Using Ultrasound as a Marketing Tool for Determining Value of Finished Cattle

K.F. Hoppe, J. Dhuyvetter, and C. McIntyre

Cow calf producers considering retained ownership often question the value of their calves. Actual value of a calf relates to feeding performance and carcass value. Traditionally, carcass value was only known after slaughter with the exception of a few individuals with a trained eye for estimating carcass value in the live calf.

Carcass value is influenced by USDA Quality Grade (amount of fat within the rib eye muscle) and USDA Yield Grade (amount of fat under the hide). Ultrasound technology allows the user to estimate quality and yield grades by viewing the internal muscling and fat of the live animal.

To demonstrate the value of ultrasound technology, a live animal demonstration was conducted. Seven market steers representing differences in breed type, carcass weight, fat cover, muscling and marbling were displayed with their estimated value under three pricing scenarios of average weight price, high-cutability grid for individual carcass price, and high-quality grid individual price based on ultrasound images.

Cattle were harvested and actual carcass information was used to compare ultrasound technology. Cost of ultrasound was estimated at $2-5 per head.

Estimating carcass traits by technique

Traits	Visual	Ultrasound	Actual
Quality Grade	Choice	Choice	Choice
Yield Grade	3.35	2.3	2.52
Backfat	0.6	0.43	0.45
Ribeye Area	14.1	14.3	14.6
Value After Sorting and Selling to Best Market	$ 876.00	$ 893.00	$ 898.00

Sorting cattle with ultrasound aids in discovering cattle value prior to marketing. This creates the opportunity to market cattle to the best price and return more value to the owner.

Affiliation of co-authors and non-CREC staff:
J. Dhuyvetter, Area Extension Livestock Specialist, Minot Research Extension Center,
C. McIntyre, USDA Agricultural Marketing Service.