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LIVESTOCK

Knowing what to look for minimizes calving difficulty

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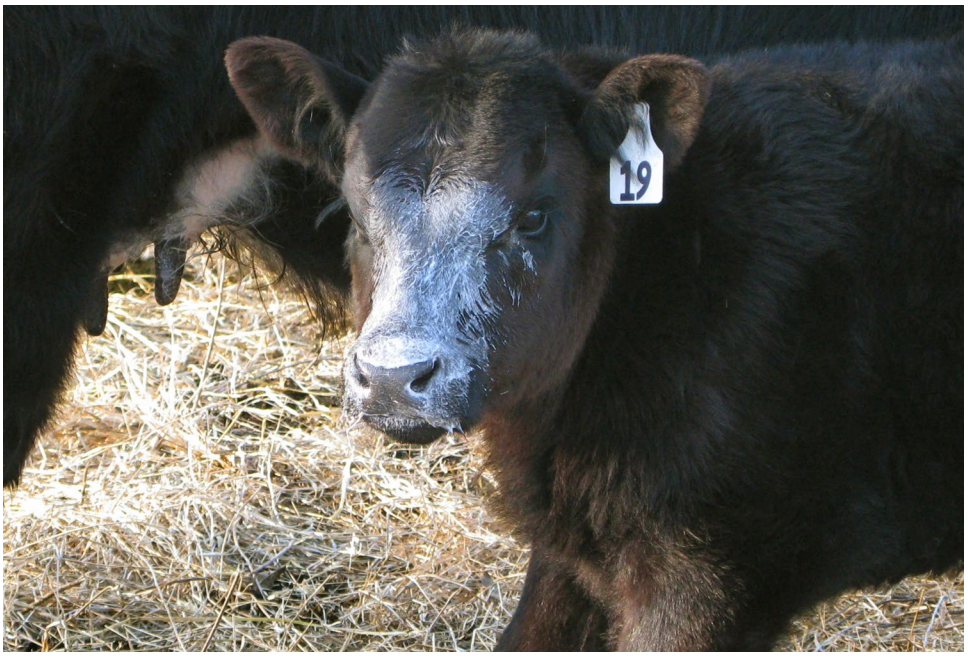
Anyone who has been through even one calving season has most likely dealt with calving difficulty. Dystocia (calving difficulty) is the biggest cause of calf death loss at birth. It can be minimized by managing factors like genetics and nutrition; but once the calving season is upon us, those things are in the past. Now the focus becomes observation and possible intervention. Being prepared to provide assistance is critical. It's been estimated that timely and appropriate intervention can save up to 70 percent of calves that otherwise would die due to dystocia. It's also just as important to know when not to intervene and just let the calving processes continue uninterrupted. The key is experience and knowing the normal sequence of events up to and through calving, which will vary tremendously between individual cows. It's also important to know the limits of our abilities and when to call professional help. Preparation should include developing a plan of action with your veterinarian. The following signs are extremely variable and may go completely unnoticed.



As calving approaches

Two weeks or more out:

- The cow's/heifer's udder fills out; this is often referred to as "making a bag." It can be even more gradual in first-calf heifers.
- The vulva will noticeably relax and enlarge, "springing," in more common terms.
- The cervical (mucous) plug may dislodge and be excreted.

12 to 24 hours out:

- The pelvic ligaments will relax, resulting in "lank" appearance around tail and pins.

12 hours out:

- The cow/heifer may exhibit behavioral changes, such as trying to isolate herself or not coming to feed, etc.

At calving

The calving process itself is divided into three stages.

- Stage one starts when the cervix begins to dilate in preparation for delivery. The cow/heifer may begin to have minor contractions, but these often go unnoticed. She may isolate herself and show signs

of discomfort like tail switching, licking her side, stomping her feet or elevating her tail. You may see an increased mucous discharge. **Although stage one can precede the birth of the calf by four to 24 hours, it's common to check things out when the cow/heifer has been in stage one for more than eight hours without progressing to stage two**.

- Stage two begins when the membranes and fetus move into the birth canal and ends after the calf is born. Contractions provide the force necessary to deliver the calf. In a normal birth, the first water bag appears and/or ruptures, then comes the amnion (fetal sac) or, if the amnion ruptures internally, the front feet with hooves facing down followed quickly by the calf's muzzle and head. **Any other presentation of the calf is not normal and should be investigated.**
- As contractions grow in intensity and frequency, the rest of the calf is pushed through the pelvic canal and delivery is complete. A generally accepted length for stage two is two to four hours from when the first water bag appears or breaks; for cows, this process usually lasts less than two hours and for heifers, less than four hours. Work at Oklahoma State University and the USDA station in Miles City, Montana, indicates these times should be shortened to 60 to 90 minutes for heifers and 30 to 60 minutes for cows. It follows then, that intervention should be considered if the calf is not born within two hours after the first water bag appears. **After intervening, if you are not able to progress the birth within 30 minutes, consider calling the veterinarian.**
- Stage three is expulsion of the afterbirth, usually naturally within eight hours. If not completely expelled 24 hours after calving, call your veterinarian.

Given the time frame of a normal birth, the most logical frequency to check the herd during calving to catch most of the potential problems would be at least every three hours. Remember, no cow is going to follow this series of events to the letter. One may "make a bag" six weeks before calving; another may simply come to feed one morning with a newborn calf. The key is being prepared, knowing what is normal and abnormal, and providing appropriate assistance when necessary.

One final note: Time of calving can be influenced by when the cows are fed during the day. A study done by Oklahoma State University with 1,331 cows from 15 farms showed that 85 percent of the calves were born between 6 a.m. and 6 p.m. when fed once daily at dusk. ■