

Kiowa National Grasslands Integrated Management Program

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Case Description

On the Kiowa National Grasslands of New Mexico, collaboration between the Forest Service, Soil Conservation Service (now the Natural Resource Conservation Service), and a handful of local ranchers has greatly improved the quality of the area's rangeland.

In 1991, Alton Bryant, Forest Service District Ranger, and Mike Delano of the Natural Resource Conservation Service broke convention and decided to cooperate in assisting ranchers who worked both public and private land and were interested in improving environmental quality. As Delano noted, "there was a logical overlap there," because both agencies are involved in rangeland improvement. Under this jointly-administered program, rather than having different management schemes for public and private lands, and a mix of advice from Natural Resource Conservation Service and Forest Service staff, a rancher sits down with the two agencies together to develop a long-range plan for the entire area being utilized. According to Delano, by managing all of one rancher's land as a "single operating unit," needs of wildlife, cattle, and environmental restoration can be addressed as a whole.

A typical plan has multiple stages, but almost always begins with the development of a comprehensive water program. Instead of the usual few larger watering holes for cattle, water is piped in to create multiple small watering areas. By having many smaller watering areas spread out over the area being grazed, the rancher can then employ time-controlled grazing, a system that rotates the herd through a series of small parcels for short periods of time. Unlike many traditional ranching systems that apply lower, but constant pressure on a large parcel, it is believed that this system of short, but intense grazing followed by long periods of rest better facilitates natural re-vegetation; it was designed to better mimic the natural grazing pattern of pre-domesticated large browsers.

Wildlife habitat improvement is also a goal of the program. Because cattle are now being watered in several smaller areas, stress is taken off riparian areas, allowing them to recover naturally and host additional wildlife. Some participants in the program have created additional wildlife ponds away from cattle watering areas and adjacent to cover and potential nesting areas. Some species that have already benefited from water, feed and cover improvements include deer, scaled quail and prairie chickens.

One of the first ranchers to try out this idea on her parcel was local rancher and civic leader, Ellen Grove. In her words, she is "sold on it." On her approximately 1,500 acres of private and permitted land from the Kiowa Grasslands, Grove fenced in 16 individual paddocks and installed a new water storing and transport system to service each of these paddocks, all at a substantial cost to herself. She rotates her cattle through the series of paddocks as the vegetation begins to show

stress, and does not return them to that paddock until the vegetation has completely recovered. Other improvements include live snow fence plantings, wildlife habitat and wetlands creation. Although initially hesitant to break with the well-established and traditional ranching techniques that her family had always used, Grove was pleasantly surprised by the improvements in the land and the cattle that she observed.

Improvements in environmental quality were staggering. After only three years, Grove had more diverse vegetation than ever before. Some native grasses that were thought to have been locally extinct have reappeared on previously degraded parcels, and cottonwoods and willow seedlings are sprouting in the riparian area. Wildlife habitat has been improved so much that over 50 species of birds were recently recorded where previously there were only a handful. According to District Ranger Bryant, the “crowning jewel” of Grove’s efforts has been the dramatic improvement in the riparian area. An old creek bed that had been dry since the 1950s was once again running with water, a powerful symbol of environmental restoration and a habitat for wildlife.

With these environmental improvements came health improvements for the cattle. Both conception and birth rates have improved in almost all cases, with weaning weights being higher as well. In addition to improved quality of health, ranchers have actually increased their parcels. For example, when Ellen Grove began the program she was running 47 cattle. At the end of the third year she was running 115 cattle, and hoped to develop a stable situation where she could consistently support 80 head with continued environmental improvement. As a result of success stories like these, a number of ranchers who do not even have parcels on the Kiowa Grasslands have sought management advice from the Forest Service.

The most compelling proof of this project’s success is the greatly improved quality of the grasslands. Grove states that her parcel “improved more than people thought possible,” with increased and more diversified flora and fauna, as well as an increased carrying capacity for cattle. After two years, grasses were found on the Grove ranch that had not been seen in the area for years, bird species were recorded at significantly increased numbers, and a creek that had been dry since the 1950s ran with water.

Even more remarkable are the spillover effects from public to private land. Because permittees often hold both public and private parcels, improvement techniques begun on public lands are also employed on the private parcels, adding much more improved land to the overall tally than what is recorded within the federal grasslands. Alton Bryant estimates that about 68,000 acres of public grasslands are currently under integrated resource management, and more than 87,000 acres of private land, with more and more being added. This acreage represents 68 permittees on the grasslands. Encouraging to Bryant and his staff is that ranchers who do not even have parcels on the

Kiowa Grasslands have heard about this program's success and are seeking advice from the Forest Service.

Both a cause and a measure of success is the smooth interagency coordination and cooperation. The local districts of both the Forest Service and the Natural Resource Conservation Service, by agreeing to cooperate ahead of time, have significantly simplified the bureaucracy that the average rancher encounters in soliciting information, assistance and funding. Before their agreement to jointly develop and administer integrated resource management plans, each agency had its own guidelines for their specific programs and operating policies for their lands. Not only does this cooperation benefit the individual ranchers, but also the agencies that are able to minimize overlap and, moreover, share resources and information.

What is fostering progress?

Both the ranchers and the agency representatives agree that the main ingredient in the success of this program has been the human factor. Their frequent contact and, moreover, genuine interest and concern about the economic and ecological viability of local ranches, has enabled both Forest Service and Natural Resource Conservation Service staff to develop a relationship of trust and mutual problem-solving with the permittees. According to Ellen Grove, there is a feeling now, more than ever, "that we are in this together...Alton and Mike's doors are always open and I feel as if they really care." Bryant and Delano speak just as highly of their collaborators who they feel are, "very dedicated to the conservation of their resources."

In addition, success was fostered by a realization among agency personnel that they needed to work together to do their jobs, because of the inter-mixing of federal, state, and private land in the area. Delano commented, "To manage the resource, we need to work together. We're scattered out over a lot of miles here, and we have to work together in a coordinated effort."

What challenges were faced and how were they overcome?

According to one rancher involved in the program, the hardest thing for him to do was to alter his way of thinking about ranching. His family had been using the same techniques for five generations and to consider managing the resource in a fundamentally different way was both challenging and threatening. Although there was certainly an element of risk involved, this major barrier was mitigated by developing a person-to-person trust between the agency workers and the ranchers. Quite often, Forest Service and Natural Resource Conservation Service staff travel out to local ranches to discuss a rancher's concerns, problems and suggestions one-on-one. This personal

touch has helped engender trust between permittees and the agencies, opening the channels of communication enough so that conversations about alternate techniques could take place and, ultimately, thrive. According to Bryant, a belief that the agencies were “caring for the land and serving the people” had to be fostered before any discussion of ranching philosophy and technique could occur.

At times, the initial up-front financial investment can be a problem. Time-controlled grazing requires water to be available in each individual paddock. Frequently water must be pumped from a single deep source long distances away. Not every rancher has access to the capital required to devise this system. The Forest Service has helped finance some of the work through the Challenge Cost-Share program and has helped to arrange loans from the Farmers’ Home Administration.

What lessons can be drawn for future bridging?

According to former Kiowa Grasslands District Ranger Bryant, a positive attitude and a proactive approach to addressing problems are the most important ingredients in making a program like this work: “You always hear about how harmful grazing is on the land and how agencies can’t seem to coordinate their activities, but we know it doesn’t have to be that way.” In expressing this positive attitude and determination to work together, Bryant has encouraged some local ranchers to take a risk and experiment with alternative ranching techniques that have proven very beneficial to themselves and the local environment. By backing up this encouragement with quality technical expertise and interagency cooperation, the Forest Service also lowers the risk to the ranchers of trying these experiments.

Another lesson learned at the Kiowa Grasslands is that a small, but significant success can encourage others to become active. Rather than implementing a broad, large-scale program aimed at all permittees, a handful of ranchers were identified as possible candidates for a more intense plan. By ensuring that training and technical advice were available, monitoring was steady and problems were handled cooperatively and promptly, this more focused program yielded significant results. Such an image was very powerful for other ranchers in the area and record numbers, both grassland permittees and those that ranch on privately-owned land, are currently seeking aid and advice from the Forest Service and the Natural Resource Conservation Service.

Similarly, the Kiowa Grasslands case illustrates how important it is to realize that resource users on both public and private land care about the resource and want to treat it in a sustainable manner. Agency officials should not feel like they are shouldering this burden alone, but need to enlist the energies and dedication of this ready human resource. An essential role for resource managers is to help these individuals contribute, whether it be through technical assistance as

provided here, or in promoting volunteer work groups or citizen advisory councils as seen in other cases. If given the opportunity to contribute, that is precisely what these dedicated individuals will do. Brown noted, “The ranchers want many of the same things as the environmental people want, but people get stuck on their positions.”

Another, more general observation from the Kiowa Grasslands case is that in situations where results are less than certain, small poignant examples work very well. They allow an agency to showcase a particular success for other users, while at the same time not fall out of favor with a user population or the general public if the experiment is a failure. They are also relatively less expensive, easier to administer, monitor, and alter as natural or human components dictate.

The Kiowa Grasslands integrated management plans are both economic and environmental success stories; it seems as though everyone came out a winner. The hope of Bryant and Delano is that this integrated ranching system will spread, with more ranchers improving their grazing conditions. According to Bryant, “We cannot make an ecosystem improve, but we can give it the opportunity by applying the proper management. It is apparent, by observing the response of this management unit, that we usually underestimate what nature can do if given a fair opportunity.” The same could be said for human collaboration as well.

For further information

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