Properly Handling Sows is Very Important!

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Importance of Good Sow Handling Techniques

- Ensure animal welfare
- Improve worker safety
- Better utilization of time and resources
- Maximize reproductive productivity

Effect of Stockperson Behavior on Pig Performance

<table>
<thead>
<tr>
<th>Trait</th>
<th>Control Farms</th>
<th>Trained Farms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive attitude score</td>
<td>89.2</td>
<td>102.9</td>
</tr>
<tr>
<td>Negative handling, %</td>
<td>55.8</td>
<td>38.6</td>
</tr>
<tr>
<td>Pigs born/sow/yr</td>
<td>22.2</td>
<td>23.8</td>
</tr>
</tbody>
</table>

Impact of Environmental Stressors on Sow Performance

Greatest stress effects:
- Wean to estrus
  - Lightening can decrease feed intake
- Days 1-12
  - Excess movement can cause embryonic death
- Days 11-14
  - Progesterone secreted to maintain pregnancy
- Days 14-30
  - Fetuses implant
  - Avoid unnecessary handling & movement

Losses During Gestation Due to Stress

<table>
<thead>
<tr>
<th>Factor</th>
<th>Potential Litter Size</th>
<th>Number Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eggs Ovulated</td>
<td>14 (eggs)</td>
<td>---</td>
</tr>
<tr>
<td>Eggs Fertilized</td>
<td>15 (embryos)</td>
<td>1</td>
</tr>
<tr>
<td>Implanted Embryos</td>
<td>11 (fetuses)</td>
<td>4</td>
</tr>
<tr>
<td>Mid-Gestation</td>
<td>10 (fetuses)</td>
<td>1</td>
</tr>
<tr>
<td>Farrowing</td>
<td>9 (piglets)</td>
<td>1</td>
</tr>
</tbody>
</table>

(Source: NC State, Gestation Management Video Series)
Grouping Sows
- Avoid mixing sows immediately post-weaning if possible
- Do not mix sows during or immediately post-breeding
- If necessary, group to:
  - minimize weight variation
  - minimize range in parity
  - reduce fighting and competition
  - reduce injuries
  - improve feed intake

Handling Sows
- Handling is conducted for specific reasons
  - Moving sows
    - Gestation – Farrowing
    - Cull sows
  - Breeding
    - Dependent on system used
  - Vaccinations/treatments
    - Restraint

Use Animal Behavior and Instincts to Move Hogs
- Understanding the sow’s natural instincts will help you use proper handling and management techniques
  - Facilitate handling
  - Reduce stress
  - Enhance handler safety
  - Improve animal welfare

Pigs’ Characteristics
- Eyesight
  - Poor clarity, but picks up movement well
  - Floppy ears may hinder sight
- Curiosity
  - Like to explore, but dislike novelty
  - Adapt quickly if not forced
- Social
  - Like company, dislike isolation
  - Follow the leader
- Intelligence and Memory
  - Very smart
  - Long memories

Pigs Have a Strong Natural Urge to Escape
- Pigs have wide-angle vision
- Small visual gaps may cause a sow to try to escape
  - Pens, alleys, ramps, side gates, chutes
- Sows can injure themselves when trying to escape!

Sows Are Easily Distracted
- Watch for and remove:
  - Spilled feed
  - Any objects in the path
  - Extreme bright lights and darkness
  - Shiny objects
  - Sudden changes in the color or appearance of equipment
  - Stepping downward
  - Slippery floors
  - Loud noises
**The Flight Zone and Point of Balance**

- Will help you move animals more easily
- Flight zone is the animal’s personal space
  - Size is determined by the wildness or tameness of the animal
  - Completely tame animals have no flight zone
  - When you enter the flight zone, the animal will move away
  - Stand at the outside of this zone

**The Flight Zone and Point of Balance**

- Point of balance is at the animal’s shoulder
  - Animal will move forward if handler stands behind point of balance
  - Animal will back up if handler stands in front of point of balance
  - Common mistake: attempting to move animals forward while standing in front of point of balance

**Use Lighting to Your Advantage**

- Pigs are very sensitive to sharp contrasts of light and dark
  - Lighting should be bright, but evenly diffused
  - Sows housed in enclosed buildings may balk at full daylight
  - Use lamps to illuminate areas into which you want the pigs to move
    - Lamps must not shine directly into eyes of approaching animals

**Avoid Aggressive Handling**

- Use of electric prods!!!!!!!
- Loud noise and yelling
- Moving sows too fast
- Moving sows in large groups
Handling Tips

- Patience, patience, patience
  - Use a gentle demeanor
  - Calm, deliberate movements
  - Low noise
  - Positive physical interactions
  - Think like a pig

Design of Equipment and Facilities

- Facility, pen, and alley design all influence the ease with which a producer can move and handle the animals in the breeding herd.
  - Alleyways 24 to 30 inches wide
  - Ample supply of gates that swing from either end
  - Breeding and AI collection areas should have designated “Safe Areas” for workers
    - Position yourself alongside and behind boar when collecting semen, and stay on your feet (do not sit down to collect)
  - Personnel should never “trust” the animals

Use Appropriate Sorting and Handling Equipment

- Lightweight sorting boards or panels

Use Appropriate Sorting and Handling Equipment

- Shaker paddles

Boar Handling Equipment

Summary

- Handle sows with patience and respect
  - Prepare pathways prior to moving sows
  - Always use appropriate handling equipment
  - Utilize the sow’s own natural instincts
- Evaluate equipment and facilities
- Never move sows from d 10 – 30 post-breeding
- Avoid grouping sows post-weaning if possible
- Understand that sow handling can have a significant impact on reproductive performance!!!
Additional Sources of Information on Handling

- Transport Quality Assurance (TQA) program
  http://www.pork.org/Producers/TQA/TQA.aspx

- Pork Information Handbook (PIH) and Pork Information Gateway (PIG)
  http://www.porkgateway.org

- National Pork Board Production Series CDs
  http://www.pork.org

- Temple Grandin webpage
  http://www.grandin.com