

### Planning can mitigate drought effect

It's true, you can't do much about the weather but you can do something about its impact on your grazing system. That was the consensus message from a full slate of experts at the Kansas Graziers Association Winter Conference, "Managing Drought Risk on the Ranch," Jan. 21 in Emporia. Presented by the National Drought Mitigation Center, the in-depth workshop examined the effects of drought on forage systems as well as strategies to lessen that impact.

Drought Center Researcher Tonya Haigh emphasized that there is not a single plan that works for every operation but, she said, steps can be taken to significantly reduce farm and ranch vulnerability to drought.

Natural Resources Conservation Service Range Management Specialist David Kraft told a large crowd of farmers and ranchers that the combination of dry weather and heavy grazing takes a heavy toll on forage vigor and productivity. Reduced cover — from both litter and standing plants — leaves the soil vulnerable to increased evaporative losses as well as extreme soil surface temperature and the impact of drying winds.

Increased plant diversity in pastures, as well as avoiding over-grazing, results in healthier plants and plant roots and that means a quicker recovery from drought conditions.

"What you do today impacts tomorrow. What you do this year impacts next year," Kraft said. "We have to take advantage of good years to prepare for the bad."

The Emporia-based range specialist suggested that a drought plan focus on efforts to protect vegetation during extreme dry periods. He also advised that producers establish in advance drought management procedures — such as reducing stocking rates — as well as the "trigger points" that put those procedures into effect.

University of Nebraska Forage Specialist Jerry Volesky asserted that "forage has never been more valuable" than it is in the current beef industry economy. He discussed a variety of management tools to address forage shortages, including preg-checking and selling open cows earlier, utilizing corn stalks, supplementing with dried distillers grains, stricter culling and early weaning of calves.

"It is estimated that about 10 pounds of forage is conserved for each day that a calf is weaned. Ten pounds of forage is about 40 percent of the daily requirements for a cow," he said, adding that there would be a positive effect on cow weight and body condition as well.

Kansas rancher Ted Alexander shared some of the steps he's taken as part of his drought management plan. He emphasized the importance of measuring rainfall to better understand its effect on forage crude protein content as well as productivity. Alexander's drought mitigation measures, which are triggered by previously identified conditions, include reducing yearling grazing days, early weaning and reduced stocking rates. Additionally, he has taken steps to "drought-proof" his ranch by installing pipelines and waterers and eliminating non-productive pasture plants such as eastern red cedars.

The Sun City rancher's advice for the attendees was, "Stay flexible. Do the planning and then implement that plan."

Flexibility is an essential component of a drought management plan, said NRCS Range Specialist Dwayne Rice. He advised producers to begin by estimating their average sustainable carrying capacity during average climatic conditions. The manager should then divide — on paper — his or her existing herd into at least three herds. The "A" herd would be the number one priority group, consisting, for example, of the most profitable cows and yearling heifers with high potential value. The "B" herd could include replacement heifers and/or steers nearing their target weight. The "C" herd would include cattle that could be readily sent to market in short-forage situations — older cows, inferior cows, early weaned calves.

By prioritizing the herd, Rice said, producers can avoid "knee-jerk" reactions to drought conditions. Pre-established trigger dates — based on rainfall and forage conditions — would then set the producer's plan in action. Trigger dates should also reflect pivotal periods for forages grown on the farm or ranch. In eastern Kansas, for example, conditions on April 15 would be an indicator of what type of production to expect from cool season grasses.

Strategic financial planning is another important aspect of drought management planning, according to Barry Dunn of South Dakota State University. Dunn suggested the producers begin with an inventory of all aspects of their operations, including balance sheets and risk assessments as well as physical and human resources.

Each farm or ranch should also develop a vision statement of the operation's goals and plan strategies for various scenarios, including the occurrence of drought.

A relatively new tool for dealing with the financial impact of drought was discussed by Amy Roeder of USDA's Risk Management Agency. RMA is now offering Pasture, Rangeland and Forage insurance through a pilot program that includes Kansas. The policies, Roeder said, are based on a rainfall index that utilizes National Oceanic Atmospheric Administration (NOAA) Climate Prediction Center Data.

Insurance indemnities, Roeder explained, are based on the deviation from normal precipitation in a given area during a specific time period (or periods) selected by the participating producer. Time periods are in two-month intervals so producers can decide which periods correlate to forage growth in their operations. More information, including an online decision tool, is available at [www.rma.usda.gov](http://www.rma.usda.gov).

Drought conditions across much of Kansas are not likely to moderate in the near future, Kansas Climatologist Mary Knapp told the crowd. According to the U.S. Drought Monitor, more than half of the state is rated as abnormally or exceptionally dry, a situation forecast to continue in the southern part of Kansas.

A La Nina situation is persisting in the tropical Pacific Ocean, Knapp noted, and that means it will continue to influence drier-than-normal conditions in the Southern Plains. Additionally, she pointed out, fluctuations in sea surface temperatures (oscillations) in the Atlantic and Pacific are weakening which also supports La Nina's persistence.

La Nina conditions are expected to weaken eventually and be replaced sometime this summer with

El Nino conditions that warm the equatorial Pacific and favor wetter conditions in Kansas and across the Central Plains.

The drought management program was supported by a grant from the U.S. Department of Agriculture's Risk Management Agency. Participants received a "Managing Drought Risk on the Ranch" handbook containing information that is also available online at <http://drought.unl.edu/ranchplan>.

In addition to the National Drought Mitigation Center, the Kansas Graziers Association and the Kansas Grazing Lands Coalition, workshop sponsors included the Kansas Rural Center, the Kansas Farmers Union and the Kansas Center for Sustainable Agriculture and Alternative Crops.

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