

# Alliance

## Dr. Temple Grandin's Low Stress Animal Handling Techniques

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Diagnosed with autism at a young age, Dr. Temple Grandin has been able to use her experiences with the disorder to relate to animals in a way that allows her to uniquely interpret situations as an animal would. Her famous work designing handling chutes and slaughter facilities has revolutionized the livestock industry and led to the story of her life being brought to the screen by Claire Danes in the 2010 flick *"Temple Grandin"*. Harmony Organic Dairy recently welcomed Grandin to lecture in Stratford on *"Creating the Best Life for our Animals"*, which fostered discussion about fear and animal handling techniques.

Based on Grandin's own experiences with autism, she has divided fear behaviour in cattle into two elements, one that triggers anxiety and vigilance and another that stimulates a full fear response. When curious cows view something new and are allowed to approach it on their own, they are vigilant, but their full fear response is not triggered, unlike cows that refuse to pass a coat hanging on a post when they're being crowded into the parlour. She suggests allowing cattle adequate time to acclimate themselves to their environment and to let one of the more curious cows in the herd to explore and investigate the distracting object, in this case a coat.

Once the curious cow is satisfied and moves past the coat, the more reluctant cows and nervous heifers will follow her. Grandin refers to this phenomenon as forced novelty, which can be attractive or it can be scary. "Unfortunately," she continues, "in a meatpacking plant cattle don't have the freedom to slowly investigate scary new things. They have to keep moving." This has led her to create a checklist of items to consider when designing handling chutes, which includes eliminating distracting and reflective objects and arranging cardboard over the open sides of a chute to reduce anything (including people) that may be in the animal's flight zone.

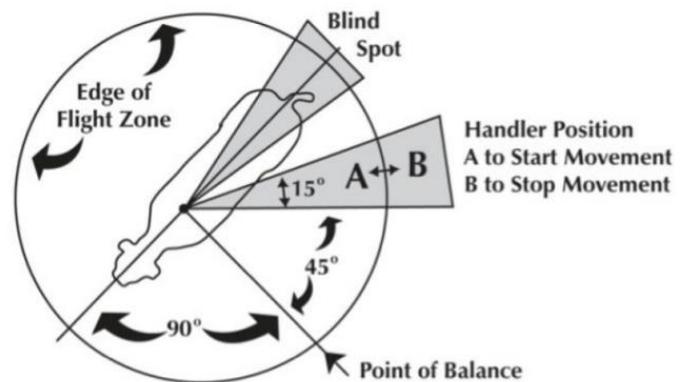


Diagram courtesy of Dr. Temple Grandin

"The two times cattle are most likely to be upset by their human handlers are when they have to be moved and when they have to be closely inspected and restrained for a veterinary procedure," says Grandin. She recommends training animals to enter chutes and trucks by rewarding them with a treat.

This positive reinforcement helps the animal learn the behaviour and a similar tactic has been employed by the use of special pellets designed specifically for robotic milkers.

To move a group of cattle, she suggests pressuring the flight zone by coming right up to its edge and slightly entering it to get the cattle moving away from you. The key to this technique is to retreat back out of the flight zone once the animals are moving. Applying this pressure-release principle until they have reached their intended destination is the least stressful way to move them. This concept works on the basis that cows are prey animals and this movement triggers the anxiety response mentioned earlier.

If attempting to herd them into one area, she recommends that the stockperson take his/her time and zigzag behind them in slow, deliberate steps, which forces the cows together into a calm, soft bunch so they can be more easily directed.

"When a stockperson zigzags back and forth on a straight line just outside the herd's flight zone, he/she is acting enough like a predator to mildly stimulate the anxiety/vigilance part of the cow's fear system," she says. "They are treating the person like a predator and gathering together for protection, then moving away as the predator moves towards them."

Once the cows are in the soft bunch, they can be easily herded without yelling, which triggers the full fear response. This method is also important because it prevents cows from breaking into a run and initiating milling behaviour, which occurs when the frightened cows on the outside of the soft bunch attempt to get into the middle of the herd to avoid the predator. The strongest animals continue to shove their way into the centre in a continuous circle, which is dangerous because animals will trample anything in their path as their panic escalates. Other things that scare cows include yelling, sudden appearances of people into their line of vision, a person in close proximity to them, fast movements like a car driving by and any speed of sudden, unexpected movements. Being knowledgeable and respectful of a cow's fears and flight zone will reduce their stress level and improve their ease of handling.

Grandin would like to see more adoption of low-stress handling techniques. "The rewards are so large that I think more and more ranchers will adopt them as they see the good results they produce," she says.