



Getting Ready for Calving Season

by Troy Smith

Generally, cow folk look forward to calving season. Most enjoy the sense of renewal that comes with the arrival of a new calf crop. They're anxious for a first look at the results of time and money

invested in genetic selection. And often, they're relieved when calving season is over — especially if it was accompanied by foul weather, complicated deliveries, or extraordinary amounts of calf sickness and deaths.

Sooner or later, every producer faces some amount of calving trouble. Challenges should be expected, so savvy producers make the most of calving season by planning appropriate responses. Some problems may be avoided, or at least reduced, with sufficient preparation before that first heifer or cow gets the urge to calve.

Common sense and good management are the best tools producers can apply, according to veterinarian Scott Reynolds, who practices in Broken Bow, Neb., and also manages a 100-cow spring-calving herd. Reynolds says it just makes sense to evaluate body condition and manage nutrition to have the herd prepared.

"I advise producers to monitor body condition continuously and make sure cows reach a body condition score (BCS) of at least 5 and preferably 6 well ahead of calving time," Reynolds says. "Fetal programming studies indicate nutrition of the pregnant cow influences how her developing calf will perform throughout its life. When cows are in proper condition, their calves generally get up quicker and suckle faster. The volume and quality of cow colostrum will be better. That's also important to lifetime health and performance of her calf."

Reynolds says adequate body condition ensures cows will have enough energy for the laborious task of delivering a calf. A thin cow may weaken and give up during labor. Additionally, cows below BCS 5 at rebreeding exhibit lower conception rates.

"We have seen the repercussions in our practice," Reynolds says. "In 2009, feed quality was generally lower and a higher percentage of area cows were thinner at calving and at rebreeding. We saw more open cows at preg-check — 50 to 75% more — especially among young (first- and second-calvers) and old cows whose nutritional needs probably weren't met."

Reynolds advises producers to have feedstuffs analyzed and

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provide necessary energy, protein and mineral supplementation. He urges particular attention to cow diets during the last trimester of gestation.

Be prepared

Assuming the cows are nutritionally ready, producers should make preparations for when a cow needs assistance with delivery. Make sure facilities are clean and in good repair. Find the calf chains, handles and calf puller. Have them cleaned and ready, along with obstetrical sleeves and lubricant.

It's a good idea to have a supply of frozen colostrum or commercial colostrum "product" on hand, says Dee Whittier, Extension veterinarian and professor at the Virginia-Maryland Regional College of Veterinary Medicine, Blacksburg, Va.

"The real thing is always best, when you can get it by milking out a just-calved cow. Or, sometimes a producer can get frozen colostrum from a nearby dairy," says Whittier. "There are a bunch of colostrum products available, but look at the label and choose a colostrum 'replacement' rather than a 'supplement.'" (See also story about colostrum, Page 20.)

Observing the herd

Once a producer has readied the facilities, equipment and supplies, it's a matter of observing the herd. Whittier says the first calves are likely to arrive about 270 days after cows were exposed to a bull. He reminds producers that selection for calving ease has been accompanied by shorter gestation periods. Since heifers are generally bred to calving ease bulls, they should be observed accordingly.

"Heifers might calve 10 days earlier and sometimes sooner than that," Whittier warns.

Indicators that parturition is near may include "springing" — the relaxation and enlargement of the vulva. A relaxation of muscles around the tail head also occurs but is less evident among animals with more fat cover. A little better indicator, says Whittier, is the



Whether spring or fall calving, keeping an eye on the herd can help producers catch those cows that need help before it is too late.

filling of the udder and teats. Often, when the teats become filled with milk, calving may be only a day or two away.

“Very near signs might be apparent discomfort and nervousness — especially in first-calf heifers — and an increase in vaginal discharge,” Whittier adds. “And cows and heifers tend to isolate themselves just prior to calving. That’s a pretty reliable sign.”

Both Whittier and Reynolds advise producers to become familiar with the stages of parturition in order to gauge an animal’s progress and determine if and when intervention is needed. During the first stage, the calf should rotate to an upright position and the mother’s cervix dilates. Uterine contractions begin during this preparatory stage and the water sac is expelled.

“The first stage may take only a couple of hours, but it could take eight to 10 hours,” Whittier explains. “If you check in the morning and find a cow in the first stage, she should be progressing with delivery by noon. If not, an examination is probably in order. But before sticking an arm in there, wash the vaginal area with soapy water, tie her tail out of the way and use a clean plastic sleeve with plenty of OB lube. If examination reveals the cervix is not completely dilated, she may need a couple more hours.”

In some instances, cautions Whittier, a calf might be in an abnormal position that does not stimulate the second stage of labor, so assistance is needed.

The second stage of parturition involves the actual delivery. The calf enters the birth canal and, typically, the cow will lie down and strain with the contractions. In a normal presentation, the calf’s nose and forefeet protrude first, followed by passage of the shoulders and then the hips. First-calf heifers may require up to two hours, but mature cows often deliver in an hour or less.

“If she’s in stage two, you ought to see progress. If there’s been no real progress in a half-hour, assistance is probably needed and it’s time to act,” warns Reynolds, stressing that producers facing dystocia (calving difficulty) need to know their limitations. “If they’re not experienced in assisting delivery and especially if they have no experience with abnormal presentations, they should call in a veterinarian.”

The third stage of calving is expulsion of the placenta, which normally occurs within eight hours after delivery of the calf. If it hasn’t happened in 48 hours, consult a veterinarian. Treatment with antibiotics may be prescribed to fight infection, and removal of a retained placenta is sometimes necessary.

The calf

Newborn calves that are weak following a difficult delivery or other stress often require attention. Whittier says any newborn that hasn’t stood

and nursed within a couple of hours probably needs help, but dystocia-affected calves are often exhausted and may even suffer from a little brain damage. It may be necessary to teach them how to nurse.

“Calves lost within two days after birth usually die because of starvation, hypothermia or both,” states Whittier. “Hypothermia can be prevented in a lot of ways — in a pickup cab or under a heat lamp — but a warming box is one of the best ways to warm a chilled calf.”

A warming box doesn’t have to be fancy. Whittier says an enclosure (about 3’ x 3’ x 4’) with an electric hairdryer as a heat source can create a 100-degree environment that warms a calf quickly. But you can kill a calf by overheating it. He recommends using a rectal thermometer to check a calf’s temperature, calling 100 degrees (Fahrenheit) warm enough.

Whittier and Reynolds emphasize the importance of getting colostrum or a suitable colostrum replacement product into a stressed newborn as soon as possible. Reynolds warns against thawing frozen colostrum in a microwave oven, as extreme heat destroys antibodies it contains. Rather, he recommends placing the container of frozen colostrum in warm water and allowing it to thaw slowly.

“I recommend feeding a quart of colostrum within the first hour after birth. Don’t try to feed two quarts all at once. A second quart can be given during the next four to six hours,” Reynolds explains. “And it’s better if the calf suckles it from a bottle rather than administering with a tube. If colostrum is tube-fed and it gets in baby calf’s rumen instead of the abomasum, there is virtually no absorption and no transfer of immunity to the calf.”

Scour prevention

Reynolds and Whittier also agree that preparation for calving season ought to include some thought about preventing calf scours. They believe the most important thing a producer can do is take steps to limit calf exposure to disease-causing organisms.

“I started my veterinary career in Saskatchewan (Canada), where most calves were born in calving barns during cold weather,” Whittier says. “But we found that calves born outside, on clean ground, were less likely to get sick. In the calving barns, calves were exposed to all kinds of bugs that cause scours. So I think the Sandhills Calving System is good.”

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Calving season preparation also includes taking steps to prevent scours by limiting calf exposure to disease-causing organisms.

The Sandhills Calving System, developed by the University of Nebraska, is based on the idea that environmental pathogen levels are relatively low at the start of calving season. However, a few of the first calves become infected and shed large numbers of pathogens into the environment, increasing the risk of exposure to calves born later. More calves become infected and shed even greater numbers of pathogens, and the incidence of scours increases as calving season progresses.

Put into practice, the System calls for removal of cows that have not yet calved to a different clean pasture after the first week or 10 days of calving season. Existing pairs remain in the pasture where those earliest calves were born. The process then continues throughout the calving season, although the resulting different groups of pairs can be commingled after calves reach four weeks of age.

The complaint among many producers, says Whittier, is that multiple calving pastures are required. Reynolds concurs, noting that many of his Nebraska clients aren’t set up to fully implement the Sandhills Calving System.

“But even if a producer sorts heavies into a different pasture only one time, it really helps,” states Whittier. “Just having one more pasture available and splitting the herd one time can help reduce the younger calves’ exposure to bugs shed by older calves. And the larger the herd is, the more good it does.”

Also to help protect calf health, Reynolds warns against buying a sale

barn calf to foster onto a cow that has lost her own baby. By doing so, a producer may be buying trouble.

“I think it’s a big mistake,” Reynolds says. “You don’t know if the calf received colostrum or not, but you can be sure it was exposed to all kinds of pathogens. You might bring home disease organisms you’ve never had on your place before. It’s not worth the risk.”

On a final note, Whittier says he hears producers complain that a veterinarian was reluctant to come when summoned to help with a difficult calving. But there may be a good reason.

“Maybe the last time a veterinarian heard from one of those producers was two years ago, at midnight, on Christmas Eve. The producer probably waited too long before calling, so things were already a mess,” suggests Whittier. “Producers should consult with their veterinarian, buy products from him (or her) and develop a relationship. It can make a difference when you need some professional expertise on a cold, dark night.” **HW**

