

Who's taking the lead on Production Economics?

# The Mythical Performance Curve for Net Sow Output



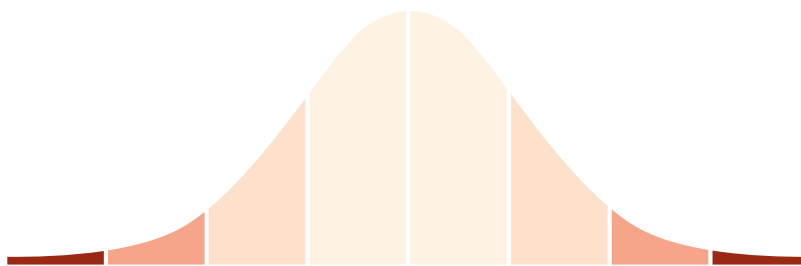
One of the most neglected parts of sow management is the culling process. In our experience, when most farms voluntarily cull an animal, they do so on the basis of total parities or age. There is this mythical performance curve for net sow output, which on average, rises from the gilt litter and peaks somewhere in the third or fourth parity. From there, it is all downhill.



The mythical part is the belief that on average, the whole farm parity structure should reflect the greatest number of animals in the most productive parities. The problem with this strategy is you simply can't "set it and forget it," only bothering to glance at the average parity to assure yourself you are managing the herd well.



# Don't just look to the average for guidance



## What is 'average' anyway?

Don't just look to the average for guidance. As a quick example with simple math, we know you can achieve an average of 50 with two numbers when those numbers are 0 and 100. Most people begin to scratch their head when they realize that you can also achieve an average of 50 with the numbers 49 and 51. Note the extreme values in each case. In the first case, the spread is 100 between top and bottom. In the second case, it is only two. **Looking at the average conceals what is going on "beneath" the average to generate it.**

In the sow herd, what is going on beneath the average is critical to optimizing performance and getting the voluntary culling decision right. If you achieve your target parity with lots of very young gilt litters and sows and very old parity animals (the "0, 100" farm), you will have a very different outcome than achieving it with a more profit optimal and balanced distribution of parities which doesn't become unbalanced quickly with the next weaning/culling events.



## Every farm is different?

The truth of the matter is every farm has a different optimal parity structure (sometimes slightly different than the touted benchmark number and sometimes a difference a little more than that). These "rules of thumb" can be very useful in managing a herd where analytical capabilities are low or where data is not available due to cross-fostering and the like. However, within five years, the profitability left on the table using averages to benchmark the sow herd (*and the rest of the farm's performance*), will mean the difference in being competitive and being part of the "also rans."

Right now, the methodologies to fine-tune the culling strategy are not readily available at the farm level and neither is the data, even when we ask the simple question of how many pigs each sow farrowed that achieved acceptable weaning weight. The practice of cross-fostering separates some or all of the piglets from a poor-doing birth mother. But, when placed with a nurse sow or another litter, these piglets get "lost" with respect to traceability back to the birth sow at weaning. Because of this, individual sow performance is often impossible to calculate.

**We believe where profits are left on the table, the relentless competitive forces of the industry will create insight and new technologies to capture it, so the day of averages is limited.**

## Relentless forces

In addition, sow managers are often too busy trying to make sure the target breeding group number for the week is achieved and the animals are successfully bred. Few veterinary practices still perform analytics like they used to in the 1990s when the industry was in a euphoric expansion and reinvestment phase. During that time, everyone was excited to see how efficient and profitable the new, larger-scale, indoor farm operations could be.

Market crashes, mini disease epidemics and the commoditizing of the new, more efficient farms resulted in allowing the farm technology to "do the work" while focusing on good, consistent standard operating procedures. This reduced one-off, "lone ranger" decision making by (even) managers. Managers will take a look at the records, but most of the time, they are looking at current numbers or last week's (or month's) average and guidance will simply be back toward the national average or some similar benchmark.

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