



Who talks about bovine reproduction in the fall? In my mind, anytime is a good time to talk about cattle reproduction. Traditionally, cows calve in the spring, breed-back in the summer, are checked for pregnancy in the fall, and nourish their growing calf over the winter. So, really- there is always some aspect of bovine reproduction to consider year round. I'll attempt to cover some basic bovine reproduction in this article.

Thankfully, Dexters are known for their high fertility, and hopefully we as an association will continue to select out those with poor fertility. Dexters boast very acceptable conception rates, along with extreme calving ease, and mothering ability. Believe it or not, this time of year is the best time to start preparing for next year's breeding season. As we prepare to feed our cows over the winter months, we need to consider the nutritional needs of the cow who not only need to go into winter in good condition, but also need to be consuming enough energy to ensure optimal fetal-calf growth. If cows do not have enough protein and energy from their winter feed, they will be prone for calving difficulties, weak born calves with poor immune systems, decreased milk production, and poorer conception rates come breeding season. Knowing the body condition score of your herd is helpful in determining if you'll need better quality hay or supplements for the winter months. Although Dexters are a dual-purpose breed, they align more closely with the beef scoring system rather than the dairy. The beef scoring system is on a scale of 1-9; with a Score of 1 being extremely thin, and 9 being excessively fat. The web is helpful with Body Condition Scoring charts; the following website gives a good overview: <http://www.pubs.ext.vt.edu/400/400-795/400-795.html>. Dexter cows need a pre-calving score somewhere between a 5 (moderate), 6(good), 7(very good) in order to maximize their reproductive potential, and produce a healthy, vigorous calf. The same goes for bulls in preparing for breeding season. Bulls with scores less than 5, will have poorer semen quality, and won't be able to service as many cows.

A normal healthy mature heifer or cow will "cycle" every 21 days, with a range of 17-24 days considered normal. A cycle is the 21 day period in which the cow's ovaries normally alternate which one will ovulate an ovum (egg) from a mature follicle. Short cycles (usually less than 10days) indicate that an ovarian cyst (overgrown follicle) may be present. This is abnormal and needs to be treated before she will conceive. A "heat" is the term used to describe the activity a cow displays when she is in estrus- which is the physiological stage of the reproductive cycle just prior to ovulation. A cow in heat will allow other cows and more importantly the bull to mount her for a mating. When you see cows mounting each other, it's the one that's standing for the mount that you should note in heat. If you see several cows coming in heat every 21 days, the problem is more likely with the bull- whom should be tested to determine the problem (see previous article on semen testing: Spring 2009). If the bull is good, it could be the cow's supplemental mineral program that should be addressed. Bulls tested satisfactory should be expected to service 25-30 cows or heifers with no difficulty. Abnormally long heat intervals could indicate an infectious disease such as Leptospirosis- which can cause early embryonic death. If this is the case, you should consult your veterinarian. Unlike humans, cows do not shed their uterine lining following an estrus, but will, however show a bloody mucus tag after a normal heat, which is due to the hormonal change in the uterine environment. In other words, the presence of a blood tag (usually noted on the tail or vulva) after a heat does not indicate that the cow did not get pregnant, it only means she went through a normal heat and could possibly be pregnant. Most cattle breeds report that their average gestation length is 283days, with bull calves typically having a longer gestation than heifers. Our herd has averaged right on 283days with a range of 273-292; reflecting 5 different Dexter bulls over the past 5 years. With the exception of one year, our bull calves had a 1-7day longer average gestation than our heifer calves. A good rule of thumb is to expect a calf

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10 days on either side of its 283d due date. If it's more than that, the actual breeding date may have been the following heat. Calves born over two weeks early are considered premature, however occasionally twins will come that early. In regards to twins, it's important to note that a heifer born twin to a bull has a 95% chance of being what is called a free martin. A free martin is a heifer that doesn't develop a normal reproductive tract due to the testosterone influence from her twin brother. She will never be able to get pregnant, however the bull calf will be unaffected and fertile.

For those that have their cows tested for pregnancy status, this is the best time of year to do it if you calve in the spring/early summer. Most veterinarians are most accurate in predicting pregnancy age prior to 5 months along. Plus, for those interested in having their fetuses sexed via ultrasound: 60-90 days is the best time to have that done. Pregnancy testing is often done at the same time calves are worked, vaccinated, or weaned. It is hopefully an exciting time of year for all the hard work that went into the past breeding season and pasture management. Next bulletin I plan to continue the reproduction discussion in regards to the calving season- what to expect and when to intervene. Best wishes for this year's preg checks!