Biography:
Dr. Colin Palmer is an Associate Professor of Theriogenology (Animal Reproduction) at the Western College of Veterinary Medicine. Originally from Nova Scotia, Dr. Palmer worked in mixed practices in Ontario and British Columbia and has owned/operated a practice in Saskatchewan. Dr. Palmer along with his wife Kim and children Lauren, Emily and Carter run a herd of purebred Red Angus cattle under the KC Cattle Co. name.

A Breeder's... Veterinary Perspective

Catching up late calvers

Late calvers are a fact of life, but it is especially frustrating when it is one of your better producers. If your calving season is longer than 2 to 3 months catching up a late calver can be a real problem; however, I might be able to provide a few suggestions to help these girls become valued members of your herd.

In order to maintain a 12-month calving interval most cows really have only about 42 days, or 2 cycles to get pregnant. I will explain: The average gestation length is 283 days; 365 - 283 leaves 82 open days. But, at least 40 of these days are required to clean up the uterus and resume normal ovarian cyclicity leaving 82 - 40 = 42 days, or two 21-day cycles, for pregnancy to be established. Cows that have been compromised through poor nutrition or disease will require even more days before they begin to cycle; this could be as many as 50 or 60 at the very least. Twins, retained placenta, inadequate mineral supplementation, are commonly cited explanations for delayed cyclicity yet the most common cause may be inadequate energy in the diet. Most of us overwinter cattle with dried hay and in many cases, despite how nicely it was put up, the energy provided by feeding hay alone is not enough to support lactation and the resumption of cyclicity; especially, if you are calving during the winter or early spring. Inadequate energy in the ration is even worse for first-calf heifers because they must also meet their demands for growth. Protein content of the diet certainly must be considered as well. Most of us produce feed of different qualities and feed testing is a very useful way to allow you to manage your feed supplies to your best advantage.

Cows and heifers should be cycling before the onset of the breeding season.

The first post-calving heat is often "silent" – ovulation occurs, but the animal does not display estrus. Not even a bull will detect this heat. The second heat may not be that great either. In fact, cows that have had 2, 3 or more heats before the beginning of the breeding season are more likely to become pregnant early in the breeding season than those that do not.

Bull issues and abortion are other causes of delayed pregnancy.

What can we do to help these cows catch up? I once believed an old tale that it would take 5 years for a cow to be moved back to the first 3 weeks of the calving season. Of course it depends on how far she got behind! My personal experience has been that with good nutrition and reliable bull power a 6-week gain in a single year is relatively easy to achieve. Of course, one of the best nutritional sources in my arsenal is "Vitamin Green Grass"! Banked grass from last fall is not likely to fit the bill. If your breeding season is to begin before grass is available then supplementing with grain and possibly a protein supplement along with minerals and vitamins will be necessary.

CIDRs may be used to shorten the number of days to conception.

Another way to catch up late calvers is to employ estrus synchronization. Estrogens, prostaglandins and other injections are not the ticket; the single best thing you can do is to use a CIDR® (Controlled Internal Drug Release) intravaginal progesterone-releasing device. The sustained progesterone concentrations achieved through the use of the CIDR have been shown to mimic the kind of progesterone profiles typical of a cycling cow and will initiate normal estrous cycles in non-cycling cows.

Most estrus synchronization protocols involve the placement of a CIDR for 7 to 8 days. Longer may result in poor quality ovulations and lowered pregnancy rates; therefore, 7 days should be sufficient when using a CIDR to advance cyclicity. When the CIDR is removed it is a good idea to inject prostaglandin F2alpha (or an analogue) i.e. Lutalyse®, Estrumate®, Estroplan® intramuscularly to ensure that estrus will occur. Also, if the uterus has even a mild infection the prostaglandin will help to clean it up. But remember, as I mentioned already, prostaglandin F2alpha alone will not induce estrus in non-cycling animals, only exposure to progesterone.

Wait until at least 6 weeks post-calving before inserting a CIDR.

Uterine repair requires 6 weeks to be completed. Prior to that, there may be low-grade bacterial infections that can flourish under the influence of progesterone from the CIDR. Furthermore, research has shown that the use of a CIDR to decrease the number of days to conception in cows that calved less than 50 days before offered no benefit over doing nothing at all. You must also consider your bull power if you are using natural service. I would conservatively suggest no more than 5 to 6 animals be treated at a time for breeding with a single mature bull.