



Pig Improver

PIC®

Making Every Mating Count

Looking beyond breeding and semen handling for answers

Traditionally, when farrowing rate trends are flat or down, our first instinct is to blame breeding or semen. However, there are more factors involved that influence farrowing rates and many times data is pointing us in a different direction.

PIC took a data deep dive to look at trends and further understand all factors affecting farrowing rates and how they impact each other on a system level. The goal? Find opportunities and make every mating count.

What story is benchmarking telling?

When evaluating the different global benchmarking data sets available, the PIC Technical Services team pointed out three key points:

- Farrowing rate trend has remained flat over the last five years.
- The gap in farrowing rate between the top 10 percent and the average is between five to six percentage points.
- Sow death rate (in the same period) increased one point a year. Both the mean and the top 10 to 25 percent of the sample experienced an increase, which leads us to believe farrowing rate and sow death rate root causes are closely connected.

What does this mean?

"The industry is getting better in terms of reproduction like semen handling and semen quality and tools available for breeding females," explains Dr. Sergio Canavate, PIC Technical Services manager. "What's happening is we have opportunities in other areas that are not exclusively based on reproduction or semen, like the quality of the females bred or environmental factors or health."

Finding the root cause

Farrowing rate is an indicator, just like high blood pressure. High blood pressure is an indicator of an underlying ailment.

"When farms start having farrowing rate challenges, in most cases, their first reaction is to protect the farm throughput, with the hope to find the origin of the problem quickly and fix it." says Sergio. "They try to increase the number of matings to compensate for losses to try to maintain the number of farrowings per week."

For example, if a 5,600-sow farm increases weekly matings by three percent, that means breeding 10 more sows per week. In a 20 week reproductive cycle, 200 more sows being bred which means 200 more animals over inventory.

If the problem is not fixed, that 'temporary solution' sets off a chain reaction of additional challenges. This can lead to higher sow inventory, a higher pool of opportunity females bred, inconsistent gilt utilization, and fluctuations in the number of sows bred and farrowed per week.

"It is important to shift away from talking about the farrowing rate issue and start talking about reproductive efficiency issues because it's more than just farrowing rate," he says. "From the technical services' standpoint, the first thing that we look at is what happened with the other 10, 15, or 20 percent that didn't farrow?"

Knowing and analyzing that information will provide a better chance to identify the root cause.

"We need to analyze where the reproductive failures are happening, in which part of the gestation period is it happening, and what kind of reproductive failure issue do we have?" he says. "If we don't have data, we cannot fix it. We cannot understand the root causes of that issue."

Now there is a tool to help pinpoint the root cause. PIC Technical Services developed the ReproTool, a globally applicable tool that uses farm data to help farms understand their reproductive failures, economic impact and potential opportunity areas.

Once data is analyzed and the root cause uncovered, plans can be made to mitigate or eliminate the cause based on the system.

"We understand that not all systems are the same and addressing the root cause can take time, but nevertheless, analysis of data and identification of the root causes should not take long and should be part of the production and technical service routine," explains Sergio.

Contact your PIC team to discuss reproduction efficiency and [make every mating count](#) on your farm.