

# Cow Stress and Animal Handling



By Dr. John Popp

The importance of low stress livestock handling continues to gain recognition for its impact on dairy cow production. Dr. Temple Grandin has brought tremendous awareness to this subject and has developed outstanding protocols for better handling and care of

livestock. Bud Williams was another livestock handling expert that could achieve stunning results. He allowed animals to feel comfortable and had the ability to get animals to move at his will. Bud was dropped out in the tundra to gather a herd of wild reindeer; a feat he achieved in a matter of a week over difficult terrain and many miles. I am fortunate to have received a lot of training from people that were mentored by Bud Williams. Bud Williams died November 25, 2012 of pancreatic cancer. His contribution concerning animal welfare has benefited many animals.

The most important things learned from Bud Williams are: cows are always willing to go 'back' to where they came from, that is where they feel safe. Livestock handling facilities should be designed with this concept in mind. Animals like to be able to see their surroundings. Any animal handling set up with solid walls or sides creates undue stress. An unfamiliar surrounding, along with the introduction of unfamiliar handling practices, creates a negative environment. Animal handlers need to be aware of where they are positioned relative to the animals' point of balance. Hitting and yelling create stress, elevate cortisol levels, negatively affecting milk production (up to 15%) and reduce immune function.

Pajor et al. (2003) did four studies to simulate positive and negative stimuli in cattle. One of their studies demonstrated that cattle are willing to return to areas where they experienced positive stimuli and avoided areas of negative stimuli. Yelling and hitting created a negative experience. Providing small amounts of feed were positive. The second study showed that cattle prefer tail twisting over hitting, yelling or the use of a cattle prod. When comparing

loud shouting to using a quiet and gentle voice, the cows chose the person with a gentle voice.

Cattle remember negative handling experiences and if these experiences are repeated, it elevates the animals' flight distance along with evoking a stress response. Reduced stress throughout the lifetime of a cow is an important aspect in maximizing her lifetime milk production. Breuer et al. (2000) showed a significant reduction in milk yield, milk fat and protein when animals were repeatedly exposed to stress. Handlers that yell, whistle and slap cows tend to be kicked more frequently.

While this only scratches the surface of how to handle the animals on your farm, it shows that the way we handle cattle can have a significant impact on how animals respond to us. The next time an untrained dog runs in amongst the cows, someone hangs their jacket where cattle are supposed to walk by to be milked, or someone yells and hits animals, explain to them the negative impact their behavior has on animal welfare and production.

Breuer, K., Hemsworth, P.H., Barnett, J.L., Matthews, L.R., Coleman, G. J. 2000. Behavioral responses to humans and the productivity of commercial dairy cows. *Applied Animal Behavior Science* 66:273-288.  
Pajor, E. A., Rusehn, J., dePassille, A.M.B. 2003. Dairy cattle's choice of handling treatments in a Y-maze. *Applied Animal Behaviour*. 80:93-107

