



New Measures in Assessing Sow Lameness

The pork industry is no stranger to change. Producers are always looking for new ways to improve their bottom line. What if we could increase the productive capacity of our breeding herds? Specifically through management changes that would result in earlier detection, and subsequently treatment, of lameness resulting in increased longevity of sows in the breeding herd.

The ability to identify the risk factors affecting sow welfare and longevity in the herd becomes increasingly important for animal well-being, and economic viability, especially as we transition to group housing for gestating sows. A collaborative project funded through the Swine Innovation Porc (Canadian Swine Research and Development Cluster) and lead by Dr. Nicolas Devillers (AAFC) and Dr. Laurie Connor (University of Manitoba), with collaborators at the University of Guelph and Prairie Swine Centre, focuses on "Risk Factors and Assessment Techniques for Lameness, Productivity and Longevity in Group and Individually Housed Sows."

What are the Main Areas of Focus ?

1. Development and validation of new methods of measuring lameness, including a scale with separated force plates to measure distribution of sow's weight on each limb and infrared technology.
2. Studying the relative importance of lameness in sows in different housing systems in terms of productivity and longevity.
3. Determining the role of social factors in both productivity and longevity in various group housing systems.
4. Assessing and validating factors contributing to sow lameness, productivity and longevity. These factors include examining floor types, group compared to individual housing, temperament types, calcium and phosphorus balance on bone density and synchronized breeding strategies.

Benefits to the Producer

This project focuses on conventional and new technologies that identify factors, such as social rank, lameness, nutrient balance and early reproduction management that impact sow welfare and longevity in the breeding herd. By assessing relationships of these factors to lameness and longevity, reliable tools for early identification of lameness and temperament traits can improve animal selection for particular housing (individual or group) conditions. Producers will have a set of quantitative assessment tools that will remove some of the subjectivity, and allow comparisons across facilities and the industry.

Reliable tools for early detection of lameness in sows help to reduce veterinary costs, and decrease culling for non-productive reasons which lead to higher production efficiency and a improved financial position for producers.

For those producers transitioning from individual to group housing - a set of criteria will be available that identify the preferred flooring, bedding, and social management options that will assist producers in their decision making process.

New Tools Under Development for Early Detection of Lameness

<http://www.prairieswine.com/new-tools-under-development-for-early-detection-of-lameness/>

Assessment of Lameness, Productivity and Longevity in Group and Individually Housed Gestating Sows

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Scientists Seek Strategies for Early Detection and Prevention of Lameness of Sows

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