In last month’s article, we discussed the importance of having a controlled breeding season and how that can give a cattle producer the ability to efficiently and effectively use other management and marketing practices. In next month’s article, we will look at an example scenario for moving from year-round calving to a defined calving period. But, before getting that far, it is important to decide the time of year you would like your calves to arrive.

Most small herds in Tennessee that already have a defined calving season choose to breed for calves that are born in the spring. Spring calving can be thought of as the “default” season because, even in year-round calving herds, several of the calves will be naturally born in the spring. That might be one of the largest factors in deciding on which calving season you want to adopt.

More cows tend to calve naturally in the spring is because they adapt to match their nutrient needs to environmental changes. Cows’ nutritional demands are usually highest the first few months after they calve - when they are in peak lactation. So, if that happens when more (and higher quality) grass is available in the spring, those cows will stay in better condition. If the cows stay in good condition before and during lactation they will start cycling again sooner after calving and breed back quicker, keeping them within that spring breeding and calving season. Cows calving in the fall have high nutritional demands when for forage is less abundant. They usually require more supplemental feed to maintain their condition. The cost of feeding cows is the largest single annual expense for cow/calf producers. If that cost is increased because cows are carrying calves through the winter and require more supplemental feed, then the calf crop has to generate more revenue to offset that added cost.

For producers who traditionally market calves immediately after weaning, spring-born calves are marketed in fall and fall-born calves are marketed in spring. Seasonal highs for feeder calf prices usually hit in the spring as feeder calf supplies tighten and demand for calves increases to utilize spring and summer forages. Producers retaining ownership of calves post-weaning must look at seasonal costs and marketing opportunities further down the production chain. Seedstock producers should consider targeting the calving season so that cattle reach a marketable age during peak demand periods for replacements.

The effects of heat stress on fertility are more dramatic than cool-season effects. Heat stress is the result of a combination of both temperature and humidity (Heat Index). The hot and humid summer months in our state can depress fertility in cows, heifers and bulls. The negative effects of heat stress on cows include hormone imbalances, lower conception rates, lower calving rates and reduced blood flow to the uterus. Conception rate averages are greatly depressed in July, while early spring and fall conception rates are three to five times higher.

Calf performance is also influenced by season. Calves born in the fall generally come earlier than spring calves. Because of this, calf birth weights are typically higher in spring than fall. A possible explanation for this is that as fall-calving cows are gestating through the hot summer
months, blood is shunted away from the fetus to the extremities to dissipate heat. This reduction in blood flow to the fetus may decrease calf birth weights. Weaning weights in the Southeastern U.S. tend to be lower in spring-born calves than fall-born calves. Calves born during summer months are significantly lighter at weaning and have more health issues than calves born during the rest of the year.

If there are enough cows in a single herd to justify it, another good option is to use two defined calving seasons. This provides the opportunity to roll non-pregnant breeding females to the opposite calving season without having to miss an entire production cycle. It also allows a reduction in the number of bulls needed to settle the herd. Herd sires can be used in both seasons, but nutritional programs must be designed to maintain good bull condition going into each breeding season. If more than one calving season is used, there is an opportunity to compare the effects of changes in markets and weather on production and profitability at a single location.

Again, next month’s article will address how to transition from a year-round calving season to a 90-day breeding/calving season. So, in the meantime, consider working with your local UT Extension Agent on determining which season(s) might fit your herd the best.