

Stocker Stewards



The basis of any successful beef cattle operation is grass management. That's especially true if you're a stocker operator. An Oklahoma stocker shares his perspective on getting the most out of the range, and it starts with monitoring.

by Sue Gordon; photos courtesy of John Phelan

Just as tracking beef cattle performance requires recordkeeping, successful range management hinges on taking account of the natural resources of the land. For Oklahoma beef producer John Phelan, his “recordkeeping on the range” means keeping a watchful eye on the soils, plants, animal performance and weather patterns.

Phelan operates a stocker operation near Mountain Park, Okla., with wife Tamra and sons Clay and Grady. He relies on his native range to produce enough forage each winter, spring and summer to put efficient gains on the stocker calves he backgrounds prior to sending them to the feedlot.

“We typically buy thin, crossbred cattle with some age.

They are not pretty cattle. We make lemonade out of lemons; that’s what this business is all about,” Phelan says. “I buy steers that are economical and that can live off dead grass and a little protein supplement through the winter. Then when spring comes and they are grazing high-quality native range, they turn wrong side out. The compensatory gain is amazing.”

He credits the success of their stocker system to an intense focus on the forage produced on the range. Phelan’s philosophy is that there are two important R’s to manage for on the range: rest and residual. Under that premise, his annual benchmark for utilizing his range efficiently means leaving at least half of the grass standing at the end of the grazing season.

He says, “Plants need adequate rest, and you need to leave some residual plant material at the end of each grazing season. Graziers seem to think that just because you rest the range, it will all come back. But I believe it’s important to watch how close you graze that grass. That saying of ‘take half and leave half’ still applies. Taking over half of the plant really does slow regrowth,” he says.

That said, Phelan manages his entire stocker operation by listening to cues from the land. He’s been pleased with the results.

The Phelan system

Phelan’s keen range management knowledge is the result of a lifelong affiliation with ranching. He is a 1973 graduate

of the ranch management program at Texas Christian University (TCU) and worked for several large ranches in Texas and Oklahoma before going into business for himself. Of his interest in range resources, he says, “My dad lit the flame and John ‘Chip’ Merrill fanned it.” Merrill was director of the TCU ranch management program for the better part of 30 years.

Over the years, Phelan has also worked closely with range professionals from the Natural Resources Conservation Service (NRCS), the Extension service, the Noble Foundation and Holistic Resource Management.

Initially, the Phelan family operated a traditional cow-calf operation. Several years ago, they elected to switch to an all stocker program using high-intensity rotational grazing. Phelan says he felt this change would help them meet their primary goal of maintaining a high quality of life for their family and keeping costs as low as possible while conserving the natural resources on the ranch.

They manage a high-intensity rotational grazing system that includes approximately 25 permanent paddocks through which the cattle are rotated. The sizes of the paddocks vary due to rough terrain, but they average around 80 acres. Phelan begins receiving cattle in mid-November to early December and sells in late July or early August. Each fall, after the cattle are sold, forage estimates are made to determine the carrying capacity for the coming year. The steers are purchased accordingly.

Phelan usually purchases 300-400 head of lightweight, medium-frame cattle. But, facing their fifth year of drought, the Phelans have continued to decrease their stocking rate.

“This summer we had 150

► Above: The Phelans’ carefully controlled grazing system has resulted in healthy wetlands, an abundance of wildlife and increased grazing capacity.

head turned out," Phelan reports. They've reduced their numbers in hopes of maintaining their range in good condition despite the inadequate rainfall.

Quick rotations

Once the cattle arrive they begin making their rotations through Phelan's grazing system. All the while, Phelan pays close attention to the forage. During the winter months, the grass is dormant and the cattle will typically make one pass through each paddock, staying in each pasture from five to 10 days. At this time, the animals are supplemented with 2 pounds (lb.) per head per day of 25% crude protein (CP) range cubes, which is gradually increased to 3 lb. per day, depending on weather conditions.

To efficiently utilize the dormant winter forage and cut winter feed costs, Phelan often subdivides his permanent paddocks with temporary electric fencing (single-strand poly wire).

"I do a better job of rationing out the dormant grass by doing this," he says of the subdivision of paddocks. He adds that keeping the cattle in a small area and essentially forcing them to graze the dormant forage before moving them to a fresh paddock is key to winter grazing.

"By holding them in smaller acreages, they aren't trampling on all of the forage all season long. Instead, they are moving to fresh forage every few days," Phelan says. "Even though it is dormant and there may not be much there, there is some nutrition, and you are more efficient at utilizing it. We do this all winter long, and in March we're still moving to fresh paddocks where the grass isn't stale or trampled on."

As the grass greens up and offers more nutrients in early April, the supplementation program ends and time spent grazing in a paddock is shortened to one to three days. When the forage is green, the animals initially rotate through the system quickly and will then

pass through each of the paddocks again by mid- to late summer. This rotation system allows the animals to take advantage of the highest quality forage available and still allows adequate time for rest, Phelan says.

"The aim is to just go around once in the dormant season, depending on the size and carrying capacity of the paddock," he explains. "During the active growing season, in spring and summer, we'll typically pass through the paddocks twice if enough forage is available."

In late June or early July, when forage quality begins to decline, he provides approximately 1 lb. of protein supplement per head per day. Shipping usually begins with the largest steers in late July or early August. The lighter-weight steers will be held on grass longer to allow for more gain. However, this is not a hard-and-fast rule. If drought conditions make it necessary, the Phelans will ship the cattle earlier to protect the range.

The entire ranch receives a rest from August through mid-November, when they begin receiving cattle again. At the end of each grazing season, the Phelans always aim to leave some standing forage to protect the health and vigor of the plants, minimize soil loss and improve water quality in their streams. As a result of their grazing system, they have noticed several improvements, including an increase in more desirable forage species such as big bluestem, Indian grass, switchgrass and little bluestem. This in turn has significantly decreased problems caused by erosion and runoff.

They believe their high stock density and rapid rotation through pastures helps achieve uniform utilization of all plants and helps minimize problems with poisonous plants, since most problem plants are grazed before they reach their toxic stage. The rapid rotations and high stock densities help reduce fly problems and improve the distribution and recycling of urine and manure. Finally, this



► Tamra and John Phelan (sitting) manage a stocker operation near Mountain Park, Okla., with the assistance of their sons (back row, from left), Clay and Grady.

system allows plants to stay healthier and more robust due to periodic grazing, rather than becoming decadent through infrequent use, Phelan says.

Monitoring for success

Those improvements are primarily due to the Phelans' watchful eye on their pastures. Practicing what he preaches,

Phelan really monitors how much standing residual forage remains as the stockers rotate through each paddock for the last time in late summer.

"If I feel I'm taking too much, I either need to move the animals faster or have a lower stocking rate. I don't think it's a good idea to flog a pasture. This drought

CONTINUED ON PAGE 383

Simple monitoring steps

The purpose of range monitoring is rather straightforward – it should provide information to support decision-making for range management and animal performance. For many, implementing a range monitoring system can be fairly overwhelming.

However, it doesn't have to be, according to Roy Roath, a Colorado State University Extension range specialist and range science professor. Roath says monitoring is simply about "gathering information." And he advocates keeping it simple.

Roath offers these strategies for getting started:

Use a calendar to track grazing dates for each pasture, the number and kind of animals in each unit, and the average weights of animals, if available. A grazing calendar can also be a good place to track precipitation and weather.

After cattle have been moved out of a pasture, make a quick trip through the area to determine if grazing was light, moderate or too heavy. You can adjust next year's stocking rates accordingly.

Note annual trends in plant communities. Do weedy species appear to be increasing, or are the grass plants, which cattle prefer to graze, maintaining a steady presence? If undesirable plants are taking over, you may need to make some adjustments in stocking rates or graze the pasture at a different time of year. To track these changes in plant communities, you may consider taking photos in the same location of a pasture year after year, as well as writing down four to six of the most prevalent plant species in that area.

Stocker Stewards CONTINUED FROM PAGE 379

has gotten my attention. When it rains, you can kind of mess up and your sins will be forgiven. But not when it's dry."

Phelan is always looking to improve his grazing system and his forages. For example, like any grazing operation, the Phelans do have weeds, but they don't turn to chemicals to solve the problem.

"I don't feel I can afford to spray them," John says. Instead, his strategy is to try to figure out what they are doing to cause the weeds and, if possible, fix it. "We've seen a lot of weeds the past few years, just due to drought. I try to deal with them through my grazing strategy, and I believe I can," he says.

To add efficiency to their grazing program, the Phelans have also worked with NRCS as part of their fecal sampling project. The collection of fecal samples, which are analyzed for

nutritional quality, has helped them make more economical and timely decisions concerning the supplementation of their cattle, the quality of the grass and the movement of the cattle.

Most recently, the Phelans are working to implement a long-term range-monitoring program on their ranch. Phelan says he implemented the system because of the drought. "I became concerned about the land condition when it got dry. So I needed some way to determine what's happening on the land."

Last summer Phelan established three monitoring sites with assistance from Charlie Orchard of Land EKG. The sites include photo points and transects. Of his newly-implemented monitoring system, Phelan says, "I'm very excited about this. I see it as something my sons, Clay and Grady, can use in the future as

well." He recognizes the importance of protecting and cultivating his resources on a day-to-day basis as well as for the future of their operation.

Phelan adds, "We're starting gradually with just three monitoring sites because we don't want to overload ourselves with information. But I do plan to establish more monitoring sites and keep up with this over the long term."

Even with the monitoring system in place, Phelan says much of range monitoring is still simply having an eye for the grass. "I often step off an acre square and visually appraise it as to what that acre can support. It's trial and error."

Phelan refers to his system as "time-controlled grazing," and says, "It all has to do with time — either time grazed or time rested." But he cautions that implementing such a system

won't automatically increase carrying capacity.

"Grazing systems like this were first sold as offering the ability to 'double your stocking rate.' But that is not true, especially if it doesn't rain. My advice to producers is to leave their animal numbers alone, get their feet wet with a controlled grazing system and then start measuring forage and stock accordingly. The only way to increase stocking rate is if you're growing more forage than before," Phelan says.

He adds, "Critics ask, 'If you can't guarantee an increase in stocking rate, then why spend all that money on cross-fencing and implementing such a system?' But to me it's more than monetary pay. You are taking better care of your country. And, in the long term you will be rewarded for that."

