

Focus on Calving

Carla L. Huston, DVM, PhD, ACVPM
Beef Extension and Outreach Coordinator
College of Veterinary Medicine, Mississippi State University
Submitted to: Cattle Business Magazine, Jan 2016

Herd fertility is the most critical component to a seedstock or commercial calf producer's operation. The past several articles here have focused on cow and bull reproductive topics, and many of us are now eagerly awaiting calving season. A successful calving season requires knowledge of the normal birthing process, as well as recognizing potential problems.

Dystocia, or difficult birth, is one of the leading causes of death of neonatal calves. Approximately half of all calf deaths at or soon after birth can be attributed to dystocia, and studies have shown that calves born requiring assistance had a greater risk of death within the first 120 days of life. Cows experiencing dystocia have less milk and are more likely due to be culled during that season. An average of 4% of females will require some type of assistance at calving, with first-calf heifers more likely to have difficulty.

Are you ready for that first calf to arrive? Have your facilities and equipment ready and available if problems should arise. Being ready for potential complications will help us prevent losses from dystocia, and help ensure a healthy calf and dam. How many times have you looked for a halter or set of OB chains only to find they are not where you thought they were? Keep your "Calving Kit" ready prior to each calving season. Only put items you are comfortable using in your obstetrical kit, and check and modify your kit as necessary before each calving season.

Calving Kit

- Halter or rope
- Bucket, disinfectant, mild soap
- OB sleeves and OB lubricant
- OB chains/straps and handles (3 each)
- Eye hooks, head snare (optional)
- Calf puller (optional)
- **Veterinarian's phone number**

Normal calving has three stages:

- During the *first stage*, or the "preparation stage," the cow's cervix is dilating, her contractions begin, and the calf rotates into the proper position (upright with nose and forelegs pointing towards birth canal). It's during this time when we often observe the cow off to herself, appearing restless and not eating. Her vulva may appear swollen and relaxed, and her tail slightly lifted up. This stage can last for several hours or even longer. Try to avoid moving cows once they start the calving process. A cow can stay in the first stage of labor for extended times, especially if she is disturbed. The first Normal calving position stage ends when the water bag ruptures.
- The second *stage*, or the "delivery stage" starts with increasing contractions. The cow appears to be straining more and will often be lying down. The delivery and rupture of the water bag indicates that the calf has entered the birth canal, and delivery should be expected soon. The key is to watch the delivery process for *progress*. Stage 2 labor usually lasts less than an hour in an adult cow, and can

be up to 2 hours in heifers. Call your veterinarian as soon as you fail to see progress during this stage, or suspect problems. General guidelines for providing assistance or calling your veterinarian have been provided (see sidebar). The second stage ends with the delivery of the calf.

- The *third stage* of delivery is the “cleaning stage,” where the membrane attachments relax and fetal membranes are expelled. The placenta is normally expelled within 2-8 hours after delivery.

Knowing when to assist or when to call for veterinary assistance can be difficult to predict. Assisting too early or too late can cause harm to both the dam and the calf. Calving times can vary by many factors, including age and individual animal characteristics. There’s an old saying that nature picks the day, but the cow picks the time to calve. Always avoid disrupting the cow as much as possible, watching for progress at a reasonable distance.

If you encounter an animal that may need assistance, bring her to an area where she can be safely caught and examined. Be sure this area has good footing, and try to avoid sawdust and newspaper bedding, which can stick to a wet newborn calf. If you have to snug the cow up behind a gate or panel, it’s a good idea to get a halter on her to keep her restrained, leaving enough rope to allow her to lie down if needed. Now is the time to call your veterinarian for assistance if you are not comfortable proceeding with an examination.

Have a bucket of mild soap or disinfectant available for cleaning of yourself, the cow, and your equipment, such as obstetrical (OB) chains. Clean the cow’s rectal and vaginal areas, and gently perform a vaginal exam using a plastic OB (palpation) sleeve to explore the situation: Is the calf in proper position? In a normal birth, you should feel the head resting upright between the two front legs. Has the waterbag ruptured? Is the cervix dilated, and does the pelvic area seem wide enough to deliver the calf? If something wrong is found that cannot be easily corrected, or if you are uncomfortable further examining the cow yourself, call your veterinarian for consultation and/or assistance immediately.

Minor calving problems can often be resolved with minimal assistance. Again based on your level of comfort and experience, you may be able to manipulate the position of the calf to allow delivery. Obstetrical chains or straps can be used to provide assistance in delivery. When placing chains on the calf’s legs, be sure to loop above and below the fetlock joint to avoid injury to the calf. A loop may also be placed around the head - over the poll behind the ears and through the mouth. Never attach a loop to the lower jaw or just around the neck. Always use plenty of lubricant. When pulling, time your pulling with the cow’s contractions. Never ever use more force than what can be exerted by two adult men. You may have to “stagger” your pulls to alternative sides to help the calf’s shoulders clear the pelvis and avoid “shoulder-lock.” If “hip-lock” occurs, the calf may need to be pushed back a bit, then rotated. Give yourself a time limit – if you try a technique for 5 minutes that isn’t successful, it’s time to try something different. Be sure to consult with a veterinarian for more complicated calving situations, or at any time when you think further assistance is needed. Don’t wait until it’s too late.

Our goals for calving season are focused on delivering a viable, healthy calf and preventing injury to the dam. Observe the calving herd closely, paying special attention to first-calf heifers. You can also help prevent future calving problems by recognizing that there are many factors that contribute to a successful calving season such as nutritional management and genetic selection. Work with your veterinarian and extension specialist to be ready for calving this year and prevent problems in the years to come.

When do you assist calving or call for help?

General guidelines:

- Over 90 minutes since water bag seen with no progress
- Over 6 hours of restlessness, tail up with no progress
- Over 40-60 minutes of heavy straining with no progress
- Calf hooves visible and pointing up
- Only head or tail of calf seen

