

Minimizing Stress

key to grass recovery

by Lyndee Stabel

Producers across the Plains have been struggling with drought the past two years. As pasture conditions deteriorated and ponds dried up, keeping livestock fed and watered became the primary challenge. Natural Resources Conservation Service (NRCS) Rangeland Management Specialist David Kraft and Kansas State University

time to help pastures recover, but they did provide some suggestions and information for the coming season and any subsequent dry spells.

The first recommendation is for producers to assess pastures and determine how each will finish the growing season. Right now, the best thing producers can do is minimize the

replace 30% of the root mass. If the grass is stressed and does not have the resources necessary to complete this process, growth rate and productivity the following spring will be reduced. Kraft said recent rains some areas have received may allow pastures to have a minimal “growth spurt,” but he warned producers against being lured into a false sense of security. While pastures may look a little better with rain, that does not mean the grass is ready to be grazed again.

“If we go out there and remove that vegetation, we haven’t allowed those root systems to take advantage of the leaf growth,” Kraft said. “It takes a longer period of recovery than we visually see, and we need to allow for a longer time frame than what is left of this growing season.”

Gillen admitted this may not be possible for all producers, especially those who have cows year-round. He encouraged ranchers to seek out other possible forage sources to help maintain pasture cover and conserve moisture for next year’s growth.

Cow-calf producer Kent Woolfolk of Protection worked to reduce the stress on his pastures during the drought. When the dry conditions first began, Woolfolk had leased a ranch in South Dakota with the intention of expanding his operation. However, as conditions worsened, the leased ranch



Rangeland Scientist Bob Gillen both suggested even those producers with the best management practices will be short on grass in their pastures. As grass goes dormant for the season, Kraft and Gillen admitted there are only a few steps producers can take at this

stress on grass and allow pastures to finish the growing season in the best condition possible. This is especially important for native grasses due to the way the root systems recover. From the middle of July to the end of the growing season, these plants typically

became a way for Woolfolk to help protect his Kansas pastures. He culled his oldest cows, kept the youngest ones on the home ranch and sent everything four years and older to South Dakota. Instead of allowing 20 acres per cow, he decreased carrying capacity to 40 acres per cow.

Another step producers can take is to start developing a drought plan. As part of this strategy, producers define the operation in terms of resources - acres and forage available, condition of the forage and its expected recovery from the previous year, and animals. Kraft said producers first need to determine how much forage the herds will require for a year. Then, to know how to adjust herd numbers according to the amount of available forage, they need to know the average rainfall their area receives. Month by month, they can compare the precipitation received with the average to track grass productivity. From that calculation, producers can better adjust the number of animals on that pasture to keep from stressing the plant community.

On the animal side, ranchers need to assign each cow in the herd to specific groups based on age, genetics, temperament and any other characteristics important to the operation. If producers know they are behind on rainfall and need to cull animals, cattle can be quickly identified and moved to minimize damage to the breeding programs.

Producers also can stretch available forage by early-weaning calves. Cows require fewer nutrients when not lactating. Although too late for 2012, this practice is most effective when applied in mid to late summer.

Many producers may be reluctant to sell any part of the herd and choose instead to try to "tough it out" until the next rain comes. Even if a producer is lucky enough to get some precipitation during a drought, pastures most likely will not be able to recover from the initial dry spell and support the same number of cattle. That added stress on the pastures will only prolong recovery when the drought ends.

"We get about 70% of our year's growth of forage by July 1. If we don't get it by then,

even if conditions improve, we won't recover what we didn't grow the first half of the year," Kraft said.

In 2011, he personally reduced his herd by 15% and plans to do the same again this year. Kraft stressed the most important part of developing a drought plan is to write it down.

"Mental models do not work. We have to have a written plan of what we will do and when we will do it," Kraft said. "Otherwise we second-guess ourselves and fail to pull the trigger."

As a rancher, Woolfolk agreed producers cannot wait to act. Even after developing and following his own drought plan, Wool-

folk said with such extreme conditions the past two years, in hindsight he could have reacted even sooner.

Aside from eliminating any added stress on pastures, at this point in the season there is not a lot to be done, Gillen said. Both he and Kraft advised against applying any sort of fertilizer to native grasses because it would only encourage the growth of less desirable, cool-season grasses like fescue, brome, etc. Native grasses best respond to the natural breakdown of organic material and bug populations in the soil to supply needed nutrients.

Burning pastures is less advisable during dry periods. Not only do the conditions make it difficult to safely control and contain fire, it also encourages evaporation by reducing ground cover that helps retain moisture. In the absence of good soil moisture, producers face the threat of burning off the grass now, with no guarantee there will be enough rain for it to grow back.

When the drought does start to end,

producers likely will see a flush of weeds in pastures, Gillen said. But he advised producers not to panic.

"Weeds will probably take advantage of any bare ground that has opened up because they respond more quickly. But they should fade back as the grasses regain strength," he said.

Gillen urged producers to allow the grass to get rid of the weeds rather than spraying. Only in the most severe cases did he suggest a herbicide treatment be considered.

Because it is impossible to predict the future, it can be very difficult for producers to prepare for a drought. Stocker operator Mike Collinge of Hamilton said he purposefully stocks pastures conservatively to avoid disasters. But in trying times, his main goal as a grass manager is to react quickly and efficiently to the circumstances that arise. He also looks to experts and other producers for advice.

"I know a lot of people who know a lot more than I do, and I'm not afraid to ask," Collinge said.

Despite the tough weather, producers need to stay optimistic and keep looking ahead. Woolfolk is planning for the future by working to retain as many heifers as possible. He is hoping the weather pattern will change, allowing him to build his herd back and have replacement heifers to sell for other producers looking to do the same.

Pastures may be hurting now, but the grass will grow back with time.

"Kansas native grasslands are the most resilient in all of North America, if not the world. They've gone through droughts like this before and they will recover," Gillen said.

Most importantly, individual producers need to remain flexible. By adjusting herd numbers based on prevailing conditions, ranchers can give pastures every opportunity to adjust and recover despite unfavorable weather patterns.

Lyndee Stabel is a freelance writer who lives at Lakin. She earned a degree in ag economics, with a communication specialty, from Kansas State University.



Kent Woolfolk



David Kraft