

Agriculture & Natural Resources TIMELY INFORMATION

ANIMAL SCIENCE SERIES

Dealing with Hot, Dry Weather in Beef Operations

This Timely Information Sheet provides an overview of potential drought management strategies in beef cattle operations.

Drought Conditions

Drought is an expected periodic event in the production cycle in the cattle industry. However, it is not without its own set of management challenges. The following provides some potential strategies for dealing with drought in beef cattle operations:

First Steps

Take an inventory of current resources – evaluate current pasture and hay supplies. Conduct a forage analysis to understand quality of stored forages. Estimate supplemental feed requirements based on any deficiencies present. Contact your local Extension office if you have questions regarding ration formulations. Consider the ability of the operation to handle alternative feedstuffs if necessary – specifically, the capacity for storage and mixing ingredients.

Forage Strategies

Be prepared to maximize any forage production when it starts raining. Active management towards a fall forage plan allows producers to be able to capitalize on potential forage production when rainfall returns. During a hay shortage, this is an especially attractive option.

Rotational grazing and forage availability – Do not overgraze pastures. While this may be easier said than done, it is important to try to maintain at least 2 to 3 inches of residual stubble in warm-season pastures to encourage more rapid regrowth when rainfall events occur. Remember that evaporation of water occurs much faster on short, overgrazed pastures, further reducing regrowth potential after periods of rainfall. Consider limit-grazing pastures (allowing access to an area for a few hours per day) then moving cattle to an area where hay and supplemental feed can be provided. In a rotational grazing system, designate a specific pasture where hay and supplemental feed can be provided during drought conditions. This will allow other paddocks in the rotation to rest and recover following a rain event.

Planning ahead for the fall forage gap – Planning your winter forage program is especially important when the summer months turn dry. Consider stockpiling tall fescue or bermudagrass beginning in August to prepare for the fall forage gap. Plant cool-season annuals into a prepared seedbed beginning in September. Most areas of Alabama will not overseed cool-season forages into warm-season systems until early- to mid-October.

Estimating hay needs – When pasture forage availability falls short, many producers will begin feeding hay. Many of the adages for winter feeding apply during drought situations: feed hay stored outside before sources stored inside, and low quality before high quality. Calculating how much hay you have available currently and how quickly hay resources are being used will impact availability for the winter feeding program.

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Feeding Strategies

Pay attention to bunk space – Mature cattle need 1 to 2 feet of bunk space per head to have adequate access to feed. This means one, ten foot trough for every 10 to 12 cows in the herd.

Labor – Understand that hand feeding during periods of drought may be necessary to ensure that animals are being properly supplemented during times of low forage availability.

Understand dry matter requirements – Consider dividing cattle into different feeding groups based on nutrient needs. A mature, dry cow may consume 2.0% of her body weight per day in dry matter, whereas a cow-calf pair (lactating animal) or growing cattle (heifers and steers) may need between 2.5 and 3.0% of their body weight per day.

Example Feeding Programs:

Dry, Pregnant Cows

Moderate quality hay (\geq 55% TDN and 10% CP) + 2 to 3 pounds of whole cottonseed, or 3 to 4 pounds of 50:50 soybean hulls and corn gluten feed, or 3 to 5 pounds of low-fiber range cubes

Lactating Cows/Replacement Heifers

Moderate quality hay (\geq 55% TDN and 10% CP) + 4 to 6 pounds of whole cottonseed, or 5 to 7 pounds of 50:50 soybean hulls and corn gluten feed, or 5 to 7 pounds of low-fiber range cubes

Cattle Management Considerations

- Early weaning of calves
 - Lactating cows have greater energy demands than dry, pregnant cows, often resulting in increased dry matter intake. Weaning calves can reduce cow nutrient demands by 25 to 30%. During times of reduced forage resources, producers may consider early weaning and marketing calves (4 to 5 months of age).
- Creep feeding
 - While creep feeding calves will not greatly reduce nutritional demand on the dam, it may add additional weight to calves when quantity and quality of forage resources are limited. The profitability of creep feeding is largely dependent on current cattle market conditions, and the improvements in calf gain must offset the cost of supplementation to be warranted.
- **Cull open cows** If you have not already done so, now is the time to cull any open cattle, those with poor body condition, or historically poor producers in the herd to reduce forage demand. An example culling order may be as follows:
 - \circ $\,$ $\,$ Open, old cows $\,$
 - Old cows with production problems poor udders, feet, legs, eyes, etc.
 - Open cows of any age
 - Open replacement heifers

Additional Resources:

<u>ANR-2224 – Collecting Forage Samples for Laboratory Analysis</u> <u>ANR-0112 – Nitrate Poisoning of Cattle in Alabama</u> <u>Timely Information – Determining Forage Demand and Animal Intake</u>

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