

pinpoint ways to improve their beef products.

## Cull cows to cash cows

A 2007 audit of market cows and bulls by the beef industry shows us where we are missing the mark when we "market" our cull cows.

by Ronald F. Eustice, Dan Hale, and John Maas

HE belief that dairymen get little value out of a cull animal is outdated. There is no reason that a dairyman should accept less for their market animals than what they actually are worth. It's becoming increasingly evident that extra value can be obtained for very little --- sometimes no — additional effort.

Approximately every five years, the beef industry conducts a nationwide audit to evaluate the physical condition of cows and bulls not raised solely for beef. The beef checkoff-funded effort is used to develop tactics for improving the quality and minimizing economic losses from beef produced from these animals.

In 1994, the first audit identified where the beef industry fell short. In general, it showed that producers waited too long to market cattle. The audit concluded that problems could have been reduced if producers managed and monitored their cattle more closely and marketed them in a more timely fashion.

In 1999, a second audit determined that the industry had made significant strides in reducing condemnations; the frequency of disabled cattle; bruising; damage caused by branding; injectionsite lesions and improving overall condition of cattle, but concluded much more work needed to be done. The 1999 audit showed the need to eliminate antibiotic residues and improve handling in order to minimize bruising, increase total meat yield, and lower condemnation rate.

The 2007 National Market Cow and Bull Beef Quality Audit was conducted by researchers from seven universities in order to compare results with the 1994 and 1999 audits and addresses ongoing issues. The latest audit showed a signifi-

cant reduction in injection-site blemishes, fewer bruises, less hide damage, and an overall improvement in animal welfare and handling practices compared to 1999. However, condemnation rate from down cattle, incidence of antibiotic residues, bruising, and lameness continue to be challenges that need further attention.

The 2007 audit was conducted in four phases: Phase I: Researchers visited packing plants to identify quality defects in cows and bulls in receiving areas and holding pens, and in their carcasses on harvest floors and in c hilling coolers. They also audited packing plants with regard to fabrication problems and traceability.

The audit took place in 23 packing plants in 11 states. Collectively, these plants harvest more than 15,000 head per day. The audit surveyed approximately 5,500 live animals, 5,000 carcasses during harvest, and 3,000 carcasses in the coolers.

Phase II: One packer and one Food Safety In-

spection Service (FSIS) employee were interviewed at each plant to determine improvements and declines in the quality of cattle since the 1999 audit.

Phase III: Interviews with eight end users, looking specifically at subprimal defects, top sirloin center cuts, caps, and bottom round flats. They also looked for injection-site lesions and other defects that would cause reduced carcass value.

Phase IV: Researchers, producers, retailers, restaurateurs, packers, processors, and government representatives met for a two-day workshop to discuss strategies and tactics to ensure continued quality and animal-handling improvements.

## Lessons from Phase I . . .

Auditors evaluated over 5,000 live animals and 10 percent of arriving trucks during this phase and found:

• Substantial improvements in beef quality and cattle welfare. There were reductions in the incidence of downer cattle, but slightly over 1 percent of dairy cattle arrive in a moribund condi-

QUALITY AUDITS by the beef industry help dairy producers

tion approaching death. Packing plant and FSIS representatives acknowledged that the downer

rule instituted by USDA's Food Safety and Inspection Service has led to several improvements in beef quality.

• All truck and trailerloads met American Meat Institute (AMI) guidelines for spacing.

• Use of electric prods has diminished but continues to be a cattle-handling problem that needs improvement.

• Cattle slipping, while being unloaded, is low but still exceeds AMI guidelines and is a problem that needs to be addressed.

• Cattle need to be separated by gender to avoid injuries.

• Dairy cattle traveled shorter distances (average of three hours and 125 miles) than beef cattle.

## Future direction . . .

Meat from market cows is no longer just used for ground beef. Research shows that about 44 percent of the muscle from cull dairy animals is used as whole muscle cuts. As a result, protecting the integrity of those whole muscles is becoming increasingly important. There is a very good possibility that the beef from your market cow will be consumed at a steak house and not as a fastfood hamburger.

Many dairymen also have found that earlier culling to ensure that a cow is able to get to market is good practice. Since many of these cows make long trips to their final destination, animals need to be in good condition when they leave the farm, as well as when they reach the plant. Condition will become even more important, since there will soon be a total ban on downer cows for human beef consumption. Not waiting until the last minute can be the difference between an animal that's an asset and an animal that's a liability for the dairy producer, for the plant, and for the entire beef industry.

## What you can do to help yourself and your industry:

1. Be proactive to ensure the safety and integrity of your product. Consumer confidence is one of the most important issues facing the beef industry. Market cows and bulls must be free of chemical and physical hazards when they are shipped for harvest.

2. Monitor herd health, and market cull cattle in a timely manner. Producers should closely monitor their herds for serious conditions as early detection and diagnosis can help prevent market losses. Producers need to work with their veterinarian to identify cows that may need additional care or feeding before being sold for slaughter.

3. Prevent quality defects. Producers should implement a quality assurance program and use

'best" management and handling practices. State beef councils, university extension specialists, cattle organizations, and pharmaceutical companies sponsor Beef Quality Assurance training programs.

4. Optimize the value of your market cows and bulls. Beef from market cows and bulls is used in a wide variety of product forms — not just as ground beef. Dairymen can, for example, add value to their market cows and bulls by feeding cows for a short period prior to mar keting to increase weight and improve body condition and carcass characteristics.

To view the complete on-line version of the 2007 audit report, visit www.hoards.com and click on "Dairyman Extras."

Eustice is executive director, Minnesota Beef Council. Hale is a professor and extension meat specialist at Texas A&M. Maas is an ex-tension veterinarian at the University of California, Davis.