LIVE.STOCK companion

Volume 34: September 2026

MONTHLY TIP

Stockpiling fescue: how late is too late for Nitrogen?

In the August issue of Live.Stock Companion, I shared data on nitrogen rates for stockpiling tall fescue. The bottom line is simple: 60 lb of nitrogen per acre remains the sweet spot for stockpiling tall fescue in Tennessee. It provides a good return on fertilizer investment while maximizing fall forage production.

But how late is too late to apply that nitrogen? In trials conducted in Knox and Jefferson counties, we found that September 1 through October 1 was the most efficient window for nitrogen application. After October 1, forage produced per pound of nitrogen applied dropped sharply, reducing fertilizer efficiency.

Ideally, we want to clip or graze the pasture down and apply nitrogen in September. This gives the fescue 30 to 40 days of good growing conditions to turn that fertilizer into forage.

Remember, applying nitrogen is an investment. We need moisture (after a good rain would be perfect), and we want the grass to have enough time and the right conditions to use it. Otherwise, we may be applying nitrogen without producing enough forage to pay the fertilizer bill.

Dr. Bruno Pedreira, UT Extension Forage Specialist

BEEF & FORAGE CENTER

"Beware of emotional decisions."

- Russell Hackley

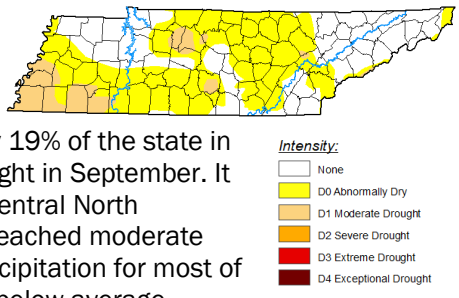
OPEN COWS DON'T PAY WINTER FEED BILLS

Katie Mason, Associate Professor, UT Department of Animal Science

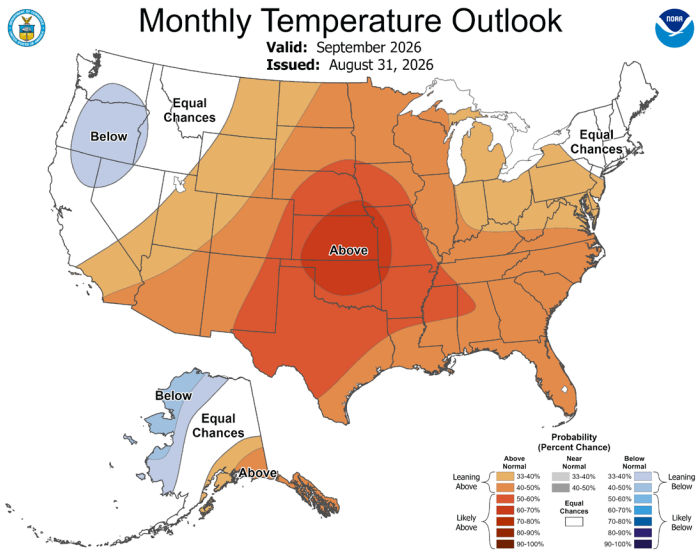
Fall is an important time to evaluate cow herd productivity, and pregnancy diagnosis remains one of the most valuable management tools available. While pregnancy checking has always been a sound practice, it becomes even more important when cattle prices are strong and winter feed costs are approaching. Every open cow consumes forage, hay, and other resources without contributing to next year's calf crop. Identifying these females in late summer or early fall allows producers to market them before they consume valuable winter feed supplies. With cull cow prices remaining favorable, removing open females can improve herd efficiency and reduce unnecessary expenses. High calf prices have increased the value of every pregnancy in the herd. A bred cow represents future income, while an open cow reflects a year of feed, labor, and pasture costs without a calf to sell. As a result, the opportunity cost of keeping an open cow has never been greater. Pregnancy diagnosis also provides insight into calving distribution. Cows that breed late tend to continue calving late, resulting in younger, lighter calves at weaning. Identifying these females helps producers make informed culling and replacement decisions that can improve long-term herd performance. In addition, knowing pregnancy status allows producers to better allocate winter feed resources. Nutrient requirements vary among bred, open, and fall-calving females, and sorting cattle by production stage helps ensure that higher-quality forage is directed to animals with the greatest nutritional demands. Simply put, it costs just as much to feed an open cow as a bred one, but only one will generate a return next year.

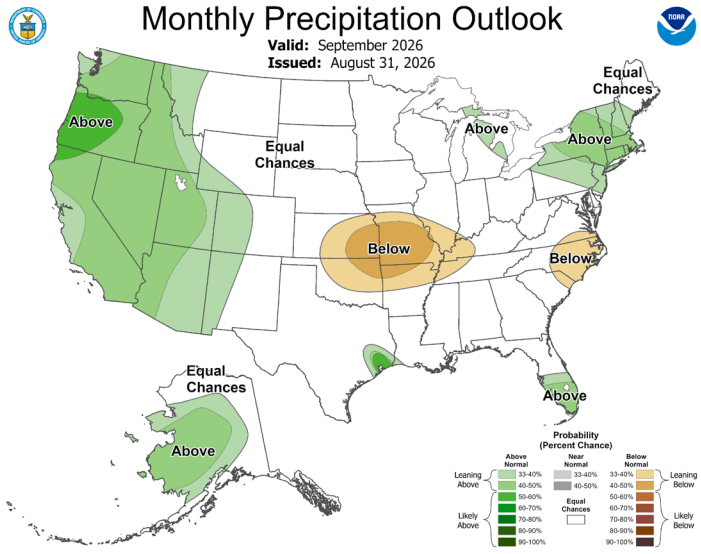
WEATHER UPDATE

Dr. Bruno Pedreira, Director of the UT Beef & Forage Center



August's average temperature was 77.9°F, about 1.22°F above the 10-year average. Total precipitation totaled 3.65 inches, 0.85 inches below normal (ncei.noaa.gov). After a wet August with only 19% of the state in drought, about 60% of Tennessee is in drought in September. It is especially concerning in Southwest and Central North counties. So far, 17 counties have already reached moderate drought (D1). Forecasts indicate normal precipitation for most of the state, except in West TN, which may be below average. Temperatures are expected to be above average statewide, as we had in August. El Niño conditions should persist through the end of the year, with a greater than 90% chance of a very strong event during the fall and winter.





THE RUMEN DOESN'T CHANGE OVERNIGHT

Dr. Phillip Myer, Professor, UT Department of Animal Science

Fall often brings changes in how cattle are fed and managed. Forage quality begins to shift, calves move through production systems, and the amount and type of feed cattle consume can change considerably. Along with those visible changes, something less obvious is happening inside the animal: the rumen microbial community is changing too. The rumen is home to a complex community of microbes that helps cattle break down feed and convert it into nutrients the animal can use. Because different microbes are better suited to different types of feed, the microbial community present in the rumen is closely connected to the diet being consumed. Research from our group at the University of Tennessee has examined what happens to these microbial communities when cattle move between diets. One important thing we have learned is that microbial adaptation is not instantaneous. Following a substantial dietary change, the rumen bacterial community can continue shifting for weeks, even though the animal is already consuming the new diet. That is important because change in the rumen is not necessarily a bad thing. A microbial community does not need to remain unchanged to be stable or function effectively. In many cases, successful adaptation requires change as the rumen responds to a new nutritional environment. Understanding these dynamics is one reason we study rumen microbes. By learning when microbial communities change, how long those changes continue, and how those changes relate to digestion, feed use, and animal performance, we can begin to better connect what is happening in the rumen with what we observe in the animal. As cattle move through the seasonal transitions of fall, the rumen is adjusting right along with them. Those changes help shape how cattle respond to the feeds and forages available throughout the production cycle. For more information, visit: https://rumenmicrobes.utk.edu

UPCOMING EVENTS

- Live.Stock - Join us for our broadcast October 14, 2026 at 2 PM ET
- Beef and Forage Systems Field Day September 22, 2026 at 8 AM CT
- Northeast Tennessee Beef Expo October 15, 2026 at 8 AM ET

Details can be found on **UTBEEF.COM**

Photo of the Month by Malerie Fancher:
New and reassigned agents came together in August for In-Service Training! Interim Assistant Dean and Professor Dr. Aaron Smith joined in the fun and even took part in the forage activities.

This and other useful information can be found at your local UT Extension office or on UTBEEF.COM

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