

1978

Management of Pigs Prior To and Immediately Following Weaning at Four Weeks of Age

George W. Libal
South Dakota State University

Richard C. Wahlstrom

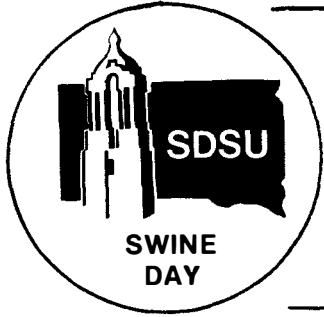
Wayne E. Schiefelbein

Follow this and additional works at: http://openprairie.sdstate.edu/sd_swine_1978

Recommended Citation

Libal, George W.; Wahlstrom, Richard C.; and Schiefelbein, Wayne E., "Management of Pigs Prior To and Immediately Following Weaning at Four Weeks of Age" (1978). *South Dakota Swine Field Day Proceedings and Research Reports, 1978*. Paper 9.
http://openprairie.sdstate.edu/sd_swine_1978/9

This Report is brought to you for free and open access by the Animal Science Reports at Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. It has been accepted for inclusion in South Dakota Swine Field Day Proceedings and Research Reports, 1978 by an authorized administrator of Open PRAIRIE: Open Public Research Access Institutional Repository and Information Exchange. For more information, please contact michael.biondo@sdstate.edu.



MANAGEMENT OF PIGS PRIOR TO AND IMMEDIATELY FOLLOWING WEANING AT FOUR WEEKS OF AGE

George W. Libal, Richard C. Wahlstrom, and Wayne E. Schiefelbein

Department of Animal Science
Swine Section

South Dakota State University
A.S. Series 78-16

Baby pig management at weaning remains the weak link in most swine operations. The pig's management requirements remain as high at this stage of growth as they are when the pigs are on the sow. Stress from improper nutrition, housing, temperature and ventilation as well as from establishing a new social order among regrouped pigs may affect performance and health problems of this young pig. Much is still to be learned about proper management which will minimize stress. South Dakota State University is cooperating with other Land Grant colleges in the North Central Region to evaluate the practice of intermingling litters prior to weaning to learn if the stress of weaning can be reduced. The data presented herein are the results of the first trial at this university.

Experimental Procedure

Litters from the February-March farrowing were divided into three management treatment groups:

1. Two litters kept intact during lactation and moved to nursery pens at 4 weeks of age as intact litters with no intermingling of pigs
2. Two litters allowed to intermingle during the last week of lactation and then divided by weight into two nursery pens at 4 weeks of age
3. Two litters kept intact through lactation and intermingled at 4 weeks of age when divided by weight into two nursery pens

Each treatment was replicated five times giving a total of 10 litters per treatment and a total of 192 pigs in the experiment. Pig weights were recorded at 3 weeks of age, at 4 weeks when weaned and at 8 weeks of age when the experiment was terminated. The pigs received our standard 18% protein starter diet and feed consumption was measured from weaning to the termination of the trial. Scouring in the nursery pens was recorded daily on the first three replications using a scale as follows: 1 = firm feces, 2 = soft feces, 3 = loose feces and 4 = watery feces.

Results and Discussion

Table 1 summarizes the results of the three weaning management systems. Three-week weights and 4-week weights were not significantly different among groups of pigs (approximately 13.0 lb. and 16.5 lb., respectively). The only significant ($P < .05$) differences in performance among management systems were found for average daily gain from weaning to 8 weeks of age.

Gains were slower for pigs mixed at weaning. This seemed to be related to feed consumption. However, when compared from 3 weeks until 8 weeks of age, the differences were not significant. This longer period took into consideration the stress of intermingling pigs on the sow as well as after weaning. All means tended to favor not mixing the pigs through the nursery period and there appeared to be a trend toward poorer performance when the intermingling occurred at weaning compared to intermingling during lactation. With more numbers of sows, this pattern may become more clear. Scouring was not a real problem in any group. Individual average scores for pens ranged from 1.0 to 1.6 using the scale previously described, with slightly higher scores for pigs intermingled at weaning. However, fecal consistency was acceptable in all groups. Death losses and pigs that were removed because they did not gain were approximately equal across treatment groups.

Summary

Thirty litters consisting of 192 pigs were used to study the effect of leaving litters intact through 8 weeks of age, intermingling the pigs 1 week prior to weaning or intermingling pigs at 4 weeks of age when weaned and moved to nursery pens. The response criteria evaluated were gain, feed efficiency and fecal consistency. When considering gain from 3 weeks of age, when the management schemes were first imposed, to 8 weeks of age, no significant differences were observed. There was a trend for slightly better performance from pigs left as intact litters or intermingled on the sows prior to weaning compared to intermingling pigs at weaning.

Table 1. Results of Management Treatments of Litters on Pig Performance to 8 Weeks of Age^a

	Litters left intact	Litters intermingled on the sow at 3 weeks	Litters intermingled at weaning (4 weeks)
3-week initial wt., lb.	13.0	13.5	12.8
4-week weaning wt., lb.	16.2	16.8	16.2
8-week final wt., lb.	36.6	36.2	34.1
Avg daily gain, 3 weeks to 8 weeks, lb.	.66	.65	.61
Avg daily gain, 4 weeks to 8 weeks, lb. ^b	.72	.69	.64
Avg daily feed consumption, 4 weeks to 8 weeks, lb.	1.43	1.43	1.25
Feed/gain, 4 weeks to 8 weeks	2.02	2.03	2.08

^a A total of 192 pigs with each mean representing pigs from 10 litters (5 litter pairs per treatment).

^b Significant ($P < .05$) management effect on average daily gain from weaning to 8 weeks of age.