Denmark Gilt Development and Cross Fostering

Terry L. Steinhart
Field Specialist/Swine
Keokuk County Office

Denmark Farm

Table 1. Breeding herd results 1996-1998, Denmark

<table>
<thead>
<tr>
<th>Trait</th>
<th>3 months</th>
<th>12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average # sow &amp; born gilts</td>
<td>12.0</td>
<td>12.1</td>
</tr>
<tr>
<td>Average # pigs born alive/litter</td>
<td>14.6</td>
<td>14.4</td>
</tr>
<tr>
<td>Average # pigs born dead/litter</td>
<td>1.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Pre-wean mortality (%)</td>
<td>10.6</td>
<td>10.6</td>
</tr>
<tr>
<td>Average # pigs weaned/litter</td>
<td>13.1</td>
<td>12.9</td>
</tr>
<tr>
<td>Percent return services</td>
<td>6.4</td>
<td>6.0</td>
</tr>
<tr>
<td>Born Production (Days per litter)</td>
<td>11.0</td>
<td>12.0</td>
</tr>
<tr>
<td>Average lactation length (Days)</td>
<td>26</td>
<td>31</td>
</tr>
<tr>
<td>Farrowing percentage</td>
<td>90.8</td>
<td>89.3</td>
</tr>
<tr>
<td>Litters per year</td>
<td>2.43</td>
<td>2.36</td>
</tr>
<tr>
<td>Pigs weaned/return service</td>
<td>38.7</td>
<td>39.6</td>
</tr>
</tbody>
</table>

US average pigs per sow per year?

- Top 25% of US herds averaged 23.7

Gilt Development

- Heavier Weight
  - 290 pounds recommended
  - Some producers go to 350 pounds
  - Average market weight 230#
Gilt Development cont. . .

• Increased age
   - Eight months of age
   - Some farms nine months of age
     • 1.8 ADG on US gilts = 166 days or 5.5 months
     • 8 months = 240 days = 1.25 ADG
     • 9 months = 270 days = 1.11 ADG

Gilt Development cont. . .

• Restricted feeding

• Added roughage (fiber)

Gilt Development cont. . .

• Well managed available gilt pool
  - Strict control of estrus triggering
    • Limited movement
    • Limited mixing of groups
    • Timing of boar introduction
  - Strict control of weight gain

What are the Barriers?

• Added facilities
• Select gilts earlier
• Earlier selection more gilts culled
• More labor
• Larger gilt pools
Cross Fostering

- High numbers of born alive mean more sows are required to nurse piglets
- Many continuous flow farrowing rooms
- Younger sows are often kept for extended nursing
- High Health status

One Step Nurse Sow

- Wean piglets from a sow after at least 21 days (Danish Law)
- Select sow with good litter size and piglets in good condition
- Sow is moved either to a newly created litter of excess piglets
  Or to a litter of 4-7 days of age
  - The sow providing the litter of 4-7 day old pigs is then moved to a new litter of excess newborn piglets
  - The best practice is to move the sow not the litter

Cross fostering requires empty farrowing crates

- Goal is a litter size of 12
- You have 12.9 born alive
- How many more farrowing spaces do you need to cross foster?
  - Approximately 7.5% or for every 13 sows farrowed you need one extra crate

Could any of Denmark’s “ideas” be incorporated into your system?