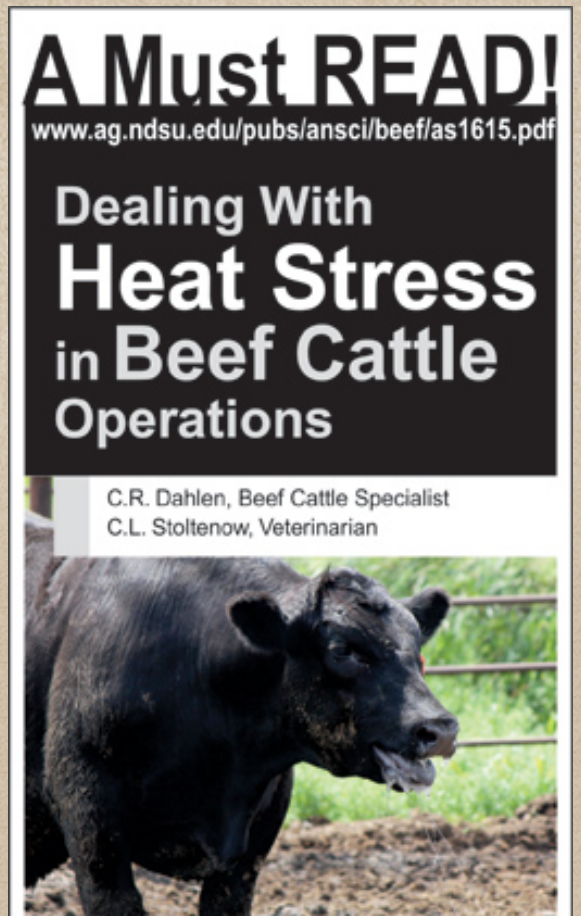
BeefTalk 620: Let the Cattle Rest and Check Water and Check Water and Check Water



Producers need to be very proactive about the potential seriousness of pending weather scenarios.

There are days when finding bright spots is hard because the beef industry is in a bit of a tough spot. Things will work out, but, for today, it is tough.

For the short term, heat, humidity and windless days are bad news for cattle. Actually, for most living things, heat and humidity are not good. The confounding effects of direct and immediate health issues with cattle, along with long-term feed availability issues, have even the well-seasoned producer worried.

The problem is not new, but, unlike last year, the temperatures continue to reach for triple digits and the scarcity of seasonal rains across the U.S. is seriously impacting feed reserves.

In the short term, heat impacts cattle performance because cooling down, or the dissipation of body heat, is critical for survival. High temperatures do not allow for a good mechanism to effectively dissipate a cow's internal body heat production. The body needs to function at a preset temperature range, so internal alerts sound loud and clear when that temperature gets out of the acceptable range. Death will ensue unless a normal body temperature range is restored.

Recent high heat and humidity, plus relatively calm days, trigger overheating. Although the common thought is that this is a feedlot problem because of the confinement and proximity of the cattle to each other, heat exhaustion knows no boundaries. For instance, cattle have a typical rectal

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temperature of 101 F. As the ambient temperature and humidity go up and the wind goes down, the ability of an individual to remove excess body heat goes down.

A heat stress index has been calculated to determine what alarms should go off and is well described in a new publication authored by NDSU's Carl Dahlen and Charlie Stoltenow. The NDSU Extension Service publication "Dealing with Heat Stress in Beef Cattle Operations" is available at http://www.ag.ndsu.edu/pubs/ansci/beef/as1615.pdf or through your local Extension office.

Producers need to be very proactive about the potential seriousness of pending weather scenarios. Common cow sense tells us that cattle should not be worked when the heat index indicates stress. Why? Those animals that have adapted to higher temperatures have a much larger tolerance for large swings in body temperature.

For instance, a camel obviously can tolerate heat, but a cow is not so fortunate. A cow prefers a very stable body temperature that preferably does not vary much more than 1 F under normal conditions.

Any activity can increase a cow's body temperature several degrees. Even inactivity during a period of a high heat can increase a cow's body temperature. Water intake and excretion are required to reduce the cow's body temperature.

The point to remember is the body is trying to expel heat. Even when things seem alright, if internal heat production exceeds the body's ability to dissipate heat, the individual or group of cattle are in a crisis situation. Even with emergency intervention, such as external cooling with cold water, internal metabolic disturbances already may have advanced, resulting in weakness, muscle tremors and collapse. As the circulatory system tries to respond, the cascading of failed heat-regulating mechanisms results in circulatory collapse and death.

Even in recovered cattle, the disturbance of their electrolytic balance needs time to recover. Those cattle that are older, fat, late-term pregnant or have a compromised respiratory system are subject to increased fatality rates.

Likewise, newborn calves are very susceptible to heat stroke. Any cattle that are dark in color also will be more at risk.

There really is not much that, as producers, we don't already know. Water, water and more water, combined with no to low disturbance, helps. Cows and calves will seek shade and a breeze. Artificial shading and air circulation usually are impractical in the world of extensive cow-calf production.

Having cattle adapted to the environment is a key to a long-term production system that works. Is a hot day in July worth changing cattle type? Is a cold day in January worth changing cattle type?

While you ponder the question, let the cattle be and check water and check water and check water because water is critical. However, with the past high temperatures, high humidity and no wind, a producer can do everything right but still have cows die. Somewhere in the middle is comfort. In other words, cold and hot, wet and dry, full or hungry, fast or slow, the list could go on and on.

In the short term, one side might be better than the other but, in the long term, the middle is not too bad. In passing through the extremes, one can always rest assured you will pass back through the middle. For that, I guess, there is some rest. However, the environment is harsh and, at times, the environment wins and we lose.

May you find all your ear tags.

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