

Manage the Marbling Window to Let Profit In

Commentary by **LARRY CORAH**, vice president, *Certified Angus Beef LLC*

You hoped for better quality grades, and now you want answers. You ask the feedlot manager, “Why didn’t they grade?” He says, “Let’s find the answers together.”

The economic advantage of Choice, high-Choice and Prime over Select-grading calves can’t be denied. *Certified Angus Beef*® (CAB®) brand premiums often run \$4-\$5 per carcass hundredweight (cwt),

and Prime premiums of \$8-\$12 per cwt. are common. Yet the industry continues to produce cattle that grade 55% Choice and above, leaving 45% to go Select, Standard or “no-roll.”

These lower-quality cattle can affect prices for everybody. Speaking at the Kansas State University (K-State) Beef Stocker 2002 Profitability Conference this fall, Pratt Feeders manager Jerry Bohn said, “Lower-quality cattle unfortunately determine the price of all cattle in the industry today. That’s wrong — cattle need to be priced on the economic merit of the carcass.”

Increasing value

The industry is committed to increased value-based marketing and is searching for ways to increase overall beef quality. In either case, the focus is on marbling.

For years, it was widely believed that marbling deposition occurred in the last 50-80 days of the feeding period. But that is now being refuted. Scientific evidence shows marbling occurs in critical “windows,” considerably earlier in a calf’s life.

Scientists at several universities say one of those critical windows may be from about 4 to 8 months of age, with another at 11 to 12 months. Researchers are suggesting the nutritional and health management of calves during these periods is critical to ensure later marbling.

The genetic component is the foundation for marbling potential. With the increased use of expected progeny differences (EPDs) for marbling and intramuscular fat, today’s cattle have an unprecedented opportunity to carry the right genetics to ensure marbling potential.

However, we’re learning that the right genetics make up only part of the equation, and that cattle must be managed properly to allow the kind of CAB and Prime acceptance rates that are possible.

We used to think a CAB acceptance rate of 30% was pretty phenomenal, but now we know that with the right combination of genetics and management, CAB acceptance percentages in the 40s, 50s and 60s are very possible. Acceptance rates like these garner hefty premiums on today’s grids, bringing critically needed dollars back to the producer.

Critical windows

Let’s go back to finding the correct way to manage calves. Fig. 1 shows one of the critical windows where marbling deposition can be achieved or lost.

Numerous things happen in a calf’s life when it is 5 to 7 months of age. The dam’s milk production is often in decline, resulting in a lower plane of nutrition. The stress of weaning occurs, creating health problems and loss of performance. The calves are placed on strange diets, and nutritionally related metabolic disorders occur.

Here are six steps that will ensure and safeguard the quality-grading potential of calves.

Step 1 — Identify the correct wean-

ing age for your calves. Weaning at 5-6 months appears to be an optimum time to enhance marbling potential. Calves at this age are still carrying some of the passive immunity from birth, so health-related problems are often minimized. This strategy has the added advantage of allowing spring-calving cows to gain body condition during the fall and early winter months, enhancing later reproductive performance.

Recent research at Ohio State University shows that calves weaned at 202 days of age had CAB/Prime acceptance rates of 55%-60%, but the rate was considerably lower on the same genetic pool when they were weaned at a later age.

Step 2 — Proper health management is critical. The Texas A&M Ranch to Rail project showed that beef industry calves that get sick at weaning time have significantly lower

quality grades. Subsequent research has verified the importance of proper health management in and around weaning to avoid the detrimental carcass-related effects of sickness.

Anything that can be done in terms of a vaccination and management program that will reduce the incidence of sickness will be economically beneficial. Better health will improve carcass merit and enhance performance during the growing and feeding period.

Step 3 — Nutritional management at weaning plays a role. Once we determine the proper weaning age and health strategy, the next critical factor in managing these calves during a key window of marbling deposition is dietary energy level. Ideally, these calves need to be placed on a nutritional program that will allow gains of 2.5 pounds (lb.) or more per day following weaning.

The old philosophy of placing calves on old dry grass, cornstalks or other residue fields after weaning can be extremely detrimental to achieving desired carcass merit later on.

Step 4 — Utilize less aggressive implanting strategies. Research evidence is starting to show that using low-estrogen or non-trenbolone acetate (TBA) im-

plants during this critical window of a calf's life is very important to ensure marbling potential later. Some producers even wait until the calves are on full feed to implant them. Not to be underestimated, the implanting strategies during the finishing period are also critically important to quality grades.

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Step 5 — Develop a preconditioning program before the calves leave the ranch. How the calves are managed two to four weeks before weaning and in that 30- to 45-day window after weaning is critically important. The key to success is developing a sound preconditioning program that includes a vaccination schedule, nutritional management and overall health management.

Step 6 — Share information. Developing a productive working relationship between the cow-calf and feedlot

segments is absolutely essential to ensure the kind of results everyone wants later. When cow-calf producers share genetic information, prior vaccination schedules and other management strategies, feedlots have a big advantage in making sure the cattle are handled properly once they arrive.

More and more producers are building integrated systems in which Angus seedstock producers work with their cow-calf clientele to create marketing opportunities. A part of that strategy needs to include building bridges to the feedlots that buy those customers' calves to ensure that their economic potential is met.

Today, the greatest monetary reward for cattle feeders is still adding pounds, so, unfortunately, most feeders overlook the economic benefits of improved quality grade and yield grade in today's marketing system. By sharing information, feeders can work with the seedstock and cow-calf segments on the common goals of achieving excellence in both quality and quantity.

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B

Fig. 1: Window of Opportunity — Calf's Life

