

Advantages and Disadvantages of Different Types of Gestation Housing Systems

There are many different types of acceptable housing types in use for housing gestating sows in today's U.S. pork industry. These housing types usually fit in one of two categories:

- Individual housing
- Group housing

The individual housing category includes the individual stall system. In this system, sows are housed in a structure large enough for one sow. There are variations in stall designs. Some of the advantages of individual housing include:

- minimize aggression and injury among sows
- reduce competition for resources
- allow individual feeding
- assist in the control of body condition so sows do not become too thin or too fat
- provide for the safety of the worker

Some of the disadvantages of individual housing include:

- restriction of movement and exercise
- restricts ability to perform foraging behaviors
- sows have limited social interaction

In the other housing category, sows are housed in groups. Group sizes may range from five sows per pen up to more than 100 sows per pen. Free access stalls, trickle feeding, electronic sow feeding stations and deep bedded systems are just a few of the many different variations in group housing systems in use. Some of the advantages of group housing include:

- freedom of movement and exercise
- social interaction

Some of the potential disadvantages of group housing include:

- aggression and injury
- uneven body conditions

In 2004, a review of available scientific literature on sow housing was conducted by animal welfare professionals (McGlone et. al., 2004). Their conclusion was that overall evidence showed that well managed gestation stalls and pens produced similar states of welfare for pregnant sows in terms of physiology, behavior, performance and health. Likewise in 2005, the American Veterinary Medical Association performed a similar scientific literature review and concluded that neither stall nor pen housing is clearly superior to the other and that each system has advantages and disadvantages (Rhodes et. al., 2005). Many of the concerns of individual housing are based on public perception and should not be confused with animal welfare. Both types of systems can meet the welfare requirements of pigs and focus should be placed on the skills of the stockperson to provide for the individual care of the pigs. (Barnett et. al., 2001).

The American Veterinary Medical Association (AVMA) and the American Association of Swine Veterinarians (AASV) have used this information to publish position statements that concluded that both types of housing types have advantages and disadvantages. The AVMA and AASV have concluded that regardless of the type of housing system in use, the system should:

- minimize aggression and competition among sows;
- protect sows from detrimental effects associated with environmental extremes, particularly temperature extremes;
- reduce exposure to hazards that result in injuries, pain, or disease;

- provide every animal with daily access to appropriate food and water;
- facilitate observation of individual sow appetite, respiratory rate, urination and defecation, and reproductive status by caregivers; and
- allow sows to express most normal patterns of behavior

The official statement of the National Pork Board statement on sow gestation housing:

National Pork Board Statement "The National Pork Board builds its animal care and well-being programs on this foundation: What is best for the pig? The board also relies on the best scientific research available, and the best scientific research now available indicates there are several types of production systems that can be good for pigs. Those systems include open pens, gestation stalls and open pastures."

"Regardless of the system, what really matters is the individual care given to each pig."

"Through the Pork Checkoff, the National Pork Board provides educational programs and materials that focus on how producers can best assure the well-being of their pigs. These programs offer methods that help producers take an objective look at each animal's well-being, independent of the size of operation or the specific type of housing. Producers are then able to decide for themselves the type of production system that is best for their animals, and for them given their resources and markets."

Wayne Peugh Immediate Past President, National Pork Board

References

McGlone, J.J., et al.. 2004. Review: Compilation of the Scientific Literature Comparing Housing Systems for Gestating Sows and Gilts Using Measures of Physiology, Behavior, Performance, and Health. *The Prof. Anim. Sci.* 20:105-117.

Rhodes, R.T., et al., 2005. A Comprehensive Review of Housing for Pregnant Sows. *J Am Vet Med Assoc*, 227:1580-1590.

Barnett, J. L., et al., 2001. A Review of the Welfare Issues for Sows and Piglets in Relation to Housing. *Australian Journal of Ag Research*, 52:1-28.