Swine Production Update

Dale Ricker
OSU Extension Swine Program Specialist
ricker.37@osu.edu

Clemens Food Group Packing Plant

- Clemens Food Group – Hatfield, Pennsylvania
- New plant near Coldwater Michigan
- Due for completion late 2017 and employ 800 people
- Eight family farms invested in the plant, three from Ohio.
- +Country View Family Farms (Division of the Clemens Food Group)
- 10,000 head per day, first shift
What does this mean for Ohio?

- Sow farm expansion underway (+20,000 over 2 years)
- 100 – 150 new 2400 head finishing barns
- Each 2,400 head sow unit built in the state of Ohio would consume roughly 574,000 bushels of corn and 113,000 bushels of beans a year. (Farrow to Finish)
- Building investments?
• “Public opinion in this country is everything. Whoever can change public opinion can change the government”.
  Abraham Lincoln

• “A democracy is no more than mob rule, where 51% of the people may take away the rights of the other 49%”.
  Thomas Jefferson

Location – Ohio Pork Council Assessment Guidelines

• Approved by the Board of Directors January 2016
• Assessment takes a number of factors into account
  – Neighbor relations and location of neighbors
  – Environmental impact
  – Biosecurity concerns with existing swine farms
  – Location of proposed site was not parceled off to avoid the ODA permitting process.
  – Contact the Ohio Pork Council for more information: 614-882-5887

- Record breeding inventory in the U.S. (WWII era)
- Total Inventory for Ohio – 2.7 million hogs
- Total breeding inventory for Ohio – 200,000
- +30,000 from December 2014

- USDA Pig Crop Report – September 1975
  - Total inventory for Ohio – 1.65 million hogs
  - Total breeding inventory for Ohio – 256,000 (1968 – 348,000)

Source: Chris Hurt, Purdue University
• How many pigs are harvested in the U.S. per day?  – ??
• What % of U.S. pork is exported?  – ??

<table>
<thead>
<tr>
<th>Location</th>
<th>Daily Hd</th>
<th>Ann Hd</th>
<th>Daily Ann</th>
<th>Ann Ann</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pleasant Hope, MO</td>
<td>2,500</td>
<td>625,000</td>
<td>2,500</td>
<td>625,000</td>
</tr>
<tr>
<td>Miranda, MN</td>
<td>4,000</td>
<td>1,000,000</td>
<td>4,000</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Sioux City, IA</td>
<td>10,000</td>
<td>2,500,000</td>
<td>10,000</td>
<td>2,500,000</td>
</tr>
<tr>
<td>Coldwater, MI</td>
<td>15,000</td>
<td>3,000,000</td>
<td>15,000</td>
<td>3,000,000</td>
</tr>
<tr>
<td>Preston Plant*</td>
<td></td>
<td></td>
<td>10,000</td>
<td>2,500,000</td>
</tr>
<tr>
<td>Total</td>
<td>6,500</td>
<td>2,025,000</td>
<td>38,500</td>
<td>9,625,000</td>
</tr>
</tbody>
</table>

*Timing of this plant is in doubt. It may not be on line until 2019.

Source: Dr. Steve Meyer, National Hog Farmer, July 20, 2016
**The growth in contract production**

<table>
<thead>
<tr>
<th></th>
<th>2002</th>
<th>33.8%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007</td>
<td>39.0%</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>41.2%</td>
</tr>
</tbody>
</table>

**2012 Census of Ag, Dec 1 Inventory**

<table>
<thead>
<tr>
<th>State</th>
<th>Total Pigs</th>
<th>Independent</th>
<th>Integrator</th>
<th>Contract Grower</th>
<th>% Contract Grower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iowa</td>
<td>26,455,666</td>
<td>9,911,429</td>
<td>791,364</td>
<td>9,803,873</td>
<td>47.9%</td>
</tr>
<tr>
<td>N Carolina</td>
<td>8,901,434</td>
<td>1,068,752</td>
<td>2,019,828</td>
<td>5,773,854</td>
<td>64.9%</td>
</tr>
<tr>
<td>Minnesota</td>
<td>7,069,751</td>
<td>4,778,222</td>
<td>196,122</td>
<td>2,314,401</td>
<td>37.3%</td>
</tr>
<tr>
<td>Illinois</td>
<td>4,630,796</td>
<td>3,399,986</td>
<td>86,829</td>
<td>1,183,981</td>
<td>25.6%</td>
</tr>
<tr>
<td>Indiana</td>
<td>3,729,765</td>
<td>1,916,662</td>
<td>107,204</td>
<td>1,703,956</td>
<td>45.7%</td>
</tr>
<tr>
<td>Nebraska</td>
<td>2,984,412</td>
<td>2,117,706</td>
<td>262,651</td>
<td>621,054</td>
<td>21.5%</td>
</tr>
<tr>
<td>Missouri</td>
<td>2,774,997</td>
<td>1,640,427</td>
<td>7,919</td>
<td>1,126,551</td>
<td>40.6%</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>2,304,740</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Ohio</td>
<td>2,019,901</td>
<td>743,552</td>
<td>87,210</td>
<td>1,246,761</td>
<td>62.6%</td>
</tr>
<tr>
<td>Kansas</td>
<td>1,886,597</td>
<td>730,146</td>
<td>833,391</td>
<td>324,060</td>
<td>44.7%</td>
</tr>
<tr>
<td>S Dakota</td>
<td>1,191,652</td>
<td>1,041,180</td>
<td>-</td>
<td>140,860</td>
<td>12.0%</td>
</tr>
<tr>
<td>US</td>
<td>66,026,785</td>
<td>33,222,821</td>
<td>5,656,355</td>
<td>27,147,609</td>
<td>41.1%</td>
</tr>
</tbody>
</table>
Typical Contracts

• Wean-Finish
• Nursery
• Grow-Finish

Source: Brumm Swine Consultancy, 2015 and updated by Dale Ricker, OSU Extension 2017
Typical Life of Contracts

- **1990's**
  - 7 year contract
  - $110/space curtain finisher
  - $80/space nursery
- **2000-2005**
  - 10 year contract
- **2005+**
  - 12-15 year contracts most common on new construction
  - $240-265/space tunnel ($640,000) This would include everything. Well, driveway, compost unit, etc.
  - $200-220/space nursery

Payments

- **Nursery** – 3 ft²/pig pen space
  - $30-34 pig space/yr $32 most common in Midwest
- **Grow-Fin** – 7.2 ft²/pig pen space
  - $34-38 pig space/yr $36 most common in Midwest
  - Starting to see a move to 7.5 ft²/pig – no change in $
- **Wean-Fin** – 7.2 ft²/pig pen space
  - $38-42 pig space/yr $40-42 most common
  - Double stock bonus

What about energy bills?

- What's Normal
  - Nursery
    - 1-1.2 kWh/space/month
    - 2.2 gal propane/space/yr

Northern Iowa – Southern Minnesota

- Nursery
  - 1-1.2 kWh/space/month
  - 2.2 gal propane/space/yr
What about energy bills?

Northern Iowa – Southern Minnesota

• What’s Normal
  – Wean-Finish
    • Propane
      – Tunnel - <2.5 gal/space/yr
      – Curtain - <3 gal/space/yr
    • Electric
      – Tunnel – 3.0 kWh/space/month
      – Curtain – 2.6 kWh/space/month
  – Grow-Finish
    • <0.5 gal propane/space/yr

2 – 2400 G/F Barns + Nursery
(New in 2006 - Ohio)

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repairs</td>
<td>14,980.70</td>
<td>23,087.15</td>
<td>16,978.04</td>
<td>22,034.16</td>
<td>15,079.12</td>
</tr>
<tr>
<td>Payroll</td>
<td>15,982.50</td>
<td>14,831.00</td>
<td>16,722.92</td>
<td>16,031.26</td>
<td>16,234.04</td>
</tr>
<tr>
<td>Propane (Barn#2 &amp; Nur)</td>
<td>9,600.00</td>
<td>10,600.00</td>
<td>18,250.00</td>
<td>15,536.00</td>
<td>10,069.00</td>
</tr>
<tr>
<td>Electric (Barn#2 &amp; Nur)</td>
<td>17,730.68</td>
<td>16,518.80</td>
<td>17,941.70</td>
<td>17,515.58</td>
<td>17,120.27</td>
</tr>
<tr>
<td>Total</td>
<td>57,673.88</td>
<td>66,583.95</td>
<td>55,890.66</td>
<td>71,167.00</td>
<td>58,525.43</td>
</tr>
</tbody>
</table>

Average/Year Average/Barn

<table>
<thead>
<tr>
<th></th>
<th>Average/Year</th>
<th>Average/Barn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repairs</td>
<td>16,877.04</td>
<td>5625.68</td>
</tr>
<tr>
<td>Payroll</td>
<td>15,970.34</td>
<td>5323.44</td>
</tr>
<tr>
<td>Propane</td>
<td>11,211.00</td>
<td>3736.93</td>
</tr>
<tr>
<td>Electric</td>
<td>17,645.41</td>
<td>8888.35</td>
</tr>
</tbody>
</table>
• Notes:
  • Electric between Finish Barn and Nursery are within 5% of each other every year
  • Propane for Nursery is about 6,000 gallon per year and about 1,000 gallon per year for either Finisher
  • Payroll includes labor for loading 15,600 finished hogs, moving of 15,600 pigs from Nursery to Finisher and washing of buildings for one year. **Does not include any labor for owners for chores or loading**
  • Insurance $2330.00 (2 Finishers) - $1525 Nursery (Full replacement for 15 years after construction)

Who Wants Pig Barns?
  • Grain Farmers:
    – Nitrogen $0.35/lb
    – Phosphorus $0.45/lb \( \text{P}_2\text{O}_5 \)
    – Potash $0.49/lb \( \text{K}_2\text{O} \)
  • 50-35-25 analysis per 1000 gal manure typical
    – Does the contract specify drinker type – nipple drinkers increase volume
  • $0.0125-0.015/gal to inject
    – $40-45/a @ 3000 gal/a
  • Benefit (2014-15)
    – $7-9/pig space net/yr from NPK wean-finish
    – $10-12/pig space net/yr from NPK grow-finish
    – Corn on corn yield increase often 5-10 bu/a

Who Wants Pig Barns?
  • Youth returning to agriculture
Risks

• Pig Owner
  – Contract grower goes bankrupt
  – Contract grower is a bad grower
    • Refuses to heat barn correctly
    • Doesn’t properly clean between turns
    • Improper dead pig disposal becomes a health risk

• Contract Grower
  – Pig owner goes bankrupt
  – Barn sits empty – no manure produced
  – Company employee’s overuse propane due to errors in controller settings
  – Death loss due to negligence or ventilation failure

Sort and Load Responsibilities

• Who identifies market ready pigs?

• If producer – does the contract define sort loss?

• If sort loss penalty in contract – what is the standard and penalty?

Questions to Ask

• What about vaccination labor?
  – In grow-finish generally paid extra
  – Part of nursery labor (1x injection)

• What about injection labor in sickness?
  – Generally paid by pig owner

• Who pays for injection equipment?
Questions to Ask

• What are the dead pig disposal requirements?
  – Records on mortality

• What are the daily/weekly/monthly record requirements?

• Who is responsible for feed orders?
  – If grower installs bin scales, pig owner orders feed
  – Scale cost shared 50/50?

• Who pays for bin vacuum if there is feed in bin at close out?

Questions to Ask

• What is the guaranteed minimum open days between turns?
  – 4 typical for grow-finish

• Who is responsible for ventilation controller settings?

• Is grower required to be on-site during supervisor visits?

Questions to Ask

• Who grades pigs at arrival and determines rejects?
Questions to Ask

- Does it cash flow without the bonus?
- If there is a bonus – basis for computation?
  - Feed conversion
  - Is it adjusted for ingredients?
  - 12 wk peer group comparison?
  - Daily Gain
  - 12 wk peer group comparison?
  - Regional group comparison
  - Sort Loss
  - How is sort loss determined?
  - Is the payment schedule defined in the contract?

Contract Renewal

- 6 month notice or automatic renewal?
- How long is automatic for?
- What about renovation requirements?

Financing

- Are cash flow projections based on actual history of other sites in the system?
- Has pig owner already lined up lending agency or does grower locate lender?
What about inventory variances?

- Inventory errors are common
- When does grower become responsible for payment of missing (?) pigs?

Start-up Payments

- When do you get the first check on new construction?
- How is first payment determined?
- What if barn is ready but no pigs?
- What if pigs but barn not ready?

Payment Terms

- 4 weeks, monthly, quarterly or?
- Paid to?
  - Grower
  - Co-pay to grower and lender
The End – Any Questions?

There's a way to do it better - find it.

—Thomas A Edison