

Why Cattle Do the Things They Do



Due to sheer size and strength, cattle pose one of the greatest on-farm safety threats. It's not surprising that these large-and-in-charge critters take the lead over all farm animals in causing injury to their handlers. Although you have a distinct advantage as a producer in such a docile breed, it's still advisable to heed the safety advice of cattle handling experts. Injuries often are not the animal's fault; but rather our own.

Ray Huhnke, professor and Extension agricultural engineer at Oklahoma State University, was kind to share with me the information he's gathered throughout the years about the vision, hearing, flight zone and herding tendency of cattle. To understand these things helps us understand why it's important to handle cattle in a certain way. For instance, you know that cattle often spook and balk in the chute, but do you know why? If you did, you'd possibly be able to alleviate the problem.

According to Huhnke, cattle balk at shadows and objects on the ground because they have poor

depth perception, especially when on the move with their heads in the air. When they see shadows, they become skittish, hold up the animals behind them and take handlers by surprise. Facilities should be designed to minimize shadows as much as possible. If working inside, solid walls rather than open sides help rid the area of shadows.

More than anything, Huhnke says handlers need to just be patient, especially when working in new facilities. Cattle are bound to spook until they familiarize themselves with their surroundings.

Cattle also have panoramic vision — they can see in all directions without moving their heads, and they have a tendency to move toward light. Huhnke advises using frosted lamps that don't provide glare if working cattle at night. The lights should be coming from the area where you want to move the cattle, such as in the trailer or barn.

Along with vision considerations, handlers should take note that cattle have sensitive hearing. Loud

noises should be discouraged to prevent frightening the herd. "Use plastic paddles with rattles to move cattle rather than whips and prods," Huhnke suggests.

The flight zone

Huhnke also talks about the cattle "flight zone," introduced by Temple Grandin, designer of livestock handling facilities and associate professor of animal science at Colorado State University.

The flight zone of cattle is just like that of yours and mine. Have you ever had someone just get too close, and although that person was comfortable with the distance, you were not? You may have found yourself backing up or leaving the situation entirely as the individual had invaded your personal space.

Similarly, an animal's flight zone is its personal space. When a person penetrates this zone, the animal will obviously move, and when he or she exits the flight zone the animal will stop moving. There are several factors that determine the size of an animal's flight zone, including wildness vs. tameness, the angle of handler approach and the animal's level of excitement.

The flight zone can be used to your advantage when moving cows. Grandin and Huhnke advise working at the edge of the flight zone at a 45-60 degree angle behind the animal's shoulder (see Figure 1). Cattle will then circle away from you. Determining the exact flight zone pre-handling is almost impossible, but you'll know when you enter as the animal will take flight. In feedlot cattle the zone may be as little as 5-25 feet. On the other hand, some range cattle may require 300 feet of distance.

"When moving cattle, avoid approaching them directly," Huhnke says. "Try to work them close to the point of balance (front of shoulder), moving back and forth on a line parallel to the direction the animal is traveling."

Herding instinct

Along with vision, hearing and flight zone understanding, we need to recognize and take advantage of the instinct of cattle to herd. They clearly follow each other; each animal should be able to see the others in front of it for smooth movement. To get cattle through the chute, wait until it's almost empty and then give them a chance to follow each other after one makes the move. We know it doesn't always work just like that, but it's often worth time to try.

Huhnke says single-file chutes should be at least 20 feet long and 30-50 feet for large facilities to minimize the times that you have to load the chute and the opportunities for problems. "Don't force an animal in a single chute unless it has a place to go," he says. "If the cow balks it will continue balking."

Crowded areas are opportune environments for injury. Nevertheless, we always seem to try to squeeze a couple more head in that undersized corral. We forget that it may not only be safer, but also more effective and less time consuming to handle cattle in smaller groups. The cattle are less riled and rowdy if they have room to turn.

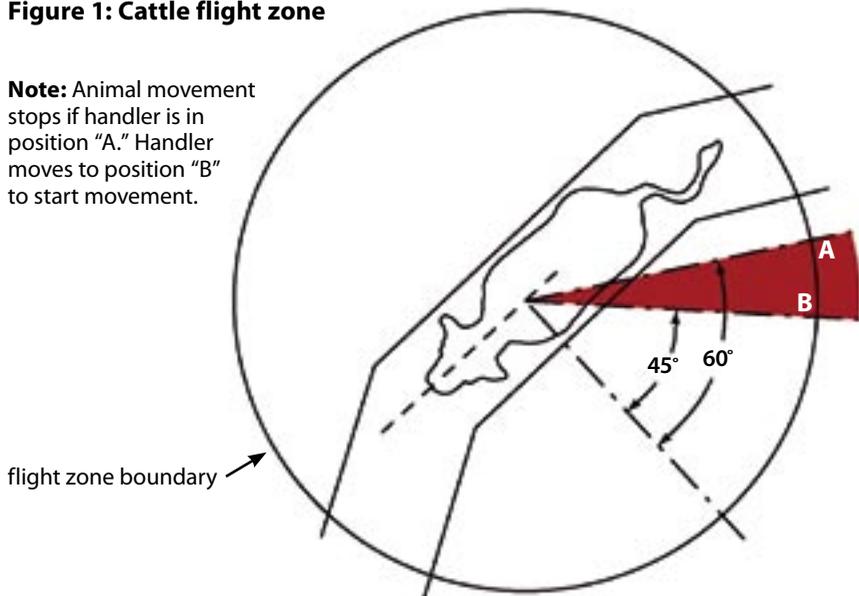
"A crowding gate is used to follow the cattle, not to shove up against them," Huhnke reminds us. "If a lone animal refuses to move, release it and bring it back with another group."

Although much of this information, as with safety guidelines in general, may seem like common sense, we're all guilty of getting frustrated and pushing too hard, in the wrong way and without heed to the dangers that we're creating. Be cognizant of the animal's eyes and ears, its personal space, and the other cattle it wants to follow. It'll make its life easier and yours safer.

Contact your local Extension office for additional information about cattle handling and facility design. **HW**

Figure 1: Cattle flight zone

Note: Animal movement stops if handler is in position "A." Handler moves to position "B" to start movement.



Adapted from figure developed by Temple Grandin, Colorado State University