

Sponsored Topic

Optimizing Personnel Management with Emphasis on Dairy Cattle Welfare

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INTRODUCTION

It is common to observe great variation in dairy personnel performance and turnover within and between dairy herds. Farm owners and managers determine whether or not to hold training programs for their employees for a variety of reasons. They often struggle to balance investing the time and resources that go into training with employee turnover.

Recently, we assessed the types of training requested by stakeholders for their dairy personnel and the actual problems reported by workers. A total of 1,100 individual written requests for dairy personnel training were assessed to determine the perceived needs for training by stakeholders (farm owners, managers, veterinarians, or consultants). According to stakeholders, the top 5 requests for personnel training were as follow:

1. Milking routine and mastitis control
2. Nutrition management (TMR and feed bunk)
3. Health screening for cows and calves (including proper animal handling techniques)

4. Replacement heifers (e.g., calving, colostrum)
5. Health and management protocols

These training sessions consisted of a 1-h lecture followed by 1–2 h of demonstration and supervised hands-on practice designed to improve both knowledge and skills. At the beginning of each training session, dairy personnel answered the question, “What problem needs to be addressed to improve your work?” We received written responses from 2,900 individual workers representing 450 dairy herds distributed in 11 US states and assessed them to determine the actual needs by personnel responsible to execute the daily tasks. The top 5 areas to improve work performance, according to personnel, were as follow:

1. Lack of communication with co-workers or managers
2. Lack of written protocols and resources for the tasks
3. Lack of facility maintenance
4. Properly organize and schedule tasks
5. Schedule regular meetings to communicate and discuss tasks or issues

They share a *system-in-place* with the following characteristics:

1. ***Committed and well organized herd managers:*** These herd managers are characterized by their problem-solving and communication skills with a trusted relationship with their workers and advisors. These individuals have excellent organizational skills, manage their time effectively and always make sure workers have the tools and resources to execute their tasks. Usually, these managers actively seek and accept feedback, either positive or negative, and look for ways to improve their operation. They tend to devote a large portion of their daily work hours to mentoring and supervising workers using a list of *talking points* (e.g., potential conflicts or signs of distress among workers, consistency of daily TMR delivery, timing of colostrum administration, milking schedules, monitoring body condition of animals). They are always making sure their workers are properly compensated for their work, including a fair distribution of bonuses. Also, they value formal continuing education programs outside their working environment and interaction with professionals and colleagues (example feedback “*the opportunity for outside professional development and interaction allows me to re-energize and overcome the wear-off associated with my daily routine*”). A well trained manager who focuses on managing the working environment will likely improve workers’ attitudes. This in turn improves teamwork (compliance with protocols) and often overcomes many other farm limitations, such as facilities.
2. ***Management program designed for transition cow needs:*** Although the

word *program* was not always used during our farm visits, they did have a *plan of action* detailing what tasks needed to be completed (who, when, and what resources should be used). In practice, the program was characterized by having a defined grouping (with weekly cow move) and feeding strategies for transition cows and calves that take into account their facilities. The overall program connected the following management areas:

- Defined strategy to prevent hypocalcemia in prepartum animals,
- Defined heifer replacement program and
- Defined strategy to manage energy balance and prevent ketosis in early lactation.

These areas were connected using health and management protocols that most humans can follow within the calendar week (greater than 90 % agreement between what was stated on protocols versus what people were able to do at the farm).

3. ***Record-keeping designed to monitor processes:*** They have implemented a simple, but meaningful record-keeping system with emphasis on monitoring processes. The record-keeping system integrated the following areas:
 - Nutrition management (e.g., bunk space per animal, daily availability of feed within reach of animals, forage quality, weekly urine pH when feeding on an anionic diet),
 - Cow comfort (e.g., stocking density, grooming of bedding),
 - Metabolic balance at the onset of lactation (e.g., energy and calcium),

- Survival/health events (e.g., stillbirth, metritis, ketosis, culling within the first 60 DIM), and
- Development of replacement heifers with key biological outcomes of lactating cows (e.g., milk yield and components, reproduction).

The farm team regularly meets on-farm with input from advisors (nutritionist and veterinarian) to discuss the data, review protocols and use benchmarks for decision making. They are aware of short term variations (e.g., due to environment) and usually do not overreact with sudden management changes.

4. ***Training program integrated and consistent with established protocols:***

The training program follows the established protocols, is available for all farm employees, and is delivered by in-house or third party trainers. Meetings with employees are scheduled at least every 2 mo to discuss meaningful items such as current protocols and making appropriate changes or management adjustments. The owner(s) or herd managers regularly attend these training sessions to remain engaged and generate meaningful discussions (collecting and providing feedback as well as answering questions or concerns). Knowing that the employer provides proper training and development, the overwhelming majority of farm workers feel valued and considered that their work was important. Often I hear *doubts* or *hesitations*” from owners to invest in a proper training program because workers will eventually leave the operation. Although personnel turnover is an inevitable part of the dairy business, perhaps the real question is: “What would happen if an employee decides to

stay without proper training?” An example of unclear recommendations written on protocols is, “wait 2 h and assist cows experiencing difficult births” or “if there is no calving progress call for help”. In this particular example, the calving protocol must provide clear reference landmarks for time zero and signs of the normal progression of calving; otherwise, most calving personnel would not be able to properly follow the above recommendations. Training should be a critical component of managing modern dairy operations because of its implications on the overall performance and welfare of animals.

The dairy business is the art of controlling variation and managing risk. The best or most successful dairy farms have achieved *consistent management* over time by integrating the 4 points listed above. Every dairy operation is an integrated system and management decisions made in 1 area of the farm will impact other areas. The entire transition cow management relies on a number of preventive management practices to achieve optimal lactating dairy cow performance and thus, profitability and welfare of the herd. Disease prevention at the herd level requires a constant effort and effective coordination of the whole system (animals, environment, facilities/equipments, feed/water, and personnel). Substantial knowledge exists to prevent many diseases or conditions; however, it must be translated into on-farm applications or practices to have a meaningful effect at the herd level. With the scrutiny of antimicrobial use and welfare practices in food animals, dairies are always under the watchful eye of consumers, legislators, and activists. It is important to have well trained employees who follow the established protocols.

CONCLUSIONS

Investing in the best genetics, nutrition, veterinary care, cow comfort, and equipment are all important for the dairy community, but will fall short without developing the *human element*. How to remain competitive? This is the big question. As a starting point, consider reviewing the consistency of your transition cow program (making sure animals receive a balanced diet) taking into account the facilities (e.g., grouping animals, comfort), resources for tasks, and personnel needed to properly implement the health and management protocols within the calendar week. Perhaps this conversation or exchange of ideas may lead to developing the *know how* of a more economically sustainable management system with best animal welfare practices for years to come. Have this discussion with your veterinarian and nutritionist. These little details make the difference at the end of the day.

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REFERENCES

- Schuenemann, G.M., J.D. Workman, J.M. Piñeiro, B.T. Menichetti, A.A. Barragan, and S. Bas. 2017. The fact and fiction about dairy personnel training and performance. *J. Dairy Sci.* 100(Suppl. 2):207, (Abstract).
- Schuenemann, G.M., S. Bas, E. Gordon, and J.D. Workman. 2013. Dairy calving management: description and assessment of a training program for dairy personnel. *J. Dairy Sci.* 96:2671-2680.
- Barragan, A.A., J.D. Workman, S. Bas, K.L. Proudfoot, and G.M. Schuenemann. 2016. Assessment of an application for touchscreen devices to record calving-related events in dairy herds and monitor personnel performance. *J. Dairy Sci.* 99:5662-5670.
- Galvão, K.N., P. Federico, A. De Vries, and G.M. Schuenemann. 2013. Economic comparison of reproductive programs for dairy herds using estrus detection, timed AI, or a combination of both. *J. Dairy Sci.* 96:2681-2693.
- Schuenemann, G.M., M.L. Eastridge, W.P. Weiss, J.D. Workman, S. Bas, and P. Rajala-Schultz. 2011. Dairy nutrition management: Assessing a comprehensive continuing education program for veterinary practitioners. *J. Dairy Sci.* 94:2648-2656.