

Low-stress Cattle Handling: The Basics

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Introduction

The advantages of low-stress cattle handling include increased profit for dairy and beef producers. Low-stress cattle handling is easier and safer for people, induces less cattle stress and injury, and produces a better product with a better public image. The best news is that it's free—well, almost free. The only cost of low-stress cattle handling (LSCH) is the time it takes to learn about cattle and then practice the necessary skills. It is that simple.

Low-stress cattle handling

The secret to LSCH is understanding why cattle act the way they do and then using that knowledge to “ask” and not force them to do what you want. We also want our facilities to help us do our work better and not be a barrier. However, even well-designed facilities will not make up for poor handling skills and a lack of cattle behavior knowledge.

Why do cattle act like cattle?

Three ingredients control an animal's actions: anatomy, instinct and experience.

Let's look at anatomy first. Cattle see the world differently than we do. Because they are prey animals, their eyes are shaped differently and are located on the sides of their heads. A cow can see up to 300 degrees around itself, whereas a human has roughly a 140-degree field of vision. Cow eyes are more rectangular—our eyes are round—and have slitted rather than round pupils. They see most things with only one eye and therefore don't have good depth perception. Cattle cannot see directly behind them and worry when people are in their blind spot. Cattle also have limited vertical vision and have to put their heads down to see the ground in front of them. Their vision limitations mean that a shadow across an alley will stop them in their tracks, or a quick motion detected out of the corner of one eye will send them running. When they are a safe distance away, they will turn and face the disturbance so they can get a better look with both eyes. Cattle can see a lot but don't see it well. Cattle do have keen hearing, and any loud noise—especially angry people's voices—is very disturbing. In fact, research has demonstrated that people yelling can be more stressful than even the use of a hot shot. However, cattle have difficulty pinpointing where the sound came from. All loud noises will frighten animals, even if we understand that the noise should not be an issue. Cattle have a sensitive sense of smell, though they rely more on vision.

Instincts are those things that we all do because we are hard-wired to do them. We jump or startle at loud noises, for example. Cattle are prey animals and find safety in numbers. An isolated or single animal becomes distressed just because it is by itself. Cattle will take their time to slowly explore anything new in their environment. The coat flapping on the side of the chute is a BIG deal to them and is translated to

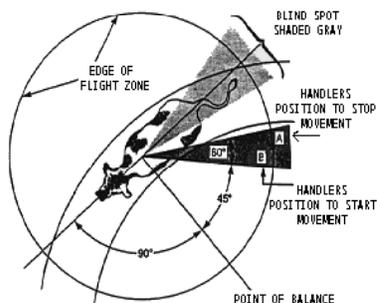
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mean danger. When cattle move, they like to follow one another, partly because they then don't need to look where they are going (remember, they can not see their feet without putting their heads down) and partly because they are staying with the group. Other behavioral characteristics include a preference to move toward areas with better lighting and uphill instead of downhill.

Experience rounds out why cattle act the way they do. They can quickly learn that a tractor and wagon mean feed. They can also learn that being chased somewhere usually leads to increased fear and distress. Cattle are more distressed by being sorted out to go single file up a chute with people hollering at them than they are by the vaccination they get while in the chute. It is extremely important that we make cattle's first experience with handling or new environments as stress-free as possible so they are willing to do it again and even easier the next time.

Facilities—What's important?

Two things are really important with facilities. No. 1 is that you have some! You need a large pen to gather cattle off pasture, a crowd pen to be able to pressure a small number of animals, a single-file alley at least two animals long with some type of head catch at the end and, ideally, a couple of pens to sort into coming out of the chute. The other critical ingredient is that you walk in the facilities to see what's wrong when animals are balking. Is there a shadow that looks like a bar, or a wet spot on the floor, or is the corner too sharp, is the single-file chute a dark tunnel, etc. Facilities don't have to be fancy, curved, solid-sided, etc., but they should be an aid to your working cattle and not a hindrance.



Graphic from: Behavioral principles of livestock handling. 1989. Temple Grandin, found at <http://www.grandin.com/references/new.corral.html>

Cattle handling skills - Get some

The secret to asking cattle to move instead of forcing them is understanding the flight zone and point of balance concepts. Cattle, like people, have their personal space. When someone, especially if that someone is scary (remember, our round, close-set eyes tell cattle we are predators) gets too close, we want to move away. It was our decision, and if the scary person doesn't follow, we don't feel any stress. The same is true with cattle. If we get a little too close, just inside their flight zone, they will move away as if we asked them to move. If we try to push too hard, there is a good chance they will try to run back by us. Neither cattle nor people want to be forced, and our/their first reaction is to force back.

The diagram below shows both the flight zone and the point of balance. Getting close to the flight zone asks an animal to move, and when you get too close, the point of balance determines the direction. As a general rule, if you apply pressure in front of the shoulder, animals go backwards or turn away. Putting pressure behind the shoulder will ask the animal to go forward. It sounds simple and it is, but it takes practice. The only way to be good at low-stress handling is to practice. By taking your time, you can walk animals just about anywhere you want them to go, not because you are faster or stronger, but because you know where to be and what actions to take.

The golden rule of low-stress handling is slow and quiet resulting in less stress for you and the cattle. For more information, visit <http://beef.msu.edu>

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