

# **Rangelands & Society**

## Crisis, context, and the reluctant socialization of the range profession.

### By Mark W. Brunson

The range profession was born of crisis. The origins of range management in the United States are usually traced to a critical situation in the late 1880s and 1890s, when severe drought and harsh winters led to heavy cattle losses, thereby forcing livestock producers to respond to problems of uncontrolled overgrazing that careful observers had been noting for a quarter-century or more.

Later range science gained a permanent place in the Forest Service with the establishment of the Great Basin Experimental Station after repeated devastating floods in Utah were blamed on range degradation, primarily by sheep (11). The Bureau of Land Management (BLM) arose from the dust of the 1930s, when Congress finally addressed decades of land abuse by placing administration of the remaining unsold western lands into the hands of a newly formed Grazing Service staffed by graduates of the fledgling range management programs at western universities.

Twenty-five years ago, the pages of the new journal *Rangelands* were brimming with predictions of yet another crisis. But this time the crisis was of a different sort – a crisis of context. There had been no catastrophic change in rangelands themselves; instead, the larger social and political context of range management had changed in ways that we weren't prepared to address. While we prided ourselves on being able to solve problems of sustainable forage production, we weren't sure how to cope with this new sort of crisis: The American people had rediscovered rangelands, and they didn't seem to like what they *thought* they saw.

Thus Idaho Gov. John Evans, in a speech to the Idaho Cattleman's Association reprinted in the premier issue of *Rangelands*, warned that a nation of city-dwellers were seeing the West in a new way, with range forage viewed as "a commodity to be kept, not used" (p. 5).

Rancher J.W. Swan lamented that in decisions involving public rangelands, "The scientist has given way to the lawyer, the judge, and the environmentalist" (p. 95). From within the ranks of range scientists the warning was echoed by Bartolome, who urged range managers to become active participants in policy discussions lest decisions about rangelands be made entirely by persons who understand neither range science nor the data it produces.

Over the years range professionals have risen to the challenge of reversing rangeland degradation via the ingenious application of scientific principles to management and policy. Improvements have been gradual, sometimes painfully slow, but clearly visible (as have been the occasional but inevitable failures). However, in the crisis of context, catastrophe often appears as imminent today as it ever was.

In this paper I assess the range profession's response to this crisis of context – how we addressed it then (based on an analysis of early issues of *Rangelands*), how we're addressing it now, and how we can address it in the future. I'll re-examine the nature of the crisis itself. My critique will show that we've come a long way, but to some extent it has happened in spite of ourselves. And I suggest that we'll fare better if we further broaden our vision of who we are and what we do.

#### **Looking Back**

To begin, it is helpful to review the situation confronting the range profession as the 1970s drew to a close. A small but effective wilderness preservation movement, focused on western public lands issues, had merged during the turbulent Sixties with a much larger environmental movement that originally had put most of its effort into urban problems such as air and water pollution.

New laws such as the Endangered Species Act (ESA) and National Environmental Policy Act (NEPA), while not designed primarily to address problems of the western rangelands, applied to those lands nonetheless. The Bureau of Land Management had a new "organic act," the Federal Lands Policy and Management Act of 1976 (FLPMA), which established a multiple-use mandate for the BLM similar to that of the Forest Service. Moreover, the new law added BLM lands to those eligible for protection under the Wilderness Act. Both the BLM and Forest Service had begun comprehensive efforts to identify which of their lands – including rangelands largely ignored in earlier wilderness discussions - were eligible and suitable for inclusion in the National Wilderness Preservation System. Due to continued public interest in environmental issues, as well as the detailed legal requirements of NEPA, a new profession of environmental activists had arisen, and its practitioners kept their vigilant eyes on rangelands (though not yet as constantly as on forests or rivers).

Meanwhile, post-war economic and social changes had led to a shift in how Americans viewed the public lands. An increasingly urban and affluent society began to value forests and rangelands as much or more for their "amenity values" – scenery, biodiversity, non-consumptive recreation, etc. – as for commodities such as forage, timber, minerals, and wild game.

The first generation of post-war suburban college graduates was hitting the job market; many sought and found employment in federal land management agencies that had grown rapidly in response to new congressional mandates. Each of these societal shifts meant Americans were becoming more aware of rangelands, but for different reasons than before. (These trends, and their implications for land management, are discussed in detail by Brunson and Kennedy).

All of this was worrisome to range professionals. The alarm was clearly sounded on the pages of *Rangelands*. I have already noted the concerns voiced by Bartolome and Swan, who focused on the darker side of change. Some found the prospect of wilderness designation or other preservation efforts especially daunting (19, 22). Criticism was leveled not only at "outsiders" and environmental activists, but also at agencies like the BLM that were accused of deliberately trying to sabotage the grazing program (18) or of failing to deal fairly with ranchers (12).

Yet others sounded a different note. High-ranking federal officials used the pages of *Rangelands* to reassure readers that livestock grazing would continue on the public lands and that the agencies were committed to improving the stability of the ranching industry (14, 15).

Others suggested that the public participation requirement of NEPA offered opportunities to influence policy (1,7). A politically active sheep rancher predicted that pressure would be relieved because "the bloom is off the environmental rose" due to what he saw as ill effects of environmentalism on the economy (16).

So how did the profession respond? Voices from within and outside the range profession were urging us to fight for the status quo. To a large extent, that's exactly what we tried to do. This was the heyday of the Sagebrush Rebellion, a backlash movement of rural and Western states' rights advocates who helped elect Ronald Reagan to the presidency. Vols. 2 and 3 of Rangelands offered a series of articles on the Sagebrush Rebellion. Politicians such as Gov. Evans of Idaho and Sen. Malcolm Wallop of Wyoming, as well as academics like economist Bruce Godfrey and policy expert Bern Shanks, offered suggestions on how to push against the environmental tide and maintain traditional rangeland uses. But as President Reagan and the Sagebrush Rebels soon learned, national political realities would prevent a significant shift in land-use control to the rural West.

To be sure, there also were constructive suggestions on how to embrace change. Many in the profession embraced the advice of E. William Anderson, who offered Coordinated Resource Management (CRM) planning as a way to work with environmentalists. A few authors discussed

how ranchers could take economic advantage of the increased interest in rangeland recreation, though the term "recreation" in these cases generally meant "hunting" (e.g., 17). These, however, were the exception rather than the rule.

Rangelands also offered a series of articles on how range managers could become better communicators in political and public arenas. A question that remained unexplored was, "What should we communicate about?" An outsider looking over the pages of Rangelands in 1979 would be excused for assuming that "livestock production" and "range management" were synonymous terms. Thus when range managers urged communication with the public, they really meant explaining to the public in a scientifically defensible way why grazing was the highest and best use of the range. The idea was that we're the scientists, we're the experts, and if we could only get urban Americans to hear us they'd quickly yield to our better judgment.

The trouble with this approach is that scientific data are supposed to be objective while judgments about "best use" are inherently subjective. We in the natural resource professions typically labor under the impression that our job is to manage nature. But it isn't. Bunchgrasses and sage grouse don't pay our salaries. People pay our salaries, and they do so because they think people will benefit accordingly. In fact, we manage a relationship between society and nature. If we observe change in nature, we may need to respond by changing our management. And if we observe change in society, we also may need to respond by changing our management. That wasn't the message that was emanating from the pages of Rangelands in 1979 and 1980. We were being urged to change society. So we tried, and largely failed.

This leads us to the other possible response that the profession didn't embrace – at least not right away. We didn't apply principles of scientific inquiry to this crisis, as we had done in earlier cases where changes in range management were seen as a potential solution. I believe this is because we didn't recognize that science – or to be more precise, social science – had anything helpful to tell us.

A telling example comes from an article exploring the nature of the range profession (13) wherein the author saw range science as a synthesis of knowledge drawn from many disciplines, from soil science to ecology to economics to animal physiology (Fig. 1). What was missing from his model was any mention of the non-economic social sciences: sociology, anthropology, political science, and so on.

#### **Looking Around**

One of the most striking things I notice in reading the first few issues of Rangelands is that so little has changed over the past 25 years in our perception of the world around us. We still perceive a crisis, and it's not that much different from the crisis we feared a quarter-century ago. Many of the pressing issues of 1979 are the same ones we're discussing today: the lack of weight given to "sound science" in natural resource decision making, changing demographics of the students in university range programs, lack of public knowledge about how rangelands contribute to food and fiber production. Widespread concern about wilderness designation has largely disappeared, but now we need to learn how to manage new national monuments on BLM rangelands. There's the huge new issue of rangeland habitat losses to subdivision, but even that issue falls into a familiar pattern: To many of us, the clearest threat to sound range management remains the same urban America that we railed against 25 years ago.

So what happened? Did we succeed well enough to fend off disaster, but not well enough to sway the public to our point of view? Or were the skeptics right when they predicted that the pendulum was about to swing away from an environmental protection stance? Analysis of trends in environmental attitudes suggests that neither answer is very close to the mark.

The pendulum does swing every once in awhile, but not very far. There's little chance of returning to the multiple-use heyday of the 1950s and 1960s (nor would most range professionals today want to see such a return). On the other hand, the crisis doesn't appear to have been as imminent nor as sweeping as the doomsayers predicted. That disaster was averted doesn't seem to have much to do with how range professionals did or didn't respond. More likely, it simply underscores the point that we hadn't relied on social science to help us understand what was going on. It's as though we took a few obvious but somewhat anomalous data points — e.g., political statements of a loud minority, or isolated but well-known court decisions — and assumed they

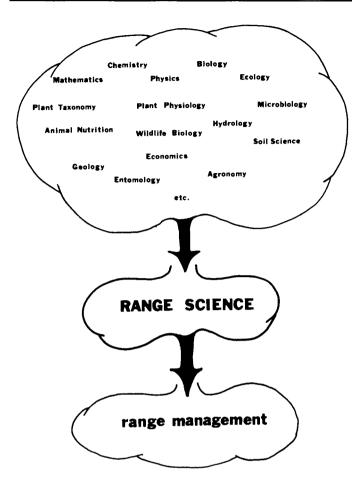


Figure 1. This diagram from the first year of Rangelands described range science as drawing its ideas from numerous disciplines. Conspicuous in their absence are the non-economic social sciences. (Reprinted from Johnson).

represented a broader truth without doing any more systematic analysis.

Contrary to predictions, Americans did not become less environmentalist during the 1980s. Sociologist Riley Dunlap, who has done the most to chart trends in global environmental attitudes over the past three decades, reported in 1987 that "levels of public support for environmental protection remained surprisingly strong in the face of energy crises, economic downturns, and tax revolts" (p. 7).

His work since has found similar consistency in opinions throughout the industrial world. In 1994, political scientist Brent Steel and I studied Americans' attitudes specifically toward public rangelands. We found: citizens overall were convinced there was a problem with public rangelands and it was probably getting worse; a majority felt public rangelands need higher levels of protection;

levels of knowledge about rangelands were low, so that attitudes about the environment in general were being projected onto a question about rangelands; and urban respondents were more likely than rural ones to believe more protection was needed (4,5).

So if it's true that the public generally is skeptical about how well rangelands have been managed, why hasn't the pressure gotten stronger? I believe a big reason is that negative attitudes toward public lands and grazing management are confounded by positive attitudes toward agriculture. Not long ago, my colleague George Wallace and I reviewed studies of attitudes toward ranching and livestock production. We found that while people tend not to like livestock in specific situations - e.g., when they're encountered in a favorite public place they love the idea of ranching in principle (6). Thus grazing management on public rangelands may face less pressure than other commodity uses of public lands that aren't so closely tied to the romance of the Western frontier.

But most range professionals aren't ranchers, and it's not clear how far the "halo effect" of positive feelings about agriculture goes toward protecting the public image of a profession made up of academic and government scientists and managers who focus on a relatively obscure natural resource. That leads me to a different crisis that occupies our attention today: our struggle to maintain the viability, and assert the relevance, of the Society for Range Management itself. One reason we face this crisis is that we haven't really come to grips with the previous one.

For several years our annual meetings have been full of discussions about whether we should change our name, jettison the "Trail Boss" logo, start a new ecology journal, or otherwise take steps to modernize and "green up" our image. So far we haven't done any of those things, largely because we don't want to repudiate a fine heritage of working to solve important natural resource problems for the benefit of *both* human and biotic communities.

I believe this ongoing discussion reflects two things: first, after 25 years we're still worried that we're not very well understood; but second, we now recognize that the problem rests as much on *our* failure to keep pace with the demands of an in-

creasing "environmentalized" public as it does on the public's failure to understand why their demands may be counter-productive.

Or maybe we *are* keeping pace, but we just don't recognize it yet. Here's what I see, as a social scientist who studies attitudes and behaviors toward natural resources, when I consider our current "identity crisis." First, a phenomenon recognized by Godfrey 25 years ago – the increasing proportion of urban and suburban students majoring in range management— continues today. These students see rangelands through a wider lens than those who may have dedicated their lives to improving forage production primarily for livestock or big game. They don't necessarily reject those goals; they simply see them as part of a wider spectrum of worthy goals. Increasingly it is they, and not we "veterans," who constitute the profession.

Second, this has gone on long enough that university range faculties also have changed their orientation. Many range scientists these days value rangelands mainly as ecosystems whose biotic and abiotic components are fascinating to study, without caring how society makes use of them (or caring mostly about how society's uses can have undesirable consequences for rangeland ecosystems). These scientists don't necessarily publish in the Journal of Range Management - maybe because ecology journals are more prestigious than ours, but more likely because they want their work to be seen by other ecologists including those outside range departments. This is worrisome because the best rangeland science isn't always found in our best rangeland journal, but we can also take heart that our sphere of influence is widening to include others outside our core profession.

Similarly, the recent decline in the number of academic departments dedicated solely to range management is a problem if rangelands are forgotten in the process. However, it's also a sign that our profession is adjusting – however disconcerting that may be – to a world where rangelands are valued as part of a larger biosphere whose problems extend across traditional ecological and disciplinary boundaries.

In other words, the range profession is coming of age. We all know growing up can be very uncomfortable. But the alternative is worse.

#### Looking Ahead

That leads me to an optimistic ending. My original premise was that the range profession of the late 1970s faced a crisis it didn't know how to confront – a crisis not in how we manage rangelands themselves, but in how we manage the relationship between rangelands and society – a crisis in the societal context in which our profession operates. We didn't address this crisis well, partly because we didn't follow our usual response to crisis: We didn't apply the scientific method, because we hadn't really embraced the social sciences that are best equipped to apply it.

Today that's not the case. One example of how the range profession is growing up is that we've begun to embrace the social sciences. A dozen years ago when I earned my Ph.D., I chose to study rangeland issues in part because hardly anyone else was doing it. I could see that someone like me was needed. But at first I felt I was the *only* one who saw that. My grant proposals drew kind words, but no funds. My faculty position was in forestry; no range program would hire someone like me. My closest peers in the profession were a few natural scientists who recognized that the human dimension was important, and chose to study and write about it.

Things have changed. In 2002, a range faculty at a U.S. university for the first time advertised and hired someone primarily to be a range social scientist. The *Journal of Range Management* has made social science a general subject area, and added an associate editor with that expertise. Social scientists are often included in grant proposals for multi-disciplinary studies of important issues in range science and management. The next time our profession is confronted with a looming problem that derives mainly from the societal context of range management – and several such problems are already out there – we'll be better equipped to understand and hopefully alleviate it.

These are just a few examples of how the U.S. range profession is responding to the crisis of serving an urbanized society that knows less than it should about range management, but asks more from range ecosystems than they can produce. Slowly, often reluctantly, we're coming to terms with our future.

Many of the challenges of 25 years ago are still with us: We need to work harder on public outreach

and education; we need to participate more effectively in decision processes; we still need to stand up for science. I, for one, am more convinced than ever that we can.

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