

A Push for Prime

Carcass ultrasound data aids Americans' access to more high-quality beef.

by Lindsey Sawin, former Angus Beef Bulletin intern

The demand for Prime beef at retail has increased over the years, driving cattle producers to make breeding decisions with carcass quality in mind.

One opportunity for breeders to see how their cattle measure up is by using carcass ultrasound data.

Measuring body composition through ultrasound found its footing in the early 1990s, and has been a vital part of helping seedstock producers assemble herds with high carcass expected progeny differences (EPDs) ever since, says Tommy Perkins, associate professor of animal science and Dean Hawkins Chair for Cow-Calf Management at West Texas A&M University.

Consumer demand

Becky Hays, a certified carcass ultrasound technician and owner of UltraInsights Processing Lab Inc., remembers when the chase was for Choice beef, but many of those producers who have collected ultrasound data for years are now pushing for Prime.

Although not all the credit can go to a single technology, collecting ultrasound data and the improvements of beef cattle quality



The use of ultrasound not only allows for greater Prime production, but on the flip side, it also allows producers to improve their genetics, Hays says.

“If they find an area that they would like to improve on then, ultrasound is one way to do

grading have gone hand-in-hand, Perkins explains.

The American Angus Association started collecting marbling data in the mid-1990s and hasn't looked back since, he says.

“The quality grade has improved so much in the beef industry, and I attribute it to multiple years of using ultrasound technology for selecting bulls that have higher marbling and bigger ribeyes,” he says.

The effectiveness of the technology, breeders who have bought into it, and bull buyers selecting on EPDs that reflect the data collected via carcass ultrasound have all attributed to the rise in the quality of beef consumers have access to, Perkins says. Nearly 30 years ago Prime made up just 1-2% of the industry average. In 2022, that number was 8.9%.

that, through the use of collecting phenotype data. Then take the data, study the data and treat it as you would any other production measurement,” she adds.

Carcass ultrasound provides Angus breeders the opportunity to manage their cattle better and provide their bull buyers the highest quality sire, says Elin Kittelmann, certified ultrasound technician and cow-calf producer.

“We can't manage what we don't measure,” she says. “Ultrasound provides a great chance for cattle producers to fine-tune their program.”

Phenotype to support genotype

Carcass EPD data is an important part of proving an animal's value. The best and most cost-effective way

a producer can do that is by hiring a certified ultrasound technician to scan their cattle, Perkins says.

Oftentimes producers rely on genomics to define their cattle. However, the importance of having phenotypic figures to prove the animal's genotype is more important than ever, he says.

Cattlemen who collect carcass ultrasound data help improve the precision of EPDs.

"The more data behind the EPDs, the more accurate they are, so then you can have more confidence in the EPDs when you put more data behind them," Hays says.

Kittlmann encourages breeders to collect ultrasound data for the long run.

"We will always need to collect phenotypic data to validate genetics. The environment will always have a major impact on phenotype or gene expression," she says.

The process

Starting the process of collecting ultrasound data on bulls or heifers can seem like a daunting task, but the Ultrasound Guidelines Council (UGC) puts together a reputable group of qualified technicians, Perkins explains.

Those interested in becoming a technician go through a rigorous



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certification process to ensure they are providing customers with accurate information. Each technician scans 40 cattle at the time of certification and takes a written exam.

Once the animal has been harvested and data has been collected, the technician will find out if they have passed or failed, ensuring only the best are collecting the information sent to breed associations.

The list of certified technicians can be found on the UGC website, making it easy to find the right professional for your herd.

The technician will come to your ranch to scan and will then send the images collected to a lab for interpretation. The lab will then send it on to the breed association.

The turnaround time for receiving carcass ultrasound data is often quick, Hays says.

"If the technician scanned yesterday, they probably uploaded the images to us last night and we started working on them this morning, and we would likely have the data to the association, same day, up to two days," she says.

Angus cattlemen were some of the first to implement body composition ultrasound into their operations. This willingness to improve their herds with

phenotype has helped provide the industry with high-quality bulls to choose from, and plenty of the best beef to market. [A](#)

For a complete list of Ultrasound Technicians, turn to page 198 in this month's *Angus Journal*.