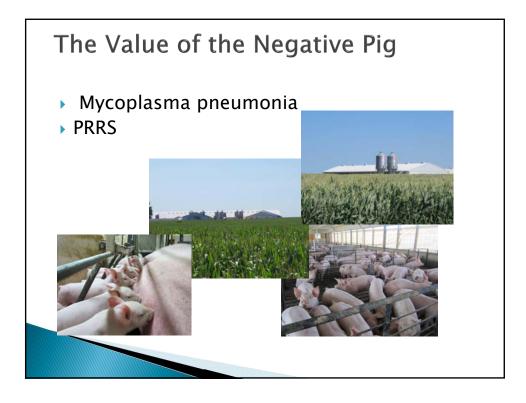
The Cost of *Mycoplasma Hyopneumoniae in Growing Pigs*

2015 Leman Conference September 21, 2015

The Cost of Mycoplasma Hyopneumoniae in Growing Pigs

- Not a statistical analysis
- Close out data: one M. Hyopneumoniae negative and two M. Hyopneumoniae positive pig flows
- An attempt to determine the cost of M. Hyopneumoniae in the growing pig



Why we have Pursued Mycoplasma Negative Status

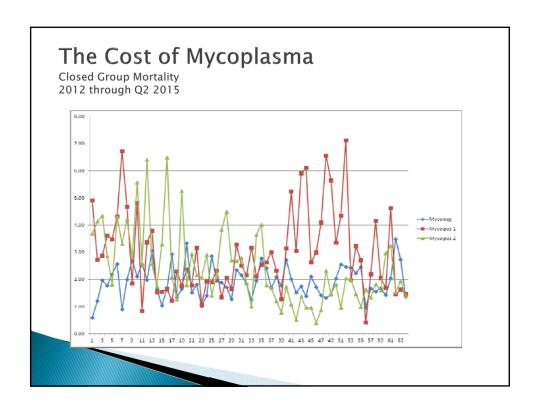
- Mycoplasma elimination programs
 - Predictable outcome when well-designed and implemented
 - Relatively low cost of implementation
 - Capturing the value of the negative growing pig

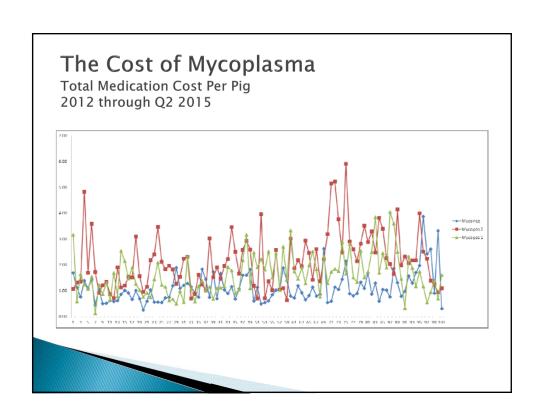
Get one of the three out of the equation

Mycoplasma pneumona + SIV + PRRS

The Cost Mycoplasma In the Growing Pig

- Farm 1: PRRS negative, mycoplasma positive
- ▶ Farm 2: PRRS p/n, mycoplasma positive
- Farm 3: PRRS p/n, mycoplasma negative





- Overlaying finishing group mortality and medication costs:
 - Medication response to current status
- Analyzing intervention strategies
 - 4 to 6 month time horizon (vaccine timing, antibiotic therapies)
- Changes in gilt developer mycoplasma status
 - Closures for PRRS results in a change in mycoplasma status when entering the breeding herd

The Cost of Mycoplasma

| | | | | | | Feed | Other |
|---------|------|------|--------|--------|-------|------|-------|
| | ADG | FG | Adj FG | Dead % | Sub % | Meds | Meds |
| Huiras | 1.85 | 2.77 | 2.77 | 2.29 | 1.81 | 0.42 | 0.72 |
| Kaylor | 1.81 | 2.79 | 2.79 | 2.78 | 2.48 | 0.74 | 1.15 |
| Sundlee | 1.83 | 2.83 | 2.83 | 2.58 | 1.99 | 0.85 | 1.32 |

The Cost of Mycoplasma

| | ADG | Adj FCR | % mortality | % subs | Med Costs |
|-----------------|------|---------|-------------|--------|-----------|
| Myco negative | 1.85 | 2.77 | 2.29 | 1.81 | \$1.14 |
| Myco positive 1 | 1.81 | 2.79 | 2.78 | 2.48 | \$1.89 |
| Myco positive 2 | 1.83 | 2.83 | 2.58 | 1.99 | \$2.17 |

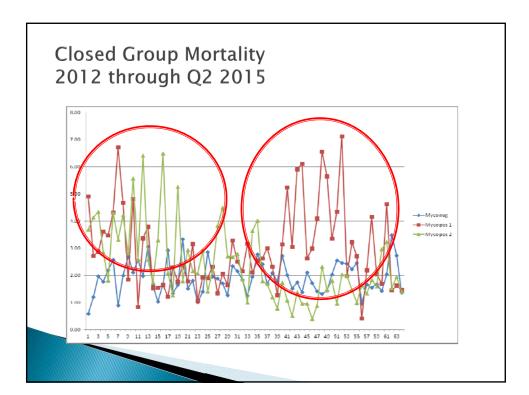
ADG FCR Mortality Substandard Pigs Medication Costs

The Cost of Mycoplasma in the Growing Pig

| | vs Myco negtive |
|-----------------|-----------------|
| Myco negative | |
| Myco positive 1 | \$2.58 |
| Myco positive 2 | \$2.83 |

- ▶ Based on 3.5 years of close out data:
 - Approximately \$2.50 increased cost of production on mycoplasma hyopneumoniae positive pig flows over negative pig flows in the grow-finish phase
 - Additional costs of antibiotic interventions at weaning: \$0.75-\$0.90 per pig
- During periods of instability, co-infections (SIV, PRRS) this cost increases dramatically

Quarterly Average Increased G-F Cost Mycoplasma negative flow vs. positive 58.00 58.00 59

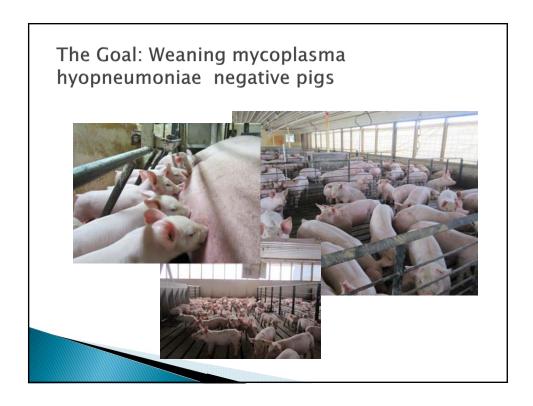


Additional Costs associated with Mycoplasma Positive Status

- Additional cost of a mycoplasma positive pig flow: a mycoplasma positive gilt flow
 - Reduction in selection rate
 - Medication cost at the gilt development level
- Additional cost of a mycoplasma positive pig flow:
 - Time required to administer treatment
 - Employee morale

The Cost of Mycoplasma Elimination from a Breeding Herd

- ▶ 2nd gilt developer: \$0.50 per pig
- Antibiotic therapy: \$0.25 per pig
- Production losses during closure (reduction in breed numbers, weaned pig output): \$0.25?
- Estimated cost per weaned pig: \$1.00
 - (Costs associated with herd closure/elimination program allocated over one year of production)



Thank you/Questions

Acknowledgements and Thank you: Dr.Maria Pieters Dr. Steven McNutt Dr. Paul Yeske

