

## Abortion Prevention

Abortions are a common problem observed at this time of year by the Animal Disease Research and Diagnostic Laboratory staff at South Dakota State University. BVD and IBR are the No. 1 and No. 2 pathogens recovered from cattle abortions.

Another cause of abortions can be toxins in feeds. Ensilage piles are often low in March, getting into some marginal feed. Late gestation is a poor time to feed moldy feed. When in doubt, don't feed it.

Whenever abortions are running more than two percent, producers should be concerned. Seek advice to determine the cause.

When submitting samples to the veterinary lab for analysis, the placenta should accompany the fetus. Cases are submitted through your local veterinarian.

## Colostrum Check

Producers can do several things to prepare a cow to increase calf survival. One thing is to prepare her to produce colostrum that will help protect the calf from common disease.

Vaccinating cows with a commercially available scour vaccine can improve calf survival. This should be done at least two weeks prior to calving. Primary pathogens to consider vaccinating against are *E. coli*, *Clostridium perfringens*, rotavirus and coronavirus. Antibodies from the cow vaccination will carry over to the calf through ingestion of colostrum shortly after birth.

Up to 20 percent of newborn beef calves are colostrum deficient, which makes them susceptible to disease. Synthetic colostrums available today appear to be beneficial.

Make sure the calf has a dry, clean environment and consumes the proper amount of colostrum within the first 12 hours. Also, make sure the cow's teats are open, especially if you have had severe cold weather.

## Good Facilities

Another step in calving preparation is to have good facilities available. Producers need an area where they can easily handle animals without exciting them. Also needed is a good headgate — it could be a squeeze chute or a stanchion. The work area needs plenty of space around the cow to operate a fetal extractor.

## Nighttime Feeding

Feed cows at night to encourage calving during the day. Normally, more than 60 percent of calves are born at night. Research shows that by feeding at night, this can be reversed so that more than 60 percent are born in the daytime.

Feeding in the daytime is often difficult when snow melts and the yards become sloppy. Instead, put hay in a pen during the early morning hours while the ground is frozen, and as the last chore at night, open the gate and let the cows in to eat.

## Know Parturition Stages

1. The Restless Stage — This can last an hour, or with heifers, can go on for 24 hours.

2. Delivery Stage — The fetal membranes are observed, the fetus is presented into the pelvis, and finally the calf is delivered. This stage can take 30 minutes to an hour.

3. After Delivery Stage — Delivery of the placental membranes.

Early detection of calving problems can be accomplished by close observation. When the second stage doesn't progress normally, you should examine the cow to determine what's slowing the process. Seek professional veterinary advice and/or assistance if you suspect a difficult birth.

**Live Calf Test:** Here's a quick and easy test to determine if a difficult delivery calf is alive. With a frontal presentation, put a finger in the calf's mouth. If it's alive, you will feel a sucking reflex. With a backward presentation, place a finger in the calf's rectum. A live calf will respond by contracting the rectal ring around your finger.

*This month's Vet Call column was contributed by Dr. John Thomson, Extension Veterinarian at South Dakota State University.*

## Shorten Breeding Season With Synchronization

Researchers at Colorado State University have developed a new estrous synchronization program using the feed additive, melengesterol acetate (MGA) and a prostaglandin injection. This program, best suited for use in heifers, could shorten the breeding and calving season.

MGA is a synthetic progesterone delivered orally as a relatively inexpensive feed additive. It is added to diets of feedlot heifers to suppress heat and improve growth and efficiency. Cattle will come into heat within two to five days after MGA is removed from the diet.

Reproductive data shows that the longer MGA is fed, the tighter the degree of synchrony following removal. Fertility at first heat is reduced, but it's not reduced beyond the first heat.

Prostaglandins are a class of naturally occurring hormones. One of its functions is to regress the corpus luteum on the ovary. This sets the stage for the next estrous cycle. Commercially available prostaglandins, such as Lutalyse, Estrumate and Bovilene, also regress the corpus luteum when given by injection.

However, prostaglandin is effective for heat synchronization only if a corpus luteum is present on the ovary, which would be days 6 to 17 of the estrous cycle.

A research trial with 315 heifers at Blair Ranches and Quinn Cow Company was conducted by South Dakota State University. Trial results suggest that feeding .5 milligrams per head per day of MGA for 14 days, followed by a prostaglandin injection 17 days later, is effective for synchronizing heifers.

Calving records for 87 heifers, synchronized in 1988, were made available from the Quinn Cow Company. Fifty-five head of the 72 head inseminated conceived, for a 76 percent first-service conception rate.

Terry Goehring, Extension beef scientist at South Dakota State University, stresses that although cattle are inseminated over a two- to five-day period, they will not calve in that short of a period. Dispersion of up to 20 days could be expected due to variation in the gestation length.

At the Quinn Ranch, 47 percent of the calves were dropped during the peak seven days of calving.

Goehring says this program should also maximize the chance of the heifers conceiving early because of the short calving season combined with calving the heifers ahead of the cows.

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