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Hot and bothered? Cool it!

Take it easy in hot weather, and take it easy on your cattle. Given time, they can adapt, but new arrivals may not have had enough time to feel at home. Especially if a combination of heat and humidity puts them in danger of heat stress.

Sudden changes aggravate the situation, even for genetically selected and adapted cattle, unless the changes add shade, rest, water and breeze.

Confined cattle may be at greatest risk, but it is important to note the effect of humidity. At 75% relative humidity, any temperature above 80° F. can be stressful. However, 90° days are no problem with humidity of less than 35%, and even 100° is tolerable in a very dry environment. That's why confinement feeding is more predominant in the semi-arid Plains.

Feedlot managers are well practiced in preventing heat stress, monitoring the combination of heat and humidity. They keep cattle origins, hair length, color and finish in mind as they coordinate pen locations for the summer, because comfort is the key to performance as well as carcass quality at harvest. Still, an extreme heat wave with successive nights above 70° may call for additional measures.

The night shift may come alive with cattle handling opportunities after midnight and before 8 a.m. Adjacent empty pens can be opened to prevent crowding and allow more waterer space, but pens with dead air spots are closed. At-risk cattle may be treated to

sprinklers or shade, depending on location. Some feedlots shift feeding to evening so the heat of digestion occurs in the cooler hours, and even reduce amount fed to minimize "metabolic" heat load.

Cattle moving with the breeze through lightly wooded highland pastures may seem perfectly content through the summer. However if they are in the "fescue belt" and forced to live on endophyte-infected pastures, they are predisposed to heat stress. And a calm, muggy day with that combination of heat and humidity means discomfort for any cattle, anywhere. They only sweat at 10% of the rate humans do and the bigger they are, the less surface area per pound to throw off the heat.

Shade helps, but many producers rotate pastures with varying degrees of shade. One effective summer strategy for cell grazing is to save shady paddocks for such heat spells. Another heat wave idea is to let cattle into open grass at night and allow them back into shade by late mornings on especially stressful days.

If you're just setting up a ranch, talk to neighbors about why they calve and wean when they do—sometimes avoiding heat stress is a key factor. An increase in heat stress often means a decrease in fertile heat, so producers in extreme climates may avoid breeding in the hottest weeks. Likewise, they avoid calving when heat stress can claim a newborn quicker than its dam can. Those who feed on the ranch may plan their year to avoid having finished cattle on hand and at risk in those same weeks.

To make the most of the naturally lower feed intake during extreme heat, drylotted cattle should get the highest quality feed possible, since high fiber creates more heat with its rumen fermentation. Mineral supplementation is critical because cattle pass through a lot of sodium, potassium and magnesium in the summer. Of course, the most critical nutrient is water.

Cattle that drink less than a gallon per hundredweight of body mass in the winter may double that in the summer. And their thirst grows quickly as temperatures rise from 75° to 90°, so a 1,200-pound cow may drink more than 25 gallons on a hot day. A herd of 50 cows needs access to more than 1,250 gallons of water at any one time, or a refill rate of at least a gallon per minute on two automatic waterer cups. Waterers must be cleaned regularly to ensure fresh, clear water supplies and to make sure they work properly.

Don't take natural water sources for granted, because pond levels can fall below waterer intake and springs can dry up causing uneven grazing, stress or even death. If hot weather drives cattle into mud-bottom ponds for relief, consider limiting access to ensure adequate quality drinking water.

Avoid handling cattle in hot weather. When it can't wait, handle them with the least stress possible and never past 10 a.m. Evening is a poor option because cattle need the first several hours of cooler weather to recover form the heat of day. If a roundup doesn't go according to plan, don't force the issue while man and beast grow increasingly agitated.

Fall back to a realistic alternative and give yourself and the cattle time to cool off, even if it means waiting a day or more. There are worse things that could happen if you continue, as confused thinking is a sign of heat stress in humans.

Next time in *Black Ink*, we'll look at how to add value to your calves, and get paid for it. Questions? Call toll-free at 877-241-0717.

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