

Thursday, August 30, 2012

Early heat interventions

Access to shade is important to keeping cattle cool

Edition: Final

Source: **ANDREW ZWAMBAG**, DVM

Column: Vet's Corner

Section: News **Page:** 20

Knowing that the weather is going to be extra warm means the opportunity to mitigate the effects on cattle

WITH THE VERY WARM weather upon cattle herds is often over looked or sometimes us and surely more to come through out of sight when cows are on August and September, keeping cool is pasture. Preventing, identifying and every ones priority. Heat stress in our treating heat stress in our herds can pay huge dividends in the next calving season and cut losses right now.

When the temperature reaches over 30°C we all know it's hot. However, it is not just heat that plays a part in heat stress, other weather conditions such as humidity, wind and cloud cover also play a role.

Monitoring these weather conditions and the herd closely is the key to success. The earlier we can identify weather conditions amenable to heat stress, or the early signs of heat stress in the herd, the sooner we can start interventions. On very hot days this means implementing cooling strategies well before noon. If an extended amount of time elapses before cattle are cooled down it may be too little too late. During times of hot days followed by warm nights there is also a potential that cattle will not have enough time to cool down completely through the night before the sun starts to heat things up again. Identifying the signs of heat stress is very important. Watch cattle early for signs such as panting or open-mouthed breathing. These are indications that heat stress is occurring and interventions should take

place. Treatments for heat stress are often difficult or very impractical on pasture and moving cattle during times of heat stress can be very dangerous. Providing shade, sprinklers and fresh cool drinking water are our only "drugs" in a case of heat stress. Easier said than done, if some thought has not been put into providing these treatments prior to a herd outbreak.

As with most livestock health conditions, an ounce of prevention is worth a pound of treatment (or in this case a tonne of treatment).

Avoid working, transporting, or moving cattle during hot weather. If it's necessary to work or move cattle, do so in the early morning hours only. Cattle are still dissipating their body heat during the evening hours. If you are feeding supplemental hay try only adding new feed in the late afternoon instead of in the morning. This shifts the heat produced by fermentation in the rumen to night time, when cattle are better able to dissipate the heat. Provide fly control through the use of fly tags, sprays, or other control methods. Cattle will group together to get away from biting flies. Under hot conditions this will add to heat stress.

Water intake decreases when water in the tanks exceeds 25°C. As a result, ensure that

water pipes are not exposed to sun. Pipes should be at least 2 feet underground. Adding a supplemental tank of water to pens of cattle is another step. Check the refill rate of the stock tanks; remember in the summer when many animals are drinking many tanks will be trying to fill at one time in addition to other potential needs for water on the same water supply line. During the summer water intake may exceed 35 litres per head per day. It is recommended that cattle have a water space requirement of 1.5" per head. For example, 100 head of cattle would need 150 inches of water tank perimeter.

Providing shade will take a substantial amount of stress off cattle. However, it is difficult to provide enough shade with the use of trees through the entire day while not encouraging cows to crowd together. It is important to provide shade to the vulnerable animals such as the sick pen and very young calves at high risk of scours. If using sheds make sure there is adequate airflow.

Sprinklers can help reduce heat stress. Although not practical on remote pastures, it could be an option where barn yards are accessible. If sprinklers are used, they should provide large water droplets instead of a mist. Water should run off the cattle saturating the hair. Running the sprinklers for 5-10 minutes at a time, twice an hour, will allow evaporative cooling to take place and is preferred over continuous sprinkling. Wetting down pen surfaces will provide a cooler surface for animals to stand and also will help alleviate heat stress.

In cases of mild heat stress, the impact on production can be long lasting. Cows will consume less feed in times of heat stress, resulting in lower milk production, lower body condition score, reduced fertility or early embryonic deaths. Bull fertility may also be reduced from lack of activity and/or poorer semen quality. Observing herd bulls for signs of heat stress is very important since they are often at greatest risk of heat stress due to their size and drive to breed cows on hot days.

Heat stress is one of those conditions that occur almost every summer, and its impact on livestock varies based on genetic makeup, weight, color, health status, stage of production and previous exposure to heat. Together, these factors can become deadly, when the combination of temperature, humidity, wind speed and cloud cover result in extreme environmental conditions. Prevention of heat stress is always more effective than the treatments. Planning ahead and anticipating the arrival of heat stress in our herds will reduce the losses from heat stress and make dealing with this heat much easier on us and our cattle.

AUGUST/SEPTEMBER 2012 ONTARIO BEEF FARMER 21

Memo: August/September 2012 Ontario Beef Farmer