

A growing number of producers are asking whether the practice can be made applicable for purebred breeders while maintaining the effort to build performance records.

by Troy Smith

t's pretty hard to make a cow outfit work if you're just flying by the seat of your pants. Like any business endeavor, a cow-calf operation requires a plan. But even when armed with a carefully charted plan, unexpected obstacles can force managers to look for a detour.

Loss of forage resources might be the most common reason why cow-calf producers find and follow an alternate route to their destination. And drought may be the most common culprit when grass and other grazed forages become scarce.

Pulling calves off the cows earlier is one way that drought-stricken producers have

sought to stretch their forage base. The calves are then placed on a concentrated diet, which saves more grass for their mothers. According to one rule of thumb, for every 2½ days that a calf is weaned, the cow gains one additional day of grazing.

For some producers, however, weaning calves earlier than the traditional seven to eight months of age is a routine practice — a tool for achieving greater productivity and profitability. Shifting weaning dates can affect herd performance and the producer's bottom line. Along with opportunities for decreased cow maintenance costs and increased reproductive performance,

► Above: Shifting weaning dates can affect herd performance and the producer's bottom line, providing opportunities for decreased cow maintenance costs and increased reproductive performance.

producers may find increased profit through alternative calf marketing options.

University of Nebraska research has shown how early weaning can influence cow costs by looking at the effects of weaning spring-born calves at an average age of 150, 210 or 270 days. All pairs were managed as a single group until weaning. After weaning, cows were managed in separate but similar pastures in order to record the amount of inputs required for each, including the costs of hay and supplement needed to achieve an average body condition score (BCS) of 5 by one month prior to delivering their next calves.

Total feed costs for cows whose calves were weaned at 150 days were more than \$12 per head less than for the 210-day group, and \$37 per head less than for the 270-day group. More than 70% of the cost difference was attributed to the greater amount of harvested forage needed to get cows from the laterweaned groups to the desired body condition.

Account for all costs

University of Nebraska researcher Rick Rasby says that early weaning can significantly reduce cow maintenance costs by reducing energy requirements normally associated with lactation. Cows then often gain body condition while grazing lowquality forages with less supplemental feed.

However, Rasby advises producers to be sure that feed costs are saved and not just shifted to another enterprise. For example, he found developmental costs were higher for replacement heifers that were weaned early. And early-weaned steers were in the feedlot for a longer period, making finishing costs higher.

"Our replacement heifers were developed in a drylot, and producers with more grazing resources certainly may be able to do it at a lower cost. But, from a systems approach, producers do need to account for costs in each enterprise," Rasby says. "Early weaning really can be a useful tool for managing limited forage resources or for managing young females. Pulling the calves and letting first-calf heifers — and even second-calvers — gain body condition can really improve reproductive rates."

University of Illinois Extension Beef Specialist Dan Faulkner says he agrees that cow weight gain, BCS and subsequent pregnancy rate are enhanced by early weaning. In addition, Faulkner has evaluated the influence of the weaning date on performance and carcass merit when calves were sent directly to the feedlot. Faulkner says early weaning improves feed efficiency and can dramatically improve carcass quality grade. He cites as much as a 30% increase in the number of calves grading USDA Choice or above and a slight increase in carcass

weights due to early weaning. Since all animals were harvested at 0.4 inch (in.) of backfat, neither increase could be attributed to calves being fatter.

Faulkner says weaning calves as young as 90 days of age need not have adverse effects. Compared to groups weaned at an average age of 152 days and 215 days, calves weaned at 90 days went on to exhibit higher average daily gains, greater efficiency and comparable yield and quality grades. And they were harvested at a younger age.

Considerations for seedstock

So commercial producers might want to consider early weaning as a tool to enhance performance and carcass quality of calves retained through the finishing phase or to manage young females in the breeding herd. It can help make the most of a tight feed situation, and some producers may discover early weaning as a way to run more cows on their existing land base. But what about the purebred seedstock producer?

Participation in breed association performance programs, such as the Angus Herd Improvement Records (AHIR) program, requires weaning weights to be taken when calf age falls within a designated range (160 to 280 days for AHIR). Weights are then adjusted to the industry standard of

205 days for the sake of comparison. Calves weaned at 150 days, for example, just don't fit the system. University of Nebraska Extension Beef Specialist Jim Gosey says he thinks it's probably time to change the system.

"Can we analyze the nursing ability of the dam with weights of calves younger than 160 days? I think we can find a way," Gosey says. "A cow's milk production peaks at 50 to 60 days after calving, so letting the calf nurse for another 100 days probably is enough time to get a measure of growth from milk.

"Should we do it? Considering the interest in early weaning, we probably should. There's nothing magic about our 205-day standard," he adds.

The practice of adjusting weaning weights to 205 days dates back some 40 years, to the early days of the beef performance testing movement. New Mexico researchers provided the model for using 205 days as a standard for weaning age, simply because that was the average age of calves involved in their study.

"It's a purely arbitrary number, and I don't know if it ever was indicative of milking ability. I think we're probably fooling ourselves about how much cows milk and how long it is important to the calf," adds Francis Fluharty, Ohio State University animal scientist. "We can't ignore the potential for using early weaning to get calves on feed sooner and take

full advantage of marbling genetics. I'm not saying everybody should wean early, but we need to be thinking about adapting (performance programs) so breeders could."

As former Director of Performance Programs for the American Angus Association, John Crouch says he recognizes the potential economic advantages of early weaning. He says a growing number of people are asking whether the practice can be made applicable for purebred breeders while maintaining the effort to build performance records.

Crouch says the Association is looking for answers and hopes to determine a method for incorporating early weaning with AHIR. The suggested broadening of the window of age at which weaning weights may be taken raises concern about whether the resulting rankings would be very useful.

"Another possibility might be to treat weights from early weaned calves separately from weaning weights adjusted to 205 days. That would be quite a challenge, too, like adding another trait to a system where 16 or 17 traits already exist," Crouch says. "We expect to have some answers within a year. And we may very well find that milk isn't as important as we've always thought."

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