MARGINS EVERY PRODUCER SHOULD HAVE
2017 I.S.U. Swine Day

June 28, 2017
Farm Credit System
Kent Bang
Steve Malakowsky
Daryl Timmerman
Dusty Compart

AgStar Swine Team

VP & Team Leader
VP Industry Specialist
Sr. Financial Services Executive
Assoc. Financial Services Specialist
AgStar Swine Credit Team

Swine Analyst Team

Jayson Koopmans  Sr. Credit Director
Rick Proehl  Sr. Credit Officer
Chris Murphy  Sr. Business Analyst
Jessica Ziegler  Sr. Business Analyst
Danica Schmidt  Sr. Business Analyst
David Trahms  Financial Services Assoc.
Agenda

• Production Metrics
• Driving Full-Value Pig Improvement
• Lender’s Perspective
  – Your Farm’s Competitive Position
  – How the competition stacks up
• “World Class” production
• Challenges
Production Metrics

• What we track, we have improved!
  – Reproduction Metrics
    • (FR, Total Born, Born live, PWM, PSY, P/MF/Y)

• What we could do better.
  – Wean to Finish Metrics
  – Cost of Production Metrics
**PigChamp Database**

- **Farrowing Rate**
- **Pigs / Litter**
- **Sow Deaths**
- **Pre-wean mortality**
PigChamp Database

![Graph showing P/MF/Year from 2000 to 2016.](image)
Wean-Finish Metrics

• Not a lot of confidence in the numbers
  – 85 to 88% of pigs placed in nursery or W-F barn are marketed to primary market (“full value”)
  – I think these numbers are improving, but would struggle to convince you with real data, except on individual farms where they have focused on continuous improvement in this area.

• For most, this would be the biggest opportunity to drive better margins!
Drivers of “Percent Full-value Pigs”

- Pig Health
  - Starts with the sow farm
  - Challenges with co-mingled pigs
- Management
  - Early care is critical
  - Temperature, air speed
  - Identifying poor performers and taking action
- Nutrition
  - Diet and access to it
- Genetics
Day One Pig Care
Animal Husbandry
Productivity

• Nursery – Finisher or Wean to Finish data is much harder to come by in outside systems.
  – But many internal comparisons are available
• Much more to gain or lose from wean-finish performance
  – Biggest factor I look at is what % of pigs weaned are sold to your primary market(s) as Grade ‘A’ or ‘Full-Value’ pigs
    • Range is 85% to 95% today
    • That is a difference of $12.50 per head or $6.00 / cwt.
What are the metrics?

• Mortality
  – Tracking mortality, along with timing and reason
• Culls & Euthanasia
  – Same as above
• Pigs sold at “full-value”
  – May be to primary market
  – May be those that hit a wide weight range
  – May be those that hit the “box”
## Marketing $80 Hogs (210# Carcass)

<table>
<thead>
<tr>
<th></th>
<th>100%</th>
<th>95%</th>
<th>90%</th>
<th>85%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pigs placed</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
<td>1,000</td>
</tr>
<tr>
<td>Pigs marketed</td>
<td>1,000</td>
<td>950</td>
<td>900</td>
<td>850</td>
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<tr>
<td>Revenue</td>
<td>$168,000.00</td>
<td>$159,600.00</td>
<td>$151,200.00</td>
<td>$142,800.00</td>
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<td>Pig cost</td>
<td>$36,000.00</td>
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<tr>
<td>Contract</td>
<td>$19,000.00</td>
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<tr>
<td>Other</td>
<td>$81,120.00</td>
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<tr>
<td>Margin</td>
<td>$31,880.00</td>
<td>$25,480.00</td>
<td>$19,080.00</td>
<td>$12,680.00</td>
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<tr>
<td>Cost of Production</td>
<td>$136,120.00</td>
<td>$134,120.00</td>
<td>$132,120.00</td>
<td>$130,120.00</td>
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<tr>
<td>COP / cwt.</td>
<td>$48.61</td>
<td>$50.42</td>
<td>$52.43</td>
<td>$54.67</td>
</tr>
</tbody>
</table>
Cost of Production

- Iowa State Model – 2016
  - $123.46 Revenue per head
  - $74.51 Feed Cost
  - $48.37 Non-Feed Cost
  - $5.30 Death loss

  - $128.18 Total Cost per head
  - $(4.72) Profit per head

- Live weight
  - $45.73 / cwt.
  - $27.60 / cwt.
  - $17.91 / cwt.
  - $1.96 / cwt.
I.S.U. Return Model

Monthly Profit / head through 3/2017

$120.00
$100.00
$80.00
$60.00
$40.00
$20.00
$
$(20.00)
$(40.00)
$(60.00)

Jan-05  Jul-05  Jan-06  Jul-06  Jan-07  Jul-07  Jan-08  Jul-08  Jan-09  Jul-09  Jan-10  Jul-10  Jan-11  Jul-11  Jan-12  Jul-12  Jan-13  Jul-13  Jan-14  Jul-14  Jan-15  Jul-15  Jan-16  Jul-16  Jan-17  Jul-17
I.S.U. Return Model

Revenue and Cost per cwt. live

- Income / cwt.
- Cost / cwt.
Production

• Most systems at 26-30 PSY and many over 30

• Pig Survival
  – Harder to get to on a U.S. trend
    • Majority of our clients are marketing a higher percentage of weaned pigs (less death loss).
    • Also marketing a higher percentage to the primary market.
Difference makers

- Percentage of pigs weaned that are marketed to the primary market
- Feed efficiency from wean to market
  - F/G, kcal / lb. gain, feed cost / lb. of gain
- Pig cost at weaning
- Pigs per sow / year
- Grower space cost / pig marketed or lbs. marketed
- RISK MANAGEMENT
“World-class” Production
“World-class” Production
“World Class” Production

- Pigs weaned / MF / Yr. 30 - 35
  - Farrowing rate 90 – 95%
  - Total Born per litter 14.5 – 15.5
  - Born Live per litter 13.5 – 14.5
  - Pre-weaning mortality 7 – 10%
  - Total Weaned per litter 13.0 – 14.0
  - Sow death loss 6.0 – 10.0%
“World Class” Production

• % Marketed as Grade ‘A’ 92 – 95%
  – Death loss (combined) 4 – 6%
  – Culls marketed 1 – 2%

• Average Daily Gain 1.75
  – Nursery (13 – 60#) 1.00
  – Finishing (60 – 280#) 2.10

• Feed Conversion 2.50
  – Nursery (13 – 60#) 1.50
  – Finishing (60 – 280#) 2.70

• Grower space utilization >2
Target Mortality (W-F)

- Weaning – 3 weeks post-weaning 1.0%
- 3 – 12 weeks post-weaning 0.5%
- 12 weeks post-weaning to market 1.5%
- Culls (Euthanasia & Marketed) 2.0%
Challenges

• External
  – Concentration of pig production in some areas
  – Training and motivating contract growers

• Internal
  – Focus on continuous improvement
  – People, engaged and productive teams
  – Managing pig health
  – Execution at the farm level
    • Breeding – Farrowing – Growing - Marketing
Questions / Discussion

For the latest updates within the swine industry, check out AgStar’s Hog Blog at:
www.AgStarEdge.com