

# Healing the land with livestock

*Putting the debate to rest. By Jim Howell*

**T**he grazing question in the intermountain West continues to be highly charged. Both sides seem convinced that their “story” is the one that stands up most effectively to scientific scrutiny. I’m here to tell you as an intermountain rancher trying his best to do the right thing for the land that experience tells me that properly managed livestock can heal the land.

Perspectives on what constitutes ecological health vary dramatically. In a nutshell, one side looks almost exclusively at species composition, while the other tends to focus on how the ecosystem processes function.

The species-composition camp wants to know if what’s there is native, be that grass, shrubs, trees, forbs, cryptobiotic soils, mammals, birds, reptiles, or insects.

The ecosystem-process camp wants to know if water is soaking into the soil and recharging springs and aquifers (as opposed to running off or evaporating), how effectively minerals are cycling from soils and air through plants and animals and back to the soil again, how efficiently sunlight energy is being captured, and the overall diversity of life. They look closely at soil surface condition, noting percentage of bare ground relative to plant density and prostate decaying litter. They look at the vigor, age distribution, diversity, and production of grasses, forbs, shrubs, and trees. This is where ecological health counts. Ranchers who care about the health of the land will manage toward the healthy functioning of those natural processes.

The species-composition side might look at all these ecosystem functions as well, and are likely to agree with their “adversaries” on what constitutes healthy and functional—to a point. The big differences seem to crop up when tools and species enter the discussion. If the ecosystem processes are functioning superbly, but the diversity of species includes some nonnative elements, then it’s automatically bad. If the grazing and disturbance of nonnative cattle or sheep or goats were the primary tools employed to produce that superb condition, then the result is automatically bad, even if the plant species composition is 100 percent native and the native grazers are thriving.

On the other hand, if plant diversity and



*Jim and his wife, Daniela, and daughter, Savannah, are well-known in Colorado for their innovative grazing program. The Howells also run an international ranch tour company that showcases cutting-edge ranches around the world—all increasing the productivity of the land through livestock.*

vigor is pathetic (but native) and exposed bare ground the predominant condition, everything is wonderful, as long as Eurasian livestock haven’t caused it. If livestock cause degradation, degraded landscapes are bad; if long-term rest and lack of disturbance cause degradation, then the same degraded landscape is good. This is what’s hard for me to understand.

I see the native/nonnative issue as totally academic. Plants and animals from other corners of the globe (including humans, from recent Europeans to the first immigrants from Siberia) have been making huge impacts on the North American scene for at least 10,000 years. Since European settlement, huge levels of fragmentation have also taken place. It’s not even remotely possible to expect the West to return to any idealistic virgin state. But we, as keystone elements in the current mix, can manage toward healthy ecosystem processes. Until we all agree on that, and on what actually constitutes healthy ecosystem function, it’s hard to see how we’ll get anywhere.

## **WHAT DOES THE GRASS SAY?**

Anyone who has spent any amount of time working out on the land knows that our west-

ern landscapes are incredibly, chaotically diverse. To define grazing simply as grazing isn’t enough. A hammer has no context unless we know how it is being used. A hammer can be used skillfully to build a house or recklessly to tear a house down. As long-time practitioners of holistic-grazing planning have realized for years, the same applies to the tool of grazing and its associated disturbance of the soil surface. Within the variables of timing, frequency, and intensity, grazing and animal impact are tools that can be applied in an infinite range of permutations, some of which can have huge negative consequences and some amazingly positive.

My experience tells me that most upright-growing bunchgrasses, as opposed to being intolerant of grazing, are instead incredibly reliant on holistically planned grazing. In 10 years of holistically planning our grazing, and controlling the variables of timing, frequency, and intensity of grazing (and actually increasing our stocking rate in the process), native bunchgrasses have returned to dominate our mountain meadows.

In all national parks across the intermountain West, where bunchgrasses have been protected from grazing for decades, the overwhelming majority of plants are in this

decadent, overrested condition, and there are essentially no seedlings. I have seen huge expanses of country in places like Canyonlands National Park, in eastern Utah, covered in dead bunchgrasses, while the same exact species of grasses just outside the park boundary are all living and vigorous. I will take living and vigorous over dead and decadent any day. [See RANGE, “The Naked Truth” by Steven H. Rich, Summer 2005.]

As long as grazing is planned to ensure full recovery from defoliation and is varied in terms of timing, frequency, and intensity, it has no negative long-term effects on the plants. The reproductive success of native bunchgrasses is also tied to the animal impact associated with grazing.

The hooves of herbivores are nature’s way of planting seed. It is almost impossible for a perennial bunchgrass seed to germinate in the arid West if it has not been planted by something. Cattle and sheep hooves are good at that. They are also good at getting any old plant material onto the ground, where it can protect the soil and do some good. This litter, once it is on the ground, also improves the chances for seedling success, because it creates moist microsites for germination. This litter also improves the water cycle by slowing evaporation from bare soil surfaces and by diminishing and dissipating the energy of flowing water. This gives the moisture a better chance of slowing down and soaking in, rather than running off into gullies full of eroding soil.

#### RANCHERS TAKE THE RAP

Think about the fact that about 98.5 percent of Americans are city or suburban based and have no connection with the production of the food they consume. Only 1.5 percent of the American population has anything to do with producing food.

What’s the one form of food production that preserves huge tracts of essentially native vegetation and diverse wildlife habitat? It’s



PHOTOS COURTESY JIM HOWELL & CENTER FOR HOLISTIC MANAGEMENT

*ABOVE: Jim Howell shares his passion about how animals can heal the land with everyone, including his daughter, Savannah. The diverse forage on the Howells’ Blue Ranch near Montrose, Colo., attests to the effectiveness of planned grazing to promote land health. They have a variety of livestock to make use of the Gambel oak, serviceberries, snowberries, big sagebrush, rabbitbrush, and dozens of grasses and forbs.*

*BELOW: Jim’s success at “drought-proofing” his land by timing his grazing to increase perennial grass numbers and vigor has made him a popular speaker for field days—like this one on the Blue Ranch for the Colorado Branch for Holistic Management. With planned grazing, Jim has found that elk will follow behind where the cattle have grazed—enjoying the fresh greenup. He takes the elk into consideration when planning his grazing.*



the ranching industry—specifically the cow/calf segment—which is overwhelmingly dominated by family ranches with deep cultural ties to place. With just a few tweaks, most of these ranches are very close to being not only ecologically sustainable, but also ecologically regenerative.

Of the 1.5 percent of our population that produces food, a tiny fraction includes western-lands ranchers. So, this miniscule segment of our population—which is producing food closer to a truly sound ecological model than anyone else in the country, and preserving possibly our last earthbound culture—gets the brunt of the blame for ecosystem deterioration. Doesn’t seem right, does it?

Through holistic-grazing planning, we can mimic these chaotic natural-grazing patterns with our domestic herbivores, create highly effective ecosystem processes, and preserve our ranching heritage. We can do this, and we are doing this. From my perspective, this argument needs to be put to bed. The West is blessed with a rich natural and cultural history. For the sake of our land, let’s carry that legacy into the future, put down our defenses, and work together. ■

*Story excerpted from Holistic Management International’s bimonthly publication, “In Practice.” For the full article or to receive a free issue, call 505-842-5252, or visit [www.holisticmanagement.org](http://www.holisticmanagement.org).*