

Study Finds Spring Calving More Likely When Barometer Is On The Rise

LITTLE ROCK, ARK.

Beef cattle due in the spring are more likely to give birth when the barometer is on the rise, but warm temperatures are more likely to be a birth trigger for beef cows due in the fall, according to researchers with the University of Arkansas System Division of Agriculture.

"Ranchers have observed that cattle often calve when skies are clear and temperatures are cold – especially in the early spring," said Tom Troxel, associate head-Animal Science, for the U of Arkansas System Division of Agriculture. "It was an observation worth exploring."

Troxel and University of Arkansas colleague Shane Gadberry, associate professor, made a study of it and their results were published last May in the "Journal of Animal Science."

The two examined the relationship between barometric pressure and high and low temperatures and when beef cattle gave birth. Specifically, the two tested the idea that an increase in barometric pressure and a decrease in daily high temperatures, and an increase in daily low temperatures are associated with an increase in fall and spring births among beef cows.

The two looked at spring and fall calving records for the five years between 2005-2009 from the Livestock and Forestry Research Station in Batesville and the Savoy Research Unit of the university's animal science department.

All of the cows had previously given birth and

were predominantly Angus. None of them was artificially inseminated. The dates their calves were born were compared against pressure, minimum and maximum temperatures obtained from the Southern Regional Climate Center at LSU.

"For spring-calving season, barometric pressure was greater prior to calving compared to cows that did not calve," Troxel said. "The indication is that beef cows who come due in the spring, have a better chance of calving when the barometric pressure rises, than when low pressure moves in."

Both maximum and minimum temperatures prior to calving were lower on those cows that calved compared with the cows that did not calve.

"A departing storm system will often be followed by a trend toward more tranquil weather and increasing barometric pressure, including clearing and cooler conditions," Troxel said. "Those conditions may initiate calving."

Temperature, not pressure, was a stronger indicator for beef cows due to give birth in the fall. Calving was more likely on days when the day's minimum and maximum temperatures weren't falling.

"Noting these weather patterns could help producers in improving timely obstetrical assistance and thus saving more calves at birth," Troxel said. Δ



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