

Range Management Problems

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I want to discuss just a few Range Management ideas, mostly in areas where I disagree with Federal land management policies. I am 71 years old and have been a western ranch owner and operator just about all of my life, as was my father and grandfather before me. We have run both sheep and cattle, often together.

I ranched on the plains of southeastern Montana for several years, and I have ranched with the L.U. ranch out of Worland, Wyoming, for 33 years. The L.U. ranch consists of desert, foothill, and mountain rangelands, with the land ownership being about 60% B.L.M. Public Domain, 10% U.S. Forest, 10% State, and 20% Private.

Over the years I have worked closely with a number of Federal land managers. Most of them are likable, but know little or nothing about livestock or ranching. I have tried to help the younger ones learn, and I have tried to learn from some of the best of the older land managers. I have gained a lot of knowledge from the University Extension Services, Federal research personnel, and other ranchers.

I have been fortunate in attending 5 outstanding range workshops conducted by A.L. "Gus" Hormay. It is too bad that his excellent government bulletins on the Principles of Rest Rotation are out of print. These bulletins contain very fine information on how plants grow, how to restore plant vigor, how to revegetate, and how to get the best cattle gains.

At the Wharton School, University of Pennsylvania, where I graduated in 1937, I was taught that the history of American business showed that 90% of all businesses fail. Recently, a banker told me that their national bank association's figure showed a 94.7% rate of failure. Either figure would indicate how terrible the odds are against all businesses including ranchers. Knowing and practicing good, practical Range Management is an absolute must.

What Is Range Management

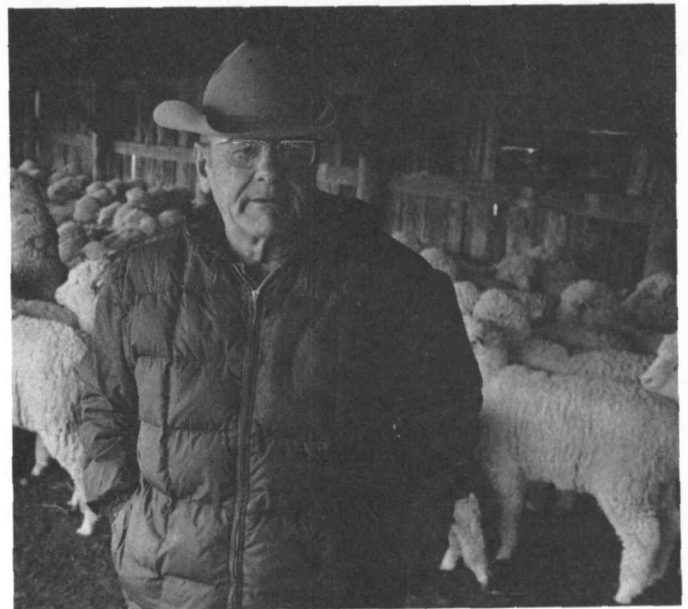
The term "Range Management" is often misunderstood or misused, so I will try to establish a common ground for my discussion here. Many ranchers think of Range Management as just trying to improve the range vegetation. On the other hand, many Federal land managers think of Range Management as a method of moving and manipulating livestock around an area just like tin soldiers, with the intention of improving the wildlife habitat and increasing wildlife numbers, but with no concern about the livestock. Both concepts are

Editor's Note: The author, Dan Healy, has deep feelings for the cattle business and its relation to the land. This is evident in the following excerpts from a letter that Dan sent with the photos.

"If I have had any success in ranching, I think that it is because I have sympathy, love, and understanding of livestock, wildlife and the range."

"Although branding the calves is necessary, I do not like the temporary pain and fright to the calves. Consequently, I insist that the work be done quickly and the cattle released immediately. Any partying or beer drinking takes place later."

We can all learn from this article.



Dan Healy and his flock. (Photo by Paul Conklin)

very faulty.

Stoddart and Smith define Range Management as, "the science and art of obtaining maximum livestock production from range land consistent with conservation of the land resources."

Maximum livestock production" speaks for itself. "Conservation of the land resources" to me means the maintenance, care, and preservation of the soil, water, air, vegetation, wildlife, and beauty of the landscape. "Conservation" means maintenance, not escalation of wildlife numbers.

I am firmly convinced that if we manage our ranch according to this definition, and are reasonably cooperative with all the other uses and users of the land, everyone should be satisfied.

So, good Range Management demands two things—maximum livestock production, and conservation of the land resources. A rancher is not practicing good Range Management when he makes livestock grazing decisions without regard to conservation of the land resources. On the other hand, a government land manager is not practicing good Range Management when he makes livestock grazing decisions without regard to maximum livestock production or ranch expenses. Both kinds of decisions are the cause of most of the friction between the rancher and the government land manager.

For example, Federal Ranch managers enjoy discussing fancy grazing systems with the rancher. But they never seem



Companionable Morgans line up on a snowy morning on the Healy ranch. Photos on this page by Dan Healy.

to get around to discussing the cost and location of the necessary water developments, the cost of fencing and fence maintenance, the cost of the rancher's time in moving the livestock between pastures, and the cost to the rancher in weight losses to his livestock with these disturbing moves and changes in feed. These losses and costs can be very substantial and difficult for a rancher to afford, so they should be the first thing discussed.

I have no faith in official Federal range surveys. These surveys are too complicated, too time-consuming, and too easily manipulated. My experience has been that they usually show the range condition to be much worse than it

really is. I suspect that this is done to exert more control over the rancher, and also to get more appropriations out of Congress.

The forage diets of sheep and cattle differ, with sheep preferring the finer grasses and browse, and cattle preferring all grasses including coarser bunchgrasses. To keep a range well-balanced with all types of vegetation, both sheep and cattle should be grazed in our area.

Up until recently the L.U. ran both sheep and cattle, but we had to sell the sheep because we were losing one-third of our lambs to predators, principally coyotes and mountain lions, with some losses to bears. The Government has



Cattle and sheep graze together on the Wyoming ranch.

eliminated any effective predator control, and thereby has eliminated practically all of the many thousands of sheep from our Shoshone National Forest and most of the sheep everywhere else. Is this in the best interests of our nation?

Good Water—The First Priority

"Poor water distribution is probably the chief cause of poor distribution of livestock on the range," say Stoddart, Smith, & Box, on page 283.

I recently went on a range tour over a Forest Permit. The Forest Ranger said that the range management plan was developed a number of years ago and the necessary fences were built by the ranchers. At a later time, the water was planned and developed. Now they find that the fences are in the wrong places and the management plan is not working. This is an example of what can and does happen.

As another example, the BLM 1982 Grass Creek Grazing Environmental Impact Statement on page 11 states, "Do not allow livestock waters to be developed in crucial elk, deer, and antelope winter areas." This restriction could affect our whole ranch area. Wildlife need water too. Wildlife often drink water developed by the rancher for his livestock. Most ranges can be improved and animals will do better when there is better distribution of animals over the range.

Grass and Browse

A rancher is in the business of producing meat (and wool) to sell, and to hopefully produce and sell enough to pay expenses and make a profit.

Some people think that all you have to do to make money in ranching is to turn livestock out on the range where they will get fat and make a lot of money. These people see no difference if the grass is short or tall, green or mature, new or old, thickly vegetated or sparsely vegetated, close to or far from water, in summertime or wintertime, with good water or bad water. Even the government charges the rancher the same grazing fee regardless of grazing conditions, and wonders if it is being paid a fair price.

Please remember this! Meat is only produced on the range during the green forage growing season. Mature forage does not produce meat, and is therefore useful only for animal maintenance.

Many people do not realize the great differences there are in nutrition between young, immature forage, and the same plants when they are mature. Young plants are much richer in protein, they are soft and tender, and they have less fiber and less lignin, which decreases the digestibility. (For more information read Hormay, 1970, page 20; Stoddart, Smith, & Box, pages 241 and 279; Feeds and Feeding, Morrison, 1957, pages 231 through 235; Feeds and Nutrition, Ensminger & Olentine, 1978, pages 231 & 232.) The

results are easily seen in the chart below from Hormay, 1970, page 20.

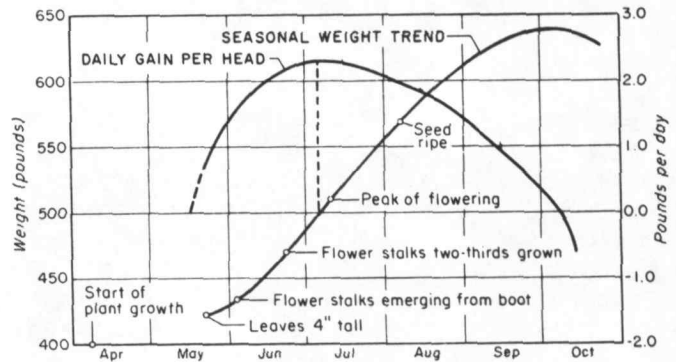


Figure 4.—Weight trend of yearling heifer in pine timber type in relation to growth in Idaho fescue. Based on data by Hormay and Talbot (1961).

Note from the above chart that the daily gain per head of cattle, from the middle of June until seed ripe time, about August 7th, exceeds 2 pounds per day, which rivals a fattening ration in a feedlot, at far less expense. After seed ripe time the daily gain falls off rapidly. About 67% of the gain here occurs before seed ripe time, and only about 33% occurs after seed ripe time.

The BLM in their 1982 Grass Creek Grazing E.I.S., on page 7 under Management Framework Plan Recommendations, for "C" category allotments which cover a very large area, state:

"RM 2.1

2. No livestock will be permitted during the period of May 1 to August 31 except as outlined in RM 2.2-1"

"RM 2.2

1. As an alternative to RM 2.1 the livestock permittees could develop a grazing system whereby livestock grazing could be continued during the period May 1 to August 31. Such grazing systems will conform to the following restraints:

a. No livestock grazing could occur prior to range readiness.

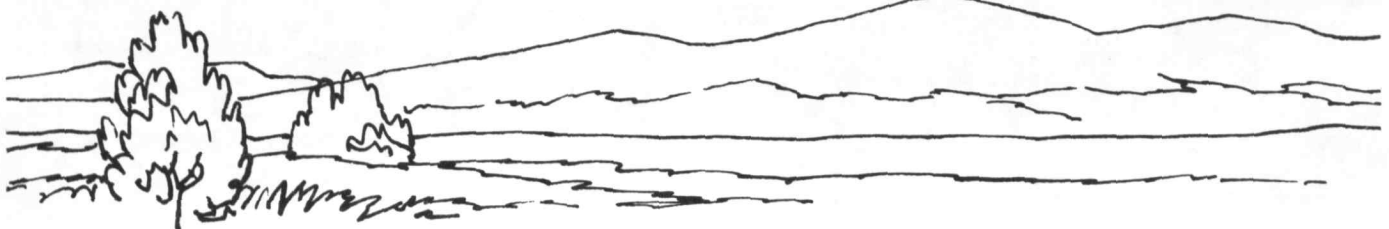
b. No grazing could occur prior to seed ripe on key plant species 2 years out of 3.

c. No grazing would occur prior to seed ripe on key species until the grazing system is developed and until all needed livestock management facilities are installed.

d. The permittee is responsible for funding and implementing the necessary management facilities.

e. The grazing system must have BLM approval."

This B.L.M. Management plan goes on to give Range Readiness dates which are much too late and too close to seed ripe time. Good Range Management should seek maximum livestock production. This plan seeks the min-



imum livestock production. This plan will put a lot of ranchers out of business because they cannot spend money to get little or nothing.

Grass plants must grow and store food (carbohydrate reserves) in their roots for the plants to live on during the winter and to start growth the next spring. Plants continue to grow during the spring and summer by having their leaves exposed to the air where they get the necessary carbon dioxide and sunlight. Plants also need warmth and rain. If the plants are constantly grazed off all during the growing season so they cannot reach the air and sunlight, they will starve, weaken, and gradually die over a period of several years.

Properly grazed perennial range grasses will live for many years. It is important in Range Management to graze the plants as well as giving them some rest to restore vigor and carbohydrate reserves.

Note the chart on page 14, Hormay, 1970, which shows that the Idaho fescue grass has acquired almost 90% of its food reserves at seed ripe time. This is more than is needed as will be shown later. Obviously, the plant could be grazed completely after seed ripe time with no harm to the plant.

Grazing Cuts

Many years ago we had decided to cut our livestock grazing very substantially. In the 1982 BLM Grass Creek Grazing Environmental Impact Statement, the BLM placed two-thirds of our L.U. ranch, consisting of our best grazing areas, in the "I" or Improvement category, with a recommended additional two-thirds grazing cut. In other words, the BLM determined that we were still grazing 3 times the livestock that we should be grazing!

In 1975 we were very fortunate in retaining a highly qualified Range Consultant who had retired from the BLM. He had been District Manager here 25 years before and was familiar with our ranch at that time. He had gone on to higher positions such as Chief of the Division of Resources in both Wyoming and Idaho, and Chief of the Soil and Watershed Branch in Washington, D.C. He re-examined our ranch and completed his E.I.S. 2 years later in 1977. He generally stated that our ranges were greatly improved and in good condition.

Two ranch neighbors of ours in the same 1982 BLM Grass Creek Grazing E.I.S., also had their best summer grazing areas placed in the "I" category by the BLM, who recommended up to an 80% cut in their livestock grazing. In other words, the BLM determined that those ranchers were grazing 5 times the livestock that the BLM thought they should be grazing.

What caused such an erratic report? Perhaps the answer is on page 11 of this BLM Grazing E.I.S., under Management Framework Plant Recommendations for "I" Category allotments, which states:

"g". Develop grazing systems that provide for:

1. Deferred areas on primary elk spring range and primary antelope and deer fawning areas.
2. Deferred or rest pastures in elk breeding areas for the breeding period.
3. Rest pastures in elk winter areas.
4. Provide at least 1 rest pasture in allotments located in

important big game areas."

I should note here that a rested pasture is one which is not grazed for 1 whole year. We have big game over our whole ranch. This BLM recommendation would cut our L.U. ranch and other ranches in this area to shreds.

There are questions which must be asked about these BLM Management Recommendations. Is this good Range Management? Will they create maximum livestock production and maintain wildlife numbers? Or is it a sham with the purpose of running the ranchers off the range?

The Taylor Grazing Act was passed by Congress in 1934. One of its 3 objectives was "to stabilize the livestock industry dependent upon the public range." Every BLM Grazing Regulation published during the past 35 years repeats this same phrase. This 1982 BLM Grass Creek Grazing E.I.S. is certainly not stabilizing the livestock industry in our area.

U.S. Forest Service Range Surveys

I don't want to pick on just the BLM. When I arrived on the L.U. ranch in 1952, we had 5 sheep permits on the Shoshone National Forest on an extended upper limit. These permits were mostly alpine, above timberline, with rocky peaks, shallow, granitic soils, and naturally less dense and different vegetation from lower elevations with deeper soils.

In 1952 the maps of our permits showed a Range Condition of about equally Poor and Fair. For over 20 years every new Ranger, and we had a lot of them, complained vigorously about the range condition of these permits. We tried several things. We replaced a small permit with a larger and better one. We cut numbers down and ran four bands for a shorter period of time. We rotated on each permit, and we rested one permit completely. Still, every new Ranger complained about the range condition, and the range condition as reported never changed for the better.

In about 1973, the L.U. Manager rode over 3 permits with a new Assistant Ranger, who reported the range in much better condition than the official records indicated. That information gave me food for thought.

In 1976, our excellent Range Consultant and I went over to the District Ranger's office to meet with the new but experienced Ranger. I told the Ranger that the Forest Service records showed that our permits were in terrible condition, with only a Poor to Fair rating. I wanted him to ride over the permits with the Range Consultant and me to see what we could do to put them in Good to Excellent condition.

This Ranger told me that such a ride would do no good. That our permits were in about as good a condition as they could be in. The problem was that the Forest Service's Guideline, which they had to use, was for a dense, lush, meadow, with deep soils at a lower elevation. That even if our permits were in ungrazed, pristine, Climax Condition, there was no way that our permits would ever rate any better than Poor to Fair, because the guideline was very wrong.

For 34 years I have been told by the Forest Service that they have been working on a guideline for alpine vegetation. They still do not have one. But they certainly had me fooled and they worked me over for 22 years. I do not feel

that this was an honest approach. If the Forest Service does not have a proper guideline, they should not use one at all.

Grazing Systems and Utilization Levels

Here is where I have another big problem with the 1982 BLM Grass Creek Grazing E.I.S. Turning to pages 28, 29, & 30, we find that the BLM will allow livestock to use about 25% to 30% of the forage under "Continuous season-long use." Under "Intensive grazing management", such as Deferred, Rotation, Rest-Rotation, or grazing after seed ripe time, the BLM will allow 50% forage utilization.

To the contrary, Stoddart, Smith, & Box, after discussing the various grazing systems, conclude on page 297, "Among different systems, there is no clear-cut evidence for one's superiority over another or over continuous grazing." On page 335 they state, "Usually 65 to 80 percent of average forage production is a safe base for calculating grazing capacity."

Ensminger & Olentine, 1978, on page 236 state, "Until and unless more research studies reveal that rotation grazing is superior, from the standpoint of both stock and vegetation, continuous grazing will be followed most extensively." On page 233 they recommended stocking at about 75% of average capacity.

Stoddart in May 1965, in the *Journal of Range Management* stated, "The old idea of preserving resources by non-use is no longer acceptable to modern schools of range land management. Anyone who manages land in a negative way by preventing its use is living in the past."

There are a lot of forage utilization studies presently going on at the BLM and the Forest Service. Stoddart, Smith, and Box, state:

Page 203, "Raw utilization data have little utility in range management."

Page 262, "Unfortunately, range forage can be neither weighed nor measured accurately....It is unfortunate that there exists no precise measuring stick for determining full range use."

Page 274, "The many experiments on intensity of grazing are inconclusive because (1) they did not sample sufficient levels of grazing intensity, (2) they were not continued long enough to determine vegetation and soil responses, and (3) they were not analyzed in terms of true economic effect upon the operator or sociological costs to the nation."

Page 263, "Good judgment on the part of the experienced manager is still indispensable to good range management."

Some Suggestions for Better Range Management

1. Ranchers should honestly try to comply with their agreements with the government land managers.

2. Everyone should avoid playing the numbers game, the fancy names game, the fancy grazing systems game. What is important is conserving the vegetation, soil, wildlife, and so on, while maximizing livestock production and reducing livestock expenses. You must understand what you are doing and why you are doing it.

3. Government land managers should always try to work with the rancher. They should try to meet on the range as much as possible rather than in an intimidating government office. Remember too that the rancher is on the range every

day and is in a far better position to protect the range than is a land manager in a distant office.

4. Ranchers and government land managers should make every effort to learn, understand, and follow the land and regulations. Laws are the basis of a civilized society. Some government land managers should stop thinking that they can do anything they want to do, regardless of the law or the regulations. Also, I have often found that government land managers will try to "bluff" a rancher by incorrectly quoting regulations. An informed rancher will call his bluff.

5. Ranchers should make every effort to go on range tours and learn how to better conserve the rangelands.

6. Government land managers should make every effort to attend livestock seminars conducted by University extension agents, government research experts, and ranchers, on how to get maximum livestock production. Their attendance will not only make them better Range Managers, it will also improve their relationship with the ranchers.

7. Ranchers should stock conservatively. Not only will their ranges improve more in the good years, but they will have to liquidate much less livestock in drouth years when prices are always terribly depressed.

8. I have always said that the proper way to manage a range is to go over it, note problem areas, determine how they can be improved with the least expense, and manage the livestock accordingly. By working with the range as it exists, a lot can be accomplished if you know what you are doing. A Federal land manager can usually get a rancher to do a good job if he works with him. But if he threatens or abuses the rancher, nothing will be accomplished.

9. Judging range condition is easy. It doesn't require a college degree, but just a little common sense. You look at the condition of desirable plants. You look for new seedlings in bare ground. You look at gullies and trails being well sodded or raw. You also look for areas with too much bare ground, invasion by undesirable plants or weeds, and desirable plants which have little vigor. You particularly look at the areas near the livestock water. Most poor condition ranges that I have seen can be healed up easily and cheaply with an understanding of livestock and plants, and some common sense.

10. For a Range Management system to work it must be simple, understandable, inexpensive. It must have common sense. It must take the least amount of time, money, and effort. It must consider the livestock as well as the vegetation, soil, and wildlife. Ranchers are reluctant to spend money for range improvements on Federal lands because the lands could be taken away from them.

11. Properly stocked ranges will leave plenty of feed to maintain adequate wildlife numbers.

References

- Range Management by Stoddart and Smith, 1955, 1975
- Feeds and Feeding, by Morrison, 1956
- Feeds & Nutrition, by Ensminger & Olentine, 1978
- Principles of Rest-Rotation Grazing and Multiple-Use Land Management, by Hormay, 1970
- Grass Creek Grazing Environmental Impact Statement, by U.S. Department of Interior, Bureau of Land Management, Worland District, Wyoming, 1982