

### Hope for the Best, Plan for the Worst:

Hope for the best, plan for the worst," rancher Ted Alexander of Barber County said at the 2013 Kansas Graziers Association's (KGA) winter conference. About 130 people attended the conference, which was held in Salina on January 19. This year's theme was: "Back to the Basics of Grazing Management," but drought was the topic on everyone's mind.

"Drought is mind consuming; every conversation begins and ends with the weather," said David Kraft, NRCS state rangeland management specialist. Drought is defined as precipitation less than 75 percent of the average, Kraft said, "The current drought can be traced back to August of 2010." Kraft said a person should always manage a pasture in one of three ways to improve the vigor of a plant. First, you are preparing for a drought, second, you are under the influence of drought, or finally you are recovering from a drought.

Kraft gave a set of steps to approach a drought management plan:

- \*Define the ranch or forage enterprise

- \*Define your animal enterprise

- \*Identify the ranch's risk possibilities and ability to endure those risks: Be aware of the general health and genetics of the livestock; as well as, the health and type of forage they are consuming.

- \*Know trigger dates: Beginning of dormancy usually occurs in October, and then the plants start to grow around April 1st. Seventy percent of rainfall occurs between April and September, said Kraft. Also approximately 70 percent of production of rangeland occurs by July 1st, but that is usually only the midpoint of the grazing seasons, he said. Just remember "plants don't know what the date on the calendar is," Kraft said, so these dates may vary from year to year.

- \*Identify decisions to be made when certain conditions present themselves: This step includes possible destocking, culling, early weaning or using a set aside forage resource, if you are in a drought situation.

- \*Write the drought management plan on paper: "Mental models don't work," said Kraft. Writing down your plan will make you accountable for your actions, he said.

Finally, Kraft said to change your drought plan every year for optimal performance.

South Central Kansas Rancher Ted Alexander, in his presentation named Drought Survival 101, stated his suggestions for drought-proofing a ranch, which include keep records, know your grazing principles, and have positive energy. "Do not wait or hope for rain," Alexander said. "Try doing what nature would want us to do."

For record keeping, Alexander has reported the rainfall for Barber County to the National Weather Service since 1986, and with this information he is able to determine the amount of rest his pasture needs. He said on an average year sections of his rangeland only needed to rest for 60 days, but now he has estimated a rest period up to 300 days for his land.

According to Dwayne Rice, NRCS state rangeland management specialist, rest is defined as the absence of grazing animals, while recovery can only take place when the plants are being rested and actively growing.

"Rest is the most important thing," Alexander said. "We are now looking at our landscapes as communities, how do we contribute to the community?" Alexander likes the flexibility of management intensive grazing (MiG) (emphasis on the 'management'), because he is able to move the livestock off a section of rangeland as needed.

Dale Strickler, an agronomist for Star Seed Inc., said rotational grazing often becomes rotational overgrazing. "Move livestock before you think you need to, one day of overgrazing is equal to one extra week of rest," Strickler said. Knowing when to move livestock off the pasture or rangeland is important to the grasses' health, and in order to do that task well we must know more about the plants.

Strickler explained that there are three parts of a plant life cycle: vegetative, reproduction and dormant. The vegetative stage has the highest quality of nutrition for an animal. The reproductive stage is lower quality, but the growing points on the plants become elevated and they start to produce seed heads, said Strickler. "MiG has a chance to do harm to the plant during the reproductive stage," said Strickler.

The dormant stage has the lowest quality of nutrition for the animal, and the plant is in a non-growing period. All the

carbohydrates and non-structural protein is moved underground, but the plant becomes very tolerant to defoliation, Strickler said.

In terms of grazing principles, Alexander said on his ranch the average annual rainfall is 21 inches. If the year has rainfall that is less than 80 percent of average, he decreases the stocking rate by 30 percent. If rainfall is 60 percent less than average he suggests decreases stocking rate by 40 to 50 percent. The stocking rate is defined as the area of land allotted to each animal for the grazing period.

Alexander said the "new norm" may be dryer and warmer weather and we must adapt to that "new norm." "If the worst happens, at least we have a plan," he said.

To conclude the day, Rice described the different types of grazing systems and how they worked. Under a continuous grazing plan the livestock can go wherever they want to in the pasture, but the land is only moderately stocked. It takes minimal management practices, but it is difficult for the pasture to have enough rest time, Rice said.

A patch burn grazing system is when the pasture is divided into three sections. Each year a different section is burned, so livestock go to the burned area to graze while another section gets rest, he said. This system does increase animal performance, but does have higher per acre cost of burning, Rice said.

Early intensive grazing means one herd per pasture. The stocking rate is doubled, but cattle are removed around July 15th so the land can get late season rest, Rice said. Switchback grazing is having four pastures for three herds, he said. Pastures are rotated seasonally or annually, said Rice.

MiG or rotational grazing is giving one herd four or more paddocks to graze on; when the grass gets grazed to a certain point the livestock are moved into a different paddock, Rice said. This requires a higher degree of management, but the pasture or rangeland has very long periods of rest.

Finally, there is mob grazing, which refers to short-duration, high-intensity grazing of many cattle on a small area of pasture moved several times a day to new forage. Rice said, "this system uses temporary fences, but does have potential for improving soil quality.

"Any system works well, but all can be abused," Rice emphasized, "All systems require management."

"Landscape is the most precious commodity," summarized rancher Alexander, "it's how we manage this together and have a grazing plan that will affect the outcome."

Kansas Graziers Association Annual Conference was co-sponsored by the Kansas Rural Center, Kansas Farmers Union, Kansas Grazing Lands Coalition, and Kansas Center for Sustainable Agriculture and Alter-native Crops.