Try these techniques to lower livestock stress

In modern livestock management, low-stress handling techniques are invaluable tools for any farm or ranch, regardless of size. By working with the animal's natural instincts and behaviors, handlers can minimize stress, improve safety, and enhance productivity.

Principles of low-stress handling

At the core of low-stress cattle handling is the ability to "read" the animal. By observing cattle's body language and understanding key concepts like flight zone, point of balance, and response to pressure, handlers can guide movement with minimal stress.

Flight zone and point of balance

The flight zone is the space around a cow that, when entered by a handler, prompts the animal to move away. The size of the **flight zone** varies based on the animal's temperament and past experiences. Cattle handled calmly and consistently will have a smaller flight zone, while those that have been subjected to rough handling or other stressors may react at a greater distance.

Livestock completely unaccustomed to human presence typically have very large flight zones and are difficult to get close to in large spaces. Pressuring livestock with large flight zones too much, too early can cause animals to panic.

Occasionally, overly stressed cattle may become aggressive when their fight-or-flight response is triggered. Other livestock, like sheep, may not become aggressive, but will panic to the point that they are capable of hurting themselves or others.

A cow's **point of balance** is usually located at its shoulder. If a handler moves behind the point of balance, the cow will move forward. By moving from the front of the cow to the back, around the point of balance, you can encourage the animal to move in the direction you want. Coming straight at the animal from behind, especially in its blind spot, can cause the animal to run to the side or to wherever it sees an escape route.

Skilled handlers can use this knowledge to control movement efficiently, backing off as needed to avoid overstressing the animal or moving it past the desired point.

Pressure and release

Cattle and other animals learn by experiencing **pressure and release**. When a handler applies gentle pressure by entering the animal's flight zone, the cow moves. If pressure is applied in front of the point of balance, the cow will stop or change direction. Once the desired movement occurs, the handler should step back to release pressure, which signals to the cow that it has performed the desired movement. Repeated pressure without release can lead to confusion and heightened anxiety, whereas appropriate release encourages trust and cooperation over time.

Herd behavior

When moving any number of livestock in a pasture or pen, it's crucial to recognize and understand herd dynamics. Walking in a calm, back-and-forth motion perpendicular to the direction you want the cattle to go helps gather them. Patience is key, especially when working with cow-calf pairs, as rushing can cause the herd to scatter.

Once the herd is grouped, handlers can direct movement by staying at the edge of the flight zone, applying just enough pressure to keep the animals moving in the desired direction. Over-applying pressure

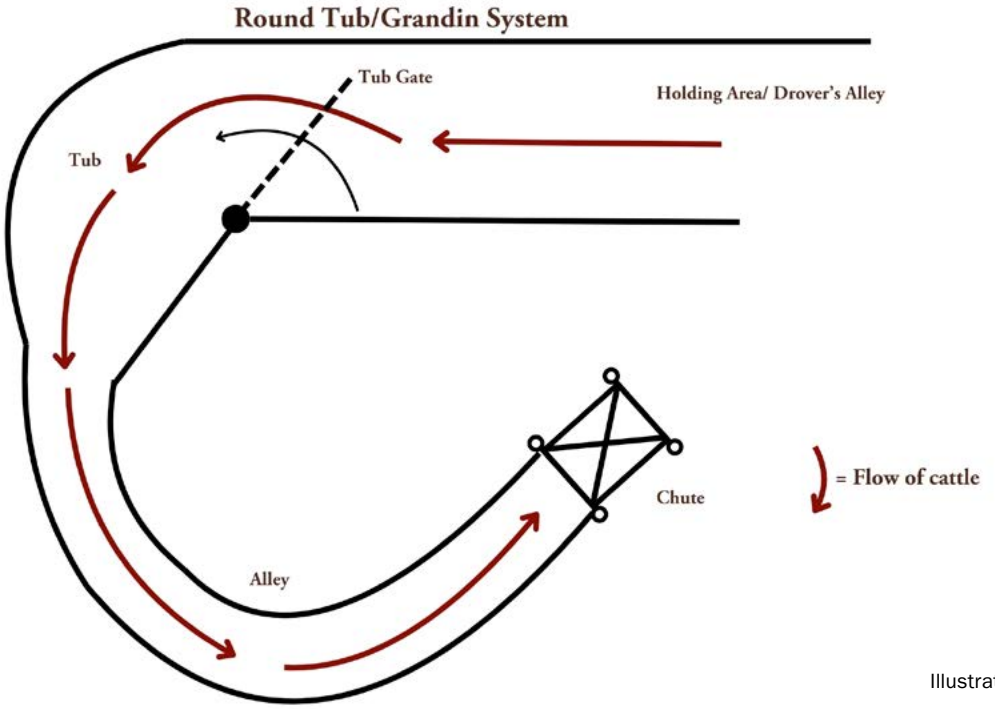

Illustration by Dagan Montgomery.

Cattle selection

When starting a herd of your own, be selective about which cattle you buy. Simply walking through a group of prospective cattle can tell you a lot. Animals that seem easily agitated by your presence should be passed over in favor of cattle that seem relatively calm when you are in the pen.

Work with the seller to help choose the most docile individuals. Even just one "flighty" or easily spooked animal can cause chaos in an otherwise low-stress small group. Once you get more comfortable with handling livestock, you may be able to work with less calm animals, but it takes practice.

or staying too long within the flight zone can cause panic, leading to bolting or scattering.

Facility design for low-stress handling

Proper facility design also plays a crucial role in low-stress cattle handling. The Grandin system and the Bud Box system, named after renowned livestock-handling experts Temple Grandin and Bud Williams respectively, are two popular designs.

In the **Grandin system**, curved chutes and alleyways, ideally with solid sides, help guide cattle through the handling facility by taking advantage of their natural tendency to turn and follow the curve. This system minimizes stress because animals can see where they are going but not what is happening ahead.

A simplified version of the Grandin system, known as a **tub**, is also available. In this system, animals are coaxed down an alleyway using a rounded tub with solid walls. Pressure is gently applied from behind using a gate that follows the sides of the tub. To minimize confusion and distraction, avoid sharp angles and open sides where an animal can see out.

The **Bud Box system** uses straight alleyways and an open-ended box. When cattle reach the end of the box, they naturally turn around and head into the alleyway because they want to return to where they felt secure. This system also uses livestock's natural instincts but requires skilled handling to avoid overcrowding or misdirecting the animals.

Designing your own facility

Even if your property size limits your ability to utilize these systems, the same basic principles can be implemented in smaller facilities. Even facilities for two or three head should keep the following principles in mind.

1. **Cattle do not like entering dark spaces.** If possible, design facilities such that the animals think they are going back to where they came from, or at least can see beyond where they need to be.

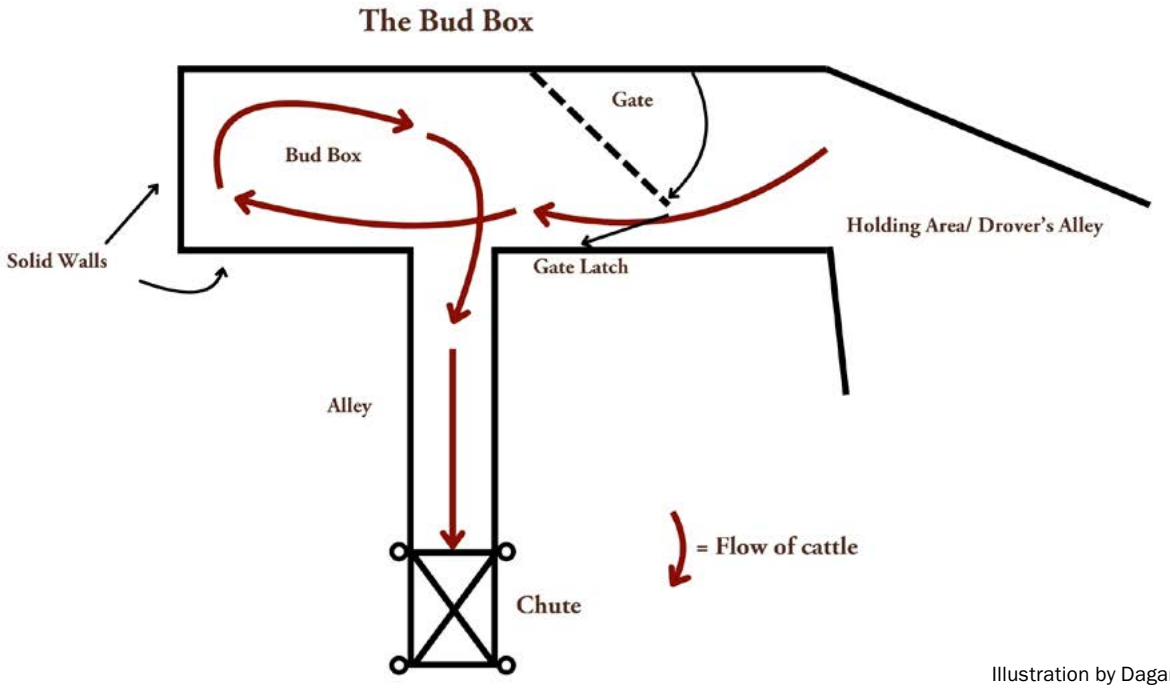

Illustration by Dagan Montgomery.

2. **Cattle can become distracted and spooked when they see too much to the sides.** Solid-walled corrals or alleyways help them focus on forward movement.

3. **Cattle do not like sharp angles.** Design alleys to be rounded or curved to encourage flow.

4. **Livestock want to get back to where they felt safe.** When possible, having others in the pen or place you are attempting to move a single animal into helps them feel as if they are rejoining the herd. Moving a single or small number of animals away from the main group will typically be more difficult. Keep in mind that moving animals farther and farther from their safe space heightens stress.

What about other livestock?

All animals react in certain ways, but livestock tend to be herding prey animals and the basics are often similar across species. The principles of flight zone, point of balance, and herd dynamics can be applied to other species, such as sheep, goats, horses, and even chickens.

The key is to figure out what movements and pressure keep animals as calm as possible. Sheep, for example, are even more herd bound than cattle, so keeping them in a group where they feel comfortable is even more crucial.

Benefits of low-stress handling

The advantages of low-stress cattle handling go beyond just safety. Studies show that cattle and other livestock handled with low-stress techniques have better immune responses, improved weight gain, and enhanced reproductive performance. Additionally, reducing stress leads to higher-quality carcasses in beef cattle and higher milk yields in dairy animals (including cattle, goats, and even sheep).

Low-stress handling can also improve the likelihood that handlers will observe clinical signs of illness, helping identify potential health issues earlier.

Finally, high-stress animals are more likely to become potentially dangerous. Cattle rarely act aggressive in open spaces where they feel comfortable or are with other cattle, so knowing their limits is extremely important. All of these benefits translate into better overall performance, reduced injuries, and improved welfare.

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