

## **GESTATION HOUSING – HOW DOES IT AFFECT SOW LONGEVITY AND REPRODUCTIVE PERFORMANCE?**

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The use of individual gestation crates is receiving more and more criticism due to perceived reductions in animal welfare. Producers in Europe will be unable to house sows in individual gestation crates in the near future. However, insufficient data exists on alternative housing systems and their effect on reproductive performance and welfare. Research at the Southern Research and Outreach Center in Waseca is attempting to answer some of these questions by comparing individual gestation crate systems to group housing of sows with electronic sow feeders.

In a recently completed study, records from 255 gilts and 475 sows were analyzed over a 3 year period. Group pens typically hold 50 - 60 sows, providing 1.89 m<sup>2</sup> of space per sow, compared to 1.33 m<sup>2</sup> of space per sow for gestation crates. Use of an electronic sow feeder allows for individual feeding of gestating sows in group pens to ensure proper condition when entering the farrowing crate. When comparing the 2 systems, no significant difference in culling or mortality rates in gilts were observed. Sow culling was higher, however, in stalls, while proportion of mortality was greater in group pens. Regardless of housing system, locomotion problems were the most prevalent reason for removal from the breeding herd. A greater proportion of females were removed for locomotor problems when housed in group pens versus stalls.

Further research examining subsequent farrowing performance was also conducted over a 9 month period. Sows in group pens during gestation had approximately ½ day shorter gestation length, were 32 lbs heavier at weaning, and had an increase in litter weight at birth (+ 3.8%) and weaning (+ 3.6%) compared to sows housed in individual stalls during gestation. Those same sows, however, took longer to return to estrus (+ 0.2 days), although a greater proportion of stall-housed sows had delayed estrus (> 10 days, 6.3% vs. 3.0%).

Pen group housing during gestation with electronic sow feeders appears to keep sows in better condition for farrowing, thus resulting in larger pigs born and weaned. However, although group pens are perceived as being more welfare-friendly, the higher proportion of females removed for painful locomotor problems in group housing indicates a welfare need that must be addressed.