

Worker Training and Education to Improve Cattle Welfare

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■ Take Home Messages

- Animal welfare on dairies is directly and powerfully influenced by the abilities and actions of the dairy workforce.
- High quality worker performance relies on three program components - well defined protocols for procedures; training for skills to perform tasks properly; education so that workers can apply good judgment in the conduct of their activities.
- Training programs are available to help provide protocols and task training for workers, but ongoing improvement in worker performance will be best achieved by investment of time and energy by the owner/manager and veterinarian.
- Good educators need to have the appropriate knowledge base, possess good people skills, and have passion for achieving optimal animal welfare on dairies.
- A good worker education program should seek continual improvement, break down barriers to communication, use good teaching methods, and set a good example of expected behaviors.

■ Introduction

One of the common attributes of dairy producers is their well-established ethic of caring for their animals. Virtually every dairy producer I know sincerely cares about the well-being of their animals, and strives to assure that their animals are well cared for. Unfortunately this does not mean that in fact dairy animals always fare well or really receive optimal care.

On many operations there are numerous areas where dairy animal welfare can be improved. Examples can easily be found by looking at rates of

dystocia, stillbirth, calf death loss, lameness, down cows and adult cow death losses. These represent situations where animals unquestionably suffer. While none of these types of problems can be eliminated in an animal population, they can often be greatly diminished, and when they do occur the affected animals need to receive proper care.

In many cases it is not the owner who identifies and manages individual animals. Increasingly dairy animals are handled and managed by employees, and in turn these employees frequently do not have the same background, training, or perceptions of the owner. Even family members will often fit this description. In such circumstances it is easy for producers to believe that observations are made, and actions are taken as they would personally do them, while in reality it is not the case.

■ **Why Are Worker Training And Education Needed?**

For any animal health or management issue we can derive information from statistics that describe the population, but in reality it is individual animals that make up the population, individual animals that are affected, and individual animals that require care. Therefore there is a profound influence on the animals that comes from the people who actually provide their care. One of the most important challenges to improving animal welfare in modern dairy operations relates to the problem of dealing with individual animal welfare on operations of increasing size. On smaller dairies it is equally important that the animal caregivers are prepared for their tasks.

Similarly, for routine animal care procedures such as colostrum administration, calf feeding, calf dehorning or castration, or animal movement within the dairy, there are methods that specifically enhance animal well-being and maintain good health, or improper methods that diminish animal welfare. Some of the reasons that substandard practices are commonly employed on dairies include lack of knowledge or tools to deal with the problems, lack of recognition that a problem exists, and perceived conflicts between economic constraints and ideal management practices.

Few dairies have active worker programs that empower the workers to continually improve animal welfare. For this purpose workers often need education about key principles of livestock care, and then follow-up with evaluations of performance at periodic intervals. In many cases the owner and the worker may not communicate well because of language and cultural barriers. One of the most important means of improving dairy animal welfare is the development and implementation of effective worker training and education programs.

■ Worker Training Plus Education

How does a dairy owner assure that the workers on the dairy are doing their jobs well? In recent years it has become very popular to develop **protocols** for various tasks. If a protocol is carefully thought through and properly written, it provides a template that defines good performance. It seems obvious that tasks should be done with consistent high quality if we expect to get high quality outcomes. But the existence of well-developed protocols on a dairy doesn't mean that workers understand them or follow them as they do their jobs.

Many people look at **worker training programs** as the means to assure that the workers have been taught to do their jobs properly and follow protocols. On the surface such training programs, just like protocol development, seem like a good way to resolve problems that arise from poor worker performance. Teaching a person **how to do something**, that is, **task specific training**, is certainly important. But the fact that a person knows how to do something does not assure that the task is performed that way, or that it is performed at the right time or under the right circumstances.

Beyond task specific training, workers also need to be able to evaluate situations and apply judgment about when to take certain actions and whether the goal is being accomplished, or when to change course and try something different. Beyond training, workers need **education about why and when** certain actions are taken in order to help develop judgment and critical evaluation of circumstances.

As an example, calving management and newborn calf care should be seen as critical elements of a dairy health program. The events that occur on the day of delivery have a profound influence on the health and survival of calves and their dams. Optimal management of these events requires good judgment and decision-making as well as appropriate skills. On many dairies decisions and activities in the calving management arena are made by paid employees. Higher rates of success require that these employees are well educated about the process so that they can make good decisions, well-trained in techniques so they can perform tasks appropriately, and provided with good protocols and facilities so that procedures are done properly.

■ Who Should Provide Worker Training And Education?

There are numerous sources of good worker training and protocol development. Some academic institutions and private businesses have specialized in developing worker training programs. Several pharmaceutical companies have begun to offer protocol development and worker training as

part of their interaction with dairies. A number of other companies that provide services to dairies also offer specific training programs. All of these sources have expertise that includes knowledge and understanding of high quality practices and procedures that should be performed on dairies. For example these entities can help a producer develop good colostrum management, calving management, milking procedure, sick cow management, and many other protocols. They can potentially perform on-farm training sessions to teach workers how to follow these protocols.

What the vast majority of these information and training sources lack is the opportunity to follow up with workers on a consistent and repeated basis. Consistent follow-up is necessary to reinforce the training, help identify misunderstandings and knowledge gaps, critique performance and help educate workers about when, where and why protocols are followed. Lack of follow-up leaves workers on their own to develop judgment and advance their understanding of nuances that significantly affect outcomes.

For example, a training program can inform workers about the three stages of calving and provide protocols for delivery of calves and postpartum care of dam and calf. But really understanding when to pull a calf, or appreciating when a dam's calving canal has been excessively traumatized and what change in procedure might have minimized the trauma – these judgments require experience, critique and feedback for most people. Even a couple repetitions of a calving management school will not accomplish this goal. As another example, good milking protocols can be developed and workers can be instructed on how to perform the procedures. But over time, if workers perceive that speed of cow movement through a parlor is the key indicator of performance then they may short-cut the procedures as they misunderstand priorities.

Who are the people in the best position to provide such ongoing feedback and critique of worker performance? Who can help educate workers beyond the simplistic level of being told to follow a protocol? These people are the owner or manager of the dairy and the herd veterinarian.

Many producers and herd managers get involved enough in other management aspects of the dairy that they fail to perform critical functions of worker education. Many producers/managers do not feel comfortable as teachers, or lack key pieces of information that would help them educate workers. Many veterinarians, who have this knowledge base, perform very little teaching. Many veterinarians do not perceive that producers want them to fill a role as teachers, and believe that producers are unwilling to pay their professional fees to be worker trainers and educators. On many dairies workers perform at a less than optimal level. Worker performance and animal care outcomes, including improved dairy performance and animal welfare,

could be significantly advanced if there were good worker training and education programs on the farm.

■ How To Provide Dairy Worker Education

The purpose of this presentation is to stimulate some thought about expanding our view of how to provide for the health and well-being of our dairy livestock by improving worker training and education. This is certainly important on large dairies that have inexperienced or poorly educated workers, worker turn-over, and reliance on workers to perform specific tasks independently without immediate oversight and supervision.

I will argue that training and education are equally important for small dairies that operate with mostly family labor. Why would it be any less important to educate the children of a dairy producer than it is to educate a paid worker when both people are performing animal care procedures? It seems that some people assume that family members inherently understand tasks better than paid workers. It is commonly true that family members have more investment in good job performance than paid laborers, but that does not equate with having the appropriate knowledge base and judgment to do the job optimally. Furthermore, there is commonly as big a gap in communication between parents and children as there is between owners and workers.

There is wide variation in people's teaching skills, as most of us have observed throughout our own education. However, teaching at the hand's-on, practical, small group or individual level is far and away the easiest level to teach. Trying to convey information to a large group, in lecture settings that are removed from the situation where activities take place, is indeed a challenge. Such settings cannot truly educate – they can convey information and increase awareness of topics and issues, and in some cases they can motivate attendees to take action, but they rarely educate people at the level required to exercise judgment in performance of complex tasks.

Conversely, if a person has experience and knowledge base and passion for good performance, and has the opportunity to work with a trainee in the performance of a task, much like a good apprenticeship, then many of the potential pitfalls that limit large group lecturing disappear. These are exactly the reasons why worker training and education by owner/managers and veterinarians can be very effective if those people take their educational opportunities seriously.

More than any specific teaching skills, people with the opportunity to teach apprentices in job performance need certain **'people skills'**. These include an enjoyment of working with people, understanding and passion for how the job is performed, and patience. Every dairy should seek a person who fits this

description and task that person with working with the laborers to continually improve job performance.

■ **Specific Teaching Skills And Aspects Of A Good Program**

Given that an appropriate teacher/mentor has been identified to conduct worker training and education, there are indeed some programmatic attributes and teaching skills that will improve outcomes.

Perhaps the most important contributor to a successful worker teaching program is **owner support**. Even though the workers are the target participants in a program, it is critically important that they see that the lead worker, “the boss”, is on-board. Most people aspire to do their job well, but are also highly motivated by the reward of acknowledgment by their supervisor. When they change something in their approach to their job they need the right environment, the right tools, and the right feedback to support their efforts, and all of these things require owner support. It becomes irrelevant for a veterinarian or herd manager to encourage a certain performance or approach to their tasks if it is not also clear that the owner agrees and supports their efforts.

Second, it is important that the person educating the workers understands clearly the difference between task training and education. Training includes description and demonstration of skills, proficiency, consistency and speed in accomplishing tasks. Education involves developing a knowledge base and rationale for improving observation, analysis, judgment and application of the skills. Obviously protocols are designed as the model for how any given set of tasks and procedures are performed, but it still relies on the individual worker to assess how circumstances develop and when procedures are employed. For this reason, ongoing assessment of outcomes by the educator and guidance to improve performance require consistent and frequent interaction and communication.

Most dairy workers are adults, or at least they are not young children. **Adult learners** require a different approach than small children because they have their own life experiences, observations and comparisons. Adult learners need to establish the relevance of an expected change in behavior. They need to have a reason for a particular change; they need to know “why” something should be changed.

Teachers need to be aware of cultural **barriers to communication**. This is true for the differences that arise from race/nationality, but also for cultural differences based on age. Latino workers, or youth workers, will generally see the world differently, and respond to directions differently than older white

people who will often fill the role of educator. The educator needs to appreciate this difference and strive to work around or break down these barriers to communication. It is very helpful early in a teaching relationship to establish the common bond that comes from having equivalent goals, to maintain humility regarding the fact that the workers have observations and experiences of their own, and to try to establish a sense of team spirit.

Educators should not confuse a worker's 'agreement' with a teaching concept to mean that the worker really understands the point. That is, a worker may nod their head or say 'yes' in deference to authority rather than because a certain teaching point is truly understood. Educators need to frequently ask questions of their apprentices to see that teaching points are understood and make sense to the learner.

There are many different ways that people learn. For some people reading and comprehension of a point allows them to visualize a situation well. Others require images and visual aids. Others require specific hand's-on experiences to fully comprehend something. A good educator will continually change the material and experiences to which they expose learners to make sure **different modes of learning** are employed.

Almost all teaching issues rely on a relatively few basic concepts. It's important for an educator to identify those **key concepts** behind a specific training activity and wrap the nuances of the activity around the key concepts with frequent repetition of central teaching points. For example, virtually all of the different behaviors and procedures that underlie infectious disease control and biosecurity involve decreasing spread of microorganisms that cannot be seen, but that spread easily to animals. Key concepts of the existence of microorganisms, hygiene and cleanliness, and preventing exposure should be repeated and reinforced frequently when discussing infectious disease control.

Most learners require **repetition and reinforcement** of learning objectives to fully adopt a change of behavior in the conduct of their work. Movement and action on the learner's part are very important for them to really adopt a change. Very few people conceptualize learning issues to a degree that they can behave differently in the future without multiple exposures and activities.

One of the key advantages of small group education is that workers can help one another in the learning process. It's important to **stimulate discussion and sharing** between workers so that interactions are not exclusively between an educator and an apprentice. Since most dairy workers are adults, they have many of their own experiences that reinforce their activity patterns and knowledge base. Interaction and discussion with peers is a great pathway to accepting changes and seeing different methods and activity patterns.

A good educator needs to **set a good example** by their own actions. As the old saying goes “Actions speak louder than words”. Nothing can detract from a training program more than to see that the owner/manager or veterinarian does not follow the same guidelines they set for employees. Since the main thrust of this presentation is to promote worker training and education as a principle component of optimum dairy animal welfare, it’s important to emphasize the role of the educator in demonstrating empathy for the animals on the dairy. Educators need to display and enunciate concern for the animals and their well-being. If an animal is sick or suffering, it’s important to express sadness or disappointment. If an animal recovers or does well, it’s important to express joy. Compassionate care for animals should be a central theme of any discussion of animal management.

■ Taking Action

For an owner or veterinarian looking to achieve optimal worker performance in animal care it’s important to have realistic goals and to take action based on those goals. The goals need to be realistic, with the understanding that change occurs slowly and requires patience. A good educator should recognize that any given teaching session should have a limited set of teaching objectives. Very few people can manage more than 2 to 3 changes at a time. Therefore a worker education program should be seen as an incremental, ongoing process with 1 to 3 action items for a session. This is one of the main reasons that short term interventions by outside experts are not commonly successful. A better approach for true high quality management is to aim for incremental changes targeted at continual improvement.

