

veterinary Tips For Delivering Calves

Two seasoned veterinarians discuss the rancher's role in assisting with calving and give guidelines on when professional help is needed.

by Lisa Hawkins Moser



As winter approaches, many producers are making preparations for the calving season. This is an exciting time as ranchers see the outcomes of their mating decisions. It's also an important financial time for many Angus producers as each successful delivery contributes to a profitable bottom line.

To help ensure a profitable calving season, veterinarians Kent Ames of Michigan State University and Bob Larson of the University of Missouri's Commercial Agriculture Beef Focus Team recommend producers monitor their cows closely as they enter the various stages of calving.

"Calving occurs in two stages: says Ames. "Stage one occurs when the female is segregating from the herd and starts to show discharge. At this point the uterus is contracting and the calf is getting into position, causing the cervix to dilate." He defines stage two as labor, when the cow is experiencing heavy contractions and the calf is expelled.

Larson adds that heifers are typically in stage one for four to six hours. "Once they are in heavy labor, you can expect to see a calf on the ground in two hours," he says. "This process occurs much faster in cows."

To help producers monitor the progress, Larson recommends ranchers make notes about the cow and write down the time the various phases of labor begin. "I

CONTINUED ON NEXT PAGE

Veterinary Tips For Delivering Calves cont.

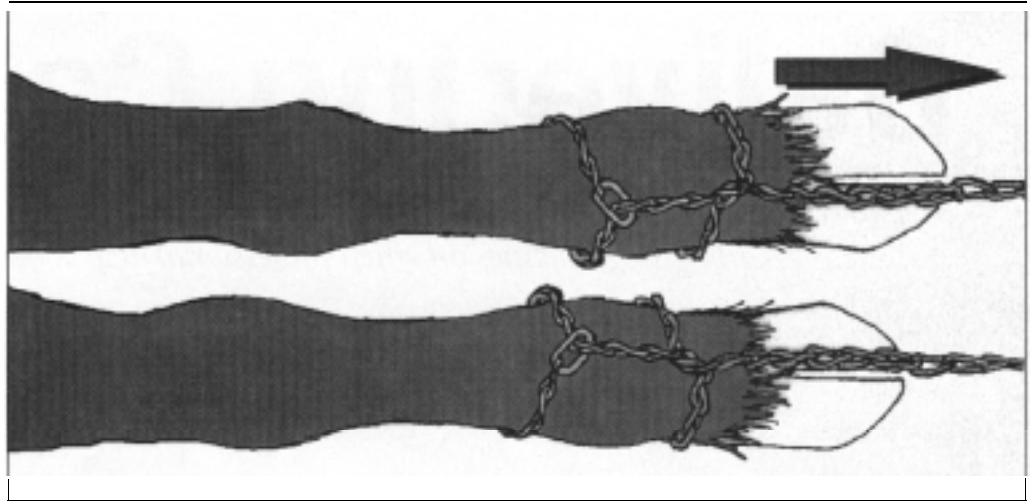
encourage producers to write down what they are seeing so that if there is a problem they have a record of what has occurred," he says.

Both veterinarians agree that if the female stops progressing during the labor process she should be examined. Ideally, the exam should take place in a 12-by-12 calving pen. Larson recommends the pen be bedded with straw or shavings. For the exam, Larson puts a halter on the cow and ties her head to one corner. If the pen is equipped with a head restraint he uses it instead.

After restraining the cow it's important to clean her backside with a mild soap. "Tie her tail out of the way and then scrub her vulva and surrounding area with soap," he says.

Next, Larson suggests producers wear plastic sleeves and cover them with a lubricant. The sleeves provide a dual purpose as some diseases are spread from cattle to humans through the birth fluids.

"The plastic sleeves are mainly to protect the cow so



When placing the chains on the calf's hoof, be sure to place one loop above the fetlock and another one-half inch below the fetlock.

you don't carry bacteria from your arms into the birth canal," Larson explains.

In respect to the lubricant, Larson says producers should not use dish soap. Dish soap is a grease cutter and will destroy the cow's natural mucus.

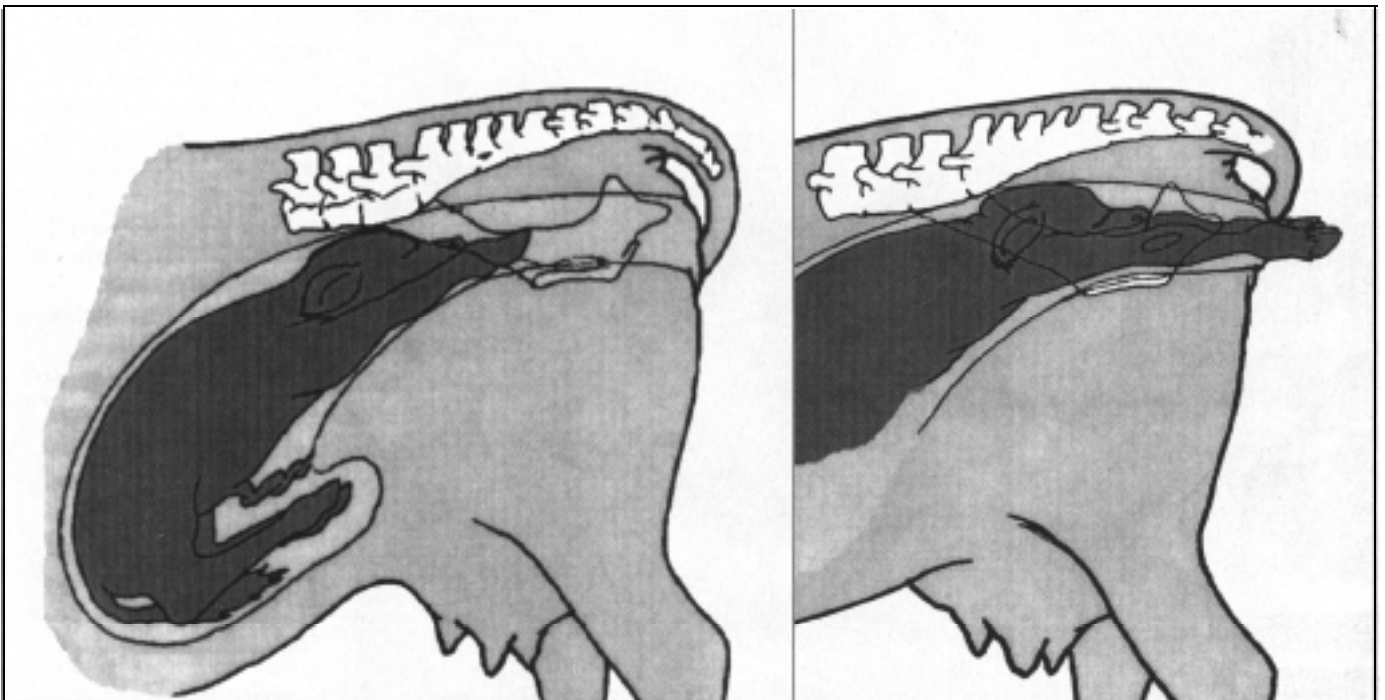
Once the hand is inside the cow, the producer should be able to identify the position of the calf. "I span the cow's pelvic

inlet with my hand to estimate its size. Then I try to get a hold of the calf's feet and span its head," says Ames. He estimates the span of his hand at 9 inches and adds, "If I cannot reach around the calf's foot at the base of the hoof, I know we are in for a tough delivery."

In a normal delivery, when reaching in the birth canal the rancher should feel the calf's

front feet and nose. With a backwards delivery, the back feet will be felt first. When the calf's tail and rump are the first things the examiner feels, it's considered a breech presentation.

To help producers determine whether they are feeling front feet or back feet, Larson advises producers to use the following guideline: "On a front leg the



The above illustrations show the natural progression of the calf as it moves through the birth canal.

first two joints always bend in the same direction. On the back leg the joints bend in opposite directions. For example, the fetlock would bend down and the hock would bend up.”

If the examiner decides the cow needs assistance, the veterinarians recommend placing sterile chains or straps on the calf. “If you are using chains, make sure you put two loops of the chain on the calf’s legs. I place one loop above the fetlock and the other loop about a half-inch below the fetlock,” says Ames. He adds the majority of calves born with broken legs come about through the improper placement of the chains.

Another tool used by some producers and veterinarians is calf jacks. These jacks are hooked to the chains and manually adjusted to assist the cow in delivery. Ames and Larson agree that ranchers should use this equipment sparingly.

“There is a tremendous opportunity to misuse calf jacks. If you are using it to its full potential, then you are overusing it,” Larson says. While few producers will injure the cows by pulling the calves with chains and human force, misuse of calf jacks and other devices can hurt the cow.

One tool both veterinarians use when trying to deliver a calf with its head facing back is a head snare. Ames explains, “Head snares are made of cable and they go around the calf’s head and tighten up underneath its chin.” Both veterinarians use the snare to move the calf’s head back into position between its front legs.

Aside from the head back, another malpresentation producers may be faced with is one front leg back. “This can be fixed by putting one hand over the hoof and manipulating it. Once it’s in the correct position, you can further assist the cow or let her deliver the calf on her own,” Larson says.

Once the calf’s shoulders are out, Ames and Larson recommend ranchers twist the calf from side to side to keep the calf’s hips from becoming locked in the cow’s pelvis. If the calf’s hips become locked, stop pulling and call professional help, recommends Ames.

“You can pull hard enough on the front legs of a hip-locked calf to break a back leg,” he says.

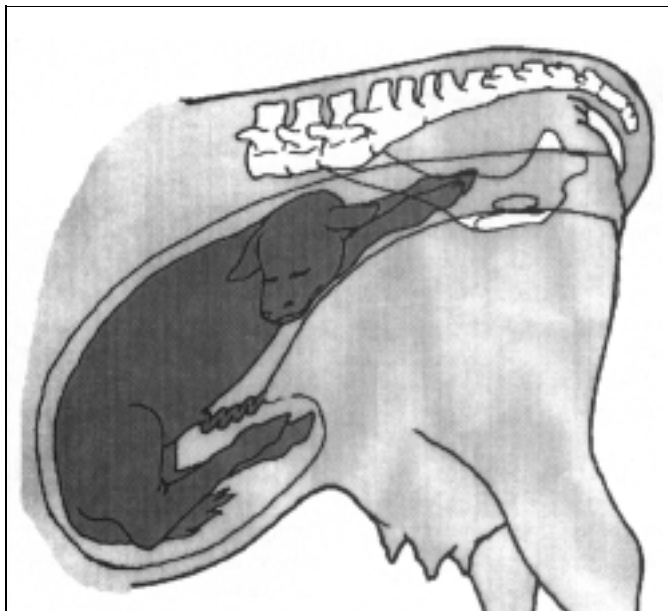
There is also a danger of paralysis for the cow. “The obturator nerve, which is the primary nerve to the legs, runs alongside the pelvis and can become pinched in a hip-lock situation,” Larson explains.

If the calf is coming out in a backwards or breech presentation, Ames says it’s important to extend the back legs out. “With a breech presentation, push the calf forward and pull the hocks up in the birth canal. You will have to reach underneath the calf to pull the hocks up,” he says.

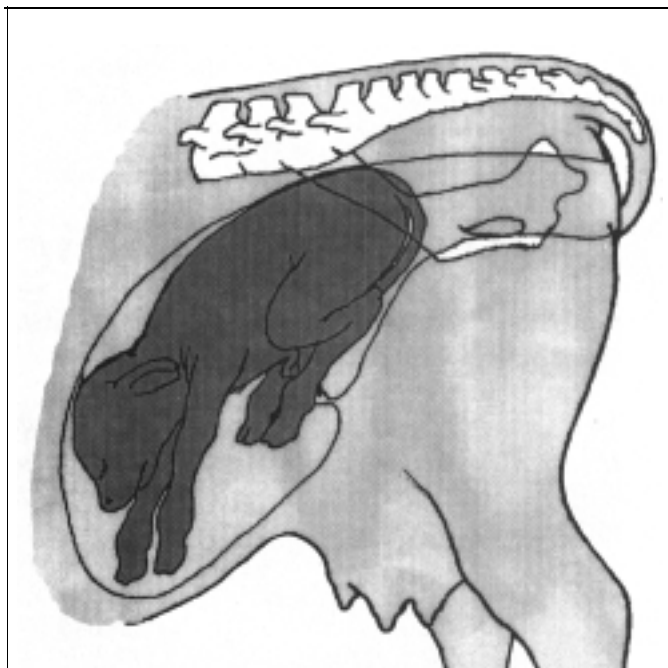
The challenge is changing the hock presentation to an extension of the back legs. The veterinarians suggest, put your hand between the calf’s legs, take a hold of the foot, protect the end of the hoof with your hand and pull it directly underneath the calf while you force the hock to the side. Unless ranchers have experience delivering breech calves, Larson recommends calling the veterinarian immediately.

Another situation when a veterinarian will need to be involved is a uterine torsion. Ames explains if you reach in the cow and your hand automatically twists over, you likely have a uterine torsion and need help immediately. The classic sign of a uterine torsion is when a cow segregates from the herd, but never seems to go into labor. Generally, those cows are in the first stage for a long time and the placenta separates from the cow and the calf dies.

Regardless of the obstetrical condition, Larson recommends



During some deliveries the head will turn back. Dr. Bob Larson says usually this is an indication of a small pelvis. The veterinarians recommend using a head snare to bring the head into the correct presentation.



This calf is in a breech position.

producers give themselves 20 minutes to fix the problem. If they haven't corrected the situation in that amount of time, then they should call the veterinarian.

He places that time constraint on himself. “If I can't fix the problem in 20 minutes, then I will perform a cesarean section,” he adds.

Understanding the

importance of timing is critical to a successful delivery, both veterinarians say. Ames adds there is a time to be patient and a time to hurry.

Larson explains, “For example, if upon examination, you realize the water sac has not broken or the cervix is not dilated, then you should wait.”

In a normal delivery, Ames

CONTINUED ON NEXT PAGE

Veterinary Tips For Delivering Calves cont.

and Larson advise pulling mainly when the cow is having a contraction. Once the head is out, the calf can start breathing and producers do not need to worry about the umbilical cord being pinched.

With a backwards presentation, Larson tries to

breathe,” says Larson. “Many people believe the fluids come from the lungs when they actually come from the stomach.”

After it’s breathing, Larson and Ames dip the calf’s navel in iodine to prevent bacteria from spreading into the calf’s body

antibodies. Colostrum from heifers does not usually contain as many antibodies as cows’ colostrum because cows have been exposed to more diseases during their lives.”

If the calf needs to be bottle fed, a rancher may give it colostrum that has been frozen.

through the colostrum of a properly vaccinated cow,” he says.

Larson does not routinely give antibody-building vaccinations to the cows or calves. “Most of the diseases can be avoided through proper sanitation,” he says. “As long as

If you can’t correct a calving problem in 20 minutes call a veterinarian.

help the cow deliver the calf faster than he would with a normal delivery.

“I try to get them out quicker because the head is down in the birth fluids and the umbilical cord is being pinched off,” he says.

Once the calf has arrived, Larson and Ames lay it on a decline with the head facing down. “It’s important to get the fluid out of the calf’s nose and mouth so it may start to

through the severed cord.

Next, they turn the calf loose and watch to make sure it nurses. The cow’s milk contains colostrum, which carries antibodies that are important in building immunity for the calf.

“I like to see calves drink 20 percent of their body weight in colostrum within the first 24 hours, and the first dose needs to come within minutes of its arrival,” Ames says. “Not all colostrum contains the same

Ames stresses the importance of thawing the colostrum in warm water rather than microwave ovens. He says, “Heat from the microwaves destroys the protein in the colostrum.”

In respect to vaccinations, Ames recommends building the calf’s immunity through the cow’s milk. “There are a lot of vaccines you can give calves orally as soon as they are born, but they are not as effective as the immunity passed along

the calves are maintained in a clean environment and receive the colostrum, producers shouldn’t have to worry about disease.”

By using calving-ease Angus sires in the herd’s breeding program, many ranchers don’t have to worry as much about calf delivery. However, if calving challenges are present, ranchers now have a strategy for dealing with them.

