

WINTER 2005

ENDING the FREE RIDE for the GET'emoff GANG

Al Medina and the Drake Enclosure.

By Dan Dagget

The compact man in the Cowboys ball cap waved his arm at the bare dirt around him and asked, "How many times are we going to have to learn this lesson before we finally get it?"

The rest of us shifted from foot to foot. Not many seminars on rangeland health start with something so "in your face."

The occasion for this gathering was a rangeland health workshop organized by the Quivira Coalition, a Santa Fe, New Mexico-based environmental group, and EcoResults!, a Flagstaff, Arizona-based group I helped create. The speaker was Al Medina, a research ecologist with the U.S. Department of Agriculture Rocky Mountain Research Station in Flagstaff.

The setting was the Drake Enclosure, a 40-acre piece of rangeland in the Verde River watershed about 100 miles north of Phoenix. This area had become so devastated in the early 20th century that a portion of it was fenced to

protect it from grazing and other human uses in 1946, so various ways to heal the land might be tried and studied. The area had come to its sorry state after more than a half century of grazing, woodcutting, burning and crop raising. In other words, it had been subjected to the same sort of uses and abuses as much of the rest of the West.

The means used to try to fix the area have become typical. Seeds of a variety of plants were sown, including exotics known to be able to survive and even prosper in the most devastated land. Juniper trees that had proliferated during the deterioration were removed on the theory that they had become so effective at capturing water that virtually nothing could compete with them. And, of course, a considerable portion of the enclosure was left untouched to see how effectively leaving the land "to nature" would heal it.

It was on one of those back-to-nature areas that Medina challenged us with his question. Some of the junipers here were as much as 40 feet apart. Separating these shrubby trees were large expanses of bare dirt where much of the soil had been eroded away in spite of the fact that the land was nearly flat and, therefore, an unlikely candidate for erosion. The surface that was left consisted largely of small rocks imbedded in a crust compacted by wind and raindrops and baked by the sun into something ecologists call "desert pavement." In other words, the left-alone area of the Drake, except for the intermittent trees, looks very much like a parking lot.

Having gotten our attention, Al continued: "We've been putting fences around places like this so they aren't disturbed by human activity and watching what happens to them for a hundred years now. And when what we see here keeps happening, we don't say, 'All right, I get it. This doesn't work.' We say, 'We need another study.'"

Medina swept his hand from just above the bare ground to a series of finger punches aimed into the distance and the future. "Is this what we want the West to look like?" he challenged. "Because if this is what we want, we know how to get it. We know that if you fence five acres or five hundred or five million, much of it will end up looking like this."

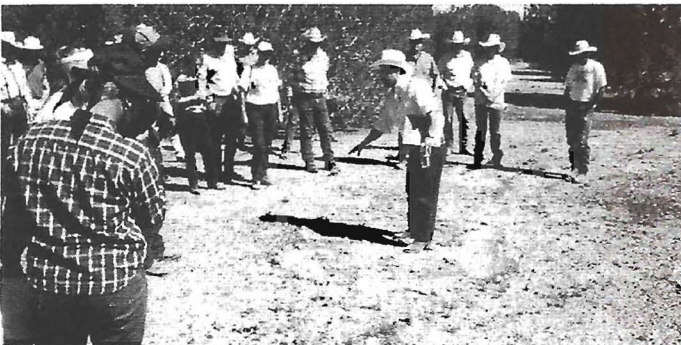
There are thousands of enclosures like the Drake around the West, maybe hundreds of thousands if you count all the



Many ungrazed public lands are becoming "desert pavement." Rest is the worst thing for this kind of arid country. It needs animal impact to rejuvenate.

mycorrhizae. With less water available inside the enclosure due to the land's reduced ability to absorb water and the water-capturing effectiveness of the junipers, the lack of mycorrhizae raises the challenge plants face in order to survive there from difficult to nearly impossible.

The fact that plants are scarcer and less vital inside the enclosure impairs the ability of the plant community there to perform a couple of important ecosystem functions. The first—removing carbon from the atmosphere and releasing oxygen into it—is important to everything that breathes.



A rangeland health workshop studies the effect of “negative impact” (rest). An acre of healthy grassland is more effective at removing carbon from the air than an acre of rainforest. The land outside the rested enclosure is closer to being healthy grassland than the land left untouched for decades.

Pete Jackson, past president of the Society for Range Management, has said an acre of healthy grassland is more effective at removing carbon from the air than an acre of rainforest. The land outside the Drake is closer to being healthy grassland than the land inside.

Plants remove carbon from the atmosphere by capturing it through photosynthesis and transforming it into organic material (tissue, food, and waste). Because most of a grass plant is underground, much of that organic material ends up underground as well. There it serves to absorb and store moisture. Any gardener knows that soil with a significant organic content is better at storing water than soil with less organic material. The barren areas of the Drake include little to no organic material and therefore are extremely ineffective at storing water. The land outside the Drake, on the other hand, has more organic material above and below ground. It's greener and lusher, and, obviously, stores more water.

All this amounts to the fact that resting the land has a significant environmental impact on it. As I understand the National Environmental Policy Act in any situation where it applies, any means of managing the land that would cause a significant environmental impact must be studied to assess the extent of that impact, and where that impact would be unacceptable it must be mitigated.

During the field trip, I asked a couple of staffers of the Prescott National Forest whether they considered the negative impacts of rest, such as those Medina had just pointed out, and whether they required measures to mitigate those impacts when they made a decision about land use. They said they didn't because “rest isn't considered to have negative impacts, because it is assumed to be the absence of use and therefore the absence of activities that have negative impacts.”

The lands of the Drake, and plenty of places like it around the West, contradict that assumption with plain and simple facts. Those facts show us that rest does have negative impacts—very significant ones. But don't look for the national environmental groups to wage a campaign to save the West from this environmental threat. With a few exceptions, such as the Quivira Coalition, the position of the environmental groups is the one from which that Forest Service assumption is derived—that use by humans is harmful and the only way to heal the land is to leave it alone.

As unlikely as it may sound, there is a way to deal with this that, in the end, will have positive effects for everyone, including the environment. All management plans and proposed actions that are subject to environmental review and don't address the impacts of rest and provide for its mitigation are subject to challenge. This includes all those instances in which environmental groups, or anyone else, buy federal grazing allotments or state grazing leases and retire them from grazing.

In order for these challenges to be successful, the issue of the negative impacts of rest must be raised in the information-gathering stage of the planning process. Help in gathering this information is available via a number of sources. The Center for Holistic Management in Albuquerque, New Mexico, and the Quivira Coalition in Santa Fe, New Mexico, have produced a number of publications describing the impacts of rest. Both also hold workshops on the subject. The Rocky Mountain Research Station of the U.S. Department of Agriculture is even available to provide scientific resources for the effort.

Once this information is collected and included in the planning process, it makes that document subject to appeal, or even a lawsuit, if the issue isn't adequately addressed. A few successful applications of this approach with the help of a lawyer who would like to gain a reputation for transforming national environmental law for the better, and those who buy federal grazing allotments or state grazing leases in order to retire them may soon find themselves required to bring in ranchers and their stock to mitigate the damage they do to the land. ■