



by RICK RASBY, beef specialist, University of Nebraska

# Have a drought plan for this fall

I hope you won't need to implement a drought plan this fall, but be prepared.

Following is what was on the Drought Mitigation Center website on the official first day of summer for the Midwest section of the United States:

*"Conditions continue to worsen across"* the Midwest during the period. Concerns for a flash drought are high as the lack of precipitation and high temperatures continue to desiccate the soils and stunt the growth of crops. Some of the area did see beneficial rains during the period, but not enough to ward off the expansion of drought. The driest areas stretch from central Kansas and Nebraska, eastward into the tri-state area of lowa, Missouri and Illinois. Precipitation is measuring 10% of normal or less in that area during the past 14 days. Meanwhile, temperatures are exceeding 5° F above normal, exacerbating the dryness."

Everyone knows this can change. There was good spring moisture and, therefore, good forage production early in the growing season. Drought forces forage and livestock producers to develop strategies that deal with indirect economic and biological effects of too many animals for the available feed resources, as well as direct effects of a possible reduction in water supply for animals. Many strategies can be used to reduce forage demand. The bottom line is to have a plan written down and steps for implementation.

## Livestock inventory

Adjusting livestock inventory to reduce and balance total forage required with available forage supply usually is the most economical alternative. Individual production records come in handy to identify low-producing females. Consider culling older cows and less-productive cows. If it is necessary to cull cows, consider culling females that are in the bottom 15%-20% of production for two to three years in succession.

#### Weaning early

Weaning usually occurs in October/



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early November for most spring-calving herds, which means the calves are about 205 days of age. Because there was good spring moisture and if there is limited moisture throughout the summer, consider weaning when the calves are 150 to 180 days of age. If backgrounding calves after weaning is a common management strategy, work with your veterinarian to determine if the vaccination program needs to be changed, and feed calves for a targeted rate of gain. If calves are usually sold at weaning, begin now to determine what your best selling options are. For every 2.5 days that the calf is weaned from the dam, there is about one extra day of grazing for the cow. This is because non-lactating cows eat less than lactating cows, and when the calf gets to be 300 pounds (lb.), it is eating close to 5 lb. per head per day of grass on a dry-matter basis.

#### Drylotting beef cows

Drylotting beef cows is not a new

concept for beef producers. Pairs can be managed and fed in a drylot. There are data that look at cow and calf performance separately and as a pair. There are reports on the University of Nebraska beef website, *http:// beef.unl.edu*. Look in the 2014, 2015 and 2016 *Nebraska Beef Cattle Reports* for more information. It would be important to check with the State Department of Environmental Quality to determine if permits are needed for this type of confined animal feeding operation (CAFO).

Pen size and lot space can be variable depending on soil type and drainage. A general recommendation is 500-800 square feet (sq. ft.) per pair. Plan on between 28 and 36 inches (in.) of bunk space per non-lactating beef cow depending on cow weight. If pairs are going to be drylotted together, allocate 3.5-4 ft. of bunk space per pair. If the herd is a mix of young and old cows, it would be ideal to have separate pens for young cows (2- and 3-year-olds). Diets for drylotted cows can contain a lot of dried forages and are bulky, so deep feedbunks will help limit waste.

In drought situations, forage may be expensive and used in limited amounts in the diet. A rule of thumb would be to have at least 0.5% of the cow's weight on a dry-matter basis as forage to keep the rumen healthy. As an example, if the average weight of the cow herd that is being drylotted is 1,200 lb., then include at least 6 lb. per head per day dry matter of forage in the diet. If the forage is 85% dry matter, then feed 7 lb. per head daily (6 lb. per head per day divided by 0.85 = 7.06). If pairs are drylotted together. account for the calf to eat some of the ration. Add between 1.0% and 1.5% of the calf's body weight on a dry-matter basis (example: 400-lb. calf = 4 lb. to 6 lb. per head per day dry-matter basis) to account for what the calf will eat.

Baled cornstalk residue, Conservation Reserve Program (CRP) hay and straw can work to stretch higher-quality forages such as alfalfa. If the cows do not have a calf at their side, then a high-energy feed will not need to be added to the ration. If the cow is lactating, then energy and likely protein will need to be included in the ration.

Depending on the price, corn may or may not fit into the diets for drylotted cows. An alternative to corn could be corn byproducts. Consider adding calcium to the diet because of the high phosphorus content of distillers' grains. Mix the diet uniformly, pay attention to sulfur content, and make sure there is plenty of bunk space so all cows get their share.

Cows in a drylot can be limit-fed. Limit-feeding means that nutrient requirements of the cow are met, but they are not fed all they can eat. Examples of limit-fed rations for cows and pairs in a drylot can be found in the 2014, 2015 and 2016 *Nebraska*  Beef Cattle Reports. As a management consideration, limit-fed diets should contain some low-quality forage to slow down rate of passage of the diet through the digestive tract, which will help cows adapt to being drylotted. When limitfeeding, consider starting at 2.2% to 2.4% of body weight on a dry-matter basis, then work down to 1.8% or so. Look at the Nebraska research.

### **Final thought**

Have a management plan and be prepared to implement it when a drought occurs. Records will be critical if culling needs to occur. Good moisture this spring should help the forage availability concern that usually happens when drought begins in early spring. Weaning calves earlier than normal or drylotting cows or pairs may be an alternative to selling. Corn fields being harvested for grain earlier than in normal years could be a grazing option. If you decide to drylot cows, check with your Department of Environmental Quality or similar group within your state to determine if a nutrient management plan needs to be developed.

**Editor's Note:** *Rick Rasby is a beef specialist with the University of Nebraska.*