

## **HOT WEATHER, HIGH HUMIDITY CREATE STRESS FOR BEEF CATTLE**

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Summer in Tennessee brings weather that is hot and humid. Both have an adverse effect on cattle performance. Reproduction, growth and lactation are all negatively affected.

Cattle can make it fairly well in hot weather if the humidity is not too great. With humidity at 75%, temperatures above 80° F can be stressful on cattle. Most of summer environmental conditions in Tennessee fall in this range. If the humidity is down, around 30%, elevated temperature is not a big problem. This is a major reason why cattle feeding is in the West and not in the South.

The elevated temperature combined with consumption of endophyte infected fescue creates an even greater problem for the Southeast and Tennessee beef industry.

Producers know the importance of shade and water in helping to keep cattle's temperature at a tolerant level. Cattle generally need 2 gallons of water per 100 lb. of body weight if the environmental temperature is 70-75°F. As the temperature increases and gets into the 90's, the daily water requirement can double. For example, a 1000 pound beef cow's water need would be met with a 20 gallon intake. With a temperature of 90° - 95°, the need would go up to 40 gallons. With a 30-cow herd, the daily water needs at lower temperature would be 600 gallons. In the elevated temperature, the water need of the herd would go up to 1200 gallons.

Lots of Tennessee producers provide water to their cattle from ponds and streams.

Without adequate rain, potential water supply will be limited. In addition, the reduced level of water in the ponds can contribute to increased exposure of disease causing organisms.

Avoid handling cattle in hot weather. If there is the need to work cattle, do it in the early morning and get the job done before 10:00 A.M. Access to shade will help keep cattle cool.

Tall mature trees that allow for movement of breeze will be beneficial in keeping the cattle cool.