

Column Name - The Heartland Minute

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*“Cattle: Planning for the Third Trimester”*

The third trimester of pregnancy is a crucial period because of the rapid growth the calf undergoes and because it is our opportunity to improve cow body condition prior to calving if needed. It is easy to forget those things when we can't see the growing calf and a growing winter coat may be deceptive when it comes to body condition.

Here is a helpful breakdown of when the 3<sup>rd</sup> trimester begins based on various dates for the start of the spring breeding season.

Start of breeding	Start of 3 <sup>rd</sup> Trimester	Start of Calving
May 1	November 6	February 8
May 15	November 20	February 22
June 1	December 7	March 10
June 15	December 21	March 24

Fetal growth is exponential during this time with blood flow increasing 3 to 4-fold mid to late gestation. In the last 60 days, 75% of growth occurs, or 60 pounds of an 80-pound birth weight. The total weight of the pregnancy with fetus, fluids and membranes at calving is around 100-150 pounds total. This process is fascinating.

Early in pregnancy, the placenta, organs and limbs develop. Muscle fiber growth starts early as well, and the number of fibers is largely determined by the 7<sup>th</sup> month of pregnancy. The size of muscle fibers and formation of fat cells that produce marbling occur later in gestation and nutrient restriction at this time can reduce the size of muscle fibers and formation of fat cells that produce marbling. The impacts on muscle fiber size have been demonstrated in heavier calf birth weights (no change in calving difficulty), weaning weights, and carcass weights. Additional marbling is not as consistently evident across studies however by harvest time many additional factors may come into play.

As little as 1 pound of 28% protein supplement per day during late gestation for cows grazing native range has been shown to be beneficial to calf weights and heifer performance. This level of restriction in the un-supplemented cows was not enough to reduce pregnancy rates compared to supplemented cows.

Feed costs are high this year, but strategic supplementation can pay off in calf weaning weight. Pay particular attention to first calf heifers that are growing themselves in addition to a calf.

Save the date for upcoming agriculture programs. December 16, 2023 will be “Livestock Production Workshop” with topics: *Cow Nutrition Considerations, Calf Care, KS Fence/Lease Law, and Small Ruminant Internal Parasite Management*. Meeting will be at the Bressner

Building at the Woodson County Fairgrounds from 8:30 am – 3:30 pm with a lunch provided. January 3<sup>rd</sup> in Yates Center and January 10<sup>th</sup> in Severy will be “Limit Feeding Cattle in a Drought” with KSRE Beef System Specialist, Jaymelynn Farney. Both meetings will start at 6pm in the respective locations with a meal provided.

Information comes from K-State Research and Extension Beef Specialist, Sandy Johnson.

For more information regarding upcoming programs, Agriculture and Natural Resources, 4-H Youth Development, or K-State Research and Extension call the office at 620-583-7455, email me, Ben Sims, at [benjam63@ksu.edu](mailto:benjam63@ksu.edu), or stop by the office which is located inside the courthouse. Be sure to follow K-State Research and Extension- Greenwood County on Facebook for the most up-to-date information on Extension education programs and the Greenwood County 4-H program.