

DAIRY STOCKMANSHIP

Paul Rapnicki, DVM MBA
University of Minnesota College of Veterinary Medicine, St. Paul, MN
Jim Lewis
Manager Emerald Dairy II, Emerald, WI

The daily management of a dairy operation requires the personnel to interact with the animals many times a day. Dairy stockmanship is the study of these interactions as well as the implementation of low-stress cow handling techniques to improve the outcomes for both the people and the cattle.

Mr. Bud Williams has been the leader in establishing many of the basic principles and practices of good cattle stockmanship and has been teaching these concepts to beef cattle audiences around the world for over thirty years. Many beef producers and their veterinarians are familiar with Bud and his concepts, but significantly fewer dairy operators have been exposed to Bud's ideas.

The success of implementing these methods on beef cattle operations raises the possibilities of implementation on dairy operations. To further explore the potential, the authors attended a two day Bud William's stockmanship school in Independence Kansas during April 2008. Our initial goal was to improve our personal stockmanship skills with dairy cattle.

During the course of these two days we gained a much clearer understanding of essential stockmanship skills and were able to improve our understanding of the behavior of dairy cattle. Most importantly however, Bud challenged us to look at the daily interactions between dairy cattle and people working with cattle differently. We realized that many of the core principles in good dairy stockmanship are being ignored on many dairies. We left Bud's stockmanship school firmly committed to successfully implementing dairy stockmanship on a commercial dairy operation.

Emerald Dairy II is a transition management facility for two large commercial dairy operations located in Northwest Wisconsin. Dairy cattle housed at this facility include both mature cows and springing heifers from about six weeks prior to freshening to about two weeks after calving. Annually about 2,700 calvings are managed at the site. In addition, young calves are housed on the same site until 4 months of age.

The transition period is a critical time period for the dairy cow. This is also a time period for many critical interactions between the people and the cattle. Emerald Dairy II provided us with a number of opportunities to learn about, improve upon, and apply our stockmanship skills in a large, modern dairy operation.

1. Dairy Stockmanship Skills

Stockmanship is the effective two-way communication between a cow and a person. The cow will always be consistent in her responses; the person is the one that can misinterpret. For more information, readers can review the information provided by Bud and Eunice Williams at www.stockmanship.com and by Drs. Tom Noffsinger and Lynn Locetelli at www.cattlexpressions.com. From our experiences at Emerald Dairy II, the following concepts are the important basic stockmanship skills.

Pressure-release: In discussions on handling cattle, people frequently refer to flight zone of an animal. It is useful to think about the flight zone in a conceptual manner. As you approach the flight zone of an animal, they will begin to feel pressure from your presence and respond. The exact response distance will constantly be changing depending on all the factors influencing the animal. By closely observing the response of the animal as you approach her, you will be able to see when you are exerting pressure. If you step back, you can release some or all of the pressure. The key point is that we can move animals by exerting pressure and varying the amount of pressure. The amount of pressure the animal feels depends on the distance and angle of the pressure. It is important not to over-pressure or to apply pressure in an unpredictable manner to the animal. The correct way to pressure depends on situation and properly reading the way the animal responds.

Understanding the basic instincts of cattle: This allows us to create, change and stop movement in cattle. Cattle want to move in the direction they are headed, they want to follow other animals, they want to see what is pressuring them, and they want to return in the direction they came from. Walking with cattle will tend to slow them down and/or stop them. Walking against cattle will tend to speed up their movement. Cattle have very little patience if we attempt to communicate with them improperly. If we are not effective in our communication they easily become confused by our actions. Skilled stockmanship actions take advantage of the basic, natural movement tendencies of cattle.

Walk straight: Cattle are a prey species and this fact controls how they perceive the world around them. Always walking and working cattle with straight lines allows our movements to be very predictable to the cow. Always have a purpose and pattern to your movements.

Create positive motion: Stockmanship is about working cattle in a positive way. We do this by creating and controlling motion. Cattle must learn to trust that the person can apply pressure to create motion, to stop motion, and to turn motion. The person must learn to trust that the cattle will be consistent in their response. Positive motion occurs with both the cattle and the people are engaged in effective two-way communication.

Every movement matters: On dairy operations cattle often are worked in confined areas. This results in the need to be aware that every movement you make has a significant impact on the animals. A confined area exerts pressure on animals in many different ways, so we must pay very close attention to our movements. When working livestock, every movement we make is talking to the animals. On a confined dairy operation, precision in your movements is very important.

Be consistent: Learn the right techniques and practice with the cattle. Consistently do the right things around cattle and work hard to avoid doing the wrong things. Remember, the cattle are always right, so it is the people that need to avoid doing the wrong things.

Don't make excuses: Animals do not become afraid of gates or trailers or chutes. We have told them not to go there. Purchased heifers are not inherently impossible to work with. With good stockmanship skills we can get animals to want to do what we need them to do. Keep in mind that our human instincts are generally wrong about working livestock. We cannot only adopt cattle handling principles to suit our selves. Be patient and do the right thing until it works.

2. Exercise routines for pre-fresh animals

At Emerald Dairy II, cows are housed in freestall pens during the 45 days prior to parturition. There are certain management tasks we would like to accomplish during this period. Tasks such as movement through a footbath, application of fly spray, providing routine exercise, conditioning new heifers to the milking parlor, and lameness evaluation create the need to efficiently move the cattle. Stockmanship allows us to easily create and control the movement to and from the management task area. Easy movement allows us to accomplish these tasks as often as necessary. In addition, this presents us with the opportunity to have workers practice creating positive movement with this population of cattle. Emerald Dairy II has an 8 foot transfer drovers lane along the 1,200 foot perimeter of the facility that is used daily to move cattle.

3. Using a Bud Box to move cows from the calving pen to the colostrum collection area

After calving in an individual box stall, fresh animals need to be moved to a colostrum collection chute to be milked for the first time. Again our goal is that this movement be accomplished calmly and quietly, but also efficiently. At Emerald Dairy II we began using the Bud Box concept to successfully move the fresh cows. The Bud Box facilitates proper stockmanship with the cow. Moving cows to the colostrum collection area is accomplished quickly and easily and without stress to the recently fresh cow.

4. Moving cattle from the freestall to the milking parlor

The calm, quiet, orderly movement of cows to the milking parlor should be an important goal for every dairy operation. Calm cows in the milking parlor allow for rapid and complete milk let-down. Rather than "pushing cows to the parlor" dairy stockmanship allows cows to understand where we want them to go. The result is calm, positive movement from the pen to the parlor. As cow movement is started towards the parlor, the natural flow occurs as a result of proper stockmanship actions. At Emerald Dairy II this allows the worker to accomplish other tasks, such as raking stalls or cleaning waterers. While doing this, the worker must still pay attention to the cows and avoid motions that stop movement and if necessary keep the movement going. In this way, stockmanship skills have helped the facility to routinely milk calm, relaxed cows.

Summary

Although dairy operations can vary widely in size of operation, as well as in housing and parlor design, the fundamental interactions between cattle and people are quite similar. These fundamental interactions are independent of the size of the dairy as well as the type of housing system. Anyone that works with cattle should receive dairy stockmanship training. Understanding basic stockmanship skills is only the start, dairy workers need to approach every interaction as a chance to learn and improve their stockmanship skills. Anybody can be a person that works with cattle. It takes a commitment to communication with the cattle to be a stockman.