Fall Calving Season Kickoff

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One of the highlights of fall is the cooler weather and the start of football season. Friday night lights draw in crowds from around town, and Saturdays are dedicated to ESPN College Gameday and tailgates with family and friends. However, for many cattlemen around the state, there is another kind of kickoff we routinely anticipate this time of year: the start of fall calving season. Just like in football, the following are some general guidelines to start the season out right:

1) Understand the nutritional "rules of the game"

Balancing the changing nutrient requirements as animals shift from a dry, pregnant state to lactating is critical in terms of cow milk production and reproductive efficiency. During the last 60 days before calving, the daily nutrient requirements of a brood cow increase from 48 to 54% total-digestible nutrients (TDN) and from 7 to 9% crude protein (CP). Normally, warm-season grass pastures will maintain adequate production and nutritive value until just prior to calving to support this change in nutritional requirements. However, should drought conditions occur, additional supplementation may be required.

As your cows move into peak lactation (60 to 80 days after calving), they need a diet containing 60% TDN and 12% CP. With fall-calving systems, the increasing nutrient requirements of the herd coincides with a time when 1) forage quantity and quality of warm-season perennial grasses is decreasing and 2) high-quality cool-season forages are not yet available for grazing. Therefore, supplementation is often needed. If you need to use stored forages, test them and use the highest quality reserves for lactating animals.

2) Know the score

Visually assess the body condition of the fall-calving herd 60 to 90 days prior to calving and at calving to better understand the nutritional and reproductive status of the animal. Mature cows should maintain a body condition score (BCS) of 5, whereas first-calf heifers should be in BCS 6 at calving. Group cows based on body condition score so that the nutritional program can be more closely adjusted to bring animals up to the appropriate score. For more information on how to body condition score animals, the University of Nebraska has an excellent publication and visual guide to evaluating BCS at www.beef.unl.edu. It is easier to put condition on cows before calving when nutrient demands are not as high, and when forage quality is still adequate. In order for a 1,100 pound mature cow to move up from a BCS 4 to 5 in 60 days, it would require a diet that is 10% higher in TDN than her daily nutritional requirement. For example, this animal would need to be fed about 3 pounds of dried distiller's grains per day in addition to the forage base being consumed to achieve this score in 60 days.

Perhaps a more critical implication of body condition status is its effect on reproductive performance in the herd. The <u>single greatest factor</u> affecting rebreeding is <u>body condition at calving</u>. The average length of the postpartum interval for a cow in BCS 5 or 6 is 55 days, whereas this interval increases to 80 days for an animal in

condition score 3 or 4. In order to maintain a 365-day calving interval, cows must rebreed in 83 days (282 day gestation period + 83 day postpartum interval = 365 days). Clearly animals with less condition can "push the envelope" in terms of meeting a timely rebreeding window, and research suggests conception rates are significantly less for animals below a BCS of 5.

3) Watch new recruits closely

Every process in nature comes with challenges, and this rule certainly applies to calving season. In particular, first-calf heifers may have difficulty during the calving season. Separate bred heifers and cows, and designate a pasture area for these animals that is easily accessible so that they can be watched closely beginning two to three weeks before the expected calving date. Ideally, this pasture should be located close to animal handling facilities. Develop a plan for moving animals to the working facility for restraint should difficulty in calving arise. A heifer that has not made significant progress one hour after the appearance of the water bag or feet may require assistance. Decide if you can provide immediate assistance or have emergency contact information for your veterinarian closely available.

4) Manage and maintain the needed equipment

A key management strategy for fall-calving systems is to make sure all of the needed tools are in place prior to the start of calving season. Make sure that identification tags and obstetric equipment are readily available. Working pens and holding facilities should be ready for use. Keeping good calving records is essential to know what you are starting with and will help you measure progress in the herd. At minimum, records should include birth weights and information for age and source verification.

5) Review your game plan

It is important to have realistic expectations when entering the calving season. Understanding the pros and cons of the given system is crucial in doing so. In general, some advantages of a fall-calving season include favorable weather conditions during this time of the year. Nighttime temperatures begin to decrease, leading to warm days and cooler nights that are favorable conditions for sustaining the health of newly-born calves. When adequate quantities of cool-season forage become available, calves are usually developed enough to begin utilizing these forages and gain weight, which can lead to greater weaning weights compared to a spring-calving season[†]. Fall-born calves can be weaned and sold in the late spring of the following year, which historically coincides with a time of strong market prices. The main disadvantage is that calving occurs during a time when forage quantity and quality is decreasing. At the same time, the nutrient requirements of the herd increase significantly. This means that the use of stored feeds will be the highest during the animal's peak nutritional demand period, and can result in increased feed and input costs.

*Spring-calving season considerations will be discussed in a future article *This article is the second in a series of five articles on Management Systems for Changing Seasons For more information on regional beef cattle management topics, visit <u>www.secattleadvisor.com</u>. Follow me on Twitter @ACESBeef or at <u>www.facebook.com/alabamabeefsystems</u> for beef cattle updates from the ACES Animal Science and Forage Team.