# Stockmanship: Principles, Practice & Wildlife-Rangeland Benefits

A Symposium at the 69th Society for Range Management Annual Meeting Corpus Christi, Texas February 2, 2016 By Jesse Bussard<sup>\*</sup>

#### INTRODUCTION

Considered an "old tool" to many in ranching circles, new applications of stockmanship to range and grazing management continue to present themselves. New evidence, as well as the tried-and-true foundational principles of stockmanship, were discussed during a Stockmanship Symposium held as part of the 69th Society for Range Management Annual Meeting on February 2, 2016 in Corpus Christi, TX. For the second consecutive year, the event was organized and moderated by Kent Reeves, a Sacramento-based wildlife and rangeland ecologist. Reeves worked diligently to organize this event, bringing together once-again an eclectic and dynamic group of five of the foremost practitioners and researchers in the field including Ron Gill, Whit Hibbard, Guy Glosson, Derek Bailey, and Matt Barnes.

Affectionately deemed "The Bud Williams Memorial Stockmanship Symposium" by last year's participants (with the family's permission) this second annual meeting's focus was titled "Stockmanship: Principles, Practice, and Wildlife-Rangeland Benefits." Speakers provided rangeland-wildlife managers and ranchers

\* Jesse Bussard (http://www.jessebussard.com/) is an independent writer, editor, journalist, photographer, media consultant, and founder of *Cowpunch Creative*, based in Bozeman, Montana. She provides content and community solutions for businesses focused on regenerative, profitable ranching techniques, grazing management, soil health, stockmanship and rangeland conservation.



L to R: Whit Hibbard, Guy Glosson, Ron Gill, Kent Reeves, Matt Barnes, Derek Bailey

information on how to incorporate stockmanship—the skillful handling of livestock in a safe, efficient, low-stress manner—into range and pasture management for economic and environmental benefits. The presenters, representing an assorted cross-section of livestock handling expertise, presented an overview of stockmanship in the morning session, then discussed how range and wildlife managers could best incorporate these methods into rangeland–wildlife management during the afternoon. Speakers addressed how stockmanship can improve management of wild horses, reduce livestock predation by large carnivores, benefit sensitive wildlife species, and restore rangelands.

Reeves' following statement set the tone for the discussion of the day:

One of the things universal to range management, ranching, natural resources, and such is that we are always dealing with uncertainty. What we do is not rocket science; it's harder than rocket science. We are dealing with a dynamic situation, things that change, and that's dealing with uncertainty. Stockmanship offers a valuable tool to help deal with some of the uncertainty that comes our way, not just with the animals, but how you manage those animals on the land."



Kent Reeves giving opening remarks.

# Stockmanship Principles and Health Benefits for Livestock — Ron Gill

Ron Gill, extension beef cattle specialist for Texas Agrilife Extension, began the morning session with an introduction to the principles of stockmanship, and more specifically "lowstress livestock handling." For the past eight In his Texas drawl, Gill opened by saying, "We grossly overestimate people's perceptions about how all this works and how we communicate with cattle. We've seen people adopting these same principles in the natural horsemanship movement. It's changed the way people work horses and it's changed things for the better for both horses and people. For some reason though, everybody is really slow to adopt this on the cow side."

The reasoning for this slow adoption, notes Gill, is still out for discussion. What was evident from his talk, however, is that a firm understanding of five basic principles of cattle behavior is essential to the effective application of low-stress stockmanship methods in cattle handling.

"Our job is to create the situation where the cattle can be successful," said Gill, "whether that's in the pasture or in a corral setting where I want them to move somewhere. You have to set them up to where it's their idea to go do it and then they will be comfortable staying where you put them."

To do this, Gill explained, three basic means of communicating with cattle are used - sight, sound, and touch. He also covered the following principles of cattle behavior to help symposium attendees understand how their proper use and implementation can improve the ease and speed of working cattle while reducing stress and increasing efficiency.

1. Cattle want to see you.

One of the basic and most important cattle handling principles deals with pressure, said Gill, and learning when and where to be to apply it. Pressure and release is key in stockmanship, and no matter what the environment, livestock must have an "out." To effectively do this he explains, the handler must use sight (from the livestock's cattle and understand how this works to get a response while minimizing stress. Sound is another way this can be accomplished, he expounded, but this sense is often overused in the industry, typically in confinement settings. The animal's line of sight remains the handler's best advantage to get livestock to go where and when they are wanted, especially in cases where cattle are accustomed to being handled.

2. Cattle want to go around you.

Cattle's natural tendency is to want to look at whatever is pressuring them. "The cow goes where her nose goes," said Gill. He explained that to move cattle the handler must not stand behind the animals to be moved. This only draws the animal's eye around and causes them to circle. Instead, Gill suggested, a change of position is needed such that the cattle are pointed directly at the intended destination (e.g., a gate). This in turn will encourage forward movement, especially in a herd setting.

3. Cattle want to be with and will go to other cattle.

A herd instinct is natural among the majority of prey animals, Gill noted, but must be re-instilled in some cattle. Stock handlers can rekindle this herd instinct and teach cattle to group and follow one another when moved from one place to another. For cattle that already work as a herd, handlers can take advantage of this natural instinct by starting to work cattle from the front first, and the back will follow.

4. Cattle want to remove pressure.

For the fourth basic principle, Gill described, is the desire to return to the last known safe or comfortable place when over-pressured; this is another natural instinct of cattle. This instinct usually results in response to excessive pressure and the desire to remove it and is the basis behind the functionality of well-known "Bud Box" facility design. Cattle handlers can use this innate tendency to their

advantage, for example, when sorting and moving cattle from one corral to another or when loading animals in a trailer. Gill suggested working with cattle ahead of time to get them used to pressure as a proactive management strategy to make scenarios like sorting and loading easier.

5. Cattle can only process one main thought at a time.

The fifth and last concept of cattle behavior Gill focused on dealt with thought processes. He emphasized that handlers must change the cattle's focus before putting on pressure if the animal is thinking about anything other than what the handler is asking. For example, if a handler is trying to move a grazing steer towards a gate, he or she should first draw the animal's eye to them before initiating forward movement.

In addition to behavior principles, Gill also touched on the many health benefits seen with stockmanship use, giving examples of studies which showed positive results, such as:

- Less stressed sale animals that go back on feed sooner
- Reductions in weight loss and sickness
- Easier weaning and sorting
- Increased gains on weaned calves
- Higher conception rates
- Decrease in diseases like pinkeye, pneumonia, and scours
- Overall improved herd health

Gill concluded with the following observation: "You can tell how good a stockman somebody is by how fat their horse is. If their horses are run down, they're not a very good stockman and they're spending way too much time going way too fast." Essentially, handlers must remember to work cattle slow so they can

be fast, and remember never to mistake motion for accomplishment. Furthermore, becoming a good stockman is a lifelong learning process.

#### PRACTICAL APPLICATIONS OF STOCKMANSHIP PRINCIPLES — WHIT HIBBARD

Whit Hibbard, editor of this journal and a co-owner of Sieben Live Stock Co. in Montana, gave a presentation on "Practical Application of Stockmanship Principles." He first clarified that what he was talking about was a particular form of stockmanship formulated by the late livestock handling expert, Bud Williams, what Allan Nation of The Stockman Grass Farmer magazine labeled "low-stress livestock handling" (LSLH).

After defining "principles" as "fundamental truths or propositions that serve as the foundation for a system of belief or behavior," Hibbard stressed that it is imperative that we understand the principles underlying LSLH so we can operationalize them into action (i.e., our cattle management and production events). In the absence of an understanding of principles and how to properly use them, what we end up with is what we often see in conventional livestock handling, which is confused, uncooperative, stressed out cattle and upset people.

Principles are the *why* part; that is, why this stuff works, according to Hibbard. Furthermore, an understanding of principles empowers us to learn for ourselves; that is, if we understand principles we can usually figure out what to do. Bud Williams even said, "Understand the principles; don't try to copy me." Furthermore, when we have difficulty working our livestock, it's almost always traceable back to one or more principles being violated. So, when things do go wrong, we should first ask, "What principle(s) am I violating?" because we most certainly are.

After doing an in-depth qualitative data reduction and analysis of Bud's teachings, Hibbard identified the following 20 principles:

- 1. Take responsibility for everything that happens with our livestock.
- 2. Be willing to learn how to work our livestock better.
- 3. Our instincts are all wrong for working animals.
- 4. We need to "read" our animals.
- 5. Keep animals in a normal frame of mind.
- 6. Animals should not be forced to do anything they do not want to do or are not ready to do.
- 7. Set up every situation so our idea becomes their idea.
- 8. Animals want to avoid pressure, and they need to experience release from pressure.
- 9. They want to be in a herd.
- 10. They want to move in the direction they are headed.
- 11. They want to follow other animals.
- 12. Good movement attracts good movement.
- 13. Animals want to see what's pressuring them.
- 14. They want to see where you want them to go.
- 15. They want to go by you or around you.
- 16. Under excess pressure they want to go back where they came from.
- 17. Proper position on our part is all the pressure we ever need to move animals.
- 18. Animals like us to move in straight lines.
- 19. We need to work with (i.e., train) our animals before doing anything else with them.
- 20. We need to prepare our animals for what's to come.

Hibbard stressed that his main point is that the better our understanding of stockmanship principles the higher our stockmanship skill level will be, which will result in more manageable cattle that will more likely stay together in a herd and stay where we take them and, consequently, our range quality, production and performance should improve. And when we integrate that with good range management it's a particularly effective combination.

# The Value and Advantages of Stockmanship for Ranchers and Rangelands

# - GUY GLOSSON

Guy Glosson, a professional certified educator in holistic management (HM) and stockmanship practitioner, rounded out the morning with his talk on the value and advantages that the use of stockmanship can bring to ranchers and the lands they manage. As a direct student of stockmanship progenitor, Bud Williams, and with over 30 years experience as a ranch manager in West Texas—15 of which were spent teaching HM and stockmanship across the U.S., Mexico and Africa—Glosson contains a wealth of practical knowledge about stockmanship.

A surprising fact, Glosson said, is that "Every place I've ever gone, people handle cattle the same"; that is, poorly. He stressed that without good stockmanship skills it is difficult to successfully initiate grazing management strategies with lasting results on rangelands. The solution, he noted, is that cattle and range managers must learn the principles discussed by Gill and Hibbard.

Glosson went on to share a 2015 YouTube video titled *Cows N Boys* which was filmed and produced by Namibian filmmaker Andrew Botelle. The film showcases some of the benefits of stockmanship, such as better quality of life for the Namibian cattle producers and the re-establishment of perennial grasses on the rangelands they manage. The video can be viewed at the following link: <u>https://www.youtube.com/watch?v=3Ey5v40KtkI</u>

# Stockmanship for Achieving Range Management Goals — Derek Bailey

Dr. Derek Bailey, professor of Animal Science at New Mexico State University, started

off the afternoon session noting that grazing distribution of livestock on riparian and upland areas is a critical issue on rangelands. Bailey, who is also the Director of the Chihuahuan Desert Rangeland Research Center, has conducted extensive research on the use of LSLH to manage grazing on rangelands across Montana, Idaho, and New Mexico.

"You can solve a lot of these grazing distribution problems with fencing, but I am not a recreational fencer," Bailey joked. Instead, he suggested that "Stockmanship is really a great tool to manipulate grazing distribution. It can reduce labor costs, facilitate movement between pastures, and likely improves livestock productivity."

Bailey's research has focused on comparing the use of LSLH versus conventional methods to herd cattle away from riparian areas to upland grazing lands. Cattle herded using LSLH grazed upland areas more frequently and spent less time near streams, in turn reducing grazing use of these delicate habitats. Bailey found that when using LSLH to target cattle grazing within a pasture, cattle should be herded away from riparian areas during mid-day (noon to midafternoon). While traditionally considered an early morning activity, herding during mid-day takes into account the cow's diurnal behavior patterns and allows the animal adequate time to drink, which in turn reduces the desire to return to riparian areas.

In addition to timing of herding, Bailey's findings suggested that strategic placement of supplements like low moisture blocks (LMB) and salt help to make herding and settling of cattle in targeted grazing areas easier by serving as an attractant, especially during times when forage quality is low. Using a combination of LMB and salt and moving them frequently to new targeted grazing areas proved to be the strategy which worked best.

Before attempting to do this, however, Bailey recommended that "You must prepare animals to take pressure and teach them that you can guide their direction of movement."

Secondly, understanding the "zig-zagging" technique is essential to initiate movement when leaving a riparian area. This is done by directing the herd from the back (or rear) by zig-zagging in a 90-degree angle, or "T", to your desired direction or target. Initiating this movement in the herd can be difficult, but will become easier with time.

In his experience, says Bailey, "Cattle began to expect that we would begin herding at midday. Near the end of the study, cattle would often travel to water at the normal time, drink, and then leave the stream and spend the afternoon on uplands."

In order to obtain successful integration of LSLH with rangelands grazing management, Bailey emphasized handlers must have a firm understanding of LSLH principles and a strong commitment to continued skill improvement. In turn, stockmanship has the ability to be a valuable strategy to improve grazing management and rangeland health.

# Stockmanship to Manage Trespass Livestock and Improve Wildlife Habitat in Big Bend National Park, Texas and Wild Horses in Theodore Roosevelt National Park, North Dakota — Whit Hibbard

Whit Hibbard talked about the practical application of stockmanship principles in two difficult and challenging real world situations that attest to their validity and efficacy. The first was using low-stress livestock handling to round up trespass livestock in the 1252 square mile Big Bend National Park (BBNP) in Texas.

In the founding congressional legislation of 1916, The National Park Service was mandated to "Conserve the scenery and natural and historic objects and wildlife therein. . . ." A serious threat to this mission in BBNP is trespass livestock from Mexico, including burros, horses, and cattle which are problematic because they degrade the park's natural resources by:

- 1. Damaging fragile spring ecosystems and competing with indigenous species for water.
- 2. Threatening wildlife by introducing disease (e.g., vesicular stomatitis).
- 3. Overgrazing park vegetation and degrading habitat.
- 4. Spreading exotic plant species.
- 5. Trampling rare plants and damaging riparian areas.
- 6. Causing significant trailing that leads to erosion.

A "low-stress trespass livestock capture pilot project" developed and conducted by Hibbard to deal with this problem obtained the following results during a three-month trial:

- 1. Seven roundups were conducted which resulted in the capture of 44 animals.
- 2. The roundups were 100% successful in capturing the target animals on the first attempt (i.e., none got away).

During subsequent years, several hundred additional trespass animals were caught during an on-going project.

In comparison with the pilot project, traditional roundups that used day-hire area cowboys were much less effective, were labor intensive, expensive, and dangerous.

As a consequence, it was concluded that low-stress livestock handling is efficient, costeffective, humane, ethical, congruent with the image and philosophy of the National Park Service, and aptly suited to deal with trespass livestock in BBNP, whereas traditional livestock handling is not. The pilot project clearly demonstrated that trespass livestock can be controlled successfully in-house by using lowstress livestock handling methods.

In a similar project, Hibbard tested the principles and techniques of LSLH to round up wild horses in Theodore Roosevelt National park in North Dakota. The purpose was to cull some animals to keep them at a sustainable level for the available range. On two different occasions he demonstrated that wild horses could be walked into a pen using LSLH instead of the traditional high-stress roundups (or "wild horse chases") conducted by area cowboys and ranchers or helicopter.

That initial success led to some novel research (McCann 2015) by Blake McCann, Senior Wildlife Biologist at the park, in which he began formally testing low-stress methods as an alternative to expensive helicopter gathers. The primary objectives for the research are to determine whether LSLH is a viable means of (a) controlling herd size, (b) addressing animal welfare issues, (c) dispensing with helicopter gathers, and (d) allowing for a better disposition of the captured horses.

To date, McCann and his volunteer crew have proved the concept and in the process found that herding by a single handler on foot is most successful at walking bands in the desired direction to a specific location. Also, horses can be sorted and culled, and selected animals calmly loaded into horse trailers by trained handlers on foot.

# Low-Stress Herding Improves Herd Instinct, Facilitates Strategic Grazing Management, and Coexistence with Carnivores

#### - MATT BARNES

Matt Barnes, a certified professional in rangeland management who works for People and Carnivores, and owner of Shining Horizons Land Management, gave a presentation titled, "Low-stress herding improves herd instinct, facilitates strategic grazing management and coexistence with carnivores."

Barnes reported on several People and Carnivores collaborative projects with ranchers and other land managers that illustrated the relationship and relevance of stockmanship to range management, and particularly to preventing conflict with large carnivores (Barnes 2015a). The projects started with existing rotations and intensified management by subdividing pastures with portable electric fence and/or herding.

In one partnership with the Germann Ranch and The Rodear Initiative in southwestern Montana, riders close-herded cattle daily at high density ("rodearing"), and night-penned them with temporary electric fence or fladry. With this strategic use of high stocking density they prevented losses to larkspur poisoning and large carnivores, such as wolves.

In a second project in western Montana, with The Rodear Initiative and Sieben Live Stock Co., two methods were tested to determine if active herding can increase the grazing capacity of a pasture by improving grazing distribution to the point where additional grazing days can be allotted to that pasture. The first method involved close herding (rodearing) with night-penning, and the second method involved low-stress herding and "placing" without night-penning of 386 co-mingled spayed heifers. Both methods showed that herding can improve grazing distribution across the pasture or landscape, and thus increase grazing capacity (Barnes 2015b).

The first method involved two riders and a stock dog close-herding the heifers in a single, tightly encircled bunch or mob—not actually low-stress livestock handling—and slowly moving that mob across the pasture at a density of up to 252 AU per acre during the day, then penning them at night under electric fence. This method:

- 1. Successfully kept cattle at very high density, demonstrating proof-of-concept.
- 2. Did not increase herd instinct.
- 3. Indicated that night-penning was necessary to maintain stocking density when riders were not present.
- 4. Did not appear to greatly affect diet selection; the heifers still avoided certain plant species.

- 5. Showed that herding speed (the rate at which cattle moved across the land-scape) matters greatly when attempting to achieve desired utilization levels.
- 6. Is labor-intensive.

The second method involved herding with low-stress livestock handling, rewarding the heifers for staying together, but not forcing high density; and attempting to "place" the herd in specific parts of the pasture in such a way that they would stay there unattended until moved the next day. This method:

- 1. Fostered the herd instinct of the co-mingled heifers, training them to stay together quite well after several days.
- 2. Failed at placing the cattle for any length of time, probably because herd instinct was not strong enough until the end of the project.
- 3. Was unable to achieve the extremely high degree of control over the cattle as with rodearing, but still much better than no herding.
- 4. Was not as labor-intensive, and probably had more benefit relative to time invested.

A third project, another partnership of People and Carnivores with Sieben Live Stock Co, combined the best of the previous two methods. This project combined low-stress herding of co-mingled steers during the day across a mountain pasture with special emphasis on under-utilized areas, and night-penning at high stocking density to get concentrated animal impact in areas with low productivity and a high density of club moss.

The project resulted in even distribution of grazing throughout the pasture and robust regrowth, particularly in the night pens. Grass clippings one year after treatment showed a significant increase in forage production in the night pens (high animal impact areas), closely correlated with stocking density and manure distribution (Barnes and Hibbard 2016, this issue).

In a fourth project in northwestern

Wyoming with two permittees (ranches), the U.S. Forest Service, and People and Carnivores, riders used stockmanship to try to foster the herd instinct in two combined herds, keep the cattle together, facilitate a rotational grazing plan with few fences, and prevent predation by grizzly bears and wolves. Whit Hibbard and Steve Cote taught workshops on low-stress livestock handling on separate occasions.

Barnes said that preliminary results indicate that (for the first two years) the herds have stayed together somewhat better than they did historically (though not all in a single group); there have been no known depredations, which was not the case prior to the project; and no wolves or grizzlies have been removed. Thus, low-stress herding appears to reduce the incidence of predation by enhancing herd instinct, facilitating strategic grazing management at higher stocking density, and promoting antipredator behavior (Barnes 2015a).

# Conclusion

This 2nd Annual Stockmanship Symposium proved to be another success, and the presenters all hoped that it helped promote Bud Williams' teachings and commitment to the animals and the people handling them. Many references to Williams, the guiding principles of stockmanship, and emphasis on the commitment to learning required to become a good stock handler were sprinkled throughout the speakers' talks.

It is likely there will still be some ranchers and range-wildlife managers who will not view stockmanship—and more specifically LSLH—as a viable solution to solve wildlife and rangeland issues. Stockmanship is a skill, possibly even an art, which requires dedication to honing one's understanding and use of it. Additionally, learning LSLH can be a laborious and challenging activity.

Despite these observations, the new and old ideas alike presented at this symposium by the speakers show clear, concrete examples of stockmanship's capability to improve and restore rangeland health for both the wildlife and livestock who share the land, as well as reduce livestock predation in areas inhabited by large carnivores. Those who study and adopt LSLH principles and techniques are seeing the fruits of their labor flourish through a variety of benefits to the wildlife and rangelands they manage.

#### Resources, References, and Literature Cited

- Bailey, D., and M. Stephenson (2013). Integrating stockmanship into rangeland management. *Stockmanship Journal*, 2(1):1-12.
- Bailey, D., H. C. VanWagoner, R. Weinmeister, and D. Jensen (2008). Evaluation of low-stress herding and supplement placement for managing cattle grazing in riparian and upland areas. *Rangeland Ecology & Management*, 61:26-37.
- Bailey, D., and G. R. Welling (2007). Evaluation of lowmoisture blocks and conventional dry mixes for supplementing minerals and modifying cattle grazing patterns. *Rangeland Ecology & Management*, 60:54-64.
- Barnes, M. (2014). Preventing predation of livestock— Livestock management for coexistence with large carnivores. *In Practice*, 158:6-7, 16.
- Barnes, M. (2015*a*). Livestock management for coexistence with large carnivores, healthy land and productive ranches. [White paper]. Bozeman, MT: People and Carnivores.
- Barnes, M. (2015b). Low-stress herding improves herd instinct, facilitates strategic grazing management. *Stockmanship Journal*, 4(1):31-43.
- Barnes, M., and W. Hibbard (2016). Strategic grazing management using low-stress herding and night-penning for animal impact. *Stockmanship Journal*, 5(2): this issue.
- Botelle, A. [Andrew Botelle]. (2015 August 31). Cows N Boys. [Video File]. Retrieved from <u>https://www.youtube.com/watch?v=3Ey5v40KtkI</u>.
- Gill, R., and R. Machen (2012). Cattle handling pointers: Stockmanship and low-stress handling. Texas Agrilife Extension, ASWeb-057. http://animalscience.tamu. edu/wp-content/uploads/sites/14/2012/04/Cattle-Handling-Pointers-v1-030714.docx-1.pdf.
- Hibbard, W. (2012). Bud Williams' low-stress livestock handling. *Stockmanship Journal*, 1(1):6-163.
- McCann, B. (2015). Utility of low-stress livestock handling techniques for management of feral horses at Theodore Roosevelt National Park. *Stockmanship Journal*, 4(2):54-62.

#### **Sponsors**

- Stockmanship Journal (Whit Hibbard) <u>http://www.</u> stockmanshipjournal.com/
- New Mexico State University, Animal and Range Sciences Department - <u>http://aces.nmsu.edu/academics/</u> <u>ANRS/</u>
- People and Carnivores (Matt Barnes) <u>http://www.peo-pleandcarnivores.org/</u>
- Texas A&M University, AgriLife Extension <u>http://agril-</u> <u>ifeextension.tamu.edu/</u>
- The Whole Picture Consulting, LLC <u>http://www.cow-boyconservation.com/</u>

#### Speaker Websites

- Ron Gill, Effective Stockmanship <u>http://effectivestock-</u> manship.com/
- Whit Hibbard, Stockmanship Journal <u>http://www.stock-</u> manshipjournal.com/
- Guy Glosson, Holistic Management International http://holisticmanagement.org/directory/name/ guy-glosson/
- Derek Bailey, NMSU <u>http://aces.nmsu.edu/directory/</u> person.php?person\_id=813/
- Matt Barnes, People and Carnivores <u>http://www.people-</u> <u>andcarnivores.org/</u>