

# A Viewpoint: Range Managers and the Tragedy of the Commons

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Some people say America's public lands are a "tragedy of the commons." They imply that early overstocking of ranges followed the pattern of Garrett Hardin's classic paper dealing with villager's livestock on common land. Overstocking, greed, and ignorance are implied as the basis for tragedy.

I suggest the real tragedy of our public rangelands lies within the manager of the lands, not the common use of the range by permittee livestock.

Webster's Collegiate Dictionary defines tragedy as a literary work depicting an honorable protagonist engaged in a morally significant struggle ending in ruin or great disappointment.

The same dictionary gives several definitions of commons: from the common people; to a dining hall; to the political class composed of commoners. Missing is Garret Hardin's apparent usage of the term: a common grazing area around or near a European village for milk cows and work stock.

Even if one accepts Hardin's definition of commons and his thesis that the adding of animals to a fixed area of land caused its ruin, his model does not fit grazing on public lands. Prior to the establishment of the National Forests and the enactment of the Taylor Grazing Act there was a widespread overstocking of public ranges. But grazing has been regulated for 60–80 years on most of the public lands. These have not been commons for many decades.

I have not studied the status of the traditional commons in Europe, but I have observed those of rural Australia. These lands are no longer needed for milk cows and work horses. Some are now public parks or nature reserves. Others serve as waste disposal areas and some have reverted to crown land and are leased. The concept of a "commons" is all but gone.

Our public rangelands, by law, are managed for multiple uses. Although most are grazed by livestock, there is broad public interest from many different groups. The new stakeholders are not just those representing traditional multiple uses but contain a much larger array of citizens.

If a commons exists on our public lands, it is not a grazing commons. It may be a commons for many uses.

If we have no grazing commons, what is the real tragedy for public lands? I argue the honorable and dedicated protagonist is the range manager. The morally significant struggle is to maintain healthy ecosystems that will keep options open for future generations. The ruin, or great disappointment, is that

the land manager has become an apologist for the livestock industry and lost sight of managing land for sustainable communities.

Our culture has changed and we range managers have not changed fast enough. Range managers need to relate to changing values, consider how land will be used in the future, and manage for sustainability if we don't want to be the main actor in the tragedy that is now being written.

We need to back off from cows and grass and elk and owls and neotropical migrants and think about where we fit in the cultural demands on land. We are ecologists who study and teach change in biotic communities, but we often ignore cultural change and its effect on public rangelands.

We should manage land for the future as well as the present. We need to shape the future conditions of landscapes for a full diversity of life, ecological processes, human values, and resource use. This will mean balancing science with social values, economic feasibility, institutional traditions, and political muscle.

Managing land for cultural values can be a recipe for sustainable land use. Sustainability has not become the watchword, as many of us had hoped for agriculture or the central mission of range management.

We are ecologists who know land sustains our bodies, our children, our culture—we belong to the land. We develop programs to maintain stable systems that are good for the land. We are proud our objectives support wise land use.

Objectives of most groups are the same: wise resource use. We just differ on what wisdom to use. To a Hopi, San Francisco peak is a holy place. . . a place for spiritual renewal. To a white recreationist it is a ski slope, a summer cabin, or wilderness. . . a retreat to sustain another very different culture. To a forester, it is a place to grow trees; to a shepherd, it is a place to grow sheep. Wise use for each group is to sustain the use that meets the cultural values of its members.

Only when forced to think globally and beyond our own culture does wise use include managing for options to be kept open for future uses, to think about sustainability, to manage lands for uses we cannot imagine.

We range managers are a product of our training and the ranching culture that has traditionally been our support. Both our early training and relation to the livestock industry served us well. But, new cultures demand different uses from the land. Range management is changing, but is it changing fast enough?

Our profession began near the end of the period of "inexhaustible grass." The first Europeans described lush pastures with grass belly deep to a horse. Investors and homesteaders were lured by this image. But within two decades after settlement, overgrazing and drought had crippled the range livestock

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industry.

Ranchers and investors called on the government for help. Botanists were sent and vegetation studied. Experiment stations were established. We range managers trace our roots to these early biologists. We can take pride that our profession came from an attempt to save the livestock industry.

Early range work was based on observation and experience, not science. Ecological succession, first described in 1899, gave range managers a theory on which to base management. The first two decades of the 20th century were an exciting time for land managers. The Chicago (Cowles) and Nebraska (Clements) schools of ecology trained a number of early range managers.

Two major points are worth noting. The early influence of science was primarily from Clementsian ecology. Second, range management in the first 50 years was geared to increasing livestock production. That heritage continues to mark us today.

Range management matured in the second 50 years. The American Society of Range Management was formed and changed to Society for Range Management. Range management became more scientific as new sciences were accepted and new knowledge developed. The process has been slow, especially when it conflicted with Clementsian dogma or our livestock heritage.

Definitions of range management in the classic textbook by Stoddart and Smith show the slowly changing concepts in our profession. The first edition (1943) defined range management as the science and art of planning and directing range use so as to obtain maximum livestock production consistent with the conservation of range resources. It goes on to say "This definition implies a sustained yield of livestock over a long period of time."

There is no doubt that the main objective was to produce livestock.

The second edition was published twelve years later (1955). It defined range management as the science and art of obtaining maximum livestock production from range land consistent with the conservation of land resources. They continue, "It is evident from this definition that range management is closely related to animal husbandry and plant ecology."

We see the beginning of a move from livestock production to land management in 12 years. Livestock is still viewed as the major commodity produced from the land.

Twenty years later the third edition (1975) saw range management as the science and art of optimizing the returns from rangelands in those combinations most desired by and suitable to society through the manipulation of range ecosystems. They go on to say "Range management is at once a biological, a physical, and a social science."

The definition no longer uses maximize or livestock; instead, it talks about societal needs and ecosystems. In a little over three decades range management had changed from a field that had livestock production as its major goal to one that sought to manage ecosystems for societal need. These definitions were all written by one man—a scholar who dared to define our profession—Arthur D. Smith. We owe a lot to Art. Most American range managers have used this textbook in at least one range course, and it was widely used overseas.

Two decades after the last edition there is a widespread quest for sustainability, and that concept should be in any

modern definition of range management.

One major question is what should range managers sustain if not livestock? I argue we should sustain the land's ability to produce what society wants, now and in the future.

Four concepts are found in most definitions of sustainability. First, equity for today's land stewards. There should be profit and a good standard of living for those who care for the land.

Second, equity for future generations. Current uses must leave options open for our grandkids and not close out future uses.

Third, long term sustainability must take precedence over short term profit. Land must be kept productive.

Fourth, sustainability implies environmental enhancement. Our culture demands we improve what has been given us and that we leave the world better than we found it.

Sustainable land use, then, is implementing a policy that meets the needs of people today without destroying the resources that will be needed in the future. The overriding challenge to range managers is coping with societal change.

I suggest the following new definition for our profession: Range management is the manipulation of rangeland ecosystems to repair past damage, provide for societal needs from those systems, and to keep options open for future generations.

This definition implies long term sustainability of the systems has priority over short term commodity extraction. If we accept the challenge of managing land instead of managing for commodities, we can prevent range managers from becoming the main actor in the tragedy of the commons.

Our traditional allies were those that protected us from world communism and nuclear destruction, promoted consumption for growth and economic gain, and attempted to maximize livestock production on rangelands. Now new clients come from diverse groups with different immediate goals: environmental organizations wanting resource protection; the underemployed, the hungry, the have nots wanting social justice.

Some new allies are trying to improve rangelands by fighting traditional users. Our new support is not always scientifically credible. We often defend practices or positions that are equally incredible. But we should not be taking sides with any user. We should be champions of the land.

Our success will be determined by whether we can manage land to produce what society wants and still protect the ability to fill other wants and needs in the future. We must adjust, change, lead. We have a rare opportunity. We are no longer living in fear of communism or the bomb. Sustainability is a widespread popular movement that fits our objectives. Our science is getting better. We realize that people are an important part of land management. We need not be the protagonist in the tragedy of the commons!

But we will write a tragedy if we continue business as usual, continue to act as if livestock grazing is the only use of rangelands, continue to argue narrowly drawn issues such as livestock production or saving an endangered species, take lightly the public desire for sustainability, or ignore equity and social justice in our sustainability equation.

I trust that we range managers will not be the protagonist in the tragedy of public rangelands. We can avoid tragedy if we concentrate on the land's ability to produce societal needs, but doing this may mean that we will have to change our own culture.