

Tools, Rules and the Benefits of Grazing

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Over the last 30 plus years of my involvement in range management issues, I have seen rangelands in the state of New Mexico exhibit tremendous changes.

Most have been positive and some negative as evidenced by the increasing woody plant populations across most rangelands. I have also witnessed federal and state employees entrusted to facilitate management of federal, state and private rangelands perform admirably and have good working relationships with the ranching community. Unfortunately, I have also seen government range conservationists use range monitoring "tools" as "rules" for management of rangelands.

An example of "tools becoming rules" is the use of utilization standards.

Utilization measurements were originally intended to be used as a mapping tool to help identify areas of light use and heavy use by livestock. The purpose of conducting utilization surveys was to get a picture of grazing distribution and develop a management plan that would more evenly distribute grazing pressure across the ranch, allotment, or pasture. This typically resulted in using distribution tools of water development, salting, trail development, and fencing. However, I witnessed a change in the goal of agencies in employing utilization guidelines when they began using them as standards. Utilization levels of 50 percent and less began to be used to enforce stocking reductions whenever those standards were exceeded. The result was that the lightly used areas increased in size and there typically was no reduction in size of the heavier grazed areas. This typically resulted in another round of stocking reductions. This caused government/rancher relationships in management to deteriorate.

I thought I had a better idea. Utilization is the most difficult vegetation attribute to measure. We are attempting to measure something that is no longer there. It is similar to telling me how much hair I had at one time, by measuring what hair I have left. Utilization surveys, if done correctly, are tremendous consumers of time, effort

and money. I argued that we need to focus on stubble heights or leaf length instead of utilization. After all, we would be measuring an attribute that is quick and easy and provides an index of plant health and site protection. Boy, was I naïve. Stubble heights have become standards that result in the same stocking reductions as the misapplication of utilization rates. We are seeing stocking reductions on federal lands when stubble heights do not meet a particular standard anyplace or anytime an inspection occurs. So, I have another bright idea.

All herbivores are selective grazers. Thus the intensity of defoliation varies among individual plants as a function of the unique combination of plants and herbivores present. Ungulates exhibit three types of selective grazing: area selectivity, species selectivity and intra-species selectivity. These levels of selection create a mosaic or patchwork of use levels across the landscape. As a result of these selection differentials, grazing is a tool that can enhance species diversity for both plants and animals.

Grazing thus creates living conditions that are varied and will be "good" for some species and "bad" for others. Selective grazing creates, at the macro and micro-landscape levels, conditions or habitat that is varied and will enhance biodiversity of plants and animals. This is in contrast to single-species management.

A shifting mosaic of intensively grazed to lightly grazed or ungrazed patches may be critical to the maintenance of structural heterogeneity and biological diver-



sity of rangeland ecosystems. Striving for a uniform level of utilization or stubble height, is not only impossible to achieve, but suppresses biological diversity by creating an environment that is "good" for only a few species by reducing heterogeneity. Grazing creates landscape level heterogeneity use patterns that promote ecological diversity beneficial to multiple species. We should not expect nor desire a uniform, slightly grazed range anymore than a uniformly heavily grazed pasture, ranch or allotment. Either condition results in less ecological diversity. Grazing at reasonable levels of stocking is a tool for enhancing or creating ecological diversity at a landscape level that serves watershed and other ecosystem services, supports a mosaic of habitats beneficial to wildlife and other ecological and economic functions. As resource managers, our job would be to monitor conditions on the ground and ensure that one level of use is not overly prevalent. Hmmm, sounds like utilization mapping to me.

Editor's Note: This article is one of a series written by members and friends of People for Preserving Our Western Heritage, www.peopleforwesternheritage.com.

Attention: Ranchers in NM and Across the West

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