

Fourth In A Series

Future Social Changes and the Rangeland Manager

Professionals must be prepared to provide expertise for managing livestock-free rangelands and non-traditional livestock uses of rangelands.

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Editor's Note: The International Affairs Committee sponsored a symposium entitled "Rangeland Professionals and Society: Future Directions" at the 2001 annual SRM meeting in Kona, Hawaii. From those presentations, a series of articles is being published in Rangelands highlighting perspectives on rangelands from around the world. The editors and authors wish to thank Dow AgroSciences of Indianapolis, Indiana, for a grant made in support of the symposium.

Current and future social changes will profoundly affect the uses of rangelands in the western United States and the role of the rangeland management profession in supplying the knowledge and skills to serve those uses. The profession is being challenged to help society meet these new demands without foreclosing on traditional demands.

The value of public and private rangelands in the western United States is greater now than ever before. We expect that value to increase because of three factors:

1) The supply is finite and is being diminished by conversion to built environments. A sage person said, "they ain't makin' any more rangeland," and as more of it is converted to residential, commercial or industrial land, the supply is decreasing;

2) The demand is increasing because of an increasing population with growing disposable income and because of the shrinking reliance on the

food and fiber produced on western rangelands; and

3) The breadth of goods and services are expanding; and these goods and services cannot be obtained from other landscapes. More people want open space, clean water, wildlife and endangered species habitat, rural lifestyle, and livestock-free goods and services found only on rangelands.

The rising value of these goods and services can also be attributed to their lack of substitutes from other lands: they are unique to rangelands. The attraction of sweeping vistas uninterrupted by forest, cropland, and cities is obvious in the strong public support for national park and monument designations on rangelands. Steeply rising land prices and the galloping colonization of rangelands with 40-acre ranchettes illustrates that for many with sufficient means, there is no substitute for living on western rangelands.

There is growing demand for hunting and particularly viewing opportunities of wildlife unique to rangelands such as antelope, elk and many bird species. By definition, habitat for endangered species such as black-footed ferrets and prairie fringed orchids can be found nowhere else but on rangelands.

There is also a growing segment of the population, who want more opportunities to live near and visit livestock-free rangelands for the purity of a

"pristine" experience and reduced conflicts with other uses. Evidence that these values exist beyond the radical calls of "Livestock Free By 93", are seen in continuing attempts to obtain state and federal grazing leases for the purpose of removing livestock.

Meanwhile, the value of livestock products from rangelands has stagnated, or at least has not risen as quickly as the others, especially in relation to the costs of land and production.

Livestock produced on rangelands are not widely perceived as being unique as are other goods and services. The unique qualities of livestock raised on rangelands versus traditional feedlot processes include greater energy efficiency and lower health risks. However, these qualities are not obvious to the consumer because neither the hamburger in the supermarket nor the leather jacket in the department store carries a label identifying those unique contributions from rangeland.

Serving Diversified Uses and Clients

These should be "boom" times for the profession because the potential client base is expanding. The profession can meet these emerging opportunities by enlarging its toolkit and redirecting existing tools. History shows that the profession changed in response to changing societal demands

without abandoning existing skills or clients. This needs to continue.

The profession emerged over 100 years ago to support sustainable livestock production in an era when open access to rangelands was being replaced with controlled access through federal edict and privatization. Clients were ranchers and land management agencies. The skills and knowledge included grazing science and management that identified principles of proper intensity, season, and kind of animal. Principles of vegetation science and management identified the relationships between vegetation change and grazing management and the techniques for establishing preferred plant species or controlling undesirable ones. Methods of monitoring and assessing vegetation and soil provided the means for measuring their response to management.

About 50 years ago, demands emerged for the coordination of livestock production with other uses, particularly on public rangelands. The profession expanded to meet these new demands without abandoning those situations and clients where livestock production was the primary goal. Previously developed skills in grazing science and management, vegetation science and management, and monitoring were expanded to coordinate the demands for mixed-goods production, and new clients were added who demanded coordination of rangeland uses. Leadership in the development of the Coordinated Resource Management process illustrates the profession's efforts to meet this expansion of demands.

Today and in the future, the most dramatic change in societal demands is the call for some livestock-free rangelands. Again, this is a new demand that can be added to the established demands for sustainable livestock production as the dominant use and as one of many multiple uses. The unifying theme or common denominator for the profession will be the delivery of expertise about the unique physical, biological and sociological traits of rangelands.

The skills and knowledge previously developed can be applicable to livestock-free situations. For example, expertise in grazing science and management can be applied to wild, endangered and recreational herbivores (horses, mules, llamas, and goats). Expertise in vegetation science and management can be applied to controlling noxious plants, and providing medicinal plants, clean surface water, carbon-sinks to mitigate greenhouse-gas emissions, and habitat for wildlife and endangered species. Expertise in vegetation and soil monitoring can be applied to evaluate recreation impacts, endangered species recovery, and other activities. Skills and knowledge in collaboration can be applied to planning the design of ranchette construction that minimizes rangeland fragmentation, endangered species habitat designation, and rangeland tourism that enriches local economies.

In addition to broadening attention to livestock-free situations, the profession can expand the skills and knowledge provided to livestock production. This expansion should be grounded in the production of goods and services that have no substitute, and are therefore unique and attractive to the modern society.

One such product is "natural" or "grass-fed" meat produced solely on western rangelands, with no substitute available from the more common feedlot process. These products have the virtues of high energy efficiency and lower health risks (i.e. mad cow disease). Clever entrepreneurs have succeeded at this venture, and they report a demand that far exceeds the supply, and consequently much higher prices than traditionally produced meat. Previously developed skills in grazing science and management can contribute to these new situations.

Expanding demands for using livestock as a vegetation management tool to control noxious plants and wildfire fuel levels are other situations that are socially acceptable, especially where herbicides are not an option. Collaboration skills and knowledge

can be applied to new situations where livestock producers are entering into conservation easement agreements with parties interested in other values such as open space and wildlife habitat. The infusion of capital from these agreements can finance the re-tooling of the operation to meet the demands for new livestock products and other uses.

Accordingly, potential clients will expand beyond the long-standing ranchers and land management agencies. These new clients might include small tract or ranchette owners, land trusts and conservancies (i.e. The Nature Conservancy), home owners associations, resource management agencies such as the National Park Service, Environmental Protection Agency, and the Fish and Wildlife Service, and local governments such as county planning departments, weed abatement and water districts, and highway departments.

Facilitating Change In The Profession

We can imagine a future where the glue that binds the profession is a breadth of skills and knowledge about rangelands that are as varied as the many demands for goods and services from rangelands. If the profession moves in that direction, it is most important that this change be an expansion – and not an abandonment – of existing skills, knowledge, and clients. Abandoning the accomplishments made so far would require a "re-invention of the wheel" when they are next needed, thus losing all the progress made in the last 100 years.

This transition will require leadership in establishing the norms for training and performance, and the cultivation of new clients. That leadership will be challenged by the difficulties of serving a diversity of clients with conflicting values and demands. Successful leadership will need to stress that professionals are united in their shared mastery of skills and knowledge unique to rangelands, and all can prosper from the

knowledge developed in service to a diversity of clients.

The Society for Range Management served this role for over 50 years. It is the leading professional organization in the development of training and performance standards, and for the communication of new skills and knowledge. Can it lead the profession through a transition that includes an expansion to livestock-free situations and non-traditional livestock production with the same success as it did through the transition to managing livestock within a mix of multiple uses?

The Society has the infrastructure to make this transition. There are accreditation standards for university curricula developed over the past 50 years, and professional certification over the last 15 years. Communication of skills and knowledge is available in technical and semi-technical journals, books, videos, and annual membership meetings. With certification, there is a developing structure of continuing education services.

However, this transition cannot be supported by a shrinking membership. Ironically, while there has been an increasing breadth of skills and knowledge developed and discussed in the Society's publications and annual meetings over the past 10 years, there has also been a serious drop in membership. More members, with varied academic and work experiences will be needed to develop and share the skills and knowledge that are demanded by these societal changes. This will only happen if there is a concerted effort by the Society to attract these new members and to legitimize their contributions.

Similarly, the Society must aggressively cultivate these new clients and maintain existing clients by selling the virtues of the breadth of skills and knowledge available in the profession. It needs to become common knowledge that the profession can offer much more than grazing allotment management plans for federal agencies. To en-


sure the delivery on these promises, curricula must be modified by adding new topics and giving examples of how existing knowledge can be applied in new situations. Certification must adjust in kind, whether by expanding standards of training and performance or by creating areas of specialization beyond the journeymen level.

These future and current social changes will lead to changes in demands for goods and services from rangelands. The profession can continue its evolution of changing to meet new societal demands only if it becomes the creator and purveyor of all skills and knowledge about rangelands and their many uses.


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