# Range Management and Image

## Lee E. Hughes

## A Fictitious Scene

Two people stood in the midst of what looked like a war zone. In the distance, two crawler tractors pulled a long anchor chain. The tractors and chain were uprooting pinyon and juniper trees. The tractors belched diesel smoke, as the chain yanked down a dense stand of junipers.

"Isn't that beautiful the way that chain works the soil and dead plant litter into the soil?" exclaimed the rangylooking government man. "The soil is ready for seed, and then we'll back-chain."

"Well, to be quite frank with you, sir, I see little to cheer about," replied the woman. "It looks like hell, and I like the unchained areas better. In fact, the older seeded areas you showed me have fair grass stands, but I wouldn't say the erosion is less in the chained/seeded areas or that the grassy area looks so good."

Feeling his anger build, the government man glared at his companion and retorted, "Well, I find it hard that someone from your urban background can judge a proven land management method that's provided watershed cover and good livestock feed for decades. I think you ought to go back to Salt Lake and plan you a wilderness area down on State Street."

Although this scenario is fictitious, similar scenes do occur. Range managers frequently find themselves explaining land use decisions involving grazing systems, fences, chaining, or whatever in more detail and frequency to our urban friends and constituents. The highly detailed explanations in environmental impact statements are looked upon as emphasizing traditional land management values, or more forage for livestock. Over the years, after tough reviews by urban dwellers, some lessons have crystallized. The urbanites have legitimate views and values that desire study and consideration by range managers.

An image that often comes to mind is one of range managers treating their city cousins (urbanites) with condescension. The image assumes that urban residents are not well informed on range matters. The frustration of the urbanites with this condescension has resulted in the shrill rallying cries like, "No moo in 92".

## A Recent Example

The headline of the Salt Lake Tribune read, "56% of Utahns polled oppose chaining. Utahns are **not** convinced that 'chaining' is an appropriate way to control the spread of pinyon and juniper trees." A poll conducted for the Salt Lake Tribune by Insight Research, Inc., on July 10, 1991, of 600 people (with a margin of error of plus or minus 4%) found that 56% of respondents opposed chaining, 27% supported the practice, and 17% expressed no opinion. The question was posed after the Soil Conservation Service, Bureau of Land Management, and a group of ranchers proposed to remove 6,700 acres of pinyonjuniper near Orderville, Kane County, Utah.

The article went on with a description of chaining: "They want to drag a heavy chain between two tractors to knock over the shallow-rooted trees. The land would then be seeded with grass. They contend this would provide additional forage for livestock and wildlife and reduce erosion. The environmentalists oppose the projects, claiming it could damage archaeological sites, infringe on an area they want designated wilderness, and use taxpayer money to benefit a few ranchers. The Soil Conservation Service will decide whether to proceed with the project sometime after a July 25, 1991, public tour of the proposed area."

The episode of the Muddy Creek-Orderville watershed treatment (chaining) project began to play across our TV screens at news time and on the pages of the Utah news-papers during the summer of 1991. Such statements describing the practice of chaining as in an Associated Press release that appeared in *The Daily Spectrum* of St. George, Utah: "the chain tenses as it is pulled against the first of thousands of trees in its path. There is a sudden cracking and tearing sound as tiny trees are ripped from the ground....In the wake, the tractors leave a swath of destruction that resembles the trail of a tornado: broken limbs, toppled trunks and small craters where the living trees once stood."

What followed in the media were statements from knowledgeable people on boths sides of the issue. The pro-chaining people made statements as: "I like the way the chaining leaves the soil surface. The little pits and pockets catch and hold the water. Grasses and forbs usually start in the bottoms of those little pits. Now there are no grasses and bushes (under the pinyon and juniper) to hold the dirt in this area, so the soil is being washed away at a rate of about 2 inches every 10 years. If nothing is done, the nutrient rich soil will soon be gone and will be unable to support any form of life."

The anti-chaining people made the statements like: "This is just a massive taxpayer subsidy for the livestock community, but the scientific evidence that this type of range treatment will cure the problem (erosion) is just not compelling....Erosion is a natural process that shaped the world-famous geologic features of Southern Utah."

In September, news releases reported that letters to the

Lee E. Hughes is District Range Conservationist, Arizona Strip District. As a new employee in the 1970s, he cut his teeth on a couple chaining projects with none other than the ELY chain. This article is Lee's opinion and does not represent the position of the USDI-BLM.

Soil Conservation Service (SCS) office opposed the chaining project 472 to 272. After consideration of the public response, SCS withdrew its "finding of no significant impact," for the project and announced that it would prepare an environmental impact statement.

### What Happened?

The Muddy Creek-Orderville watershed remains unchained. The public strongly opposed the project. One event that hindered the area from being chained was a 1990 chaining project in the BLM's Moab District. This chaining activity met resistance from protestors. Like Tianenman Square in Bejing, TV screens showed a man facing off with a tractor. Although that chaining was eventually completed, television made the public aware of the issue and opposition was mounted.

The project range managers did not read warnings from the public. They ignored protests at the 1990 chaining and the 1991 poll showing public feelings on chaining. A "public be damned" attitude seemed to prevail among project range managers toward those not supportive of the chaining.

## **The Problem**

The reaction of the range profession demonstrates the core of the problem. Statements about the poll in general were defensive. The poll showed that 56% of the people in Utah opposed chaining. The author conducted an unscientific survey of local range managers in casual conversation or phone conversation; the feelings and statements from those talks all fell into the following categories: "Most of those people polled live in the Salt Lake area, and they just don't understand chaining," or "Those people up north aren't informed," or "They are just bunch of enviros against everything."

Feelings that their city cousins are a bit ignorant and unable to respond in an informed manner to questions on chaining can backfire and can make range folks look ignorant. Take the statement that chaining decreases soil erosion. Research by range/watershed professionals in pinyon-juniper woodlands found that in Southern Utah, chaining and windrowing pinyon-juniper debris slightly reduced infiltration and increased streamflow, whereas double-chaining and leaving debris in place resulted in infiltration and water yield similar to that at untreated sites (Gifford 1975, Williams et al. 1972). Moreover, sediment production from chained pinyon-juniper sites in Utah was found generally to be no greater than from untreated woodlands except when the debris was windrowed (Williams et al. 1969, Gifford et al. 1970, Gifford 1975). Studies in Nevada show similar results. Blackburn and Skau (1974) found no statistical difference in infiltration or sediment production between chained and untreated pinyon-juniper communities measured 3 to 11 years after treatment.

The literature and experience, however, do show that chaining and seeding in most cases dramatically increase forage production for livestock. Cattle performance is much better on the grasslands created by chaining and

seeding than on the pinyon-juniper woodlands (Hughes 1980).

In this case, the views of anti-chaining folks were closer to research findings on soil erosion benefits or lack of benefits from chaining and seeding than the views of chaining proponents. Reducing soil erosion and salinity from watersheds is the oft-stated major benefit from chaining and seeding of pinyon-juniper woodlands. But research does not show such significant slowing or reducing of erosion by chaining and seeding. The real goal is to increase forage production, and it should not be masked behind imaginary erosion control benefits.

#### Image

The image of range managers has suffered because anti-chaining folks know about research on pinyonjuniper chaining whereas professionals choose to go with assumptions carried through the years that "it's just logical that chaining and seeding would be better for the watershed because it puts debris on and roughs up the soil." The image of range professionals would have been in good shape had those involved looked at research and not depended on the quicksand of assumptions or chaining folklore.

Range management's image won't improve by changing the title of its practitioners from range managers to vegetation managers as is often proposed. Other changes are needed to alter the range manager's image from that of the good ol' boy to a land manager. Change will come when grassroots range managers look at research and findings. These range managers need to communicate to the taxpaying public the benefits and failings of range management efforts from those findings. The acceptance of the fact that rangeland is too important to be managed solely by range managers is a necessity. The range-wise public knows this. Range managers need ideas and new thoughts from the public and the ability to accept the ideas. The acceptance of other than traditional ways of doing things will help the image of range managers. An improved image will come not from condescension or a "public be damned" attitude but from putting concern for the resource far ahead of personalities. An open mind to the many perspectives of resource management is the image needed by range managers. With that image, range managers are not likely to have to go back to the drawing boards over chainings, grazing systems, and other rangeland issues, as often.

## Bibliography

- Blackburn, W.H., and C.M. Skau. 1974. Infiltration rates and sediment production of selected plant communities in Nevada. J. Range Manage. 27:476–480.
- **Gifford, G.F. 1975.** Impacts of pinyon-juniper manipulation on watershed values. *In:* The pinyon-juniper ecosystem: A symposium, 127–140. Utah State University.
- Gifford, G.F., G. Williams, and G.G. Coltharp. 1970. Infiltration and erosion studies on pinyon-juniper conversion sites in southern Utah. J. Range Manage. 23:402–406.
- Hughes, L.E. 1980. Cattle performance on grazing systems on the Arizona Strip. Rangelands 2:104–105.
- Williams, G., G.F. Gifford, and G.B. Coltharp. 1969. Infiltrometer studies on treated vs. untreated pinyon-juniper sites in Utah. J. Range Manage. 22:110–114.
- Williams, G., G.F. Gifford, and G.B. Coltharp. 1972. Factors influencing infiltration and erosion on chained pinyon-juniper sites in Utah. J. Range Manage. 25:201–205.