all hogs and pigs is estimated at 51.7 million animals as of March 1, 1990. The breeding herd inventory is at 6.81 million head, down 4 percent from the same period last year. The market hog inventory is estimated at 44.9 million head and is down 2 percent from the same period last year.

What do these numbers mean? One report suggests that packers could expect fewer hogs during the second half of this year. Will this mean higher prices to producers? The chances of this happening depend on many other factors that directly affect the hog industry. Obviously, if supplies decline and demand remains stable or increases, prices will go up.

Problems exist, however, in that the hog and pig report is only an approximation and not an exact count. For this reason, it's probably not a good idea to base all of your production decisions on the report alone. How this information can play a role is in helping you to hedge your marketing decisions against the accuracy of the report to minimize your risk.

Many pork producers have failed to use tools within the commodity markets to protect their profit potentials. While some of these tools may not result in maximum prices received for the hogs produced, they can lock in a price well in advance of the actual marketing of the animals. While it is possible that price will increase from the time you purchase a contract, it is also possible that the prices may go down. Locking into profitable prices prior to the sale of your hogs is just one marketing technique available to help you manage risk.

Inventories such as the hog and pig report, while not always perfect in the projection of hog numbers, offer us the best information available at the time of their publication. In order for these inventories to work, producers must cooperate and accurately fill in the surveys sent to them.

Reports such as this offer you, the producer, just one more tool to assist in making your marketing decisions and help to determine the number of animals you want to keep in your herd.

Egg Industry Represented At Show

CHICAGO, IL — The American Egg Board (AEB) provided high visibility for the egg industry at the National Restaurant Association Restaurant-Hotel-Motel Show on May 19-23.

This foodservice trade show drew more than 100,000 attendees from 50 states and more than 70 foreign countries.

Staff was on hand to provide technical assistance and handle any specific questions and requests. More than 18,000 egg recipe cards were distributed, as well as copies of the foodservice reference booklet, newsletter, pro-

cessed egg product directory, salmonella and microbiology brochures, and egg safety and quality charts.

During the show, AEB made contact with representatives from Arby's Corporate Headquarters, Royal Caribbean Cruises, Ltd., Vie de France Corp., Kentucky Fried Chicken International, Disneyland and Disneyworld, Best Foods/CPC International, Nestle, Inc., Pepe's Inc., ARA Headquarters, McDonald's Corp., Denny's Headquarters, Baker's Square Restaurants, International House of Pancakes Corp., and Holiday Inn Hotels.

Armyworms Still A Problem

JIM MILLIKEN
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Armyworms

Over the Memorial Day weekend, our IPM Scout, Mike Spray, found quite a few wheat fields with 2 to 4 armyworms per foot of row.

They were small, mostly 3/8 inches to 3/4 inches long, but a few were 1' or longer.

We thought we might be looking at an earlier-than-normal and heavy infestation. But, a 3.5 inch rain on Tuesday, May 29, seems to have knocked many of them off. Maybe they drowned, maybe a virus or bacterial disease took them out, as frequently happens.

I'd still suggest that growers keep checking and scouting for armyworms. We're not out of the woods yet.

Rootless Corn Syndrome

Several years ago I checked out a severe problem down in the Rock Hall area. Our university agronomist at that time, Dr. Peter Thomson, called it "rootless corn syndrome" and found reference to it from Iowa.

We're seeing more of it this year all up and down the shore. It is associated with poor growing conditions, such as wetness, compaction, crusting, and excessive cold.

We think the problem this year was mostly wet and cold temperature during the critical stage when brace roots peg down into the soil. Without support, the corn falls over, since it appears that only the seed root (hypocotyl) is all that's attached to the soil.

Increasing Sow Lysine Levels Not Beneficial

NEWARK, Del. — Will additional lysine in lactation sow rations improve the overall reproductive efficiency of sows and the growth rate of piglets? Is it profitable to increase lysine in sow rations?

One of a pork grower's chief concerns is keeping sows and their piglets at optimum performance with a minimum of expense.

"Protein, the building block of muscle tissue in animals and a critical nutrient for milk production, is also an expensive feed component," said Dr. Kevin R. Cera, University of Delaware Extension swine specialist and Experiment Station research scientist.

"Pork producers have long used the level of lysine, a protein component, as the guideline for meeting overall protein needs," he said. "To increase the lysine or protein content, the level of soy meal — an expensive ingredient — is increased. It's only logical that producers want to provide the optimum amount of lysine, but no more in their feed rations."

Cera and Dr. Lesa Sterling, associate professor of animal science at the university, designed an experiment to determine the optimum dietary lysine level for lactating sows. The researchers studied the effect of dietary lysine during lactation on performance of mature sows and litters over three successive reproductive cycles.

"We wanted to look at how lysine concentration affects the lactational performance and reproductive efficiency of mature sows

David Kradel Herbert Jordan Milton Madison

Penn State

Poultry Pointers

Herbert Siegel Donald Singletary Morris Mast

John Schwartz

Forest Muir

WHY CLEANING AND DISINFECTING DOESN'T ALWAYS WORK

Donald L. Singletary

The usual recommendation after a serious poultry health or poor performance problem is that the poultry house be thoroughly cleaned and disinfected.

This recommendation is often made for farms that have continual health problems — the so-called "problem farm." A commercial high pressure sprayer frequently does the cleaning and disinfecting, using a variety of strong disinfectants.

However, all too often, in spite of the vigorous and repeated cleanings and disinfectings, the health and/or performance problems persist.

There are a number of explanations for the unsatisfactory results. One must remember that cleaning and disinfecting (C&D) is helpful only if the problem is caused by a disease organism susceptible to C&D. Therefore, a poor vaccination program, an equipment problem, or management errors cannot be corrected by C&D.

Problems which originate at the hatchery or in the breeder flock, of course, would not respond to C&D. Some of the diseases associated with the hatchery or breeder flock are Salmonella, mycoplasma, epidemic tremor, and infected yolk sacs. Thus, C&D the poultry house would be a costly, useless,

wasteful procedure if the problem is with the hatchery or breeder flock.

A person should determine that a susceptible environmental disease organism is the cause of the problems before deciding to spend the money for C&D.

Even then, there are organisms which are very difficult to "disinfect" out of a poultry house. Marek's disease virus, coccidial oocysts, and worm eggs are, for all practical purposes, impossible to C&D out of a poultry environment. Likewise, Gumboro is very difficult to disinfect out and keep out of a poultry house.

Also, many organisms exist together in a poultry house environment and frequent C&D may upset this delicate balance. What happens is that the good or easily killed organisms are removed from the poultry house environment, leaving only the hard-to-kill organisms (the bad ones, such as the Marek's disease virus and Gumboro virus) in the poultry environment. Thus, instead of making the problem better, it may not improve at all or may even get worse.

Nevertheless, a cleaning and disinfecting program should be included in every biosecurity program. But remember it is only a part of an overall program that also includes vaccination, nutrition and feeding programs, hatchery and breeder flock management, and general poultry house management.

over the long term," Cera said.

Cera said the experiment is based on a high-producing sow pool with large litter sizes (born live), large adjusted beginning lactation litter sizes, and high weaning averages with sows full-fed during lactation.

The researchers made the following observations:

- Lactation feed consumption was only minimally influenced by total dietary lysine concentration. Lysine intakes, however, were markedly increased with the increased dietary concentration fed. Diet concentrations above 0.60 percent (12.5 percent protein) did not appear to increase feed intake during lactation. This suggests that a 0.60 percent lysine diet is not so low that feed intake is adversely affected.

- A diet as high as 0.90 percent total lysine (17.7 percent protein) does not appear to inhibit sow feed consumption. The least variable feed intake responses were during week one of lactation regardless of dietary lysine.

- Lactation 21-day litter weights during the initial experimental lactation period demonstrated only a slightly heavier total litter weight for sows fed the highest dietary lysine diet. However, no increase was evident with a 0.75 percent diet as compared to the 0.60 percent diet. Litter weaned weights were similar during the subsequent two lactations.

- The number of pigs weaned declined by the third cycle regardless of lactation dietary level of lysine.

- The largest decline in pigs weaned by litter by the third lactation cycle was in sows assigned to the highest lactation lysine diet.

- Litter gain-per-lysine ratio declined substantially as dietary levels increased from 0.60 to 0.75 and 0.90 percent lysine in each of the three successive lactations studied.

- Lactation performance was most efficient on a dietary lysine basis at the 0.60 percent concentration.

- Little or no differences in shoulder fat depth at weaning was evident in sows fed the different diets, and only minimal changes in fat depth occurred during the 21-day lactation period for all three cycles studied.

- Body weight appeared to remain more consistent from farrowing to weaning in sows fed the lowest dietary lysine treatment as compared with those fed the more concentrated diets.

- Sows fed the higher lysine diets tended to consistently gain more weight during lactation.

- Productivity of sows fed the 0.75 and 0.90 percent dietary treatment were not better than the lowest dietary lysine sow group.

- Wean-to-estrus interval was not consistently affected by the different diets.

Cera concludes that under full-feeding management during lactation, if sows consume adequate quantities of feed, protein levels above 14 percent cannot be justified in many situations.