

Mark Frasier

Woodrow, Colorado

# Summary of Operation

- 3,400 head of beef cattle yearlings
- 400 head of fall-calving cows
- Management-intensive grazing on 29,000 acres of native range

## Problem Addressed

<u>Fragile rangeland.</u> Mark Frasier's rangeland poses particular challenges because it receives little precipitation, and what does fall from the sky comes only sporadically. Frasier says his 29,000-acre cattle ranch near Woodrow, Colo., is part of a "brittle" environment.

When ranchers turn cattle into a pasture for the whole season, the cows invariably graze on a few select plants, returning to graze on any fresh growth. Thus, vegetation suffers from opposing problems: overgrazing because recovery time has not been controlled or excessive growth because a plant is never grazed. Frasier moved into a rotational grazing system to increase and improve range production.

#### Background

Frasier works in partnership with his father, Marshall, who lives on the ranch, and two brothers, Joe and Chris, who manage another ranching property. When Frasier first began managing the ranch his father had begun 50 years before, they had fewer animals and raised them for a longer period of time. They confined cattle within a perimeter fence of barbed wire and, with Colorado's severe winters, supplemented with hay. They also left a standing forage bank for grazing through the dormant season. The system worked pretty well, but the ranchers put in long hours out on the range and the profit margin was on the decline.

Frasier went to a seminar and was inspired by a speaker who advocated Holistic Management®. "I was at a point of my life and my career that I could visually see some of the issues that he was talking about as concerns," Frasier says. "What he was describing, I had seen on my pasture."

Frasier realized careful forage management would improve its quality and, in turn, improve productivity on the ranch.

## Focal Point of Operation — Range management

Each year, Frasier begins to buy yearlings in March and April, and by the early part of May, the ranch is fully stocked. He purchased about 3,400 head in the year 2000 from Colorado and surrounding states. The cattle come onto the ranch weighing 400 to 600 pounds and increase by about 200 to 250 pounds over the next five months.

Frasier begins shipping in mid-August and by the end of September, the yearlings are gone. Frasier sells from 25 to 30 percent as feeder cattle and they go directly to a feedlot for finishing. Frasier and his brothers retain ownership of the remaining yearlings, which also leave the ranch for finishing at a commercial

finisher, then are sold to slaughter.

Frasier's 400 cows all calve in August and September. They graze on the leftover grass from the larger herds and provide a crop of calves each fall. Frasier weans the calves each spring when the grass begins to turn green and they contribute to his new yearling crop.

The animals all graze in a well-tooled system of 125 paddocks ranging from 50 to 300 acres each, divided by electric fence. The permanent paddocks are each equipped with water, thanks to Marshall Frasier, who had the foresight to lay underground pipelines.

Frasier manages the herds in groups of 700 to 1,100, providing them with a fresh paddock every one to three days. The system hinges on a holistic model, what Frasier describes as "managing the cattle and managing the forage for rest and recovery period — all working together toward one beneficial end." His management style has four basic elements.

First, he works to maximize the scarce precipitation. Native plants, which have developed to exist in those conditions, are the only species Frasier can count on to survive.

Second is the dynamic relationship between the animals and the plants. The soil surface needs the animals to break up the crust so water will penetrate. Grazing invigorates the grass, causing it to grow deeper and thicker roots.

Frasier's third element is managing grazing time. It is not important how many animals are turned out in a particular area, he says, but how long a paddock is grazed and how long he allows it to recover. He has split his cattle into herds of about 1,000 head, which graze in 50- to 200-acre paddocks. After one or two days, Frasier moves the herd and gives

the paddock 35 to 70 days to recover, depending on the rate of re-growth.

Finally, holism brings everything together. "If you take one piece out and just try to work that piece, you're not likely to be successful," Frasier says. "It depends on all of these elements working together as they do to achieve a successful goal."

Since 2001, Colorado has been gripped by the most severe drought in 250 years. To optimize their limited resources for forage and range productivity, the Frasiers have been putting more emphasis than ever on their soil management strategies. "Even during a drought, rain does fall, and it is imperative that the soil surface be prepared so that rainfall received is effectively conserved," Frasier said. During only one year of drought conditions have the Frasiers been forced to de-stock their ranch.

#### **Economics and Profitability**

The short-term return to Frasier's holistic system is better management. "The long-

term return is to the ground, and both of those have an economic benefit," he says. "When we made the changes in our management, our ease of management grew and our overhead costs dropped. That was our initial savings.

"Now, we're seeing a healthier landscape and growing more grass. And we are just in the past few years starting to increase the number of cattle we graze. Grazing more cattle on the same resource is going to have an economic advantage."

With more effective range management, they have increased total production, in essence producing weight gain at a lower cost.

A study of ranch records going back 30 years reveals the initial cost of production was about 16 to 17 cents per pound. That cost increased to about 35 cents per pound 20 years ago.

Through his methods of Holistic Management® and rotational grazing,



Mark Frasier has seen a drop in the cost of beef production from 35 cents per pound to 11 cents per pound since intensifying range management.

Frasier has been able to increase the size of his herd by about 15 percent. More importantly, he has seen a drop in the cost of production from 35 cents per pound when he took over the operation to 11 to 12 cents per pound today. Frasier says the costs are actual and not adjusted for inflation.

## **Environmental Benefits**

Developing a symbiotic relationship between the cattle and the land through careful grazing management has proven beneficial to the range environment.

"I'm starting to see changes in the natural resource base, the grass and the ground itself," Frasier says. "Our ground is fairly hard and the plants that are on it are very hardy and very resilient, but they are really slow to change."

Learning the best methods to manage his rotational grazing operation proved to be challenging. Every paddock is different, in size as well as forages, soils, slopes and a number of other factors. Frasier also must factor in the dynamic effect of plants changing over time — not only through the grazing season, but from year to year. And finally, the weather is always variable.

"Grazing is something of an art form," Frasier says. "A person has to feel for where the forage is, and anticipate where the growth will be. That takes a great deal of experience and willingness to let the animals tell me what's better and what they prefer."

Frasier measures the forage in each paddock after moving the herd to determine how closely they grazed. If the cattle grazed a lot more than he had anticipated, Frasier knows it has improved. Frasier tries to adjust to the changes by extending or reducing the time the cattle spend in a given paddock. When forage recovers quickly, Frasier will graze the paddocks out of sequence. "I need

to be very flexible," Frasier says.

# Community and Quality of Life Benefits

"It's of great value to be able to dedicate myself to something that's meaningful to me and that I feel is successful, not only economically, but ecologically," Frasier says.



The operation of this ranch "has provided my family with security, but also a nice place to live, and that is important."

While Frasier spends a lot of time managing his grazing system, he spends less time with more mundane tasks like driving around the ranch looking for cattle.

"The cattle are so much easier to deal with when they're all together," he says. "I go out, and within 30 minutes, I have seen all of the animals, instead of bouncing around in the pickup truck half the day." Through daily contact with the cattle, they are easier to gather, weigh and load for shipping.

# Transition Advice

Frasier enthusiastically encourages other

producers to consider Holistic Management® for grazing. Western ranchers, however, consider water sources first and foremost.

"The most significant cost is water and anyone who has developed an extensive area will tell you that, particularly in the arid West," he says.

While Frasier depended heavily on the trialand-error method to hone his skills, he says there are a lot more resources available now for those just getting started. He has taken course work in Holistic Management® in Albuquerque, N.M., and worked with a consultant for a number of years.

He recommends traveling as a way to discover new ideas, even if the environment and operations are different. "I've been to New Zealand and Argentina where the people have elevated grazing to a level that you don't see much in this country," he says. "Each site is going to be different and the challenges won't be the same, but if you see someone else's success, that reinforces your own resolve."

#### The Future

Frasier plans to continue to increase the size of his herd as the range forage improves.

"The past 16 years have opened my eyes to the potential for increasing the production from the same resource," Frasier says.

■ Mary Friesen

## For more information:

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Editor's note: This proile, originally published in 2001, was updated in 2004.