Early Weaning

Why some producers choose to separate momma and baby at an early date.

by Troy Smith

The practice of early weaning has gained considerable attention in recent years. University researchers have looked at the potential advantages of weaning calves at a younger age — younger than the 7-8 months at which many cow-calf producers separate calves from their mommas. And some producers have broken from tradition for reasons of their own.

In many instances the decision has been drought driven. Such was the case with northeastern New Mexico’s Clavel family. Along with his father (Joe) and grandfather (C.J.), Blair Clavel manages registered and commercial Herefords on a ranch near Roy. According to Clavel, weaning their spring-born calves sooner was a way to better manage grazing resources.

“We had typically weaned toward the end of October. With adequate moisture, we can have good grass in the fall — good enough for calves to keep gaining and good enough to keep cows in condition,” says Clavel. “But it’s been dry here for over five years, so we’re pretty short on grass.”

To help cope with drought, weaning was moved to early September. Pulling the calves 45-50 days earlier has helped Clavels save on cow feed. Putting a halt to lactation allows the cows to maintain or gain body condition while grazing available forage. Supplementation of the cows then can usually be delayed until December or even later.

“An added benefit of weaning earlier is better calf health,” explains Clavel. “We’re located at 5,900 feet (of elevation), where fall usually brings wide swings in temperature. By late October we can see it range from 85 degrees in the daytime to 35 at night. That can be hard on a 550 to 600-lb. calf. There’s less fluctuation in September, less stress on the calves and less respiratory disease.”

Clavel admits that weaning earlier has cost a few pounds of

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weaning weight, but fewer calves get sick. Both treatment costs and death loss have been reduced.

About 25 miles from the Mississippi River, near Mazeppa, Minn., the Sanborn Hereford herd grazes pastures located among the area’s rolling hills and rugged bluffs. Here, mostly April-born calves are introduced to creep feed by late June or early July. They know what feed is and are eating it well by weaning time in August.

“The calves average about 110 days of age,” says Tim Sanborn. “And after a couple days of bellaring, they really take off on feed.”

According to Sanborn, the early weaned calves gain as much or more weight, postweaning, than they would have while nursing their mothers. In fact the fall marketing date for steer calves has been moved up too, by about 30 days. Pay weights of 540-545 lb. are comparable to those of a few years ago, when calves were weaned and sold later in the fall.

“Those early weaned calves are really efficient,” says Sanborn. “And by weaning earlier the cows get an extra 60 days or more to put on flesh before winter.”

Improved efficiency

More efficient use of pasture or range during late summer and fall is often cited as a chief benefit of early weaning. According to one cow-country rule-of-thumb, for every 2.5 days that a calf is weaned, its mother gains one additional day of grazing. This can cheapen cow maintenance and improve reproductive performance.

Research by the University of Nebraska has shown how early weaning can influence cow costs by comparing 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, and then cows were managed in separate but similar pastures to measure inputs for each group. Included were costs of hay and supplement needed to achieve an average cow body condition score (BCS) of 5 a month prior to delivering the next calf.

For cows whose calves were weaned at 150 days of age, total feed costs 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 later-weaned groups to the desired body condition.

University of Nebraska Extension Beef Specialist Rick Rasby says early weaning can significantly lower maintenance costs by reducing energy requirements associated with lactation. Often, cows can gain body condition while grazing low-quality forages, with less supplemental feed. However, producers need to be sure that feed costs are lessened and not shifted to another enterprise.

For example, early weaned steers were in the feedlot for a longer period, making finishing costs higher. Rasby also found that development costs were higher for replacement heifers that were weaned early and developed in a dry lot. However, producers who do have sufficient forage for grazing, or other low-cost feed resources, may be able to grow heifers quite economically.

Reproduction benefits

Rasby says there is ample evidence that early weaning can be used to manage cow reproductive performance. When a cow is thin in the fall, she is far more apt to be thin at calving time in the spring. Poor condition may result in delayed cycling and failure to rebreed on time, particularly with young females. So, weaning earlier and allowing first-calf heifers and second calves to gain body condition can boost subsequent pregnancy rates.

University of Illinois Animal Scientist Dan Faulkner agrees that early weaning can benefit reproduction, but in addition, he has evaluated its effects on calf performance and carcass merit. According to Faulkner, early weaned calves sent directly to feedlots have exhibited improved feed efficiency and improved carcass quality grades. Development of intramuscular fat, or marbling, is initiated sooner among calves fed a high-energy diet at an early age. Studies suggest that as much as a 30% increase in the number of calves grading Choice or above may be attributed to early weaning.

Faulkner says weaning calves as young as 90 days of age can be accomplished without adverse effects. Compared to groups weaned at an average age of 152 days and 215 days, 90-day-old calves went on to exhibit higher average daily gains, greater efficiency and comparable yield and quality grades. And they were harvested at a younger age.

Researchers at Ohio State University and Kansas State University also report a measurable improvement in carcass quality due to early weaning. The growing
body of evidence suggests that weaning at 100-150 days can be a viable strategy for enhancing carcass value, particularly for early maturing, British-type cattle. However, the cattle must be managed and marketed appropriately to avoid the harvest of cattle that are too fat, with undesirable carcass yield grades.

Plan ahead
Successful early weaning starts, well, early. Regardless of age, calves have to be prepared ahead of time.

“That probably means vaccination against blackleg (and other clostridial infections) and respiratory diseases prior to weaning, and repeating the respiratory vaccinations at weaning time,” says Kansas State University Extension Beef Specialist Twig Marston. “But producers should consult their veterinarians for advice on developing appropriate health programs.”

Just like older animals, early weaned calves are prone to walk the fence. Make it a good one, Marston advises, without holes or gaps through which smaller calves may escape.

“We need to try to keep calves comfortable and make the process as easy for them as possible. We need to keep down the dust. And since they’re going to walk, let’s place feeders and waterers where calves have to come into contact with them. And have them at a proper height, low enough to the ground to be easy for young calves to reach,” he adds.

Feed ingredients
Rasby says creep feeding calves for two to three weeks prior to weaning can aid the transition to a grain diet. If producers choose to creep their calves, he recommends using a pelleted product so calves can’t sort out mixed ration ingredients. Feeding pellets also minimizes milling dust. Providing the same creep feed postweaning works well when calves are weaned on grass. But even if calves are weaned in a dry lot, Rasby recommends continuing the same feed for up to 21 days, before introducing a prepared ration.

Both Marston and Rasby stress the importance of high-quality feed ingredients. When a highly palatable, nutrient-dense ration is provided, getting early weaned calves to eat is seldom a problem. Within a week after weaning, feed consumption should equal about 2.5% of calf body weight. Performance usually meets or exceeds that of calves still nursing their mothers. It’s not unusual for early weaned calves to gain .5-1 lb. per day more than nursing calves.

“Calves on the cow will gain close to 2 lb. a day. Weaned calves on a good ration should do at least that as well,” notes Rasby. “Young calves are efficient at converting feed to gain.”

The key, he adds, is to avoid letting calves get too fleshy, especially if the plan is to sell them later. Early weaning can work for sellers of feeder cattle. It has proven its worth as a drought management strategy. As a regular practice, however, it may be more appropriate for cow-calf producers who retain ownership of calves all the way to harvest. These producers may have the greatest opportunity to profit from the potential benefits of early weaning.

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