



As mentioned in the last bulletin I will continue the reproduction discussion in regards to the calving season, specifically what you should expect from your expectant mothers and also when and if you should intervene. As mentioned previously, Dexter cows have an average gestation of 283 days which is approximately 9 months and 13 days for quick calculation. Knowing the expected calving date of your cows or heifers makes preparing for calving season much easier. However, remember to expect calves up to 10 days before or after the actual due date. If you have no idea what the estimated calving dates are in your herd, it is helpful to know what to watch for when a cow or heifer is preparing to calve. There are 3 stages of labor. In short, the first stage is the preparation stage of getting the birth canal ready for calving, the second stage is the actual expulsion of the calf, and the third stage is the expulsion of the fetal membranes (placenta) and the involution of the uterus ("shrinking" of the uterus back to normal non-pregnant size).

In the seventh to eighth month of gestation the expectant mother will start to "bag up" which means her udder will start to engorge with colostrum and edema as she prepares to feed the coming calf. The vulva will also start to appear "loose" as it enlarges and becomes more swollen. Once a cow or heifer separates from the herd and appears restless, it is likely the beginning signs of labor. She may stand with her back arched, tail in the air, and make some premature attempts at straining. The first stage lasts up to 3 hours in a cow and can last as long as 72 hours in heifers. During this stage the ligaments of the pelvis relax and the cervical mucus plug is released as the cervix dilates. It is important to note that premature intervention in stage 1 will not only slow the labor down, but could potentially cause irreparable damage if a calf is forcefully delivered through a cervix that is not fully dilated. The damage could affect her ability to carry another calf, or worse it could lead to her death. Due to the lengthy stage 1 in heifers it can be challenging to know when to intervene. If a recumbent heifer has been doing some intense straining for over an hour, she has likely been in stage 1 for a few hours already and should be carefully examined to see if there is a problem.

The second stage of labor is signaled by the appearance of the "water bag", which is the fetal sac that surrounds the calf. Once cows reach stage 2 the calf is usually delivered within a half hour. Heifers, on the other hand, can spend 2-3 hours in stage 2 with no detriment to the calf. With that said, however, no cow nor heifer should be allowed to go for more than an hour in stage 2 without examining her to see if she needs assistance.

Before you assist a calving it is very important to properly restrain the cow or heifer. If you don't have a head gate, make sure you have a halter handy. Occasionally a cow will remain recumbent when you assist her, but it is still wise to at least get a halter on her and tie her loosely to a nearby post. A cow that gets up with a calf puller attached can be a dangerous weapon. Cleanliness is a must and can't be over emphasized when assisting a calving. Use a good soap that you can mix with warm water in a bucket like Nolvasan (Chlorhexadine) to wash up the vulva and tail if necessary. If you don't have any OB sleeves, make sure you scrub your hands and arms up well before entering the birth canal. Any equipment (chains/ straps/ head snares) used needs to be spotless and disinfected. If you have never applied chains to calf feet before, have someone train you how to do it correctly with 1 loop above the fetlock and a half hitch below the fetlock. A single loop can cause a leg fracture that is difficult to repair even with a cast. Lubrication is also important, but I would suggest not using J-lube (polyethylene polymer) as it can be fatal to the cow if a C-section is required. Find a lube that is specified for obstetrical use (either a carboxy methylcellulose or a chlorhexadine lube).

There are 2 main calf presentations that are considered normal. The first occurs 95% of the time and is the forward presentation of the front feet with the head tucked between them a few inches back. The second occurs 5% of the time for normal presentations, and is the backwards presentation of the hind feet and tail. The backwards presentation tends to lead to more dystocias (difficult calvings), but is still considered normal. A good rule of thumb is that you need 3 appendages in the birth canal before you can go ahead and pull the calf: either 2 front feet and a head, or 2 rear feet and the tail (a forward positioned tail can actually pose a problem for delivery). If there are more than 3, then you either have a very flexible calf or there are likely twins fighting for the way out.

Upon examination the first thing that should be assessed is the cervix. A fully dilated cervix is difficult to detect, but if you can only get a few fingers through it is either too early or there is a problem with the cervix. The cervix could be twisted due to a uterine torsion, or there could be something structurally wrong with the cervix. Malpositioned calves come in many different combinations from one or more limbs back, a head back, upside down, tail first breech, or any combination you can think of. It helps to be able recognize if you're working with a front leg or rear leg. When in doubt- study the dam to match up what you're feeling with what you're seeing.

When it comes time to actually pull the calf (with either chain handles or a calf puller), pull straight back until the head and shoulders are out. At that point the calf puller is intended to be used for downward pressure between cranks. This allows you to use the natural curvature of the birth canal to help expel the calf. A hiplock occurs when the calf's hips get lodged in the dam's pelvis. To correct, the calf must be rotated approximately 90degrees in either direction if possible to allow the hips to pass through the pelvis.

When the calf is delivered: clear any mucus from the mouth or nose and rub its abdomen to help stimulate breath. A piece of straw or a sharp object applied to the nose of the calf also stimulates coughing and breathing. Once the calf is out and breathing well on its own, scrub up again and go back in to make sure there are no uterine tears and to make sure there is no twin waiting for you. It is important to know your limitations and when you need to call for help. A delay in correction can make the situation worse as the cow continues to strain on a mal-positioned calf, wedging it into the birth canal.

Passing of the placenta and the shrinking (involution) of the uterus (getting ready for the next pregnancy) comprise the third stage of labor. The placenta is usually expelled within a few hours of birth but if it has not passed within 12 hours it is considered retained. If signs of illness such as a suppressed appetite, fever, or decreased milk production accompany a retained placenta the cow should be treated. Antibiotics can be given and manual removal of the retained membranes can be accomplished 3 days after calving. Complete involution of the uterus usually takes between 14-21 days after calving but is prolonged by infection or excessive trauma. Occasionally a cow will continue straining shortly after calving and will actually push her whole uterus out. A uterine prolapse is an emergency and needs immediate attention to correct. It can sometimes be prevented by getting the cow up and licking her calf (even if it died) as soon as you can after a difficult calving. This action not only helps stop her from pushing but also releases oxytocin which helps the uterus contract down- starting the involution process.

There are a few things you can do for the newborn calf that will help it get off to a good start. Dipping or spraying the inside of the navel cord with either a 7% Iodine or a 50/50 mixture of chlorhexadine (Nolvasan) & rubbing alcohol will greatly reduce the risk of a navel infection. The calf needs 2 quarts of its mother's colostrum within 6 hours after calving. If it is not up sucking within 3-4 hours, intervention should be taken to make sure the calf is okay and that gets adequate colostrum. If it does not suck the cow or a bottle by 6 hours it should be tube fed with an esophageal feeder. If you've never used one, I recommend having someone train you how to use it, as colostrum tubed into the trachea is almost always fatal. Once a calf has had its first meal it is a good time to apply your registration tattoo, an ID tag, and/or take hair samples for genetic testing. Newborn calves are easy to catch and apply them to, but it's wise to be cautious of the dam, as even the tamest cow can turn into a bear when she has a new calf.

I wish you all an uneventful calving season, but if not I hope the information will prove helpful when you're facing a calving dilemma!