



## MONTHLY TIP

*While we're busy feeding hay, now is the perfect time to sit in a warm office and plan your yearly forage strategy. Reflect on your forage production throughout the year—has it met your herd's needs? The past two years of fall droughts have severely impacted forage production in Tennessee, emphasizing the need for more resilient systems.*

*Renovating pastures is costly, so our goal should be to develop long-lasting, sustainable systems. Tall fescue has served us well, but diversification is essential. Incorporating more species, annuals, and warm-season forages can strengthen resilience. Improved crabgrass and legumes like clovers enhance forage quality and nitrogen fixation, benefiting companion grasses.*

*Start rethinking your strategies now to prepare for 2025 and beyond. For details on forage variety trials, visit the UT Beef and Forage Center website at [UTBEEF.COM](http://UTBEEF.COM).*

*Dr. Bruno Pedreira  
UT Extension Forage Specialist*

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*“Cheers to a new year and another chance for us to get it right.”*

*-Oprah Winfrey*

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## POST-FLOOD SOIL MANAGEMENT

*Dr. Forbes Walker, Professor, Department of Biosystems, Engineering, and Soil Science  
David McIntosh, Coordinator and Researcher, Department of Plant Sciences*

In October 2024, East Tennessee was severely impacted by Hurricane Helene, resulting in widespread flooding that damaged many farms and thousands of acres of cropland. Floodwater covered fields with debris, including sand, silt, clay, river rocks, and organic matter, and in some areas, topsoil was washed away entirely. Sand, silt, and clay are typically deposited in layers, with silt being more fertile but also prone to forming a hard surface as it dries. Compaction and crusting are common issues with flood-deposited soils, particularly in areas with significant silt. It's important to avoid deep tillage or subsoiling when the soil is still wet, as this can worsen compaction. Additionally, covering the soil with locally available organic materials, such as spoiled hay or chipped wood debris, can provide protection and improve soil health throughout the winter. Please note, if hay or other organic materials are contaminated with herbicide residues there may be issues with target species planting and use. Restoration of flood-affected fields requires careful assessment of the soil's condition, nutrient levels, and physical structure. Soil testing is essential to determine pH levels and nutrient needs. In addition to major nutrients, flood-deposited soils may also suffer from micronutrient deficiencies that can affect plant growth. Soil testing should include an analysis of these nutrients to ensure adequate levels are available for future crops. Currently, a team of UT Extension Specialists and Researchers are developing recommendations for this coming spring planting period. Please reach out to your local UT/TSU Extension agent for any questions or updates. For more flood related resources visit: <https://utextension.tennessee.edu/flood-related-resources/> Adapted from UT Extension Publication D 246.

## NUTRITION CONSIDERATIONS FOR MUDDY CONDITIONS AND COLD WEATHER

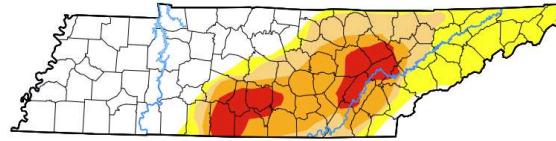
*Dr. Katie Mason, Assistant Professor, UT Extension Beef Cattle Nutrition Specialist*

Muddy conditions during the winter months can significantly impact cattle performance, especially in the Southeast. Excessive mud makes it difficult for cattle to move to feeding areas, which could reduce feed intake by 4-8%. To mitigate this, it is important to feed hay in well-drained areas and move feeding locations throughout the hay-feeding period to reduce wheel traffic across pastures. Additionally, strategies like reduced frequency feeding and bale grazing can help minimize daily trips but must be managed carefully to avoid disrupting rumen function, decreasing animal performance. Long term solutions include establishing a sacrifice paddock or heavy use feeding area reinforced with materials like concrete or stone alongside geotextile fabric can prevent excessive mud accumulation. Consider investing in equipment such as 4-wheel-drive vehicles and spreading gravel in key areas when needed. Winter weather increases cattle energy requirements by up to 30%, making high-quality hay essential to meet these needs. Low-quality hay can lead to rumen compaction, so supplementing with fiber-based feeds can improve energy availability. Offering hay on a free-choice basis is crucial in avoiding compromises in the cows' ability to meet their energy requirements. There are ways to manage and implement solutions to these winter challenges.

## WEATHER

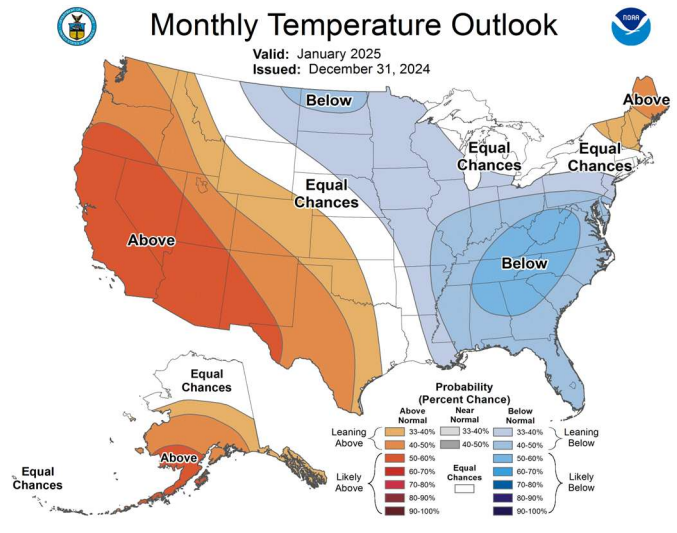
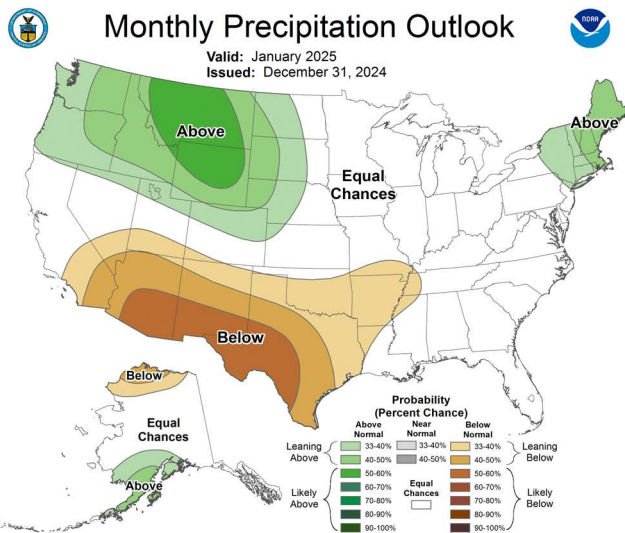
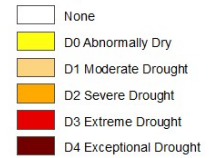
Dr. Bruno Pedreira, UT Extension Forage Specialist

December 2024 data was not available at the time of this release, but the 10-year December average is 43.7 °F with 3.5 inches of precipitation. [ncei.noaa.gov](https://ncei.noaa.gov)



With the winter break upon us, January temperatures are expected to be below average across Tennessee. Middle and East Tennessee are forecasted to be colder than the West. Precipitation chances are average for most of the state, except for a few counties in the West. In December, 65% of Tennessee was experiencing some level of drought (D0-D4). While conditions have slightly improved, over half of the state (54%) is still facing drought. In Middle Tennessee, Giles, Lincoln, Moore, Bedford, Marshall, Maury, and Coffee counties have been in extreme drought (D3) since October. In East Tennessee, counties now classified as D3 include Morgan, Cumberland, Bledsoe, Roane, Rhea, Meigs, Hamilton, and Loudon. [droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

### Intensity:



## UPCOMING EVENTS

- **Live.Stock** - Join us for our broadcast on February 12, 2025 at 2 PM ET
- **Middle Tennessee Grain Conference** February 4, 2025 at 7:30 AM CT
- **Tennessee Novel Endophyte Tall Fescue Renovation Workshop** March 4, 2025 at 8:45 AM ET

Details can found on [UTBEEF.COM](https://UTBEEF.COM)



**Photo of the Month** by Malerie Fancher: Dr. Bruno Pedreira speaking about Pasture Renovation at the 2024 Animal Science In-Service training for UT/TSU Extension Agents in Spring Hill, TN.

This and other useful information can be found at your local UT Extension office, or on our website.

[UTBEEF.COM](https://UTBEEF.COM)

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