5 Hot Topics In Sow Management
The 5 Hot Topics

Gilt Development

Feeding

Housing

Individual Care

People
Gilt Development

 Doesn’t stop when she is bred
Gilt development sets up sow lifetime productivity.
P1 Farrowing Rates Impact on PW/MF/Y

- <75%
- 75-79%
- 80-84%
- 85-90%
- >90%
P1 Farrowing Rates Impact on Wean to Service

- <75%
- 75-79%
- 80-84%
- 85-90%
- >90%
Importance of Wean to Service Interval

Farrow Rate by Wean to Service Interval

<table>
<thead>
<tr>
<th>Wean to Service Interval</th>
<th>Farrowing Rate</th>
<th>% Bred</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-2</td>
<td>74.8%</td>
<td>1.1%</td>
</tr>
<tr>
<td>3</td>
<td>85.2%</td>
<td>3.2%</td>
</tr>
<tr>
<td>4</td>
<td>87.4%</td>
<td>41.9%</td>
</tr>
<tr>
<td>5</td>
<td>86.1%</td>
<td>31.5%</td>
</tr>
<tr>
<td>6</td>
<td>82.0%</td>
<td>6.9%</td>
</tr>
<tr>
<td>7-9</td>
<td>75.7%</td>
<td>3.8%</td>
</tr>
<tr>
<td>10-22</td>
<td>73.5%</td>
<td>6.5%</td>
</tr>
<tr>
<td>23-29</td>
<td>83.6%</td>
<td>3.0%</td>
</tr>
<tr>
<td>30-63</td>
<td>79.8%</td>
<td>2.0%</td>
</tr>
<tr>
<td>64+</td>
<td>73.1%</td>
<td>0.2%</td>
</tr>
</tbody>
</table>
% of Gilts entered that failed to farrow

4.8% to 17.0%
Gilt Development

• Start daily boar exposure at 26 weeks of age 1-1.5 minutes/gilt

• Space impacts cycling- 3.6-4.6 sq meters/ gilt

• Boars should be 10+ months (1 boar per 12 gilts in pen)

• 16 hours of light per day

• Breed at 136+ kg on 2\textsuperscript{nd} or 3\textsuperscript{rd} heat
Udder Development

- 23% reduced output
- Fighting
- Eat Less
- Wean smaller pigs
- Behind for life

Chantal Farmer, agr., PhD, & Nicolas Devillers, PhD Research scientist, Agriculture and Agri Food Canada, Sherbrooke, QC
Feeding
Bump Feeding Strategy

Bump Feeding and POP Incidence

- None: n=55
- All Animals: n=13
- Only Lower BCS: n=14

P = 0.02

Bump Feeding and Non-Prolapse Mortality

- None: n=55
- All Animals: n=13
- Only Lower BCS: n=14

P = 0.002

Iowa State University Extension and Outreach

Iowa Pork Industry Center
Transition Feeding

Key points:
- Diets: Gestation 1345 Kcal / lb ME, 0.58 Lysine, Lactation: 1510 Kcal / lb ME, 0.99 Lysine & 2.5% added fat
- Ave. Birth weight (BTW): 2.55 lb, Colostrum intake (CI) 0.24 lb & Weaning Weight: 12.4 lb.
- Feeding Lactation diet increased colostrum by 32%, reduced litter variation at birth, increased weaning weight and improved piglet survival.

### Effect of diet during the last 10 days of gestation on colostrum intake and piglet quality

<table>
<thead>
<tr>
<th>Trait</th>
<th>Diet</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lactation</td>
<td>Gestation</td>
<td>P-value</td>
</tr>
<tr>
<td>Average piglet birth weight, lbs.</td>
<td>2.50</td>
<td>2.60</td>
<td>0.24</td>
</tr>
<tr>
<td>Coefficient of variation in piglet birth weight, %</td>
<td>3.13</td>
<td>2.51</td>
<td>0.04</td>
</tr>
<tr>
<td>Total sow colostrum yield, lbs.</td>
<td>0.279</td>
<td>0.211</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Average piglet colostrum intake, lbs.</td>
<td>12.77</td>
<td>12.05</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Coefficient of variation in piglet weaning weight, %</td>
<td>14.7</td>
<td>17.9</td>
<td>0.02</td>
</tr>
<tr>
<td>Piglet survival, %</td>
<td>87.3</td>
<td>84.2</td>
<td>0.29</td>
</tr>
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</table>
Prefarrow- Length of Farrowing

**Study detail:** 166 farrowings with 2889 piglets. Dr. Thiel: The longer the time from the last feeding, the longer the farrowing process and the more stillborns. Feed (starch) is absorbed from intestine in form of Glucose (blood sugar) and it happens in 4 to 6 hours after eating. **Suggest feeding sows smaller meals before farrowing more times per day.**

*Figure 1. The length of the farrowing process of the sow increases if the farrowing starts more than three hours after the last meal.*
Study detail: 166 farrowings with 2889 piglets. Dr. Thiel: The longer the time from the last feeding, the longer the farrowing process and the more stillborns. Feed (starch) is absorbed from intestine in form of Glucose (blood sugar) and it happens in 4 to 6 hours after eating. Suggest feeding sows smaller meals before farrowing more times per day.

Figure 2. The number of stillborn piglets increases when the time from the latest feeding to the end of farrowing increases.
Before and After

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total pigs born / female farrowed</td>
<td>16.77</td>
<td>16.90</td>
<td>17.05</td>
<td>17.24</td>
<td>17.19</td>
</tr>
<tr>
<td>Pigs born live / female farrowed</td>
<td>14.43</td>
<td>14.62</td>
<td>14.76</td>
<td>15.58</td>
<td>15.60</td>
</tr>
<tr>
<td>Stillborns / female farrowed *</td>
<td>1.57</td>
<td>1.52</td>
<td>1.48</td>
<td>0.83</td>
<td>0.71</td>
</tr>
<tr>
<td>Percent stillborns *</td>
<td>9.4%</td>
<td>9.0%</td>
<td>8.7%</td>
<td>4.8%</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

.65 less stillborns per litter
Driving Intake

Effect of Water Temperature on Performance of Lactating Sows

Water intake vs. Feed intake

Temperature of drinking water (°F)

- Water intake: 72°F = 8.2 gal/d, 59°F = 10.1 gal/d, 50°F = 10.1 gal/d
- Feed intake: 72°F = 8.4 lb/d, 59°F = 11.8 lb/d, 50°F = 11.7 lb/d

Leon et al. (2006)
Group Housing

• Bigger footprint

• How many per pen?

• What system?
Group Housing
Group Housing - Body Condition

- More or less work?
- Thin Sows
  - More prolapses
- Heavy Sows
  - More stillborns
  - Smaller weaned pigs

![Sow caliper score graph](image)
Individual Care
Foot Care

- Gilt Selection
  - Each strike of the toe promotes growth

- Make sure rations are supporting foot health

- Maintenance
Foot Care

• Trim within a couple of days of farrowing

• Use a chart to document who needs it and if it is done.
Foot Care

- Declaws
  - Coronary band
- Toes
  - 3 fingers
Foot Care—Before and After
When are sow deaths occurring?

% lost by days since served

- 0-44
- 45-89
- 90-109
- 110-119
- 120-139
- 140+

- Canada
- USA
A small section of time

30% in 9 days
% of Death Loss

- <1000 (340)
- 1000s (224)
- 2000s (194)
- 3000s (44)
- 4000+ (68)

Legend:
- Top 10%
- All
- Bottom 30%
What to do?

• Get everyone up everyday

• Temping sows @ Farrowing

• Early identification of those off feed

• Early identification of lameness
Prolapses - Initial Thoughts

Herd size, induction protocol, sleeving protocol, tail length, hygiene, particle size

Geographical region, sow housing, laxatives, mycotoxins, health status and disease outbreaks, antibiotic usage, nutrition, genetics

Water quality, body condition, bump feeding strategy, perineal score
People
People

- Hire
- Train
- Retain
- Reward
Hire

Good Luck!

- Social Media
- Craigslist
- International Workers
- Looking outside the industry
- Humble, Hungry, Smart
- What can we take off of the barn staff’s plate?
  - Data Entry?
  - Laundry?
  - Office cleaning?
Train

• The importance of the first 90 days

• Fewer people hired with animal husbandry skills

• Training programs
  • Pork Avenue Training
  • PQA/TQA
10 Things that take ZERO talent but will get you 100% respect

1. Being on time
2. Work ethic
3. Effort
4. Body Language
5. Energy
6. Attitude
7. Passion
8. Being Coachable
9. Doing Extra
10. Being Prepared
Retain

- Get to know them personally
- Generational Differences
- Cultural Differences
- Gender Differences

Harvard Business Review
Retain
<table>
<thead>
<tr>
<th>Day</th>
<th>Week</th>
<th>4-Fans</th>
<th>Avg Breed</th>
<th>Total B</th>
<th>Born Alive</th>
<th>Still</th>
<th>Pock Death</th>
<th>Sow Death</th>
<th>Total Deaths</th>
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<tbody>
<tr>
<td>Monday</td>
<td>80</td>
<td>30</td>
<td>11.0</td>
<td>16.2</td>
<td>14.2</td>
<td>6.6%</td>
<td>4</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Tuesday</td>
<td>15%</td>
<td>30/60</td>
<td>15.7</td>
<td>13.3</td>
<td>6.8</td>
<td>40/60</td>
<td>0/4</td>
<td>10/40</td>
<td>0/4</td>
</tr>
<tr>
<td>Wednesday</td>
<td>15%</td>
<td>15/45</td>
<td>15.2</td>
<td>13.6</td>
<td>6.5</td>
<td>15/60</td>
<td>1/5</td>
<td>2/5</td>
<td>1/5</td>
</tr>
<tr>
<td>Thursday</td>
<td>15%</td>
<td>8/64</td>
<td>15.3</td>
<td>13.5</td>
<td>8.5</td>
<td>18/10</td>
<td>2/4</td>
<td>4/11</td>
<td>2/4</td>
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<tr>
<td>Friday</td>
<td>15%</td>
<td>16/64</td>
<td>15.9</td>
<td>14.1</td>
<td>7.0</td>
<td>24/17</td>
<td>4/11</td>
<td>2/4</td>
<td>2/4</td>
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<tr>
<td>Saturday</td>
<td>15%</td>
<td>6/40</td>
<td>15.5</td>
<td>13.9</td>
<td>5.0</td>
<td>16/15</td>
<td>4/11</td>
<td>2/4</td>
<td>2/4</td>
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<tr>
<td>Sunday</td>
<td>15%</td>
<td>15</td>
<td>14.2</td>
<td>14.2</td>
<td>6.4</td>
<td>14/15</td>
<td>1/4</td>
<td>1/5</td>
<td>1/5</td>
</tr>
</tbody>
</table>

### SWINE MANAGEMENT SERVICES

**SMS Executive Summary**

52 Week Performance

"Information solutions" for the Swine Industry

Potential for Improvement = $2.20/yr

![Graph showing production index and farm performance metrics](image)

**Example Farm 8**

- 10 Farms & 44,100 Mated Females
- 902 Farms & 1,582,100 Mated Females

<table>
<thead>
<tr>
<th>Percentile</th>
<th>Pig/Weaner</th>
<th>Total Born</th>
<th>Piglet Survival</th>
<th>Litter</th>
<th>Weeks to 1st Service</th>
<th>Farrowing Rate</th>
<th>Female Deviation</th>
<th>Total Born Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-100</td>
<td>92%</td>
<td>63%</td>
<td>92%</td>
<td>84%</td>
<td>92%</td>
<td>50%</td>
<td>68%</td>
<td>37%</td>
</tr>
<tr>
<td>70-90</td>
<td></td>
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<td>50%</td>
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<td>50-70</td>
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<td>36%</td>
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<tr>
<td>30-50</td>
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<td></td>
<td></td>
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<td>36%</td>
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<td>0-30</td>
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<td></td>
<td></td>
<td>36%</td>
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</table>

<table>
<thead>
<tr>
<th>Farm</th>
<th>Pig/Weaner</th>
<th>Total Born</th>
<th>Piglet Survival</th>
<th>Litter</th>
<th>Weeks to 1st Service</th>
<th>Farrowing Rate</th>
<th>Female Deviation</th>
<th>Total Born Females</th>
</tr>
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<tbody>
<tr>
<td>Farm 1</td>
<td>27.81</td>
<td>34.15</td>
<td>82.8%</td>
<td>5.24</td>
<td>90.0%</td>
<td>6.5%</td>
<td>90.0%</td>
<td>39.99</td>
</tr>
<tr>
<td>Farm 2</td>
<td>30.01</td>
<td>34.92</td>
<td>81.0%</td>
<td>5.24</td>
<td>90.0%</td>
<td>6.5%</td>
<td>90.0%</td>
<td>45.18</td>
</tr>
<tr>
<td>Farm 3</td>
<td>32.49</td>
<td>34.92</td>
<td>81.0%</td>
<td>5.24</td>
<td>90.0%</td>
<td>6.5%</td>
<td>90.0%</td>
<td>45.18</td>
</tr>
<tr>
<td>Farm 4</td>
<td>25.44</td>
<td>34.92</td>
<td>81.0%</td>
<td>5.24</td>
<td>90.0%</td>
<td>6.5%</td>
<td>90.0%</td>
<td>45.18</td>
</tr>
</tbody>
</table>

**Note:** Interpreting the reports or steps need to take to reach the next level contact Swine Management Services.

(403) 777-0200 - 1044 23rd St - Pleasant, SD 65025 - www.swm.com

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## Retain

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<th></th>
<th>New Team Member</th>
<th>Existing Team Member</th>
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<tbody>
<tr>
<td>90 days</td>
<td>$100</td>
<td>$100</td>
</tr>
<tr>
<td>6 months</td>
<td>$250</td>
<td>$250</td>
</tr>
<tr>
<td>1 Year</td>
<td>$500</td>
<td>$500</td>
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<tr>
<td>Total</td>
<td>$850</td>
<td>$850</td>
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<tr>
<td>Anniversary</td>
<td>$500</td>
<td></td>
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Turnover Cost is 50-75% of annual salary
Reward

• It’s not just about money

• Celebrate
  • Perfect Attendance
  • Birthdays
  • Goals

• Employee/Team of the Month
  • Let staff vote on employee
  • Management selects team
Feed
Housing
Individual Care
Gilt Development
People
Thank You!

“How success in not one thing but many things put together correctly time after time!” - Unknown

Information solutions for the swine industry.

How to reach me:
Valerie.Duttlinger@swinems.com
812-430-596
www.swinems.com