

*Profile of Good
Stewardship:*
**The Rafter
F Cattle
Company**

Roger Bowe heard the whistle of change long before the train ever appeared on the tracks.

For three generations, the Bowe family managed the private, 14,000-acre Rafter F as a traditional cattle ranch. That meant continuous grazing year round at a stocking rate that was commensurate with the ranch's location on the high, windy plains of the New Mexico-Texas state line, near In-

terstate 40. of subdivisions moving in around here either," says Roger with a chuckle.

In the early 1980s, Roger and his family, including his brother, faced the possibility that they would be the next to leave. The ranch suffered from a slow, but steady ecological decline. His cattle, though distributed evenly across the ranch, were impacting the land unevenly. They were overgrazing the blue grama and buffalo grasses on the flat mesa tops while underutilizing the tobosa bottomlands.

The cattle didn't mind this arrangement much, but the land did. Roger began to observe a distinct lack of vigor in the plant community across the ranch. The grasses on the mesatops were never allowed to set seed, and the tobosa grass looked gray and sickly. "I knew the land was unhealthy," says Roger in his quiet plains accent, "but I didn't know why."

That's when Roger distinctly heard the whistle of change for the first time.



Roger Bowe. (Photo courtesy of Roger Bowe.)

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Change is no stranger to the area, however. Thirty years after Roger's grandfather homesteaded the ranch in the early 1900s, the Bowe family watched with dismay as a sizeable farming community in the area was literally blown away in the Dust Bowl. In the decades since, families have continued to drift away one at a time. Roger thinks the population has dropped by two-thirds since he was a boy—a trend he believes will likely continue into the future.

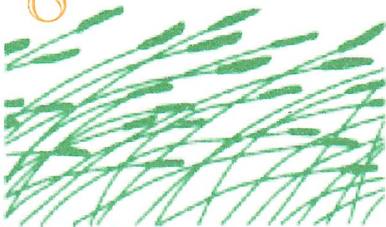
"There's not much threat

HRM

In 1983, looking for answers to their dilemma, Roger, his brother, and, eventually, his father enrolled in a course on Holistic Resource Management (HRM) taught by Allan Savory where they learned a life-changing lesson: overgrazing had more to do with timing than with numbers of cattle.

Recovery was the key. A grazed plant needed sufficient time to recover, and become vigorous once more, before being grazed

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again. Sending the cattle back into a pasture too soon would cause overgrazing. The numbers of cattle involved, or stocking rate, had very little to do with anything.

Roger and his family came away from the HRM courses convinced that if ranchers were to succeed in a rapidly changing world, they had to start learning the principles of ecosystem function. The words “water cycle, mineral cycle, energy flow, and succession” became the words we used to describe the landscape,” says Roger. “This is like a foreign language to most ranchers and it is sure not what I was taught in school. This has been a big problem in trying to relate what we were doing to other ranchers.

“My dad and I were very excited about what we had learned,” continues Roger, “but we made the mistake of building a lot of fences and doubling the stocking rate right off.

“Thank goodness we were also monitoring what was happening on the ground.”

The plants, Roger noticed, were not recovering quickly enough. He responded by reducing the size of his herd and creating longer periods of recovery for the plants.

It took three years to work the kinks out of the system, but monitoring data showed significant improvements. Bare ground on the ranch decreased by one-third; litter cover increased by over 10%; basal cover doubled. The average distance between plants declined by two-thirds and snakeweed declined by 90%.

Roger raised the water

table, too. “We had an old well that ran dry in the ’50s, but now it has 10 feet of water in it,” he says. “My dad had never seen water stay there. He had seen it dry from 1950 to 1990.” Roger credits the short-duration grazing management for the new water; by growing more grass he increased the rate of water infiltration on the ranch.

“Growing water” is just one of a number of wonders Roger has experienced since 1985. “I’ve seen tremendous things happening,” he says. “We have many new grass species showing up—bluestem, western wheat grass, Canadian wild rye, Indian grass and a 50 to 60% increase in ground cover from new plants and litter.”

The key, says Roger, is a willingness to keep learning from the land. “After 15 years of this, I’m still a student,” he says with a smile.

Profit

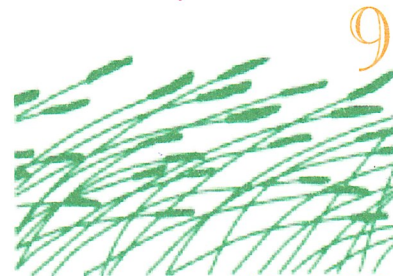
Almost as a bonus, Roger’s ecological success on his ranch translated into economic success

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MONITORING RESULTS - BOWE RANCH
 SAN JON, NEW MEXICO USA

NORTH CELL	1984	1986	1990	1991	1992	1993
% BARE GROUND	46	54	25	26	39	30
% LITTER	44	39	57	62	49	54
% BASAL COVER	8	7	18	17	17	16
% MATURE CAPPING	42	22	2	2	5	2
AVG. PLANT DISTANCE	1.8	0.86	.96	.70	.95	.69
SPECIES PERENNIAL GRASS	6	NA	17	17	17	18
LBS. BEEF PER ACRE	14	23	29	31	31	26
NET INCOME PER ACRE	5.84	8.00	19.4	18.4	22.5	NA
% BROOM SNAKEWEED	11	NA	1	1	1	1



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as well. Even though he more than doubled the size of his herd, Roger managed to cut the production costs per pound of beef in half while raising production. "We went from 15 pounds per acre to 32," says Roger. And his profits went up correspondingly.

Roger's labor costs were reduced as well. For example, winter feeding, once an eight-hour job, now only takes two hours because the cows are grouped together as a herd. Of course, the initial labor of building the paddocks and establishing new water sources was expensive, but Roger figures the return on that investment has now surpassed 1000%.

The ranch's rise in profitability was not an accident, however. It was part of a carefully considered plan. "HRM is more than just a grazing system," explains Roger, "it helps you attain your goals for your total operation." Roger and his family were required to sit down

and come up with long-range plans. What did they want the ranch ecology to look like? What sort of quality of life did they want to achieve? What were their production goals? "It was the hardest thing I've ever done," he says. But it paid off handsomely.

"Success requires vision, observes Roger, "but it also requires flexibility. Don't cast your goals in stone, or you won't reach them." That flexibility includes the grazing system itself, notes Roger, which must be adapted to

the specific economic and ecological needs of each ranch. The principles are always the same—rest, recovery, timing, intensity, frequency—but how they are expressed can vary tremendously.

In 1993, Roger's success paid an unexpected dividend when he was selected as one of seven regional winners of the National Cattleman's Association's Environmental Stewardship Award. As the Southwest representative, Roger was recognized by the Selection Committee of the NCA for showing that good conservation practices and good business go hand in hand. He also got a free trip to the annual convention in Reno, Nevada.

Roger made the newspapers and was quoted as saying, "With a little investment in capital, a lot of hard work, and a big change in the way I manage resources, we have made good progress in sustaining our land for the next generation."

Frustration

If there is a dark cloud to Roger's tale of success, however, it might be the frustration he feels at the slow response of his fellow ranchers to his example.

"When neighbors come on the ranch, they always look sideways, either at the horizon or at my cattle," says Roger. "They only want to talk about the weather or performance. They almost never look at the ground."

And talking about the land, Roger believes, is the key to the future of ranching.

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**BOWE RANCH RESULTS
 COST PER POUND OF BEEF**

ITEM:	1983	1990
FEED	.14	.09
REPAIRS	.02	.002
INTEREST	.07	.03
SUPPLIES	.03	.01
CHEMICALS	.01	0
VET & MED.	.02	.007
GAS & OIL	.02	.006
TAXES & INS	.02	.007
UTILITIES	.006	.003
LAND RTRN 3%	.25	.10
TOTAL	\$.60	\$.26



Over the years Roger has worked hard to share his story with other ranchers. He has written and lectured extensively, and even taught a class on holistic management at the community college in Tucumcari. "I even tell people that I've dropped my golf handicap from 12 to six since switching to HRM, which is true," says Roger, with a smile.

It hasn't worked. It's not just his neighbors either; Roger has encountered everything from skepticism to outright hostility from ranchers across the region. To a meat-and-potatoes rancher like Roger, who does not consider himself a radical at all, it is a perplexing, and distressing, situation.

The reasons for resistance by ranchers are varied, but Roger singles out one in particular: pride. "The quickest way to end a conversation is to say I'm here to educate you," he says, "especially if the topic involves the environment. Most ranchers equate any discussion about ecology with environmental activists from the city," he says.

It is an irony that causes Roger some pain. "What environmentalists say is what ranchers believe too," he says. "There should be a lot of common ground, but there hasn't so far."

Doubly frustrating is the denial maintained by ranchers in the face of rapid change taking place all around them. Roger hears the whistle of change loud and clear on the tracks, aimed directly at the ranching community. "It's coming," says Roger, referring to pressure from cities and other glo-

bal forces, "and every rancher should pay attention."

Roger has worked hard to stay ahead of that whistle. That more ranchers have not chosen voluntarily to join him has discouraged him somewhat, but not to the point of despair.

Like most ranchers, Roger remains stubbornly optimistic.

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Healing riparian area on the Rafter F.
(Photo courtesy of Roger Bowe.)

"Doing things differently can really pull you down sometimes," says Roger. "Peer pressure can be overwhelming to the point you want to say why bother? When this happens I saddle up my trusty quarterhorse and ride the range looking at the creeks that have healed up with grass, I ride by the ponds that are clear and full of life again, I look at the grass plants that are thriving due to proper rest, and finally I go back home and look at my goals and smile, knowing that I'll never go back."



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