Use of Better Carcass Data Will Improve Beef

Carcass data is one key to making upward change within a cow herd.

by ***Miranda Reiman***

As the beef industry moves closer to grid marketing, it's economically important to focus on the end product, said Larry Corah, vice president of Certified Angus Beef LLC (CAB). The Choice-Select spread averaged more than $13 per hundredweight (cwt.) last year, he said. That should make carcass data collection and use a top priority for cattlemen this year.

Glen Dolezal of Cargill Meat Solutions spoke at a seminar that CAB co-sponsored last fall, and said the company sees value in sharing information with producers. There are ways to make it more relevant, however.

"We understand fully that it's important to make progress," Dolezal said. "We strongly prefer that if you ask for data, the cattle be individually identified — then the data can be meaningful."

The director of new technology applications also wants the carcass data Cargill shares with producers to be as accurate as possible. The packer has been researching and testing camera-vision grading equipment for more than five decades, and plans to fully move to that standard this year.

"If you make a management or genetic change, it's a heck of a lot more likely to show up with this technology as being meaningful and directional," Dolezal said. "You can respond with more confidence when you get data back with this device."

RMS

The Research Management Systems (RMS) camera system, as adapted by Cargill, had been operational in six of the company's major plants since spring 2000.

The system records such preharvest information as processing lot number, feedyard source and buyer. It then tracks every carcass by trolley number, documenting the harvest time, all the components of the yield grade equation, lean color score, and marbling texture and abundance.

"We also have a series of error codes," Dolezal said, noting there is still a human factor to the technology. If the image is blurry or the camera was held too far from the carcass it is remeasured.

Carcass weight data and eligibility for Angus programs are also attached to the trolley number.

"The goal here is to link all of this in a system so that data can be utilized to make better decisions," Dolezal said. "We think it's the way of the future."

Camera grading nearly eliminates the human subjective nature of quality and yield grade calls, although graders are still needed to assess some factors, such as maturity and internal hemorrhaging.

"I have a lot of respect for what the grading service has done for quite some time, but at these paces today, and with that much detail and the quality of technology available, we feel strongly it's time to change," he said. U.S. Department of Agriculture (USDA) graders typically have about seven to eight seconds to determine nearly a dozen factors and then accurately make a marbling and cutability call. "They need vision cameras to help them do a better job."

During 2006, the USDA Standardization Branch did extensive testing on both the RMS camera and the German-manufactured E+V system, Dolezal said. Cargill has more recently adapted the E+V system to its needs at several plants, he added.

"On Oct. 23, USDA announced that both vision camera systems successfully called marbling with the accuracy and precision they were looking for," he reported. "That's a big step forward."

Cameras in place in packing plants across the country currently double-check the accuracy of graders and are often used to rail carcasses off for regrades.

"We track the accuracy, readability and sameness on 97% of all carcasses and the 50 graders that work in our facilities throughout the calendar year," Dolezal said, noting the information helps them manage their plants, too.

"The camera predicts 'X' number of pounds of products, closely-trimmed, that should come from this carcass," he explained. "We know the weights of the boxes going out the other end. You can then measure the yields of product."

Gradual changes

The camera won't be a magic solution to the lack of quality or the abundance of overfat cattle in today's marketplace, Dolezal said.

"You're not going to see big, landslide changes," he said. "And you shouldn't, because of holding regrades and other things that have hopefully increased consistency."

Dolezal predicted the changeover to vision-based cameras will occur gradually, region by region.

"With this technology, do we feel the playing field will be level between and across regions?" he asked. "That's our hope. It should read the same, and that's what we want."

The cameras have been calibrated with the USDA Grading Service. The last step in implementation is to develop standard operating procedures (SOPs) for the equipment. Dolezal said if a camera fails for any reason, the backup will likely be a visually-applied call by the USDA grader.

"It's high time now to implement this based on science instead of an art," he concluded. "We feel we need a laser, not a shotgun, to let USDA make better decisions that are more repeatable to improve value determination of carcasses in the industry."

Consumers are demanding more top-quality beef, and Dolezal said meeting this challenge is a team effort.

"We think that with technology, and with efforts going on preharvest that many cattlemen contribute to, we will continue to increase the demand for beef."

For more information on this topic, or others related to quality beef production, see the proceedings of the Feeding Quality Forums at *www.cabpartners.com/events/past_events/index.php.*