

Back to Basics: Herd Management Lessons from COVID-19

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In response to these especially volatile times, producers have been faced with having to make rapid changes. These changes have led to some unintended consequences, many of which would often be considered positive in a typical dairy market. When producers take a step back to ensure they are doing the basics of herd management, it provides cows the best environment to be productive and healthy. Below are some reminders of best management practices, and stories of producers who implemented these strategies and saw positive results.

- **Cow Comfort**
 - Given that cows spend about 11-12 hours per day lying down, providing a properly designed and managed stall is one of the most significant factors impacting cow comfort and production. While deep-beds are usually considered the “gold standard” (reduced lameness, fewer injuries, higher lying times), other types of stalls can work really well with the right amount of bedding and management. Cows lay down longer with more, dry bedding, and lameness is reduced when there is at least 2 inches of bedding covering the stall surface. Maintaining stall hygiene and comfort is key to overall cow health and performance no matter what the circumstances.
- **Stocking Density**
 - When cows are too crowded, lying time is reduced, feeding rate increases, competitive interactions increase, and milk production and reproduction can suffer. While there are multiple research studies that show these negative impacts of overcrowding at the feedbunk and the stalls when stocking density gets above 115-120% and less than 24 inches of feed space, there is no perfect stocking density – this is a number that is herd and situation specific. What works on your herd is unique given your facilities and management, and it will vary depending on other factors, such as outside temperature, time spent out of the pen, feed management. Stocking density is something that should be continually evaluated, and you may be surprised that you’ve slowly crept up and are above an optimal level. Several producers have mentioned how they sold an extra 20, 50, or 100 cows and milk in the bulk tank actually went up.
- **Water Space**
 - When was the last time the linear water space was evaluated per cow in the high pen? Recommendations are for at least 4” of linear water space per head, but often pens have been crowded and cows on average have less than 2” of water space. One producer recently pulled out waterers that were not using the full length of crossovers, as he measured only about 2” per head, and put in waterers that fit the full length of the crossover, putting him closer to that 4” per head. Within a week, the whole herd average increased about 4 pounds of milk. This is in agreement with research that has shown a linear milk response with increasing water space.
- **Diet Considerations**
 - High quality forage sources in lactating cow diets are always important, but become increasingly so when we raise the forage to concentrate ratio. This has been a strategy to reduce excess milk production, increase components, and contribute to overall

rumen health, without threatening future production. Working with a nutritionist to properly balance and strategically feed a higher forage diet will also give producers a chance to uncover opportunities to save on diet and health costs, and set a plan for forage production and inventory goals in the future. Many producers have also taken this opportunity to work with their nutritionist to become more knowledgeable about the return on investment of feed additives, while focusing on a more efficient and profitable ration with better cow health and components.

- **Strategies for Feeding Milk to Calves**

- Feeding an increased plane of nutrition to calves has long been recommended and studied by researchers at Cornell. The benefits include higher and more efficient growth rates early on that last throughout the cow's productive life, as well as increased nutrient availability in times of cold stress (where nutrient requirements are increased for maintenance and growth) and for immunity response. The presence of excess milk production over what milk processors will pick up have given farms the chance not only to feed whole milk to calves, but the opportunity to keep calves on milk longer. Transition milk (the first four or five days post-calving) contains a high amount of growth factors that research says enhances health and long-term performance of calves. Producers have experimented with extending milk feeding up to 60-90 days of age, which has reduced waste of excess milk, and showed noticeable improvements in calf growth and condition.

- **First Lactation Cows**

- It is well recognized that heifers have different requirements than mature cows; in terms of growth, milk production and behavioral/social needs the first lactation heifer is a vastly different animal than a 3rd or 4th lactation cow. Herds that take the time to identify a strategy for making a separate plan for housing first lactation animals see results quickly, and often state they wish they had done it sooner. One producer, after figuring out how to manage lactating first calf heifers separately, saw pounds of milk at peak increase almost ten pounds and whole herd milk production increased almost five pounds.

- **Culling Strategies**

- What does your optimal herd look like? We have seen farms experience disturbances in labor, and reduced milk pickup. This had led to farm managers to evaluate each cow before you invest in dry cow treatment, or another straw of semen/sync program. On the heifer side, determine how many replacements are needed, and whether each heifer has the potential to improve overall herd performance when she reaches the productive stage. Producers have improvements in overall herd performance when choosing to cull less productive and problem animals.

- **Farm Team Communication**

- Communication between employees and the farm management team is important during the best of days, and especially during times of struggle or challenge. Writing protocols and organizing staff meetings are probably most farmers' least favorite tasks, but they are critical to a smooth and successfully run farm business. Further, most dairies are required to have written protocols and continuing education training with their employees through programs like the FARM Program. Ensure your dairy has a

detailed on-boarding process for new employees, up to date written protocols (in their language), and a plan to have staff meet regularly to not only address issues as they arise, but also to celebrate farms wins, contributing to a sense of farm culture and community.

- **Recognizing All Farm Options**

- When thinking about making a change, only looking at one option is just that: a farm either makes a change or stays doing what they're doing. Instead, producers should sit down and evaluate the problem or issue at hand, and identify a few ways to remedy that problem. Sitting down with a CCE farm management consultant to do a partial budget analysis on more than one option often gives clarity to what move is best. Today, a hard option to think through might be what it looks like not dairy farming, but in some instances that can be a valid scenario to work through. In the end, a change in operation should be the result of a decision-making process and not a knee-jerk response. CCE educators can help with the process.

