

Evaluating and Correcting Lameness in Sows

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One of the greatest challenges facing breeding herd managers today is increasing sow longevity in the herd, especially when gestating sows are group housed. Today's females have been bred to produce and support large litters, increasing the pressure and drain of nutrients from their bodies. Dr. John Deen, University of Minnesota, has indicated that the lactating sow undertakes more stress on its body as a function of its weight compared to any other animal. The result often is an increase in lameness, due largely to foot health or the lack thereof. These sows are often culled due to locomotion problems, or at the very least are less productive during lactation since they may consume less feed due to reduction in sow comfort, resulting in poorer litter and subsequent reproductive performance.

How do we go about identifying foot and claw health? Dr. Deen suggests inspecting the feet of sows while they are in the farrowing crate – ideally at night with a flashlight when sows are resting. Examine the claws first and the area of tissue around them. Identify the presence of cracks and lesions, and whether these are small or more significant. Cracked claws will mend very slowly, so culling or euthanization may need to be considered. Perhaps more than anything else, presence of poor foot health can predict future productivity success of the sow.

A high level of cracks and lesions may indicate poor flooring, so evaluate this area first. However, recent European research results indicate that mineral nutrition may also play a part in improving foot soundness. Danish data indicates that feeding organic minerals, including copper, zinc, and manganese, greatly reduces foot issues compared to providing inorganic sources of the same minerals. Over a two year period, heel erosion was reduced from 80% to 30% by switching to organic mineral supplementation. A follow-up study indicated that sow deaths dropped 50% within 2 months after beginning the organic mineral treatment. Over half of the losses of sows due to culling or euthanasia in that herd were associated with leg or feet problems.

Certainly more interest and focus is being paid attention to sow foot health and overall sow locomotion, and in particular what can be done with nutrition and other management practices to minimize problems. By evaluating crack and lesion prevalence in lactating sows, one can determine if management changes should be considered, and if so, continual monitoring and recording of foot health data will allow producers to determine if management changes are providing beneficial results. Perhaps the best practice that can currently be implemented if foot health problems are identified is use of organic mineral sources in diets, along with evaluation and maintenance of flooring.