Range Beef Cow Symposium XX

Dec. 11-13, 2007 • Larimer County Fairgrounds and Events Complex, Fort Collins, Colo.

Ultrasound's Evolution

Implementation of ultrasound is increasing across the beef industry for many reasons.

by ***Kindra Gordon***

FORT COLLINS, Colo. (Dec. 13, 2007)— University of Wyoming Extension beef specialist Steve Paisley shared some of the opportunities offered by ultrasound technology to the beef industry during his presentation Wednesday at the Range Beef Cow Symposium XX in Fort Collins, Colo.

"Ultrasound offers us a way to evaluate the eating quality of the beef we produce by looking at carcass traits," he shared.

Giving a brief history of ultrasound, Paisley explained that research has shown that with this technology producers can estimate cattle's actual measurements for backfat, ribeye area and marbling pretty accurately, and that the heritability for these carcass traits is fairly high.

"So, there is opportunity to make genetic improvement using ultrasound data," Paisley said.

He also noted that ultrasound data being used by breed associations is interpreted by an independent third party to ensure accurate, consistent data. Further ensuring accuracy, ultrasound technicians must be certified every two years.

That said, Paisley noted, "Ultrasound has been around for quite a while, but the industry has struggled with its implementation as a management tool." That is beginning to change, and more feeders and cattle producers are recognizing the value that ultrasound data can offer.

PHOTO BY TROY SMITH

►Steve Paisley

For example, many breed associations are now building large databases of ultrasound data and using that information within carcass expected progeny difference (EPD) calculations or for separate ultrasound EPDs. Paisley said the industry now has an ultrasound database with 10 times the information compared to actual measurements.

The development of chute-side software that allows for real-time interpretation of ultrasound measurements is also advancing the use of this technology for management decisions, Paisley said. For instance, at the feedlot, chute-side ultrasound data allows for immediate sorting of cattle into more uniform lots.

This is especially beneficial when marketing cattle on a grid, Paisley said. "The penalties for out cattle are higher than the premiums, so ultrasound can be an important tool to minimize those discounts."

At the ranch, chute-side ultrasound software is being used in some instances to gather information on calves at weaning. This can be beneficial if calves are marketed via retained ownership, or simply to gather carcass data for future herd improvement.

Because of the heritability of carcass traits, Paisley said he is seeing more ranchers collect ultrasound data on replacement females as well.

In closing, Paisley pointed out that across the industry cattle producers are still struggling with the ideal quality and yield grade distribution. More Choice and Prime cattle are needed, while Yield Grade (YG) 4s and 5s need to be eliminated.

Paisley reiterated that ultrasound can be a valuable tool to improve the carcass quality of the cattle we are trying to produce. But, he added, it is a technology that needs to be used realistically.

CONTINUED ON NEXT PAGE

Editor's Note: *API coverage of the Range Beef Cow Symposium XX is made available for distribution to all media via an agreement with the Range Beef Cow Symposium Committee and API. Headquartered in Saint Joseph, Mo., API publishes the* Angus Journal *and the* Angus Beef Bulletin, *as well as providing online coverage of events and topics pertinent to cattlemen.*

Ultrasound's Evolution CONTINUED

"Ultrasound is a technology that needs to be used in the right context to make management decisions," Paisley said. "When ultrasound data is collected chute-side, it is a point-in-time measurement; carcass traits are still impacted by management and environment."

Ultrasound may not be an investment for every operation. "As we look at new technology, No. 1, we want it to benefit our operation and our bottom line," Paisley noted.

The cooperative extension services and animal science departments of Colorado State University, South Dakota State University, the University of Wyoming and the University of Nebraska hosted Range Beef Cow Symposium XX. Additional coverage of the symposium is available at *www.rangebeefcow.com.*

AJ