Benchmarking – Production Practices Used By the Most Profitable Companies

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- Background

Presenter's Note: This presentation will utilize average and top 25% data from the most current Agri Stats report presented in graph and/or table form. To make the presentation and information more timely the presenter will use the most current data available during the Banff Pork Seminar in January, 2011. Therefore, this written paper will be a simple summary of what is expected to be presented and will include general concepts and experiences based on years of evaluating and analyzing profit, cost and performance data. Actual data will be presented at the 2011 BPS.

Agri Stats is a privately held company that provides professional benchmarking services to the commercial livestock industries. Currently, benchmarking services are provided for broiler, eggs, turkey, and swine production companies as well as their slaughtering and processing plants. Agri Stats started in the mid 1980’s with broiler benchmarking services. There are now twenty-one international companies participating in Agri Stats with the majority of those located in USA, Canada and South America.

Benchmarking companies collect participant financial and production data electronically each month. Internal auditors convert the data, prepare it for comparison and perform the monthly audits. Each company’s costs and financials are reconciled to their general ledger. Participants receive monthly detailed reports and performance summaries that allow them to compare their performance to other participants, the average of all companies and the top 25%. Current month, current quarter and previous twelve month periods are reported.

In swine, there currently are forty-five finishing locations and thirty-five sow locations included in the Agri-Stats monthly comparison. The monthly report
accounts for a little more than 1.8 million sows and 3.2 million weaned pigs. Over a twelve month period, the number of weaned pigs included in the analysis is approximately 38 million. The finishing comparison includes about 35 million pigs over a twelve month period.

Each monthly report contains eight sections for analysis and comparison: Performance Summary, Feed Mill, Ingredient Purchasing, Nursery, Finishing, Market Haul and Profit. Participants also receive an abbreviated Key Performance Indicator report as well as historical graphs. Agri Stats account managers conduct on-site live reviews to assist with report utilization and analysis.

**Production – Cost Relationships**

A profit factor and variance analysis was performed for the years 2007, 2008 and 2009 to determine the advantages that the most profitable companies have over other participants. Rankings and variances to the average company were recorded for twelve performance measurements. Totaling variances by category and expressing them as percentages identified the categories where the Top 25% held bigger advantages. This analysis revealed the following observations:

- Those companies in the Top 25% in profitability did not necessarily have the best production. They did, however, have advantages in cost. This does not mean the most profitable companies had poor performance or the issue of throughput can be ignored.

- It was possible to rank near the bottom in key production parameters yet still be at the top of the list in profit. Each company has their own “story” or combination of strengths that give them advantages.

- Some companies that received lower sales prices still ranked in the Top 25% in profit.

- Getting more pigs to market – whether by less market variation, lower mortality or higher productivity – seemed to be the most critical production category affecting profitability.

- Percent market culls (or percent top value pigs), mortality in nursery and finishing and pre-Wean mortality were three of the top four categories in variance advantages for the most profitable companies for each year analyzed.

- Traditionally, popular performance measurements such as gain/d, feed conversion, number born live, pigs/mated sow/year (PMSY), etc. did not show up as top ranking advantages affecting profitability. Of course they do impact throughput and cost and have to be evaluated.
Some companies with exceptional weaned pig production have significant weaned pig cost disadvantages.

In 2008 and 2009, feed cost per ton advantages became stronger for the best in profit and this variable kicked weaned pig cost out of the top five profit factor advantages. Still, those that were in the top 25% in profit were very similar to the average in weaned pig cost – that was just not their advantage.

It was evident that some companies were sacrificing feed conversion performance for lower cost per unit of gain as feed cost pressures hit in 2008 and 2009.

It appeared that overcoming poor performance with lower cost would be easier than trying to overcome high cost with best production.

This analysis and these observations obviously reflect the findings from this data set and may not be completely applicable to all swine enterprises. No regression analysis was performed to predict top profitability factors. Likewise, no statistical analysis was done to eliminate effects of covariates and identify true sources of variance or advantages. However, the basic findings seem very logical – get more pigs to market, don't feed or house them and then let them die, and work to have lowest cost.

The fact that the number one company in profit did not rank very well in PMSY indicates other factors can greatly influence profitability and we cannot just focus on bragging about the best PMSY. Companies with higher feed costs/ton made it in the Top 25% list by being efficient and having advantages in other areas. Again, while improving production is an important effort, it may not always be the most profitable decision. The bottom line take home message is that a swine production company or entity needs to be aware of their advantages and disadvantages so they may properly position strengths and allocate efforts for improvement.

### Five Year Trends

In addition to the profit factor analysis, five year historical trends for profit, cost and performance measurements were also evaluated. Degree of change over the five year period was also measured for the average, the top 10% by trait, the top 25% in overall cost and the top 25% in profit. Key observations from these analyses include:

- Improvement in sow herd performance was seen for all categories. A linear increase in Total Born, Number Born Live per Litter and Number Weaned per Litter was observed.
The top 25% in weaned pig cost and profit have more aggressively lowered pre-wean mortality while the average has actually increased over time. This indicates a widening gap between the average and top 25% companies.

Companies that were highest in profitability had stronger cost advantages than sales price advantages. Cost advantages were largest in pig placement cost (cost of the pig when placed in finishing) followed by facility cost and feed cost, respectively.

Finishing ADG and FC were not better for the most profitable group and were very similar to the average.

The only advantage the top 25% in weaned pig cost had to the average was in pre-wean mortality.

**Conclusion**

As discussed earlier, higher production levels do not guarantee lower costs and/or higher profits. Companies that get more high quality top dollar pigs to market and have decent production tend to be most profitable. Lower market culls, nursery/finishing mortality and pre-wean mortality appear to be the top three drivers of profitability in this population. Swine production companies need to be able to measure their strengths, advantages and opportunities in order to focus efforts on lowering costs and improving profitability.