Calving Management Tips

As anyone who's been around a cow-calf operation knows, there's nothing like calving season — both for the annual wonder of new life, and for the difficulties it can bring. To help producers avoid problems during calving season, Kansas State University (K-State) Research and Extension veterinarian Larry Hollis provides these tips.

Feeding

Proper feeding management helps achieve three objectives: to get the cow to produce milk well, to get the cow to rebreed quickly and to have a calf born during daylight hours. Research has shown that cows in a body condition score (BCS) of 5.5-6.5 at calving will nurse well and breed back better than those with lower BCSs.

Research has also shown that the time of calving can be influenced by the time of feeding. Feeding late in the evening can result in roughly 80% of calves being born during daylight hours. This makes observation of calving easier and should provide for earlier intervention, if needed.

Observation

Once heifers/cows near their anticipated calving date, start bagging up, begin loosening in the vulvar area or start producing mucus, observation should begin on a regular schedule. Since heifers are more prone to dystocia problems, they should be observed every two hours to allow for early intervention.

Stage 1. Preparation for calving can take up to eight hours. The heifer/cow will appear restless or uncomfortable and often separate herself from the rest of the herd.

Stage 2. Delivery of the calf starts when the calf is lined up in the birth canal and contractions begin. Observation during this period is critical. Heifers should complete delivery of a calf within one hour of the time they are first noticed going into labor. Cows should complete delivery within 30 minutes after labor begins. If delivery is not complete within that time frame, the heifer/cow should be examined to determine if assistance is needed.

Stage 3. Expulsion of the afterbirth normally occurs within 12 hours after delivery.

Research Link

University of Nebraska researchers conducted a three-year study to determine the effects of dam nutrition on growth and reproductive performance of their heifer calves. During the last trimester of gestation (Dec. 1-Feb. 28), cows received either 1 pound (lb.) per head per day of a 42%-crude-protein (CP) supplement fed three times per week or no protein supplement.

During calving season (March 1-April 30), cows were managed as a single group. For one month (May 1-May 31), half the cows were fed cool-season grass hay while the other half grazed subirrigated meadow. On June 1, cows were recombined and managed as a single group throughout the breeding season.

Supplementing their dams with protein during late gestation resulted in heifers that were heavier at weaning and breeding, had higher

Intervention

If proper bulls with appropriate calving ease and/or birth weight expected progeny differences (EPDs) were utilized, calving will normally proceed without the need for intervention. However, especially in heifers, intervention may be necessary to complete the process. Knowing when to intervene is critical. Intervention is recommended when:

1) the process is taking too long (longer than the times mentioned above);
2) when you see that the calf is in trouble (tongue or head swollen);
3) when you observe rectal bleeding from the heifer/cow;
4) when the heifer/cow quits trying to push the calf out after obviously beginning Stage 2; or
5) when you first detect that the calf is coming in an abnormal position (something other than nose and two front feet first, such as breech, leg back, head back, etc.).

When intervening, know your limitations. Don't get in over your head. Use good sanitation. Tie the tail of the cow to the side, wash the area around the vulva and use an obstetrics sleeve when you work inside the vagina. Let the cow help you. Lay her down on her right side and pull only when she pushes. Pull the calf's lower leg first, then the upper leg. Repeat the sequence. Pull the calf straight out, rather than pulling down toward the feet of the cow. Time yourself; if you do not have the calf out within 30 minutes, get professional help.

When the calf is out, do not hang it upside down. Instead, place it in a sitting position to enhance its ability to breathe. Calves may be stimulated to breathe by tickling their nose with a straw or splashing their face with cold water. Squirt iodine inside the calf's navel, not just on the outside of it.

It is extremely important to allow the mother and calf to bond. Good signs of bonding are when the heifer/cow is vigorously licking the calf and coaxing it to stand and nurse. Observe the pair until you see the calf nurse. If the calf has not nursed within two hours, milk the cow and force-feed the calf to ensure that it gets adequate colostrum in a timely fashion.

More information about livestock production is available at K-State Research and Extension county and district offices or on the K-State Department of Animal Sciences and Industry Web site, *www.asi.k-state.edu*.

Editor's Note: *This article was written by Mary Lou Peter-Blecha of K-State Research and Extension, which provided this article.*

Dam's diet affects heifers long term

pregnancy rates and earlier calving dates.

Dams grazing meadows after calving raised heifers with heavier weaning weights than those fed hay. However, there were no differences in heifer reproductive performance.

Dam nutrition had no effect on heifer body condition score (BCS) or feed conversion. However, residual feed intake (RFI; actual minus predicted feed intake) was improved in daughters of cows fed hay.

The authors concluded that supplementing cows with protein during late gestation has lasting effects on the growth and reproductive performance of their heifer calves.

(Martin et al. 2006. University of Nebraska Beef Cattle Report *MP 88-A)*

Editor's Note: *This research summary was written and provided by Michigan State University beef cattle specialists Harlan Ritchie, Steven Rust and Daniel Buskirk as part of their Spring 2006 "Beef Cattle Research Update."*