PHOTO COURTESY SHAWN FREELAND

# Connecting Pieces & Parts

Regenerative ag practices, direct marketing, agri-entertainment contribute to profitability and positive quality of life.

Story by Troy Smith, field editor

A fter purchasing a place near Caputa, S.D., Shawn Freeland and his wife, Kristy, tried to make their operation a model of conventional production-driven farming and ranching. The couple put in long hours, applied widely accepted management practices, and strived to acquire more land and expand their commercial Angus cattle herd.

After a decade, they had managed to grow their cow numbers to around 600 head, but input costs were high and profits scarce. Freeland thought there had to be a different way — a better way — to manage the operation.

The fact that Freeland is a first-generation rancher might have made it easier for him to

think outside the box. Relatively unfettered by tradition, he was willing to consider alternative methods.

Ultimately, both he and Kristy would embrace the holistic management philosophy, which emphasizes the interconnectedness of the various pieces and parts of an operation. With the adoption of regenerative agricultural practices emphasizing soil health, the couple believed they had found their better way.

### Out with the old

"Before that, our operation was like a lot of others," tells Freeland. "Like most, we calved in January and February. I got a lot of practice at treating sick calves every year. We ran just about everything through a calving barn, and I think that contributed to sickness in the calves."

Like many others, the Freeland operation had depended heavily on homegrown feed crops. Three pivot-irrigated fields produced harvested forages that formed the basis for mixed rations fed to cattle maintained in lots during winter months. Costs associated with farming and feeding equipment, fertilizer, and fuel were high.

#### In with the new

A change in direction happened after Freeland began participating in the South *Continued on page 84*  Dakota Agriculture and Rural Leadership (SDARL) program in 2014. The 18-month experience included a dozen two- to three-day seminars; a trip to Washington, D.C.; and two weeks traveling internationally.

Freeland signed up to become betterequipped to represent agriculture and respond effectively to its detractors. What he didn't expect was the way the SDARL experience whetted his appetite for learning.

He next enrolled in a grazing school organized by the South Dakota Grasslands Coalition, at which he was introduced to holistic management and regenerative management practices. Emboldened by his educational experiences, Freeland began to explore alternative practices that might be put to work at home. An overarching goal was to improve soil health, which Freeland believed to be suffering from neglect probably for decades.

"We adopted no-till planting in 2015 and started using cover crops for grazing in 2016," recalls Freeland, explaining how, instead of haying a field of triticale, he grazed it with 200 yearlings. After grazing out the triticale, Freeland followed with a warm-season grazing mix — a variety of summer annuals that provided a lot of forage. From there, Freeland moved forward and never looked back.

Many producers question whether irrigated crops can be grazed profitably. Freeland says he has no doubt grazing can be profitable on irrigated ground under forage production. Compared to harvesting the forage as hay, total yields should be as good or better when grazed.

### Lessening inputs

Over time, the combined effects of rotating forage crops, having living roots in the soil throughout most of the year, and the addition of nutrients from animal manure and urine will enhance soil fertility. That should reduce or even eliminate the need for commercial fertilizer, he says. Crop rotations lessen the need for herbicides and pesticides. And, of course, grazing eliminates the costs associated with harvesting and feeding the forage as hay. "Profit doesn't always come from making more money. Often, profit is in the money you don't spend," says Freeland, explaining that lowering costs allows him to keep more of the money he makes.

# Timing

These days, the Freeland cow herd calves in May. Scours and subsequent health problems are much diminished under a system of year-round grazing that incorporates various cover-crop mixtures, standing alfalfa and native range.

Management must remain adaptive, adjusting to changes in environmental conditions, but Freeland tries to rest at least 320 acres of grazing land each year.

Grazing management is relatively intensive, with extensive use of temporary electric fencing to subdivide pastures and fields for grazing in planned rotation. On average, cattle are rotated to fresh forage every three days.

In a typical year, cattle might graze cool-season forage crops in the spring, prior to going to native range for the summer and fall. Native pastures often support cattle well into the forepart of winter. Then, cattle are moved to stockpiled fields composed of diverse warm-season cover-crop mixtures.

While he is no longer dependent on hay as winter's primary feed source, Freeland still supplements cattle with hay. He either grazes bales, allowing cattle access to only so many bales at a time, or he may roll out hay on the ground for the cattle. Particularly with bale-grazing, which generally results in more hay trampling and more animal impact, hay feeding is strategic and serves more than one purpose.

"We're feeding more than the cattle. The residue feeds the soil, too, adding nutrients and building organic matter that helps the soil retain moisture better," says Freeland, explaining that hay residue has fertilizer value, as do the manure and urine of cattle feeding on it.

"We try to feed on land that will benefit from it. Hay that cattle leave behind isn't "Profit doesn't always come from making more money. Often, profit is in the money you don't spend." Shawn Freeland

wasted if it's placed in areas that can benefit from the added nutrients," he adds.

Most of Freeland's forage crops could be hayed if that were advantageous. Over time it has become preferable to graze all homegrown forage and purchase needed hay. Buying hay results in the importation of nutrients to the ranch. Additionally, Freeland has been freed from owning and maintaining haying equipment.

The emphasis on managing for soil health is paying off. Periodic soil tests show increased organic matter. Natural Resource Conservation Service (NRCS) assessments check all the boxes for indicators of healthy soil, and tests suggest a high rain infiltration rate and reduced runoff.

Impressive to Freeland are the increases in various life forms, from earthworms below the soil surface to dung beetles above ground, and increased diversity in plants and larger animals.

"Dr. Alan Williams has said, 'When you start to see the bugs, the birds and the wildlife return, you know you are regenerating," offers Freeland. "We have seen an abundance of wildlife grazing alongside our cattle in our winter covercrop mix. From over 300 head of deer, both whitetails and mule deer, to hundreds of turkeys and grouse all on the same field at the same time. A pretty amazing sight. Biology builds biology. Life builds life, above and below ground."

### **Direct marketing**

Even before adopting a regenerative agriculture mindset, Freeland had launched a direct-marketing enterprise for homeraised beef. A portion of their calves were marketed to mostly local consumers as corn-fed freezer beef. They have continued to grow their direct-marketing business since shifting to sales of forage-finished beef. *Continued on page 86* 

HOTO BY TROY SMITH

According to Freeland, calves remain with their dams until nearly 10 months of age, when they are fenceline-weaned on pasture. Yearlings then continue to graze the highest-quality forages the ranch has to offer. Some are sold as feeder cattle through an area auction market. Some remain on the ranch until reaching harvest weight and are then sold directly to consumers as processed beef.

"We also buy feeder pigs to raise and market as pasture-raised pork. We run them behind a single hot wire and rotate them through paddocks. If they start to root around in the soil, we know it's time to move," says Freeland, noting that pasturing pigs has served a particular niche in their efforts to better manage land resources.

"We wanted to reclaim some areas that had been feedlots in the past, and we struggled to get grass established. Ragweed and kochia was about all that would grow in those areas until we put pigs there," says Freeland. "After the pigs, the grass came on. I can't explain it, but it's pretty cool."

Still new, but promising, is the addition of forage-fed lamb to the meat business offering. The sheep enterprise grew out of two ewes that were gifted to Freeland's daughters, Riley and Ryan.

"Now we've got 20 ewes, and we're starting to run them with the cows. I like how that's working," states Freeland, who anticipates improved forage utilization based on each species' preferences for different forage plants.

# **Additional revenue**

Always thinking about ways to do more with existing resources, the Freeland family developed an agri-entertainment enterprise, including a pumpkin patch, a cover-crop maze, and family-friendly activities like hay rides. When the season ends, cattle graze the maze and clean up whatever pumpkins weren't sold before Freeland seeds the patch to rye for spring grazing.

"The pumpkins and maze add another revenue stream. It makes a little money, and

we have a chance to introduce more people to our meat products. But just as important, I think, is how it gets people on our place and exposes them to agriculture. We have an opportunity to provide some education to consumers."

Freeland thinks it's important to share positive stories about agriculture and management practices that contribute to sustainability. However, to be sustainable it must be profitable.

"You really can't afford to do this for the lifestyle. Farming and ranching operations must be profitable to be multigenerational. If my kids want to carry on with it, I don't want to leave them a used-up piece of ground," says Freeland, adding that regenerative practices and diversification are boosting profitability and the resiliency of his family's operation.

According to Freeland, "When it all comes together, it does offer a good quality of life." ABB

Editor's note: Troy Smith is a freelance writer and cattleman from Sargent, Neb.