Chapter 5

Quality Assurance of Market Cows and Bulls

The sale of market cows and bulls accounts for 25 percent of all U.S. beef consumption. Beef and dairy producers must realize the value these animals contribute to the industry. Whole muscle products are fabricated and sold to foodservice operators as entrees in family steak houses and “quick-to-fix” supermarket beef products such as fajitas. Fast-food roast beef sandwiches and “Philly steak” sandwiches are also examples of products that result from market cow beef.

National Market Cow and Bull Quality Audits show that producers lose market value on every beef and dairy cow they sell from product defects such as: bruises, injection-site lesions, hide damage, poor condition (lame cows, poor doers), and excess fat. In addition to these industry losses, individual producers lose much more when their own cull animals are condemned due to antibiotic residues and systemic diseases (i.e., bovine leukemia virus).

These economics are important at the individual farm level when considering the revenue cull animals provide for both the beef cow/calf and the dairy producer. According to the National Animal Health Monitoring Service (NAHMS), the income from the sale of cull animals provides 15 to 20 percent of gross herd revenue. This means the Best Management Practices found in this BQA Manual are just as important in culling and management for dairy and cow-calf producers as they are in marketing and management for steers and heifers. Today, the stakes are even higher because:

- Producers must demonstrate proper care for cull animals to be marketed.
- Producers must educate the public that cull animals are handled humanely.
- Public attention is focused on food safety and quality.
- More potential value is found today in defect-free subprimal cuts from market cows and bulls, which can be utilized as higher-value whole muscle cuts instead of ground beef.

Producers must think of their cows and bulls as part of the food supply and treat them accordingly. This is the necessary mindset that adds value to beef, builds consumer confidence, and safeguards the public image of the beef and dairy industries.

The profit gained from the sale of cull animals is dependent on the quality assurance practices used by producers. Beef and dairy producers must do a quality job of managing, transporting, and marketing their cows and bulls. The industry has seen a significant increase in trim losses due to arthritic joints (severe lameness) and injection-site blemishes (improper injection site and/or technique).
Quality assurance must be used in the production, management, and marketing of cows and bulls to maintain the highest profits possible for all segments of the beef industry. Quality control guidelines are easy for producers to use and adhere to. Most of the guidelines simply require common sense. Beef and dairy producers who implement these practices will find they pay dividends in other areas of productivity, herd health, and profitability—in addition to producing a more valuable market cow or bull for the beef industry.

**Herd Culling**

The Beef Improvement Federation defines culling as the process of eliminating less productive or less desirable cattle from a herd. Culling is used by beef and dairy producers to improve herd productivity and efficiency. Culling impacts revenue on a farm and contributes to the value of the total beef supply.

To improve culling management and income, cattle producers should use the following methods.

- Establish strategic culling methods to identify reasons to cull individuals based on production and economics.
- Understand and practice quality assurance.
- Establish sound management practices for those identified cull cows and bulls.

**Quality Control**

Some quality control points require changes in current management practices, for instance:

- Giving injections in the neck instead of the hip
- Reading and following meat and/or milk withdrawal times on product labels
- Locating brands high on the hip instead of on the rib cage to prevent damage to the more valuable areas of the hide

Bruises frequently have been cited by packers as a quality problem (See Chapter 4). An NCBA audit revealed there were about five times more bruises on cows than on bulls. Proper care and nutrition of cattle saves value in terms of saleable meat as well as reduced bruising. Cattle should be marketed in good body condition. When producers allow cattle to become emaciated, bruising occurs more easily and more frequently. Bruising can also be greatly reduced by using good dehorning practices.

The three largest quality losses in market cows and bulls are excess external fat, inadequate muscling, and whole cattle/carass condemnation. With an improvement in management techniques, these quality losses can be minimized or even eliminated. By incorporating best management practices, beef and dairy producers improve beef value, the industry’s public image, and their bottom line.
Strategies for Marketing Cull Cows

Prevent Damage to the Hide and from Bruising

**Bruising**
- Dehorn cattle at an early age.
- Correct deficiencies in facilities and transportation equipment.
- Use proper cattle handling techniques.

**Hide Damage**
- Use external parasite (lice, grubs, etc.) control practices.
- Use proper branding methods or permanent identification alternatives.

Market at Adequate Body Condition

Evaluate body condition because better condition means better price. Producers can improve the end product by:
- Marketing before cattle get too lean, too fat, and too thinly muscled and before they become emaciated.
- Feeding cull animals for a brief period prior to marketing to improve poor body condition.
- Preventing severe lameness by promoting foot health, monitoring cattle for early signs of lameness, and addressing conditions promptly before they progress to severe lameness
- Providing dry-off time before marketing lactating cows

Prevent Condemnation

Prevent drug residues and injection-site lesions by ensuring proper administration and observance of meat withdrawal times for all animal health products.
- Don’t: Market treated animals before the drug withdrawal time for meat has expired (In many cases this is a longer period of time than required for milk withholding.)
- Don’t: Market significantly lame cattle
- Don’t: Market animals that are emaciated
- Do: Euthanize disabled cattle and those with advanced or terminal conditions
- Do: Market animals with physical disorders in a timely way to avoid condemnations
- Do: Improve beef safety by implementing practices that reduce bacterial condemnations.

**BLV (bovine leukemia virus):** This blood-borne virus is a leading cause of carcass condemnation in market cattle facilities, especially in culled dairy cows.

The Bottom Line for Quality Assurance of Market Cows and Bulls
- Manage cattle to minimize defects and quality deficiencies.
- Monitor the health and condition of market cows and bulls to improve herd profitability and produce a better end beef product to get a better price.
- Market in a timely manner and more expeditiously in terms of timing and season to lessen occurrences of disabled cattle, cancer eye, lameness, and emaciation.