Good Management Can Reduce Impact of Heat on Cattle

As temperatures rise above 90 degrees, the concern of heat stress on cattle should also rise.

According to Dona Funk, livestock specialist, University of Missouri Extension, heat stress on livestock can reduce breeding efficiency, milk production, feed intake, weight gains, and sometimes even cause death.

“Cattle producers need to be most concerned about hot, humid weather during the breeding season. Hot weather can reduce the fertility of a cow. During the early stages of pregnancy, the embryo is directly affected by maternal body temperature,” said Funk.

High temperatures can also cause abortion of pregnancies that are less than 40 days along.

There are several behaviors in cattle that are causes for concern during hot weather, according to Funk. For example, cattle will stand up to expose more surface area to dissipate heat. Producers should beware of cattle that are not eating or are lying down.

“Another sign of heat stress is crowding around a water source. By grouping, cattle are using other cattle to block exposure to the sun,” said Funk.

Open-mouth labored breathing is the last mechanism of survival for cattle because they are not designed for panting. When cattle begin open-mouth, labored breathing, their feed and water requirements increase 11 to 25 percent but they reduce intake.

“The most important management options are providing shade and sufficient water. Trees, buildings or sunshades can provide shade but they should be high enough to allow air movement. Providing an adequate source of cool, clean drinking water is essential to keep an animal's body temperature in normal limits,” said Funk.

Temperature increases from 70 to 95 degrees can increase a cow’s total water requirements by about 2.5 times.

There are other additional steps producers can take to help cattle deal with heat. For example, moving cattle to higher quality pastures, or moving them more frequently, is helpful because high quality forages produce less heat when digested.
“Increased water consumption increases excretion of urine and the loss of minerals. That makes it important to provide free choice trace mineral salt in a location animals will consume it. Keep in mind that loose salt is more readily consumed than block salt,” said Funk.

Funk also recommends that cattle, especially bulls and finished cattle, should be handled in the early morning. It is also important to handle cattle quietly because once they get excited it will take 20 to 30 minutes for their heart rates to return to normal.

“Proper management is the only way to control the reduction in breeding efficiency, milk production, feed intake, and weight gains associated with hot weather and high humidity,” said Funk.

For more information, contact any of the MU Extension livestock specialists in southwest Missouri: Eldon Cole in Mt. Vernon, (417) 466-3102; Gary Naylor in Dallas County, (417) 345-7551; and Dona Funk in Cedar County, (417) 276-3313.

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