

Hot, Dry Weather Considerations For Cattle

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Wow! The weather for the past two years has had beef producers on a roller coaster ride. The year began with gusto – cold and wet, then an extremely wet spring and now hot, dry weather with drought plaguing some parts of southern Illinois.

The current hot, dry weather with high humidity will have several unintended consequences such as pastures that show little or no new growth with ample browning of forages. Some producers have indicated that they may begin feeding hay very soon, if not already.

This spring was challenging for many producers who baled hay. Some hay may have been cut late or may have been rained on; both situations will reduce hay quality. Thus, depending on hay harvesting conditions, the hay may not provide sufficient levels of protein or energy for the pregnant heifer/cow and growing fetus. You should have the hay tested to determine whether protein and energy supplementation is warranted and at the appropriate level for the stage of production. Remember that an excessive level of protein during heat stress may be detrimental. The excess nitrogen supplied by the protein must be detoxified and prepared for excretion (via urine). This is a biochemical pathway that is high in energy demands.

It is common knowledge that animals lose body heat by radiation, conduction, convection and evaporation. As the environmental temperature increases, the temperature difference between the cow's body and the surroundings is reduced, thus reducing the amount of body heat that can be lost. As the environmental temperature continues to increase, the cow must rely more on evaporative cooling (sweating and panting) to lose body heat. Active cooling such as panting increases the cow's maintenance (energy) requirement.

Many factors influence the amount of water required by cattle. Water consumption varies considerably, depending on the temperature and stage of production. Water consumption is influenced by other factors such as moisture and protein level of the feed, salt intake, relative humidity and the breed of cattle. In areas with high humidity, animals require somewhat less water because of lower losses to evaporation.

Because of the importance of water to body function and the difficulty in estimating requirements, cattle in all circumstances should have free access to all the quality water they will consume.

Increased water consumption will increase excretion of urine. This will also increase the loss of certain minerals, such as sodium (a part of salt), potassium and magnesium. Free choice trace mineral salt should be provided in a location that the animals will consume it. Loose salt will be more readily consumed than block salt.

Provide ample shade for cows as well as calves. If the shade is concentrated in one area, newborn calves may be stepped on or develop navel ill due to the accumulation of mud. Check the calves daily and dip all navels of newborns. If possible, move the herd to a pasture that provides plenty of shade.

Depending on the distance, moving cattle from one pasture to another will increase their body temperature. Try to move the cattle early in the morning or late in the evening to minimize heat stress. Also, calves can become overheated, so keep a close eye on them.

Excessively hot and humid weather can be stressful on pregnant heifers and cows. If calving early this fall, you should begin your routine of heifer and cow checks at least two weeks ahead of the expected first calving date. Reports from the University of Illinois Dixon Springs Agricultural Center and from producers suggest that heifers are calving from three weeks to a couple of days before the anticipated due date.

Remember, if you are hot while working, so are your cows and calves. Heat stress can cause decreased milk production and subsequent calf growth, decreased reproductive performance in cows and bulls, and decreased stocker and feeder performance. To minimize the impact of heat stress, producers need to be flexible when managing their livestock during these dangerous periods.

Also, do not forget about the bull. He will have lower libido, lower sperm production and decreased semen quality. Keep in mind that heat stress can impact semen quality for up to eight weeks. Δ

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