

Preparing for the Calving Season

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Successful calving seasons are the result of good planning and hard work. Observation of cows and heifers before and during the calving season is necessary to ensure a good calf crop. Cows should be checked at least once daily during the calving season, and heifers should be checked more frequently, perhaps several times a day. Having the cows and heifers in an easily accessible pasture will make this task more manageable. Also, allowing animals to calve in clean pastures is better for the health of the calf and the cow or heifer.

One of the complications encountered during the calving season is dystocia (a difficult delivery), and sometimes calving assistance is required. Therefore, producers need to be familiar with the signs of impending parturition as well as the sequence of events associated with normal labor and delivery to determine when assistance is necessary.

Signs of impending parturition (calving):

- The udder and vulva will often enlarge 1-3 weeks prior to parturition.
- Cows and heifers often become more nervous (restless) and, if possible, may isolate themselves from the rest of the herd just prior to parturition.
- Cows and heifers may show signs of abdominal discomfort by kicking at their belly; they may also glance to the rear nervously.
- The tail-head appears raised as ligaments around the rump of the cow or heifer relax.

Normal parturition is divided into three sequential stages:

Stage I – Preparatory

- Duration – cows (4-8 hours); heifers (6-12 hours)
- The cow or heifer may become nervous and isolate herself from the rest of the herd.
- Uterine contractions begin.
- ‘Dropping’ of colostrum/milk into the teats.
- ‘Water bag’ appears towards the end of this stage. Stage II begins when the water bag breaks.

Stage II – Delivery of the calf

- Duration – cows (< 1 hour); heifers (1-4 hours)
- The cow or heifer is now actively straining.
- In normal parturition, the calf’s forelegs and head protrude first about 70% of the time, and the hind legs and tail come first about 30% of the time.
- The calf is delivered.

Stage III – Expulsion of the placenta (afterbirth)

- Duration – cows and heifers (1-12 hours; usually occurs within the first few hours)
- Cow or heifer straining decreases.
- Uterine contractions continue and the placenta is expelled.

- If the placenta is not expelled soon after birth, do NOT manually remove the placenta by pulling it out. Manual removal can leave portions of the placenta in the uterus and serve as a source of infection.

Assistance may be necessary when parturition does not proceed as described, and early intervention is the key to a successful outcome. Waiting too long to provide assistance unnecessarily risks the life of the cow or heifer and her calf. Seek the help of a veterinarian or experienced producer when needed.

Supplies used to assist with calf delivery:

- Obstetrical (OB) chains or ropes, and chains are preferred because they can be easily disinfected after use. OB chains and ropes are used for pulling on the legs. NEVER attach OB chains or ropes to the jaw and pull on a calf, as the jaw will almost always fracture.
- OB handles for pulling on the chains or ropes
- Mechanical calf puller ('calf-jack') – USE WITH CAUTION AND DO NOT APPLY EXCESSIVE FORCE. A calf-jack can exert substantial force on the cow or heifer and the calf. When used improperly the cow, heifer, and/or calf can be injured or killed. NEVER ATTEMPT TO DELIVER A CALF BY PULLING WITH ANY TYPE OF VEHICLE.
- OB lubricants
- Plastic gloves
- Buckets
- Towels and paper towels
- Iodine for disinfecting the calf's navel

Some things to keep in mind when trying to decide when to call your veterinarian:

- Calving takes time, and it often takes longer for heifers than cows, so be patient. However, progress should be steady and generally fit within the time-frames previously mentioned. Once Stage II begins (delivery of the calf), the cow or heifer should make visible progress about every 15 to 20 minutes.
- Use the '2+1 rule' to help determine when to call. Upon examination, 2 feet and 1 head (or 2 feet and 1 tail) should be felt or seen for a normal delivery to proceed.
- If the cow or heifer becomes exhausted and quits trying to calve, then assistance is necessary.
- When in doubt, call your veterinarian. The outcome is always more favorable if assistance is provided sooner rather than later.

If possible, and if safe for you and the animal, capture the cow or heifer needing assistance before your veterinarian arrives. This will make his or her job easier, and minimize your expenses.

If you have any further questions, please contact your local Extension agent, or lstrick5@utk.edu 865-974-3538.