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Editors

W. Christopher Scruton

Stephen Claas

Layout

David Brown

Logo Design

Ruth Cronje, and Jan Swanson;

based on the original design by Dr. Robert Dunlop

Cover Design

Sarah Summerbell

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Evaluation of Sow Herd Condition Scores versus Sow Herd Productivity and Mortality

John Williams, Dale Muhs, Trevor Wilson, Chad Hill
Swine Management Services, Fremont, NE 68025

The objective of this research was to help improve production on sow farms and to increase awareness among the Swine Management Services' system regarding sow condition and feeder adjustment procedures.

Seven sow farms were selected for this exercise. The sow farms ranged in size from 1250 sows to 5000 sows per facility. On each farm 10% of the herd was selected for condition scoring based on a random sample.

Sows could be scored between 1 and 5 in $\frac{1}{4}$ increments. A condition score of one equals a thin sow and a condition score of five equals an overweight sow. A condition score of three is considered perfect. Each of these sows was condition scored by three individuals, after these individuals had come to an agreement as to what a condition score "3" sow looked like. The condition score results were compiled into a histogram for each farm.

Production data used in this study was compiled from PigCHAMP® data for each farm. A 140-day period, prior to the date of condition scoring, was used. The variables looked at were Percent Sow Death Loss and Pigs Weaned / Mated Female / Year.

The team calculated what percent of each herd scored at, or around, perfect condition

($2\frac{3}{4}$, 3, $3\frac{1}{4}$). The farms scored as follows, 59.3%, 61.7%, 75.2%, 78.8%, 79.1%, 79.3% and 84.4%.

These percentages (Percent of Sows with Good Condition Score) were correlated against Percent Sow Death Loss and Pigs Weaned / Mated Female / Year.

Percent Sow Death Loss, in the same order as above, was 13.4%, 17.7%, 5.7%, 8.7%, 8.4%, 6.5% and 7.8% calculated as a strong negative correlation of -0.83. Thus Percent Sow Death Loss is directly related to Percent of Sows with Good Condition Scores.

Pigs Weaned / Mated Female / Year for the farms, 20.6, 19.7, 21.1, 22.8, 23.5, 22.2 and 24.6 correlated to a strong 0.88. Evidence of a strong relationship to Percent of Sows with Good Condition Score.

Further correlations concluded that the farm's Average Condition Score had no effect on Percent Sow Death Loss or Pigs Weaned / Mated Female / Year.

Due to this study, Swine Management Services has increased its focus on feed-drop management throughout the system's gestation barns. Emphasizing the need to maintain individual sows at a condition score at, or near, three by increasing the number of times per gestation period a sow's feed-drop is adjusted.