

Better Measures Lead to Better Beef

Marbling trends show what's possible, red meat yield is next.

by Miranda Reiman, director of digital content and strategy

A few decades ago, some thought beef quality was as good as it was going to get. At processing plants and universities across the country, meat scientists looked into “enhancement methods” such as pumped beef product and mechanical tenderization, evaluating options to improve consumer acceptance.

“Back in the '80s, everybody was working on restructured beef and aspects like that to upgrade low quality, and then it just didn't come to fruition because people still wanted a great steak and a great taste,” says Glen Dolezal, assistant vice president, new technology applications for Cargill Protein.

After getting a master's and

doctorate in meat science, Dolezal spent 16 years on faculty at Oklahoma State University and was involved in the very first National Beef Quality Audit (NBQA) in 1991. He had a front row seat.

“As a meat scientist coming in, I thought I could make a silk purse out of a sow's ear, and readily I found out you've got to get in front of it ... and have some best management practices and good genetics,” he says.

Dolezal began in research and development for Cargill, including an instrumental role in developing their certified tender claim.

John Stika, president of Certified Angus Beef (CAB), joined Dolezal on *The Angus Conversation* earlier this

year to talk about technologies that never came to fruition, others that changed the industry and what still lies ahead.

“I think the big revolution that's taken place here through relationships across the supply and merchandising chain has been, ‘We have a great product. Here's what the consumer wants. Now, let's inherently breed and manage the quality into the cattle, meet their genetic propensity to please the consumer,’” Stika says.

Producers needed a target and good data to base decisions on, he says.

“When economic signals aren't clear, you go a lot of different



Don't Miss the Conversation

Glen Dolezal and John Stika joined *The Angus Conversation* podcast to discuss what technologies changed the industry, those that never came to fruition and which ones are still to come. To hear the whole discussion, find *The Angus Conversation* wherever you listen to podcasts, or follow the QR code directly to the episode, “The Packer or the Producer — Who Has the Power to Improve Beef Quality?”

SCAN FOR MORE and to listen to this *The Angus Conversation* episode, or visit www.angusjournal.net.



“The progress we’ve made with camera-based grading has been phenomenal. We think that it provides a lot more accurate and consistent data for feedback to seedstock producers who are trying to make genetic change or cow-calf and feedyards that are trying to manage [cattle].” — Glen Dolezal

directions. You scatter,” Stika says, noting the improvement from the demand lows in 1998. “You look at where we are today, the economic signals have become clearer and clearer every year that we’ve moved forward, and I think that’s why we’ve seen this centralized focus on quality ... and consumer demand because grid marketing and camera data collection have really allowed that information to be captured in volume and go back through the system to create a clear economic signal.”

Camera-called quality

Cargill has used camera grading technology for 14 years. An image is taken between the 12th and 13th rib, and in eight seconds or less it measures ribeye, backfat, marbling, lean color and calculates yield and if it qualifies for programs such as the *Certified Angus Beef*® brand.

“We drive our whole business based off of it,” Dolezal says.

The USDA calibrates each camera at the start of the shift, and still approves or rejects every single camera-assigned grade.

“There are obviously areas where producers and packers don’t always have the same end in mind, but this is one of those that never should be in question because the packer and the producer have the same objective here when it comes to grading,” Stika notes. The higher the quality and the more accurate the calls, the better for everyone. “This isn’t a spot where there’s really disagreement on that.”

In early 2023, Cargill had several

weeks in a row when every U.S. plant hit above 80% Choice.

“The progress we’ve made with camera-based grading has been phenomenal,” Dolezal says. “We think that it provides a lot more accurate and consistent data for feedback to seedstock producers who are trying to make genetic change or cow-calf and feedyards that are trying to manage [cattle].”

Redefining red meat

While cattlemen should still place focus on marbling, Stika says, the packing sector is considering ways to better quantify saleable red meat. The yield grade equation was developed in the 1960s, and cattle have changed. It was first based on carcasses in the 600 pounds-(lb.) range, while average carcass weights today are more than 900 lb. in all their plants, Dolezal says.

Marketing has also changed.

“We don’t sell subprimals with a half an inch or three-quarters of an inch of fat anymore. We are predominantly boneless,” Dolezal says. “We need to pick up more than just the round loin rib and chuck because the thin meats and the brisket, all the cuts of beef are important and valuable today.”

Lean trim for luncheon meats and pizza toppings isn’t accounted for, either.

“I think the industry needs to reinvest in a greater number of carcasses being tested to develop a modern red meat yield determination to improve our yield grade system today,” Dolezal says.

Gender, amount of bone and breed makeup all affect the amount of saleable product, and the yield grade method leaves the potential for incorrect estimations.

“The equation that we use today assumes a linear increase in ribeye area as carcass weight goes up, and what we’re beginning to see is that maybe that’s not the case, and that maybe it’s more quadratic in some cases,” Stika says.

Today, people like Doelzal and his team are collecting data, looking at possible improved measures, and finding ways to translate that information back to the breeders who make the decisions at the start.

“So, we’re kind of at that point in the industry where data’s being collected, questions are being asked, and I think we’ll see the industry make some strides in this area, better understanding red meat yield compared to where we’ve been in the past,” Stika says.

In the meantime, he suggests keeping the upward trajectory on marbling going while also including maternal function and efficiency in the breeding plan.

“Angus producers are doing a lot of what we need,” Stika says. “I do come back to reiterating that we’ve not arrived on marbling. We still have got to continue to put pressure on selection for marbling.”

It’s a plan that’s worked well for the past several decades, he notes.

Anybody who thought beef was as good as it was going to get back then? They know better now. [A](#)