chapter one

Stockmanship and range health

Some years ago while working with a grazing association on an allotment here in central Idaho, I realized how crucial it is to integrate a high level of stockmanship with range management.

The allotment was about 140,000 acres of rolling hills and mountains with plenty of timber, thick brush, and low precipitation—most of which came in winter as snow. Many of the creeks contained endangered or threatened fish species.

For the grazing association, meeting stubble height standards—designed to protect or enhance habitat for these fish—was the crux of staying out on the range.

When I arrived on the scene, the grazing association—whose families had managed stock there for over 100 years—was about to lose it all. "Battle" with federal land management agencies was imminent.

The ranchers were backed up as far as they would go. They were facing a big cut in stock numbers and a closed allotment. Year after year, they couldn't meet grazing standards along the creeks in spite of enormous riding efforts. They also had to deal with some anti-grazing bias.

To gain needed support and new ideas, the association formed a collaborative team of people who all had an interest in the allotment.

The team adopted holistic decision making, formulated a goal, and developed a grazing management plan that called for control of overgrazing and over-resting. This meant managing the time that plants and streambanks were exposed to grazing animals and allowing adequate recovery periods for plants and soils.

Livestock grazing and healthy riparian areas are compatible.

The team concluded the range concerns were not a result of too many animals in spite of prior recommended cuts in stock numbers. In fact, many more cattle could be supported on this range while still enhancing the resources.

The real key to meeting standards lay in controlling the time that animals were in any one area, especially in riparian areas. This had to be done without new fencing due to a lack of funds and some valid concerns about aesthetics, wildlife, and recreation impacts. This meant controlling the animals with riding alone.

Having tried for years to get better control over the stock with almost constant riding and re-riding the creek bottoms, they were going to have to uncover something new.

The team found a potential answer in the form of a Bud Williams low stress stockmanship school.

Some of the association members attended a session. When they returned, they rather hurriedly hired a rider and had me help train him so the livestock would stay together and be controlled enough to follow the range plan. This meant keeping the stock mostly in the uplands and moving the whole herd effectively when the time came.

A month or so later, the bulk of the herd was together on the range, staying where they were supposed to be and where they were settled. The entire herd was moved on time and according to plan. Riparian areas were lightly used, and streambanks were stable.

Uplands on the pastures, each thousands of acres in size, looked as if they had been evenly trimmed. Plenty of required stubble remained.

The association found the stock so calm and easy to handle that it was hard to believe they were the same cattle they had turned out. Team members (some former bitter adversaries) were working together.

By August, the association had saved about $10,000 in labor (riding) costs. Ranchers kept full numbers—1500 pairs, bulls and horses—and stock stayed out all season that year.

End-of-the year monitoring showed the cattlemen had met all the required stubble height standards on the forest except for two, which were missed by only one-fourth inch. The year before they had missed all of them—by a lot.

Four years later, they were still on the range in full numbers and full seasons. The average exposure of plants to grazing on any particular area had been reduced from 45 to 14 days. Riparian area trend was so good that it was a regular topic at ecological restoration symposiums, conferences, and workshops. It was written about in magazine articles. Managing agencies gave the cattlemen national recognition.

I have been on allotments in many parts of the West—visiting, observing riding, and teaching stockmanship. The scenario is similar almost everywhere.

Traditional handling methods create high labor costs, stress on the riders and stock, and lost productivity. Association members and their riders work hard each season, only to fail to meet standards in the end. In the winter, they receive show cause letters and argue with managing agencies over cuts in livestock numbers or shortened grazing seasons.

In marked contrast, when riders were found who could handle the stock well and implement planned grazing systems, labor costs were lower and standards were met and exceeded. In some places, stock numbers were increased and seasons extended.

I am convinced that no matter how well thought out (holistic) a range plan is or how collaborative the effort, grazing associations will not achieve satisfactory range conditions and livestock productivity without dedicated riders who are skilled in stockmanship.

The need for productivity

As a soil and range conservationist, two facts have forever changed the way I looked at livestock handling and range management.

Fact one

There is now incontrovertible evidence that long term rest creates rangeland desertification, much the same as does severe, repeated overgrazing. Even today, most scientists are unable to solve desertification. This loss of biological diversity, including the productivity and health of plants, soils and other natural resources in seasonal rainfall environment is the cause of much strife worldwide. Often blamed on poverty, lack of education, lack of technical advisors, insufficient conservation programs and too many grazing animals, addressing these items still consistently ails to achieve good results. In the western US, we have slashed livestock numbers over the past 80 years, and we have, comparatively, good extension services, a higher standard of living, lots of technical advisors and cost share programs, but the problem continues.

The solution lies in restoring the presence and creation of the effects of active, contentrated herds of large grazing animals. The time that plants and soils are exposed to grazing animals and the effects of herds on ecosystem processes is the key to halting desertification. On most pastures and ranges, overgrazing of plants and overresting of plants and soils is occurring simultaneously. On USDA and USDI enclosures and on hundreds of thousands of acres of open range that has been long rested, the range is almost dead. However, where we have concentrated herds of heavy grazing animals, where the time of exposure of plants and soils to animals and the proportion of grazed plants is well managed, we see remarkable contrast. Where herds are excited (properly turned) and the hoof disturbance that enhances diversity is created, the range is flourishing.

Without herds of well managed animals, our range will rapidly desertify; in fact it already has. But this can, on most ranges, be prevented and be reversed.

Fact two

In order to control the time and create herd effects on large expanses of unfenced grazing lands, we need to be able to control our animals at a much higher level than is occurring. Although even mediocre grazing management can be better for the range than long term rest, because it keeps perennial grasses alive, traditional handling falls short of producing the control required to even meet minimum government range standards consistently or profitably. Enhancing the range on a large scale is well beyond the reach of most grazing associations due to a lack of control over livestock. For many years, however, the knowledge of how to control our animals, without enmeshing the land with fences, has been hidden.

This is the case no longer.

Under sound (holistic) management with animals that are well handled, the effects of grazing on the health of rangelands can be outstanding—well beyond the realm of what was formerly considered possible. The results that planned grazing can achieve cannot be duplicated by rest, fire or technology.

For the person running stock on public land who is dedicated and willing enough to step ahead and lelieve a little, the value of true stockmanship can mean the difference between getting kicked off the range or showing astounding results. For our rural communities, stockmanship can be an important tool to increase watershed health and boost rural economies. It is a rare tool, being one that increases livestock profitably and range health at no extra cost.

Range plan basics

A key concept behind the Natural Resources Conservation Service range conservation planning guidelines is to control the **time** that plants, soils, and other resources are exposed to grazing animals.

A successful range plan is based on a sound goal and is adequately monitored. The plan usually prescribes that a relatively high proportion of plants will be grazed at a moderate level of use. This often means achieving grazing on areas that aren't usually grazed and reducing the time that other areas are exposed to grazing animals.

The rationale for moderate level of use (percent utilization) is so cover and litter amounts will be adequate to protect soils, favor the water cycle, and meet needs for other herbivores.

Additional needs of wildlife can be incorporated into the plan by adjusting livestock movements to avoid unnecessary disturbance of critical areas during crucial periods.

Highly controlled livestock can be used to reduce brush, keep forage productive, create more plant diversity and reduce fires—all of which create better conditions for many wildlife species.

Planning in the Arco, Idaho, NRCS field office calls for the herd to periodically move over the land en mass to get a jump start on enhancing nutrient and mineral cycles, convert sunlight to plant material, and develop the biological community.

This can be done by turning large herds rather sharply so hooves land where they may.

Done correctly, this action breaks up soil crusts, creates ideal seedling germination conditions, moves old standing dead vegetation onto the soil surface, controls sagebrush, and firms up loose soils that favor too many brush or tap rooted plants.

This helps create upland watershed conditions that favor water infiltration, which can result in lower peak discharges. It also helps protect streambanks from excessive erosion and promotes willows and other important riparian vegetation.

Controlling the length of time livestock use riparian areas can result in further enhancement of stream conditions by favoring populations of bank-holding shrubs and sedges.

Simply having animals on the land in low densities and numbers does not result in dramatic advances to the key processes that drive range ecosystems towards higher diversity and health.

The absence of concentrated herds of large herbivores on seasonal rainfall environments produces, unquestionably, serious loss of biodiversity due to poor functioning of these processes.

We can't keep perennial grasses (the mainstay of our range vegetation) and our soils (the foundation of all life on the range) healthy or biologically diverse and thriving without large numbers of hefty grazing animals.

We also need the knowledge and ability to handle stock to enhance these processes.

For a full explanation of these and other phenomena, see the Appendix, as well as Allan Savory and Jody Butterfield, *Holistic Management: A New Framework for Decision Making* (Island Press, 1999).

Healthy riparian areas and grazing are compatible when the stock are under good control. Riparian grazing by large herds of hoofed animals is certainly natural, even here in the Intermountain West.

Diaries written by trappers and soldiers reveal that large herds of bison grazed central Idaho until the middle and late 1800s. Vast herds grazed much of the Plains and the Southwest. Fossil records show that mammoths, rhinos, horses, and many other herbivores were present with the bison long ago.

Grazing can and does have many beneficial effects in riparian areas **if** it is done properly. But if stock stay too long or return too soon, significant bank trampling and changes in vegetation communities and water quality can occur.

Long ago, it is likely that pack hunting predators, grizzlies, and perhaps Native Americans—combined with the self-moving characteristics inherent within large herds—helped control the length of time these animals loafed around on any one place like a riparian area. The impacts were probably high, but the duration probably short. Soils and plants recovered and were positively affected.

Over-rest can also create desertification. Overgrazing and over-resting are occurring at the same time on most ranges. Both must be controlled to meet range standards.

Even though much of our upland range condition may rate good or excellent by conventional standards, the lack of concentrated or excited herds (turned hard to create herd effect) is causing our range to stay well below its natural potential.

Although official definitions of overgrazing do not appear in range literature, people assume too many animals cause it. But too many cattle, elk, bison, sheep or horses don't cause overgrazing.

The time plants are exposed to animals, not how many animals graze the area, is what determines if an area is overgrazed.

Overgrazing occurs when animals return to graze already **severely grazed plants** within the same growing period and prior to adequate recovery of carbohydrate reserves.

The key is to move the herd before the grazed plants send up enough growth to entice an animal to graze it again.

This sounds simple enough until we consider that on most ranges, cattle are scattered over +/-10,000 acres of range with few or no cross fences. Many of the cattle don't want riders to find them, and they don't want to be in a herd. They want to stay in their favorite hideouts.

We understand why cattle do this, in spite of it being unnatural and non-beneficial to them. We also know how to prevent and correct these problems.

To avoid over-grazing and over-resting, riders must know how to handle even large herds so they want to stay together, graze where they are placed, and can be readily moved to a new grazing area.

Well-handled livestock will go places that were formerly impossible to get them to. Their tendency for hiding out in favorite places will be changed.

To avoid and correct the partial rest (lack of herd effect) conditions prevalent on Western ranges, riders must learn to turn large herds to achieve herd effect.

Meet Bud Williams

Two extraordinary people—Bud Williams and his wife Eunice—have lived their lives working with animals and achieved incredible results. Entirely on their own, they developed a method of livestock handling called "low stress livestock handling" or "Bud Williams' Stockmanship."

Stockmanship developed from Bud's search for a way of handling livestock that reduced their stress. Along the way, he discovered that low stress livestock handling also resulted in high control.

Bud has traveled around the world for over 40 years working all kinds of livestock—from buffalo and elk to reindeer, horses, sheep and cattle—to enhance his knowledge and methods.

Bud developed this method from scratch. His only guide—the stories he had been told about riders in the past who could do some rather remarkable things with stock.

The missing part of the story was exactly how they did it. Bud had the intelligence, persistence, and perception to figure it out.

Today, people who have seen what he can do never forget it.

His search for a method to reduce the stress of handling also enables riders to achieve astounding control, even with large herds on rough range, even through complex grazing plan rotations, even with Brahma and longhorn cattle, and even while riding old gentle horses.

The method Bud developed has wonderful implications for any livestock producer. It can increase profits without additional cost, because it doesn't cost a nickel to handle stock with more understanding.

I first became aware of low stress livestock handling when Bud did a stockmanship clinic here in Idaho. A rancher called and said she knew what we were trying to do with our cattle and that we should go, that it would help. That clinic—and the day after—was a turning point for me as a conservationist who has had a lifelong interest in training animals.

At the clinic, Bud stated right up front that you could place livestock right where you want them. They would be there the next day and even longer simply by handling them properly on the way there. Cows could even leave the herd, go to drink, and return to the herd right after.

He showed us over and over that day that he could consistently achieve control. Control that just the day before I knew was impossible.

This was a tool many Idaho ranchers needed badly. I set out to learn it, because I figured what I could do, they could too.

My first try

My first attempt at placing a herd using what I had learned was with my neighbor's cattle. I had helped him work the stock many times before the old way. But I had firmly decided I was going to work stock Bud's way from now on.

There were about 200 cattle in the herd, mostly cows and a few yearlings. They were well scattered over about 120 acres of pasture that I could view from my home. This meant I could conveniently watch what happened after I placed them.

I tried to gather them by going back and forth behind groups, but many of them just took off for the far end. So I worked individual animals as I could. When they got a little calmer, I gathered them loosely in a far corner.

As I approached the herd, I saw two or three cows (the ringleaders of the ones that had taken off) with heads up and bugged-out eyeballs looking at me. Before they took off (when their heads went from me to looking ahead), I backed off. I repeated this maybe eight or ten times.

When I could get within about 30 yards of them, I went back and forth in straight lines. These sensitive cows marched off, and the rest followed. They went pretty fast, so I let them get off a ways, then just followed straight behind and slower than they were going.

They ended up at a bridge over a canal. Some cows crossed, but others stopped and looked back at me. So I stopped. They relaxed in a few seconds, and I went up the side towards the front of the herd to near the bridge and pressured them into their sides. They all went straight ahead and across the bridge. I drove the herd just as easy as I could by walking straight lines behind. I drove them for about 30 minutes more to the other end of the field and back.

The herd began to slow, so I zigzagged behind and pressured a few real slow ones directly onto their sides. By now, I could work pretty close to most of the herd. But about five or six in front were getting pretty far out from the rest.

I drove them a little while longer, and they looked pretty relaxed. They were just walking, and nobody seemed too concerned. They were all moving straight and at a comfortable walk.

I went up the sides, and they all slowed and stopped as I went by except for a few in the lead. They actually sped up a little. I cut in straight across behind them and let them go ahead. They soon drifted and stopped.

I went back and forth across the front of the main herd and turned the front animals so they were facing the back. I went around them and got a few of them facing different directions by pressuring their heads or hips to turn, doing so very carefully. About a fourth of them bedded down in a few minutes. The rest went to grazing calmly.

I left them on a part of the pasture that had very little feed left. I stayed about 15 minutes more to see if any of them were thinking of leaving. Then I left and went home. It was about 9 AM.

I could see the herd well from my house. At noontime they were all still right there. Not a cow had moved. Some of them left the herd to go to the creek. They drank and returned to the herd right away.

Cattle left the herd in small bunches throughout the afternoon to drink, but they all went back to the main bunch, even though they crossed some pretty good feed on the way.

The owner showed up about 5 PM with two riders and some dogs. He opened a gate about 30 yards from the bunch, and they all got behind the herd and started yelling. None of them moved. He got the dogs on them, and some cows spun around and jumped. But still the herd wouldn't move away. They obviously wanted to stay right there.

They kept up harder pressure for about 15 minutes. Finally the herd went forward and eventually through the gate to new pasture.

I'm sure the owner wondered why it was so hard to get 200 cows to go 30 yards to a gate. I never did tell him why.

Since then, I've spent countless hours working and studying herds and helping others with this method. I have had essential and very patient help along the way from Bud and Eunice.

During my work and vacation time, I've gone from ranch to ranch and worked many types and breeds of livestock in many different settings. I've been able to solve every handling problem encountered.

I've put cattle herds together—even some difficult herds—and placed them consistently in many settings. I can do work by myself that used to take three or four riders, because I've learned to handle the stock to work well for me **first**. The day is always productive and the job done right.

Over the years, I've had cattle do some incredible things for me. Some people tell me I'm lucky to get them to do what they do. Maybe so. But my luck changed the day after attending a Bud Williams school.

It works on the range

Over the past few years, riders trained in good stockmanship—beginners really—have been able to achieve control over cattle herds on some Idaho allotments to a degree formerly thought impossible.

A former head of the Society for Range Management toured an allotment here in central Idaho with a team of livestock producers and agricultural officers from overseas. He spoke to the rider I had trained and viewed the riparian areas after grazing. He called this method of stockmanship "the most powerful range management tool ever developed." I fully agree.

With dedicated riders who have just some skill in stockmanship, associations can meet standards and even exceed them. Ranchers and grazing associations faced with severe reductions in livestock numbers, shortened seasons, or even allotment closures have been able to sustain animal numbers and length of grazing seasons because they can—and are—meeting these standards.

Standards in parts of Idaho call for leaving a 4- to 6-inch stubble height in riparian areas. Uplands have utilization standards that are usually set at about half of the season's growth on bunch grasses. In general, all streams in the allotment must also be in good condition or have an upward trend.

Around here, ranchers have found that with good stockmanship, more forage is available to the stock, because they can get and keep them up high or move them into more difficult to access upland places. Everywhere that stock graze according to plan, more forage is being produced and the stock are in better condition.

The Pass Creek Grazing Association in Mackay, Idaho, had two low stress handlers who were able to put stock where others had long ago given up trying. They changed out the typical pattern of grazing the creeks and lower range, then moving the stock to the next fenced area. Now, they place the stock up higher, using much of the upland feed and reducing pressure on the bottoms.

Ranchers in Arizona report they have quit building fences to protect the creeks. They don't have to because they are handling stock so much better.

Officers in Australian agricultural agencies report outstanding results from ranchers and riders who adopted Bud Williams' method on the range. They send people here to see it work and learn more.

Ranchers around Arco, Idaho, are realizing both timesavings and healthier herds since adopting low stress handling.

Low stress will work for you

I've discovered that most, if not all, livestock behavior problems are due to handling that doesn't fit the animals. It isn't the breed of stock or bad luck. Used consistently, low stress handling produces profound and lasting changes in the behavior and health of all livestock.

Good stockmanship applies to many facets of production: Handling in facilities, trailer loading, doctoring, weaning, calving, breeding, showing, and more. These are items for another book.

The crisis on the range needs resolution. Herders need skills that allow them to handle a herd so it wants to stay as one herd, stay where they put them, and be easy to gather and move.

Riders should understand how to solve common range problems such as getting a herd up or down steep mountain trails, crossing creeks, rivers and bridges. Going through gates. Sorting and placing stock.

These topics are covered in this book in enough detail that it can serve as a reference guide for the serious rider.

The chapters on stress, control, and how livestock think is essential information for every livestock handler and producer.

Good news...and a challenge

The good news is that the knowledge of how to make better resource management decisions already exists. The framework has been developed, and the grazing management fundamentals for the rider are well documented by Allan Savory of New Mexico. Some NRCS and Forest Service range conservationists have a great deal of technical knowledge on grazing science and management principles.

Having a supple, light, stock horse is essential to range riders practicing good stockmanship.

The knowledge of achieving calmness, lightness and remarkable obedience in a stock horse has existed for many years. Men like Ed Techick of Arco, Idaho, are carrying on the method of the great Charles O. Williamson. His method also contains facts that are crucial to understanding and handling all hooved animals.

Powerful, proven knowledge is now available to anyone who wants it for drastically improving the range, producing great stock horses, and achieving stunning control over livestock. You can improve the land like you want and have healthy cattle, because the stock will do everything you want and the cattle will get everything they want.

The challenge with all of this is:

You aren't going to get to do it the way you want!

Reducing stress and getting outstanding control of your animals requires that you give up reacting to your instincts and respond totally to what the animals show you they need and on their timetable. This is with animals that don't reason and in ever-changing circumstances.

The rider who is knowledgeable and dedicated to stockmanship operates very differently than an engineer. This is why formulas, grazing systems, pat answers to animal handling problems, stubble heights, government grazing rules and policies, administrative actions, and environmental group ideas have met with quite limited success.

Conflict and contention is mounting over the results of grazing on public and even private lands. Good animal handlers are in high demand and much needed.

It is my hope that riders will strive to improve their stockmanship after understanding how important it is to range health and their quality of life.

When they understand how livestock learn, think, and react to handling, they will have powerful knowledge to apply pressure correctly and control even large herds of cattle quite readily, given time and experience. Resource-management implications of proper handling are enormous on **all** livestock operations.

A pool of skilled, dedicated riders is crucial for the survival of many ranchers who graze stock on public lands.