



More dead animals = improved animal welfare?

Question: When does more dead piglets equate to better animal welfare?

Answer: When you are in Sweden.

So found John McGlone, Texas Tech University animal scientist, when he visited Sweden. McGlone, recognized worldwide as an animal-welfare expert, visited a farm housing 1,500 sows near Uppsala, Sweden, that does not use gestation crates and is heralded as a model of the country's high welfare standards. He reported in a recent edition of the prestigious *Journal of the American Veterinary Medicine* that, while visiting this "model of animal welfare," a farm worker indicated that the farm had a mean of 12.2 piglets born alive and a mean of 9.2 piglets weaned per litter.

A preweaning mortality rate of three piglets per litter is just short of 25 percent. Most pig specialists in the United States believe that a farm has serious problems if its preweaning mortality rate exceeds 20 percent. Yet a purported model of welfare in Sweden is unintentionally killing 25 percent of its pigs before they can even leave their mothers.

Injury

McGlone also reported that perceived welfare trumps actual welfare in sow-housing systems. He noted "a large amount of fighting after weaning" among the sows. At this farm,

the professor found that, in a group of 50 recently weaned sows, 23 of the sows, or 46 percent, had severe wounds. He defined these as deep wounds covering an area larger than the palm of a hand. McGlone further described other issues, including shoulder lesions and bitten vulvas, concluding that they were "without question, a highly bruised, scratched and wounded group of sows by any standard." In fact, all sows had wounds of some kind.

McGlone used the same evaluation technique for sows in mid- to late-gestation and found that 13 of 50 (26 percent) had mild wounds. He related that, in his experience in the United States, only problem farms have rates of "mild wounds" exceeding 15 percent. Further, the overall rate of mild wounds on U.S. swine farms is "much lower than 5 percent."

So the actual injury rate among this group of sows in Sweden was more than 5 times that encountered in the United States.

Behavior

McGlone also examined prevalence of oral-nasal-facial (ONF) behaviors at the facility. Some have claimed that ONF behavior (snout rubbing, face rubbing and bar biting) is an abnormal behavior, perhaps even an indicator of psychological distress in the pigs. McGlone found that despite adoption of the deep-bedded housing system, which provides sows with a large bale of straw, giv-

ing them something to bite, chew and rub, the available evidence showed "essentially similar levels of ONF behavior."

In Sweden, sows are fed a liquid diet, which began when dairy products were less expensive and more readily available. Liquid diets are not part of the pig's evolutionary history. It is a forest- and river-bottom-dwelling animal. Though young mammals' digestive systems are well-suited for liquid diets, adult digestive systems are not. The "teeth, jaw and mandibular muscles have evolved for a purpose and are not able to perform their evolutionary function in adult omnivores fed a liquid diet," wrote McGlone. He suggested that using the same standard proposed by Rollin in a previous *JAVMA* article to assess the situation "can only lead to the conclusion that feeding adult swine a liquid diet is not in their best interest."

Temperature and transport

The back of the shed that housed the sows was open, and the side walls had tall wooden slats that provided year-round ventilation, but they were not adjustable. Farm staff reported that ambient temperatures in that part of Sweden reach negative 15° C (5° F) or lower on a regular basis. The lowest preferred temperature for gestating sows is 60° F and the lowest extreme temperature is 5° F. McGlone pointed to this as an indication that the sows' "physical welfare needs were not being met."



By Philip Lobo, communications director, Animal Agriculture Alliance

It does in Sweden

McGlone noted that many U.S. gestation and farrowing barns are heated unless they're located in the South. Even then, few indoor-housed sows would be subjected to below-freezing temperatures.

The Swedish farm's reported practice was to breed the sows, confirm them pregnant and house them for most of their 114-day gestation. A week or two before the anticipated farrowing, the sows were shipped on a truck to contract farrowing units operated by other farmers. The farrowing-unit farmers returned the weaned sows to the breeding unit four weeks after farrowing.

Sow mortality

The farm staff reported a sow death rate of about 5 percent and a sow euthanasia rate of 10 percent, bringing total sow mortality to about 15 percent. According to U.S. sow mortality rates, exceeding 15 percent is considered to be a "serious problem"; beyond 9 percent is considered to be a "problem" level.

Also in the pursuit of improved animal welfare, Swedish law mandates that the sows be killed after the eighth litter.

The ramifications

The deep-bedded system used in Sweden is often cited as the preferred option by professed animal-welfare supporters in the United States. Specifically, a group calling itself the Animal Welfare Institute advocates

this system in its "Animal Welfare Approved" program.

It appears that in some nations, the perception of welfare has seriously overshadowed objective welfare measures. In this report, McGlone summarized that sows are "cold in winter, fed an unnatural liquid diet, at risk of being wounded, and transported by truck (a major stressor) during each pregnancy."

The European Union is on pace to outlaw gestation crates by 2013. Some U.S. and Canadian producers just this winter announced their decisions to phase out gestation-sow crates in their production systems within 10 years. While these companies have investigated group housing systems at test farms to determine solutions for situations, the real concern is mandated actions. We've seen a sprinkling of that already in the United States, and we'll likely see more attempts. Market pressures also may intensify.

Done wrong or hastily, the animals will be the big losers. Whether it involves group-housed or crated gestation sows, the key to animal welfare has always been and will continue to be management, well-trained workers and attention to details. PE

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