Wilson County Agricultural Article from Ruth Correll, Agricultural Extension Agent

Management Tips to Reduce Heat Stress in Livestock

We are currently experiencing some very hot weather conditions with daytime highs in the low to upper 90’s and increased humidity. The heat index has already exceeded 100 degrees. Everyone knows these are very uncomfortable conditions. Hot weather and high humidity are also uncomfortable for livestock. Hot weather and high humidity reduces breeding efficiency, milk production, feed intake and weight gain. It can take a toll.

It is important to remember that cattle become uncomfortable at temperatures 20 degrees less than the temperature where humans become uncomfortable. This means that if you are uncomfortable at 80 degrees, and feel hot at 90 degrees, cattle may already be in the danger zone at these temperatures. Cattle that are heavier, and dark hided cattle, along with cattle that may be stressed due to illness or transportation will be even more susceptible to heat related stress. All livestock can experience heat stress when weather conditions are hot and humid.

Major management options are providing shade, improved ventilation and a sufficient quantity of water. Shade for livestock can be provided by trees, buildings or sunshades. Please keep in mind that ventilation is also important. When cattle congregate in a small shaded spot, there will be reduced air movement. Providing adequate shade where animals can spread out is much more desirable.

Providing an adequate source of cool, clean drinking water is essential to help keep the animal’s internal body temperature within normal limits. Temperature increases from 70°F to 95°F can increase total water requirements by about 2.5 times. Place water tanks in shady areas near where the animals will be loafing during the hot part of the day or use lighter colored tanks to reduce water temperature. Intake is extremely important as cattle can drink 1% of their body weight per hour when stressed by temperature.

Increased water consumption will increase excretion of urine. This will also increase the loss of certain minerals, such as sodium, potassium, and magnesium. A free choice mineral should be provide in a location that the animals will consume it to aid in replacing lost minerals.

Try not to do management related practices such as health programs, castration, weaning, etc when air temperature is elevated. If necessary to treat animals or move them through a handling facility, try to do these practices at night when it is cool or very early in the morning to reduce stress.

When transporting livestock during hot weather, plan to haul during the cooler parts of the day such as later at night or early in the morning while allowing ample time for the animals to become adjusted and find shade once they reach their destination. Don’t crowd livestock in trailers during hot weather, allowing extra space to reduce stress.

When livestock are extremely stressed, they will become lethargic and may be seen panting for breath. Some will breathe with their mouth open and be seen with excess saliva hanging from the mouth. When these signs are noticed, producers should take every effort practical to cool the animals
immediately. This might include spraying with water, moving the animal to an area where air movement is better, moving the animal under a fan, or providing artificial shade if the animal is non-ambulatory. Heat stress is a real concern for producers and can greatly decrease profitability. It is important to remember however that there are usual and customary production practices that are commonly accepted in livestock management. While producers should provide certain measures of comfort, there will be limits as to what is practical and appropriate to provide.

**Agricultural Market Summary**

**Cattle Market Trends**

Steer and heifer calf prices lost a few dollars per hundredweight this week with larger losses coming on lighter weight calves. Feeder steers under 500 lbs. unevenly steady, over 500 lbs. $2 to $3 lower, $170.00-$380.00; Feeder heifers $2 to $3 lower, $170.00-$306.00; Slaughter cows $2 to $3 higher, $85.00-$113.50; Slaughter bulls steady, $124.50-$149.50.

**Grain Market Trends**

Soybeans were up, wheat was down and corn was mixed for the week. Corn –Cash price, $3.50-$3.94. July futures closed at $3.53, no change from previous week. Soybeans – Cash price, $9.27-$10.17. July futures closed at $9.71 a bushel, up 31 cents. Wheat – Cash price, $4.77-$4.91. July futures closed at $4.88 a bushel, down 15 cents.

For additional information on these and other topics, contact the UT Extension Office, 925 East Baddour Parkway, Lebanon, TN 37087, 615-444-9584 or acorrell@utk.edu. UT Extension provides equal opportunities in all programs. Visit the UT/TSU Extension webpage at http://utextension.tennessee.edu/wilson or look for UT & TSU Extension, Wilson County on Facebook.

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