

## **Focus On Efficiency**

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Labour availability has become a challenge to most dairy farms. Consistency and time management are the keys to success. Ultimately this boils down to how well you are able to stay on schedule, planting and harvesting crops at the right time, delivering feed at the same time of day, milking at the same time, and feeding and cleaning calves regularly. Attempting to find a short cut or speeding up any one of these procedures often leads to outcomes that add work and time on your dairy each day.

Research has reinforced that a successful calf rearing program will afford you the opportunity to reduce the age at first calving and improve milk production in the first lactation. Spending money on your calves is an investment in your dairy's future. As a framework for this discussion, let's focus on opportunities to improve the efficiency of raising calves, without compromising your goals.

From a 2019 Progressive Dairy Operators survey, which included 117 Canadian dairies, labour was identified as the second largest expense on a dairy. Most farms reported calf feeders were most likely to stay in their position for less than 1 year. They worked on average 20 hours per week. Finally, their hourly wage was in line with other non-management position on the dairy. Participants in the study reported the biggest challenge to finding new employees included applicants not interested in the type of work, hours were not suitable to the applicant, and applicants lacked specific skills for the job available.

How do we recruit, retain, and motivate the calf feeder or reduce the time that it takes to look after calves? Many industries use a "Lean Management" model for solutions to improve working conditions. Many of these solutions do not require monetary investment just an evaluation of your routine focusing on removing wastes and improving work methods.

Before changing anything, it is important to define your calf raising goals. These include but are not limited to colostrum collection and delivery, cleaning of feeding equipment and calf housing, and making a plan for ventilation. The evidence for the importance of all of these components of a calf raising program have been established. Next, determine which measures you will use to evaluate the success of these goals. Your veterinarian will have tools to assist determining which measures to use and assist in monitoring results.

Measuring colostrum quality, passive transfer success, bacterial counts on feeding equipment, and moisture in bedding material provides early measures that will redirect your focus on producing a healthier calf that will turn into a more productive cow.

With a plan on how you are going to raise calves and numbers to evaluate your performance, you can start to look at how you actually are getting the job done. Are there opportunities to make the task more efficient by eliminating waste? "Lean Management" waste types and examples include:

- Transport - Poor farm yard layout resulting in excessive movement of materials.
- Inventory - Excess or unnecessary machinery, excess heifers, calving heifers too old.
- Motion - Unnecessary searching for tools, medicine, or obstacles to efficiently deliver milk, water and calf starter to calves.
- Waiting - For hot water, machinery, delay between collection and feeding of milk.

- Over-production - Taking too much milk, making too much milk replacer, storing too much feed.
- Over Processing - Duplicating paper work.
- Defects - Disease outbreaks in the calf barn, machinery breakdowns.
- Skills - Not training employees.

If you are a farm that employs a calf feeder, include them in the investigation of potential areas of waste. The goal of Lean Management is to challenge the farm to benefit from simplified, standardized work routines to ensure that each job is completed correctly. Employees appreciate taking responsibility for their assigned tasks and having input into how the routine tasks are completed. It is the owner's job to encourage them with positive feedback and assisting them to identify the potential reasons for shortcomings.

When a defect occurs, such as a summer diarrhea outbreak in calves, there is already an algorithm for investigation with recent data. Has colostrum quality changed? Are calves getting enough colostrum at the right time? Is the milk feeding equipment being cleaned frequently and appropriately? The 4-step cleaning protocol for milk feeding equipment works well if followed. However the disinfectant that you use will have variable activity against different 'bugs' that cause diarrhea. For example, many disinfectants have activity against the bacteria and viruses that cause calf diarrhea while very few compounds have any activity against cryptosporidium.

Adding automation to replace labour is very tempting, especially as finding people to work becomes more difficult. The automated monitoring of calf intake and feeding frequency offers health monitoring solutions. However, labour saved in daily feeding must be invested in designing and implementing a cleaning protocol for an automated feeding system to reach your calf goals. Similarly increasing the amount of milk being fed to calves with either an automated calf feeding system or added feedings per day will increase the amount of urine and manure in the pens. This will require a change in the cleaning frequency of the pen support the anticipated improvement in calf health and growth.

Sometimes the issue is simply overcrowding. Surplus heifer inventory with a shortage of available labour has a solution. The use of beef semen to control heifer inventory is becoming standard practice. Know what your maximum capacity number is for each age group and do not exceed this number. If you choose to overcrowd then modify your cleaning schedule to attempt to accommodate the change.

Give your employees opportunities to learn. This can be as simple as including them in visits with farm advisors like your veterinarian or nutritionist. In long term employment situations, sending the calf raiser to a short course or conference on calf management will ultimately make your calf program better.

Returning to the challenges expressed by farms in recruiting employees:

- Potential candidates are not interested in the type of work: Caring for healthy calves is a very rewarding experience, maintaining a clean well organized calf facility will go a long way to make the job more interesting.
- The hours were not suitable to the applicant: Critically evaluate what time these jobs need to be done. Can you make the hours more palatable to potential candidates? Is the absolute time critical or is the interval between events that matters most?

- Applicants lacked specific skills for the job available: With a clear description of the job offered and a commitment to continued coaching, and performance review you have the opportunity to mould the employee to your program without inheriting previous bad habits. Use this opportunity to better understand your farm and improve your work place environment.

Whether you find an employee or not, critically evaluating the flow of work on each management area of your farm has the opportunity to reduce the effort and time required to achieve your goals.