

LEARNING HOLISTIC MANAGEMENT

by Tony Malmberg

Tough times through the mid eighties brought me to my knees. Work in Wyoming's oil fields and Nevada's mines provided income to keep our ranch limping along but left me wondering, "What's the point?"

We ranch 35,000 acres in the foothills of the Southern Wind River Mountains. Twin Creek, a small mountain stream, flows on our ranch and through an incised canyon for 4 miles before it comes to a narrow alluvial meadow at our headquarters. The creek then turns north through juniper breaks for 8 miles before leaving the ranch. Elevation ranges from 5,800-8,000 feet.

Desperation drove me to Allan Savory's course on Holistic Management in 1987 because I heard that we could double our cattle numbers with this new fangled way of grazing.

In a Holiday Inn meeting room a troop of young, ex-agency range scientists laid out the basics. I listened politely as they lectured on the core of Holistic Management: The Holistic Goal and its three parts: the quality of life desired, the production needed to sustain that life, and the future landscape necessary to support the production.

During an interminably long session on the four ecosystem blocks I noted that no life exists on our planet without the Water Cycle, Mineral Cycle, Community Dynamics, and Energy Flow. At the end of each segment an animated Kirk Gadzia, an instructor, would shout, "Where do we look?"

After the third time we got the gist and responded, "The soil surface!" The soil surface tells us: if we are catching and holding water in the soil mantle, if the manure and dead plant material are breaking down to build soil, if we have diverse plant species, and if we are capturing and converting sunlight.

I was surprised to learn that grazing was only one of six tools, the other five tools being rest, animal impact, fire, living organisms, and technology. I realized that my only tool was grazing and it seemed that environmentalists' only tool was rest. We also learned that none of the six tools could be implemented without human creativity, labor, or money. This means the locals hold the key to implementing the tools.

We finally got to grazing management and stocking rates. I was pulling against the bit to build fences and run more cattle. Then Allan Savory warned us not to build fences and start rotational grazing but to plan the use of all the tools to achieve our Holistic Goal.

His warning caused me to pause. I needed a goal.

Developing the Holistic Goal requires input from all of the decision makers. In my case, the first layer of decision makers consisted of three ranch partners. Their response to a goal ranged from laughter to ignoring me. To be a Holistic Manager in the real world required a means other than a touchy-feely session. I worked to incorporate my partner's and other decision maker's values into our goal. The alternative was excluding my partners, BLM range con, NRCS conservationist, and banker.

While struggling with a goal, I walked and kneeled to see the land for the first time, as Kirk Gadzia taught. For three years, I watched cattle grazing, observed plants growing, and rolled up fences that no longer made sense. I also walked around the landscape pacing transects as John Likins, a BLM range conservationist, taught me to do. I noted 50% bare ground.

Animals grazing the same plants and walking in the same place for too long or not being gone from that place for long enough cause bare ground. It can also result from total rest or the absence of any disturbance, necessary to create germination sites. In an arid environment, the first happens over weeks and the second over decades. Plants need time to recover from grazing and animal impact.

I didn't get the Quality of Life deal. Our culture endures. We are tough. To plan for quality of life, well, that was a new one. I tried, forcing myself to take time off and even recreate. Suddenly, the daily tasks blurring into seasons and years stopped and I could hear those little unexpected requests for change; bunch your cattle, build a fence, move the cattle. It's scary to do something different from all the neighbors.

Finally, with a goal in mind, I acted. The first grazing plan reduced the time our cattle were in one place and increased the time they were gone by bunching them in larger herds, like the migrating buffalo. I took the plan to Roy Packer, my BLM range conservationist of 10 years. I didn't show him the grazing plan right off. It seems the academic world spawning agency personnel has strong opinions about Holistic Management and Allan Savory, so I eased into it.

"Roy," I ventured, "what do you think of Holistic Management?"

"Any management is better than none at all," he stated flatly.

By reducing time and increasing recovery periods, our stocking rate sprinted ahead by 20% in 1991, 22% in 1992, and 16% in 1993 and the sky seemed the limit.

The larger herds of cattle forced utilization of areas and plants stagnant for years. After a dry 1994 dropped our yield back 10%, Tom Ryder, a Game and Fish Wildlife biologist, said our ranch looked like a game refuge, with elk all over the place. They had moved onto areas we grazed early, which provided succulent regrowth.

A wet 1995 picked up the stocking rate 17 % and different plant species began appearing. An investigation confirmed Blue bunch-wheat grass, Indian Ricegrass, leafy green needle, and Needle-and-Thread, where I had seen none before. Probing the soil surface proved the appearance of these bunch grasses to be originating from old-dormant plants hunkering below overgrazing pressure of years past. They were not new seedlings.

The inherent diversity of riparian areas showed up even more quickly. In the early 1980's, I began experimenting with beavers. Holistic Management gave me an awareness and understanding of tools to build beaver habitat. By grazing the herbaceous undergrowth early, sunlight could draw the willow seedlings above the dark undergrowth. Rest by mid June and through the summer established diverse woody species.

In 1995 the University of Wyoming documented a 50% increase in numbers and a 70% increase in species of migratory songbirds. The resulting willows have enticed moose to become residents. The higher water table from beaver activity increased grass production for livestock grazing, water filtration, and soil building.

As success built upon success I couldn't help being downright cocky and even evangelistic. My neighbors looked for mistakes and problems. They didn't have to look far. In 1996, my invincibility ignored a basic Holistic Management principle, "Assume you are wrong."

That year Miller Spring failed to water 1,000 cow-calf pairs. The spring surfaces along the county road where everyone would see the cows muddy-black-mouthed bawling. They noticed and noted 'poor animal performance.' We planned to develop better water storage.

Cow pies scattered across the pasture suggested a dead mineral cycle. We struggled with our decision to ban insecticide eartags for fear of losing pasture customers. We explained our plan to move the cattle every 10 days to stay ahead of the fly hatch—by the time the flies hatched the cattle were gone and the larvae had no hosts available to complete their life cycle. Some customers bought it and some didn't but the decision was right for the land.

Fly larvae drilled holes through the cow pies, making them more breakable. Beetles rolled up dung and carried it below ground. Spider webs spanning every hole on the landscape glistened from early morning dew. Wyoming's largest environmental organization, The Wyoming Outdoor Council, toured our ranch, with the most common comment being, "Where is the manure?" A healthy insect population cycled the manure rapidly. Once again, time and movement of livestock delivered the key.

A problem took root in 1996 when I began modifying the definition of "recovery" to justify grazing pastures twice in one season. Holistic Management guidelines suggest that a plant

has recovered when it looks like an ungrazed plant. I told myself that a plant was recovered after regrowing 6 inches, or a seedhead set, even though they obviously did not look like ungrazed plants. Roy Packer warned me against the practice. I did it anyway.

That year our yield was 181% of when we started but from here on it was like spurring a horse up a steep talus slope, the harder you spurred the more you slide backward. I spurred harder. We began losing litter cover and in an arid environment the absence of mulch is like adding another bullet to the chamber in a game of Russian roulette. Without the soil surface covered I was highly susceptible to drought. To top it off, the bunchgrasses hunkered down again.

When we began increasing stock density, we benefited from litter stored by partial rest that season long grazing promotes. The greater number of hooves and activity knocked down these old dead plants to reduce our bare ground to 22%. Once that supply was gone, our increased stocking rates and more pliable and vegetative plants did not supply a source of litter. I was confused because I actually believed I was doing everything right.

Jim Howell, a Holistic Manager from Colorado, explained how plant recovery differs from high production and low production arid environments. Jim suspected I was not planning for adequate recovery periods, particularly in high utilization situations. The loaded cylinder rolled into the chamber as the worst drought in 108 years of records began its first year in 2000. We cut stocking rates 11% but were still behind the curve. We shipped yearlings early and weaned our calves ahead of schedule to compensate for being over stocked. We chopped 35% more for our planned grazing in 2001. Tom Ryder stopped by the ranch in September saying, "Your riparian areas really look good. Thanks."

After thirty of the last thirty-one months of less than average precipitation, we are planning a 46% reduction from our 10-year average in 2002. Even with the foul-up our latest monitoring showed 40% bare ground vs. 50% before we started planning grazing.

While allowing us to increase livestock numbers, Holistic Management caused me to value land health and not just production. I learned that Holistic Management is not a grazing system but a way of responding to the dynamic conditions of the land. Intensive grazing, rotational grazing, and grazing systems dictate use and rest according to a calendar, oblivious to recent developments in plant growth or lack of use. We plan the grazing so we get animals to the right place at the right time and for the right reasons. Those right reasons revolve around our holistic goal.

Holistic Management gave me respect for life that overcame the irrational war against 'bad' plants. Spending money on herbicides or technology to kill the symptom of unwanted plants does not address the underlying problem of bare ground, over grazing or over rest. What we see on the land is merely a reflection of the habitat our management has provided. In Hamlet Shakespeare said, "Nothing is good or bad but thinking makes it so." Certain plants aren't bad; they are just there. We can cover the soil surface and plan for adequate recovery periods to create habitat for a diverse and complex perennial grass community, just as bare ground creates habitat for cheat grass, spotted knapweed, leafy spurge, and Canada thistle.

As biodiversity on the land increased, I began interacting more comfortably with community members of diverse interests. Knowing that each tool has a role in achieving a functional ecosystem, I no longer felt pressured to defend the tool of grazing. The absence of defensiveness allowed for trust. I realized that the environmentalists and I value the same things—a safe community, a healthy landscape, and stable economy. With this understanding, I no longer needed to convert the other side to my way of thinking. I began learning from them.

Holistic Management is about being aware of how decisions affect life: plant life, animal life, human life, and economic life. Sure, scars on the landscape remind me of a time before my new awareness demanded response to mistakes. But now I have the decision-making ability to select a tool, on any given day, to move toward our goal of a diverse and complex perennial plant community. What could be better for our landscape, our community and our economy than developing generations of managers equipped to make decisions that support life?