LIVE.STOCK companion

Volume 15: February 2025

MONTHLY TIP

I can't get through February without talking about clovers, right? Like all legumes, clovers fix atmospheric nitrogen and store it in their tissues. That means they provide high-quality forage, rich in crude protein and highly digestible. Mixing clovers into cool-season pastures improves both forage quality and livestock performance. The goal is to have 25–30% of the pasture in clovers to balance quality (from clovers) and yield (from grass). For tall fescue pastures, the recommendation is to overseed 2 lbs of white clover and 4 lbs of red clover per acre. The ideal seeding window is February 20 to April 1. However, don't add clovers to a weedy pasture. Control the weeds first, then overseed.

For details on overseeding clovers, visit the UT Beef and Forage Center website at UTBEEF.COM.

Dr. Bruno Pedreira
UT Extension Forage Specialist

UTBEEF.COM

"An investment in knowledge pays the best interest."

-Benjamin Franklin

ANIMAL SCIENCE CONTINUES TO REBUILD FOR THE FUTURE

Dr. Neal Schrick, Head and Professor, Department of Animal Science

The Department of Animal Science at UTIA continues hiring faculty to set the stage for future Research, Extension and Teaching activities. Since 2011, Animal Science has overcome numerous retirements, advancements, and departures while building an undergraduate and graduate population to record numbers. Since 2020, three new Beef Extension faculty have been hired including Dr. Katie Mason (forages and beef nutrition; also teaches beef management and oversees the Master Beef Program), Dr. Troy Rowan (genetics/genomics; joint research appointment with UTCVM Large Animal Clinical Sciences as part of the UTIA Genomic Center for Advancement of Agriculture), and Dr. Saulo Zoca (beef cattle reproduction; oversees the Extension component of the UT Heifer Development Center and the UT Bull Test). The department also hired two poultry faculty in Dr. Tom Tabler (Extension/Research with a focus on commercial production) and Dr. Yang Zhao (Teaching/Research in Precision Poultry). Also, the department recently hired Dr. Yanqiu Yang (Precision Beef Research/Teaching; will utilize the Hickman Precision Unit at MTREC). Two future precision health positions will open soon with joint appointments between Animal Science and Large Animal Clinical Sciences with Research and Teaching appointments. Two additional hires include Dr. Elizabeth Shepherd (Research/Teaching in Parasite Immunology; Small Ruminants) and Dr. Blair Downey (multi-species Animal Behavior; ongoing study at MTREC with beef cattle and buzzards; Research/Teaching). While Animal Science and Food Science continue the process of building the Center for Protein Innovation, Dr. Kelly Vierck has been hired with an Animal Science Extension appointment and a Food Science Teaching appointment as a start to rebuild the meat science program in both departments. Future positions in planning for Animal Science include Research/Teaching faculty in Ruminant Nutrition and Muscle Biology.

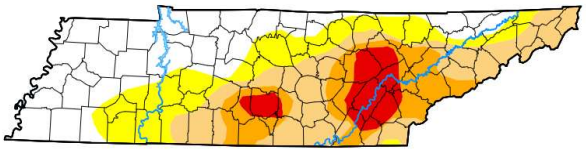
IDENTIFYING TOP COVER CROP SPECIES/VARIETIES FOR INTEGRATED ROW CROP/GRAZING SYSTEMS

Dr. Virginia Sykes, Associate Professor, Department of Plant Sciences

Winter cover crops provide a wide range of benefits to summer row crop systems like corn, soybean, and cotton. Benefits include increased nutrient availability, improved soil structure, increased weed suppression, and reduced erosion. The species used for cover crops are likely familiar to those incorporating annuals into forage systems as many of these species also provide high nutritive value for grazing. Incorporating grazing into cover crop systems is an excellent way to harness the ecological benefits these systems provide while also adding an economic value through the production of early season high quality forage. Maximizing value is highly dependent on finding the best species/variety to fit your specific system. Location along with cover crop planting/termination timing strongly impact which species/variety will provide you the maximum yield and nutritive value when incorporating grazing into a cover crop system. The University of Tennessee has had a cover crop variety trial since 2017. In 2022, we expanded this trialing program to cover a broad region of the South, including Arkansas, Kentucky, Tennessee, Virginia, North Carolina, South Carolina, Georgia, Alabama, Florida, and Texas. In addition to cover crop biomass at a pre-corn and pre-soybean/cotton termination timing, these trials also provide information on forage nutritive values. Results can be found at search.utcrops.com/cover-crops.

WEATHER

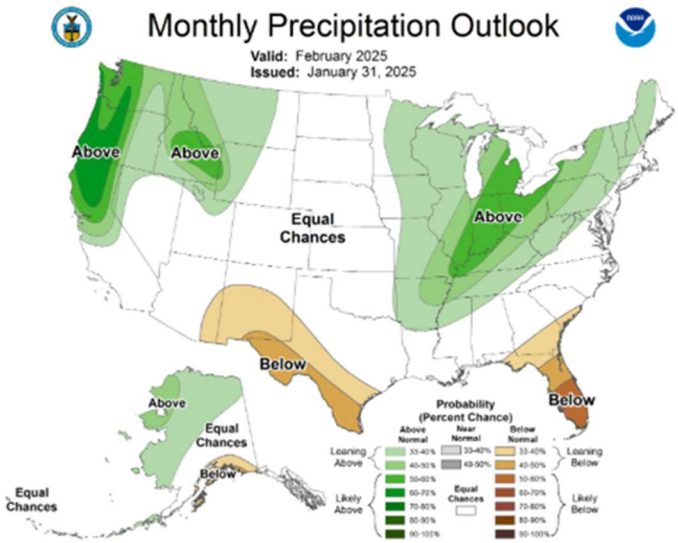
Dr. Bruno Pedreira, UT Extension Forage Specialist

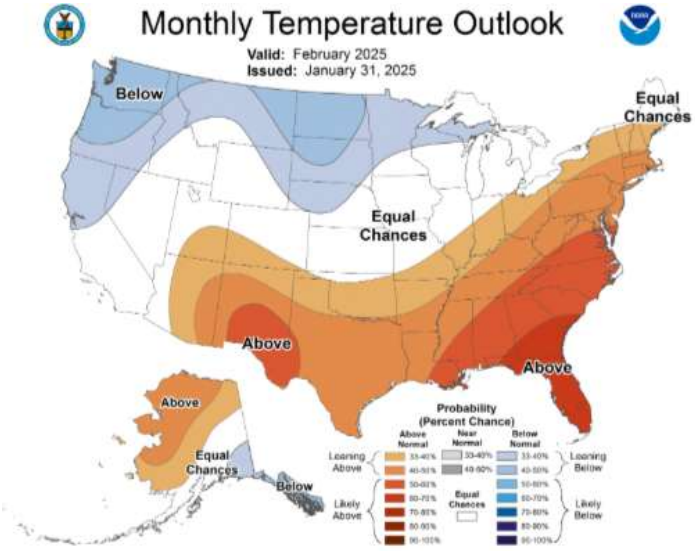


Intensity:
- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

January temperature averaged 4.7 °F lower than the average, and rainfall was 0.9 inches below the 10-year average of 37.4°F with 4.5 inches of precipitation. ncei.noaa.gov

Even with a few inches of snow, 63% of Tennessee (63%) is still facing some level of drought (D0-D4). In Middle Tennessee, Bedford, Marshall, Moore, and Coffee counties are in extreme drought (D3). In East Tennessee, D3 conditions now include Morgan, Cumberland, Roane, Bledsoe, Rhea, Meigs, Roane, Hamilton, Monroe, McMinn, Bradley, and Loudon counties. February temperatures are expected to be above average statewide, with East Tennessee hotter than the West. Most of the state has an above-average chance of precipitation, except for a few counties on the eastern border. droughtmonitor.unl.edu





UPCOMING EVENTS

- Tennessee Novel Endophyte Tall Fescue Renovation Workshop
  March 4, 2025 at 8:45 AM ET
- Live.Stock - Join us for our broadcast on March 12, 2025 at 2 PM ET

Details can found on UTBEEF.COM

Photo of the Month by Malerie Fancher**:** Our students Maggie Lindsey and Renan Cleto de Silva are doing setup by mixing substrate. Hands-on learning is a major component of research in the Pedreira lab.

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

UTBEEF.COM