Drought and the Impact on Fall-Calving Herds

Dying trees, brown grass, and cracked lawns are all visible signs of a lack of rainfall. Along with the landscape disadvantages, a lack of rainfall is detrimental to establishing crops and growing pasture grass, which can lead to negative consequences for the beef cattle that graze those fields and pastures. This will have a major effect on fall-calving herds compared to spring-calving cows. In a drought, the fall-calving herds can be at a real disadvantage, as they will require more inputs to maintain than normal. What is normally considered an advantage to fall-calving cows because of the ability to come off summer grazing months with a very good body condition score of 6 or better, are now looking at a body condition score of 5 or less because the summer pastures dried up sooner than a typical year due to a lack of rain.

Fall-calving cows normally had the ability to lose some condition over the fall and winter months without it being detrimental to reproductive performance and will be able to regain lost condition inexpensively on pasture next summer. During a drought that is not the case as cows are at their highest nutritional demands due to lactation requirements from the nursing calf. Grazing crop residue or winter annual forages alone will not meet the nutrient requirements of a lactating cow needing to add body condition. The key to maintaining an acceptable body condition score is by supplementing with high-energy and protein feedstuffs. However, this is going to provide an increase in expenses as high energy and protein feed types are not cheap to supply based on the tonnage needed.

Producers should take and analyze forage samples so the number of nutrients available, not just pounds of hay or silage, is known. Specific diets should be developed for each class of cattle in the operation. Seek help from nutritionists and extensions to help develop diets for cattle. Plan to feed a considerable amount of supplement to fall-calving cows during fall and winter in drought years. Conventional feedstuffs are likely to be expensive as demand is high and supply may be low. Look for alternative feeds such as failed crops, spent grains from local breweries, fruit and vegetable waste from local supermarkets, etc. Try to source alternative feedstuffs locally to cut down on costs. Any untapped waste stream that provides rumen-digestible, safe feedstuff that is less expensive per unit of energy (TDN) will be advantageous during drought.

During a drought, it is important to get forage analyzed for nutrients available, but it is also important to get forages tested for nitrates. Drought-stressed forages tend to accumulate high nitrate levels in the lower leaves and stalk of the plant. These forages include sorghum, sorghum-Sudan grass, and Sudan. Nitrate toxicity in livestock is because of its absorption into the bloodstream and binding to hemoglobin, rendering it unable to carry oxygen throughout the body. The result is eventual asphyxiation and death. Animals under physiological stress (sick, hungry, lactating, or pregnant) are more susceptible to nitrate toxicity than healthy animals. Nitrate testing can be done through several labs, including the K-State Soil Testing Laboratory.

Some management practices to consider during a drought. Fall-calving cows should be body condition scored before or at calving and feeding strategies should be developed based on BCS and available feeds. This year, consider alternatives to normal replacement-heifer development. It may be better to sell all heifer calves this year and source-bred replacement heifers as needed. Alternatively, the development of replacement heifers could be outsourced to producers in the
Midwest and East. Look into relocating the herd to an area of the country that has more readily available grass and feedstuffs but consider the costs that come with that choice. Another option is to reduce the herd size by selling some of the cows. As painful as it is to say, reducing the number of mouths to feed will help extend your feed resources.

Getting through the drought will require new management strategies and creative thinking. The earlier decisions are made, the more options will be available. Ranchers are encouraged to seek consultation on cattle diets and marketing decisions. If you have any questions please feel free to contact me in the Concordia office, at 785-243-8185 or khildebrand@ksu.edu.

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