

SUMMER HEAT STRESS IN CATTLE

James B. Neel
Professor
Department of Animal Science

Managing to avoid heat stress in cattle is a “good thing” during the “lazy, hazy days of summer.” Tennessee has several days of temperature above 90 degrees and humidity to match. A large number of cow-calf producers will work cattle at times during the summer when heat stress is likely.

Cattle have an upper critical temperature approximately 20 degrees cooler than humans. When people are uncomfortable at 80 degrees and feel hot at 90 degrees, cattle may be in the danger zone for extreme heat stress. Elevated humidity adds to the stress in that it intensifies the heat by making body heat dissipation more difficult. Cattle in the “Fescue Belt” would be even warmer.

Producers need to think about heat stress in deciding when to work cattle. For example, the weaning and working of fall dropped calves in preparing for feeder calf sales will soon be taking place. Weaning by itself is stressful, even in pleasant conditions. With both high humidity and temperatures, the stress would be greater which could result in increased susceptibility to respiratory problems and even death.

It all boils down to “common sense” in working cattle during the summer. Following are a few suggestions that should be considered by producers in working cattle.

1. If possible, work cattle before 8:00 a.m. Complete it by 10:00 a.m. Some producer may want to delay working cattle until after sundown or at night. At first, this may make sense but, cattle may need 6 hours or before enough heat is dissipated to cool down, especially with a “belly full” of Fescue forage.

2. Do not allow cattle to stay in the working facilities more than 30 minutes. Most pens filled with cattle permit little, if any air movement. Only bring into the working facility the cattle that can be worked in 30 minutes.
3. Provide clean, cool water to cattle when confined for any length of time. Cattle will drink 1% of their body weight daily in an hour during hot weather.

How producers feel in heat is an excellent indicator of the effects of heat stress on cattle. Remember that cattle have an upper critical temperature of 20 degrees less than humans. If the producer feels stressed, then the cattle will be really stressed.