

Evaluating the Future of the Herd



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Today's sows are highly prolific and managing them is essential to optimizing productivity and profit. Starting with what is known today, the presentation outlined the current challenges and questions that float around the maternity barn. These issues include:

- sow retention,
- gilt development for lifetime performance,
- modern gilt growth rate,
- lactation feed and water intake and its impact on weaning capacity and body reserve mobilization.

Currently, sow mortality is notably high between P1 and P2, with the most stated reason for removal being reproductive issues and followed by lameness. Regarding practices in gilt development to maximize lifetime performance, the presentation highlighted the importance of having at least one heat-no-service (HNS) before 190 days of age. Because gilts are growing very quickly, it is important to start boar exposure early to stimulate heat. Using internal data, it was shown that gilts bred on the second or third heat have better farrowing rates, total born, and retention to P3. Results also showed that through genetic improvement, gilts are growing faster; this is important as gilts are reaching sexual maturity earlier and there is a greater chance that animals are getting bred too heavy, resulting in poor performance and more lost sows. Gilts should be bred in the optimal window, focusing on the correct weight, age and most important HNS. Regarding the parity 3 fertility index (total pigs born and weaned at parity 3), missing weight, age and HNS results in a marked decrease in performance compared to the ideal quadrant of breeding at the preferred age with HNS.

Energy Requirements

Regarding what PIC is currently learning, results indicated there is a clear focus on peripartum metabolism and weaning capacity. Since gilts are growing faster, there is an obvious risk of her being overweight at first breeding as outlined above. Breeding heavier gilts will result in heavier sows, which will have greater metabolic maintenance needs than ideal body weight counterparts and result in greater feed costs. Many breeding companies have recently updated their recommendations on metabolizable energy (ME) or net energy (NE) provision to gestating sows and gilts. They have also created updated caliper stickers to provide more insight into animal condition,

suggesting calipers should be used to track body condition around farrowing, at weaning, and again at 30 or 40 days of gestation so that the feed curve can be adjusted appropriately. Additional research indicates sows should be getting a full feed as soon as possible after farrowing, ramping from day 1 with the goal of reaching 5 kg at day 5 and maximum consumption of 8-10+ kg by day 10.

Water

The importance of water is also clear, as the production of 1 L of milk requires about 2.5 L of water intake – at the peak of milk production, a sow may drink 45-50 L of water in a day. This puts a spotlight on the importance of good water flow in the farrowing crates, and that gilts must be familiar with the style and location of the drinker before she farrows; peanut butter or any other management technique to stimulate water intake will help the gilt locate and explore the nipple if you notice that she is not drinking.

Implementation

Key gilt development practices he highlighted included early boar exposure and puberty induction (21-24 weeks of age), combination of fence exposure or having boars inside the pen, Meishan is preferable, but any other boar line can be used, it's important to maintain boars in ideal body weight, high libido and endurance. Use of pheromones as extra stimulus, however boars are required. Finally, ensuring a good environment in gilt pens to reduce the risk of injury (space allowance and enrichment). Heat-no-service practices were highlighted once again – track and record HNS age and weight in a record system and aiming for most of the breeding aiming for the most breeding on the right fertility quadrant: proper weight between 135 to 160 kg, proper age between 190 to 220 days and proper HNS protocol on second or third heat

Regarding feed management, feed intake should not be limited to control weight, and that it should be maximized before the first service. Additionally, gilts should be fed to the caliper, ensuring ideal body condition at due to farrow, this will indicate proper feeding levels throughout gestation. In preparation for farrowing, feed level should be maintained at gestation level but provided over multiple meals, water intake should be monitored to ensure that the gilts know where the nipple is and try to load farrowing crates with gilts close together for easier gilt management during farrowing and lactation. In the first five days following farrowing, aim to identify non-eaters within the first 24h, increase feed provision and intake over the first 3-5 days, and ensure there is ample water flow to facilitate milk production.

