

Contentment Versus Containment:  
On Placing Cattle in Rangeland Environments  
Thomas T. Groneberg  
Colorado State University

### Abstract

This research paper explores the topic of “placing” cattle in rangeland environments. Placing cattle is a low-stress method of moving livestock that builds upon popular concepts of natural horsemanship, where a livestock producer works with an animal’s natural instincts rather than attempting to bend or break an animal to the producer’s will. Using proper methods, a stockman can move a herd of cattle calmly, without upsetting the animals. Once the stockman moves the herd to the location he wants to place the cattle, the cattle will remain in that general area. Placing cattle involves training cattle to move and graze as a fairly concentrated group, using pressure and release on cattle’s flight zones. The benefits of cattle placement include better utilization of rangeland resources, less negative impacts on riparian zones, less stress in the livestock, a decrease in predation where large predators are present, and lower production costs.

*Keywords: placement, cattle, rodear, low-stress, flight zones, natural stockmanship, herd instinct, livestock handling techniques*

Numerous research papers and articles in livestock magazines have been devoted to the topic of the tendency of cattle to overgraze riparian areas, especially during the summer and fall, when forage quality deteriorates on the range but not in areas around water sources. Many ranchers have incurred the great expense of fencing off miles of rivers, creeks, and reservoirs, and creating small water gaps or traps from which their livestock can access water in a controlled manner. Simultaneously, forage found on steep slopes or in rough terrain tends to be underutilized. In the last 20 years, forward-thinking animal behavior specialists such as Temple Grandin, Bud Williams, and Stephen Cote have promoted a cost-effective way for livestock producers to use the natural instincts of cattle to keep them from loafing in riparian zones, and to encourage them to graze areas of the range that are traditionally underutilized. In addition to the benefits of protecting riparian areas and increasing underutilized rangeland grazing, cattle that are taught to graze and move as a concentrated herd tend to have lower incidences of depredation by predators. When used properly, this low-stress stockmanship tactic, known as “placing cattle,” can be an effective range management tool for livestock producers.

Imagine a herd of cows and calves on a ranch in central Montana in late June.<sup>1</sup> Let’s call it the Blue Sky Ranch. These cattle graze a 6,400 acre pasture, a mix of steep, timbered hills and grassy parks with a drainage running through the middle of it. The cows tend to spend most of their time in and along the drainage. In the cool of the mornings, the cows graze part of the way up the slopes above the drainage before working their way to the water at the creek in mid-morning. As the day begins to heat up, the cattle spend most of the afternoon loafing in the

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<sup>1</sup> While this scenario is fictional, the passages pertaining to the Blue Sky Ranch are based on the author’s personal experience.

shade of the cottonwoods along the creek, before grazing away from the riparian area in the later afternoon.

The manager of the Blue Sky Ranch has decided to check on this bunch of cows in the mountain pasture, as the owners of the ranch are scheduled to arrive the following week for a fishing expedition along this stretch of the creek. The manager is disappointed to see that the cows have grubbed out the grass along the creek, while the range in the upper reaches of the pasture has gone untouched. He also notes that his hired hand put a tub of salt and mineral close to the creek bank. He'll have to have a talk with the cowboy in the morning. But, for what it's worth, the calves look healthy, the cows are content.

Studying this group of cows in this pastoral setting, it is easy to underestimate these animals, but there are a lot of complex relationships at work in this scenario. Grandin (2009) states, "Cows are herd animals that need to be with their buddies and family members. They have close relationships, especially between sisters and between mothers and daughters, who like to graze together" (p. 137). The cows aren't startled by the appearance of the ranch manager, because they have become accustomed to his pickup truck over time. The group dynamics of the herd are controlled by the interaction between dominant, as well as subordinate, cows. The movements of the group are also dictated by the presence of predators. Domestic cattle, which are descendants of wild cattle, prefer to live together in loose groups, a situation which is reflective of an instinct borne out of the need to protect themselves from predators. Grandin (2009) notes, "Grazing animals in a wild herd always stay close together to give each other maximum protection from predators" (p.249).

Archeological evidence shows that mankind has herded domestic cattle as early as 5,000 B.C. (Gehlen, Kindermann, Linstädter, & Riemer, 2002). Closer to home, vast herds of wild

cattle—descendants of undomesticated livestock brought to North America by Spanish explorers—roamed the Great Plains of North America in the 1800's (Wishart, 2004).

Contemporary buckaroos in the Great Basin region of Oregon and Nevada continue the Vaquero tradition of the *rodear*, a Spanish term meaning “to encircle.” In a *rodear*, cattle are held in loose bunches by men on horseback, often using only a fence line, in order to sort or brand the cattle. (Clayton, Hoy, Underwood, 2010). But these days, a vast majority of livestock producers rely on extensive corrals and working facilities when handling cattle.

Think about how the behavior of contemporary domestic cattle has been modified by the ways in which livestock producers have sought to contain them. As mentioned previously, vast herds of wild cattle roamed the American plains in the mid-1800s. Up to this point, farmers usually built fences to keep wild animals *out* of farm fields and to keep small herds of barnyard animals *in*. By the late 1880s, however, tens of thousands of miles of mass-produced barbed wire began to divide the western range into pastures. Cows, stung by the sharp metal barbs of the wire, began to learn to respect wire fences.

Netz, (2004) states:

This transformation was essentially complete by the end of the 1880s, when the success of barbed wire as a tool for the education of cows can be considered complete.

Simultaneously, more and more cows were fenced in, rather than fenced out, partly because of the general trend to establish landholding, and partly to “protect” the cows.

Instead of fences preventing the motion of cows from outside a close line to its inside (protecting the property of farmers), fences now prevented the motion of cows from inside a closed line to its outside (imprisoning cows inside ranches).

Cows and the plains were transformed, so that barbed wire became both natural and necessary. (p. 37)

As natural as barbed wire fences may seem on a present-day ranch, consider what we lost, as “herders” of cattle, when we began to control cattle behavior with fences and corrals, rather than using natural barriers and the innate behavior of the cattle to move the animals where we want them to stay. Consider, too, what instinct the cattle themselves lost with the advent of barbed wire fencing and control of large predators. Grandin (2009) points out, “Cattle that live in country with lots of predators naturally graze in soft bunches. In areas without predators, like a modern ranch, the animals spread out” (p. 151).

Most ranchers tend to frown upon groups of cattle that stick tightly together when they are on range, especially when the group is loafing near riparian areas. On the contrary, ranchers like it when a herd of cows is spread across the range, calling it “a good scatter.” This sounds good, and it looks good, as well. And yet, a herd of cows that is scattered across the range is able to graze selectively, defoliating the same palatable plants again and again. The less palatable plants go ungrazed, able to thrive and reproduce and take over a pasture. Just as cattle have been trained over time to give up their herd instinct, they have also become fairly complacent. Given a chance, cows like to graze accessible terrain with high quality forage near water sources. It is estimated that up to one third of forage found in foothills and mountainous pastures, or large arid and semi-arid pastures, goes ungrazed (Bailey, Stephenson, 2013).

The cowboy who works for the Blue Sky Ranch saddles up at dawn. His boss, the ranch manager, ordered him to move the pairs in the mountain pasture off the creek and over a ridge. He whistles at his dog to load up, and the cowboy drives the truck and stock trailer to the

mountain pasture. He finds the cows and their calves scattered along the creek. Hooting and hollering, the cowboy descends on the cattle in a straight line from above. He does his best to get the cattle gathered up for the push up the mountain. His dog works the brush along the creek, barking and chasing the cattle out into the open. It takes an hour, but the cowboy and his dog finally manage to get most of the cattle mobbed together. He plans to push the herd straight up a logging road, to the upper reaches of the pasture. However, as he starts the cattle up the road, things begin to fall apart. Cows that have lost track of their calves push back through the herd, looking for their babies. Lone calves break from the group and run back to the creek. By this point, the cowboy has lost control of his temper and lost control of the herd. Defeated, he loads his exhausted horse in the trailer and drives back to the ranch headquarters. He will need more help.

So what went wrong? First, the cowboy failed to grasp some basic concepts of cattle behavior. Cote (2004) states, “Cattle are their experiences and they act based on those experiences” (p. 32). Before the cowboy unloaded his horse and started rousting the cattle, some of the cows were lying down and chewing their cud. Others nursed their calves. They were content, free from stress. Then along came the cowboy and his dog. The cowboy starts yelling and whistling. Grandin (2009) states, “Cattle *hate* being yelled at. What’s frightening isn’t the noise so much as the person’s anger...Cows *know* when people are mad and it scares them” (p. 141). The cowboy approaches the cattle from above, in a straight line, just like an attacking predator. The dog is barking and nipping the heels of the cows to get them gathered up. And so, by balking at moving up the logging road to fresh grass, the panicked cattle are trying to reclaim the content feeling they had earlier. Cote (2004) notes, “The cow is seeking comfort and security. She associates it with both the place and the situation where she last

experienced it” (p. 12). That place, where the cow last experienced a secure, comfortable feeling, was at the cottonwood grove along the creek, the spot where she was nursing her calf before the cowboy unloaded his horse and dog and rode up on her in the morning.

The next morning, the cowboy has brought reinforcements. He has called his buddy from a neighboring ranch; his friend has also brought his three cow dogs. In a repeat of the previous morning, the mounted cowboys and their dogs force the cows and their calves to leave the cottonwoods along the creek. The cattle are pushed up the logging road in a panicked, bawling mob. By noon, the cowboys finally get the herd pushed over the saddle of a ridge to fresh grass. “That should keep ‘em happy,” the Blue Sky cowboy says, sourly. But, by later that afternoon, the cows are watering back at the cottonwoods along the creek.

So what should the cowboy have done? To fully answer this question, we need to take a step back and realize that both the stockman and the livestock need some basic training before the cattle can be placed where he wants them.

The first step in placing cattle involves a fundamental change in the way a cowboy thinks about cattle handling. Cote (2004) notes, “Every rider must first believe that it works and decide to fully commit to it before expecting good results” (p. 23). If you expect new techniques to fail, and if you adopt them half-heartedly, your efforts will usually end in failure. Keeping an open mind is the best first step in learning how to place cattle.

Next, as the stockman works with the cattle, he needs to commit himself to remaining calm at all times. Cote (2004) emphasizes that, “Calmness starts in the handler and ends up in the cattle. You must be calm around stock before their behavior will improve. If you are calm and stop chasing cattle, they will quit running away” (p. 30). In other words, if you want cattle

to stop fighting you, stop fighting them. This sounds simple, yet it's one of the most difficult things to remember when working with livestock.

Before asking the cows to gather up their calves and move up the mountainside, the Blue Sky cowboy and his manager should have taken time to work with the cattle, training them previously to learn what to expect (Bailey, Stephenson, 2013). The process of training cattle to move in a low-stress manner involves working with them for short periods of time in small groups. It's often best to work with cattle on foot, before trying to move them on horseback. Cattle can be trained to learn about pressure and release in as little as an hour (Grandin, 2014). Livestock handlers should work with cattle in a corral in order to practice pressure and release, and to learn about the cattle's flight zones.

A flight zone is an imaginary area around an animal. If a person enters an animal's flight zone, that animal will move until it feels it's a safe distance away. At the new distance that the animal has created, the person is no longer in that animal's flight zone. A livestock handler's ideal position is at the edges of an animal's flight zone (Gillespie, Flanders, 2009). It's important to remember that an animal's flight zone won't necessarily remain the same. If a predator happened to run through a herd of cattle just before a stockman arrives to move them, the flight zones are going to be much larger. Smith (1998) notes, "The flight zone is dynamic. It is continually changing size, depending upon any number of events that are presently affecting or have affected the animal in the past" (p. 118).

Once a livestock producer has a good concept of an animal's flight zone and how cattle react to pressure and release on the edges of that zone, he or she can then move on to practicing those skills in a real-world setting. In a rangeland situation, it is best to use the "zig-zag" method to get the cattle you wish to move to form into a loose bunch. For instance, if you want to move

the cattle north, start on the south end of the herd, just on the edge of the cattle's flight zone. Move back and forth in a long arc, behind the cattle, to get them to herd together. At this point, it isn't really important that the cattle move in the direction you want them to go, you are just trying to get them to form a group. Don't worry about forcing stragglers to join the group, as they will catch-up when they realize the herd is moving without them (Grandin, 2014). The zig-zag method mimics the movements of a predator that is stalking its prey. It makes the herd nervous but does not cause a panic, such as when a rider approaches the animals directly at a high rate of speed. Bailey and Stephenson (2013) note, "Zig-zagging is essential to initiate movement when leaving riparian areas. It also is sometimes essential to get cattle to climb steep slopes" (p. 10).

When the cattle begin to move, you want to remain calm and go slowly. You should only go as fast as slowest animal in group. Let the cattle determine the pace (Grandin, 2014). Then, at the location you want the cattle to stop, move up the sides of the herd to slow the cattle down. You want to refrain from stopping the cattle, as there will be a tendency for them to graze off in different directions. Rather, you want to slow the cattle to where they will start grazing. There should be fresh grass available in the new location, and the cattle will want to graze after being moved. When the cattle drop their heads and start grazing as a herd, they have been successfully placed (Kinford, 2013). Also, it's helpful to put out supplements such as salt, mineral, or low-moisture protein supplements, at the spot you want place your cattle. Put the supplements away from water sources and make sure the cattle are already familiar with the type of supplement you're using. (Bailey, Stephenson, 2013).

One more trick to successful placement of cattle is the timing of the herding. In a study done on a ranch in Central Montana led by Dr. Derek Bailey, cattle were moved from riparian

areas to upland areas using low-stress herding techniques. Cattle were moved at midday, when they would normally be found at a water source. The idea behind beginning herding at midday, rather than early morning, is that cattle will already have had time to water before being moved. On the contrary, if cattle are moved in the morning, before getting an opportunity to water, they may seek out water after being moved and remain at that water source, rather than settling in the spot where they are placed in the upland range location. The study tracked the cattle using GPS collars. Bailey, Van Wagoner, Weinmeister, & Jensen (2008), note, “Low-stress herding of cattle away from streams to uplands at midday is an effective tool to reduce cattle grazing impacts in riparian areas. Midday herding appears to reduce cattle use of riparian areas and increase use of upland areas in the afternoon and evening” (p. 36).

Cattle that are moved into a new pasture and allowed to place themselves tend to congregate at water sources and riparian areas. They spend the majority of their time in close proximity to water, usually within 100-300 yards of a water source. In their study, Bailey and his team used GPS technology to discover that placement and active herding of cattle cut down, by up to three hours a day, on the amount of time cattle spent within 100 yards of a riparian area or other water source (Bailey, et al, 2008).

There are numerous benefits to placing livestock using low-stress techniques. Doing so can reduce weight loss and adverse health issues that can be brought on from high stress situations, such as calves being separated from their mothers during cattle drives (Cote, 2013). Cattle that spend more time grazing fresh grass, rather than grubbing out riparian areas, gain better. Livestock producers can realize better utilization of grass when placing cattle in upland locations, which also benefits wildlife habitat. (Bailey, Stephenson, 2013). And too, this method of moving cattle is better for rangeland health in general. As Cote (2013) notes, “A herd (the

bigger the better) that is motivated and moving closely together tromps brush and decadent grass and creates ideal conditions to promote diversity, productivity, drought resistance in plants and soils, and many other things” (p. 21).

Livestock producers will be interested in how low-stress cattle placement might impact their bottom line. Consider the 6,400 acre mountain pasture of the Blue Sky Ranch, in our fictional scenario. If the manager decides to build six miles of new fence, with water gaps, to keep his cattle off the creek, it would mean an investment of almost \$50,000 (Edwards, Chamra, Mayer, & Olsen, 2012). While the new fence might prevent cattle from overgrazing the riparian area within the boundaries of the enclosure, it doesn't necessarily mean that the cattle will redistribute themselves more evenly across the rangeland. Bailey (2001) notes, “Managers often have difficulty predicting the effects of these range improvements on livestock distribution, which prevents them from making an adequate cost-benefit analysis” (p. 2). Also consider the number of man hours that were wasted as a result of the Blue Sky cowboy's high-stress, unproductive cattle herding. That time would have been better spent working with the livestock to get them accustomed to low-stress pressure and release herding techniques.

Recently, researchers with the Rodear Initiative—a rangeland stewardship project of Keystone Conservation—have begun experimenting with placing cattle in rangeland environments in western Montana. Riders herd cattle in concentrated groups in order to benefit rangeland health. Proponents of this method of grazing also note that losses due to depredation should be minimized. Lundquist (2013) writes, “Training cattle to stay together gives them safety in numbers, which can thwart bears, and makes them less likely to run, which is when wolves go into action.” Wolves and other large predators often avoid groups of cattle grazing in

concentrated herds, because humans, acting as herders, are often present in these cases (Keystone Conservation).

Placing cattle using low-stress livestock handling techniques is a basic idea that works based on a combination of principles that aren't easily explainable. Quite possibly, it's simply a matter of giving the cattle what they need: fresh grass, supplements, lack of stress. Practitioners of the rodear and cattle placement are tapping into a primal instinct that lies deep within today's domestic range cow. It is a sense of protection within the herd, it's the nature of contentment. But until we can ask a cow directly why she does what she does, as Cote (2013) admits, "I have been asked many times why cattle stay where I put them. I don't know. Nobody knows" (p. 15).

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