

# Get What They Are Worth

New audit program ties market value to genetic evaluation of commercial cattle.

by **Troy Smith**, field editor

**W**hat if it were possible to predict the quality of feeder cattle in terms that are well-understood and well-appreciated by cattle feeders? Wellington, Colo., cattleman Lee Leachman thinks that could be a game-changer for calf buyers and sellers alike. During the 2013 Beef Improvement Federation (BIF) Research Symposium and Convention June 12-15 in Oklahoma City, Okla., Leachman said a new third-party audited program called Reputation Feeder Cattle (RFC) should help feeder cattle fetch prices more representative of their actual value. Calling it beneficial to commercial cow-calf producers and cattle feeders, Leachman also foresees benefits for seedstock breeders.

Genetics can impact postweaning calf value because of the influence on rate of gain and feed-to-gain ratio, as well as carcass merit and weight. Leachman reminded the audience that, collectively, those things can account for up to \$200-per-head differences in the value of finished cattle. As feeder animals, however, calves with superior genetic potential frequently sell for prices similar to those paid for calves of average or below-average quality. Consequently, the better calves may bring too little money, while lesser-quality calves bring more than they are worth.

Leachman explained how a company called Verified Beef now offers RFC as a prediction of feeder-calf value, derived from the expected progeny difference (EPD) values of parent stock. Founded in 1999 by Montana State University, Montana Stockgrowers Association and Montana Beef Network, Verified Beef was privatized in 2008.

Reportedly, the company has certified more than a million cattle for age and source and other processes under various USDA programs. Verified Beef's new RFC program offers pertinent information based

on genetic merit and calf management practices, plus age and source.

"The idea is to marry index technology on EPDs with what the company was already doing on age and source verification," explained Leachman. "It's an innovative way to improve industry value signals."

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## How it works

Cattle enrolled in the program receive an RFC Certificate featuring a Genetic Merit Scorecard — a prediction of what that set of feeder calves is worth relative to a national average. The scorecard's key element is a number expressed in dollars per hundredweight (cwt.). Based on genetic predictions for average daily gain, carcass weight, feed-to-gain ratio, ribeye area,

and USDA Yield and Quality Grades, this number can be used to compare market value of different groups of feeder cattle.

The relative market-value number is set above or below a \$10-per-cwt. baseline based on across-breed predictions. Consequently, an RFC relative market value of \$12 per cwt. means their genetic merit makes that set of calves worth \$2 per cwt. more than market average. A \$20-per-cwt. relative market value suggests the cattle are worth \$10 more than market average.

The Genetic Merit Scorecard also includes a "star" scoring system showing how the cattle rank for each of the performance and carcass-merit characteristics listed previously. Cattle rating one star represent the bottom 20%, while five stars indicate the cattle rank among the top 2% when compared against the national average.

The Calf Management component of the RFC Certificate lists ranch processes that sellers have performed to prepare calves for the next owner, including weaning, vaccination against specific diseases and parasite control. According to Leachman, Verified Beef does not mandate any management protocols, but provides

documentation for the processes individual producers choose to implement. This third-party verification of when specific processes were performed is required, as are age and source verification. Pertinent information for each appears on the RFC Certificate.

Participating producers must provide Verified Beef with information on their cow herd, historical calf weaning weights and permission to access EPDs on bulls used. Verified Beef will contact the appropriate breed association to obtain the EPD information needed to calculate each Genetic Merit Scorecard.

The cost of determining a "relative market value" number is \$300. After seeing the number, the producer then decides if the RFC Certificate will be ordered. The \$300 fee already paid is applicable toward the certificate cost. Priced on a sliding scale, that cost ranges from \$3-\$7 per head of feeder cattle, depending on relative market value.

"Verified Beef won't try to change how or when ranchers market their calves," explained Leachman, noting that Verified Beef will include RFC-certified cattle on a website "show list" and in email notices sent to targeted buyers. Potential buyers will be informed of the seller's chosen marketing method whether it is through local auction, video sale, order buyer or private treaty.

## Proof in the prices

Leachman shared results from the sale of the first set of RFC-certified cattle, which sold through a Superior video auction on May 31. Representing known high-quality genetics, the Idaho calves were listed as weaned and processed according to a VAC45 protocol, with a base weight of 540 pounds. Their RFC relative market value was set at \$22.06, or approximately \$12 above market average. The calves ranked high for carcass characteristics and average daily gain, and were predicted to exhibit modest feed efficiency. The calves sold for \$16.80 per cwt.

"At least one Superior rep is convinced this is a very effective way to market cattle," reported Leachman.

Verified Beef's objective is to certify 25,000-30,000 head of calves this year under

the RFC program. Leachman believes the determination of their RFC relative market value will provide a starting point for valuing those cattle fairly. He believes RFC program participation ultimately will impact registered seedstock breeders. Ranchers using nonregistered bulls can't participate, since EPDs for their bull batteries are needed to calculate the RFC

relative market value number for a set of feeder cattle. RFC should help drive the use of registered bulls.

"By sending clear value signals, cow-calf producers paying attention to genetics should get paid a premium for quality, cattle feeders can source cattle based on value, and seedstock producers should get paid more for better bulls," said Leachman. "It should

accelerate genetic improvement and the industry will produce a better product."

To access Leachman's PowerPoint and/or listen to his presentation firsthand, visit the newsroom at [www.bifconference.com](http://www.bifconference.com). Coverage of the event is made possible through collaboration with BIF and sponsorship of [LiveAuctions.tv](http://LiveAuctions.tv).



# Breed Use of Genomic Technology

Breed associations report on genomic-enhanced EPDs.

by Troy Smith, field editor

**B**reed associations have made significant investments in technology to utilize genomic information resulting from DNA testing of beef cattle. As a result, genomic information is being incorporated in the calculation of expected progeny difference (EPD) values, along with individual performance, pedigree and progeny information. A primary goal is to increase the accuracy of EPDs for young animals and to characterize genetics for traits difficult to measure, such as carcass traits of breeding stock and maternal traits of bulls.

Reports from several breed registries regarding progress in incorporating genomic predictions into national cattle evaluations (NCE) were heard during the 2013 Beef Improvement Federation (BIF) Research Symposium and Convention in Oklahoma City, Okla., June 12-15. Representatives of the Angus, Hereford, Red Angus, Simmental and Brahman associations reported to the Genetic Prediction Committee.

According to its director of genetic research, Sally Northcutt, the American Angus Association's suite of genomic-enhanced expected progeny differences (GE-EPDs) began with carcass traits in 2009. She said genomic results function as indicator traits for all EPDs with the exception of the heifer pregnancy (HP) EPD. The association now incorporates more than 60,000 molecular breeding values into its weekly cattle evaluation, providing updated GE-EPDs each Friday morning. Northcutt said the weekly update essentially does away with the "interim" concept for EPDs.

"Breeder uptake has been amazing" stated Northcutt.

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The American Hereford Association's first inclusion of genomic information in national cattle evaluation occurred in the fall of 2012, reported Jack Ward, director of breed improvement for the organization. The effort began with information from a relatively small number of animals — about 1,100 high-accuracy bulls.

"We set a goal that by mid-February 2013, we would add at least 2,000 more bulls," said Ward. "From last fall to April we jumped to more than 3,500."

Thus far, blending of genomic information and phenotypic data has only affected EPDs for animals that are actually genomically enhanced. Ward said, with the release of fall 2013 GE-EPDs, blending will go up and down the pedigree and begin to affect more animals.

Ward also noted establishment of a rule requiring all Hereford bulls born after Jan. 1, 2011, to have a genomic profile at the official laboratory so DNA would be available for future use. A sire's genomic profile requirement must be met before his calves may be registered.

Representing the American Simmental Association, Lauren Hyde said the organization jumped on the genomics bandwagon 18 months ago. Genomics information was first incorporated into calculation of interim EPDs, but now is part of general evaluations. Hyde said positive feedback has been received from breeders pleased with improved accuracies for younger animals.

Spokesman Larry Keenan said the Red Angus Association of America began in December 2012 to incorporate genomic information through calculation of interim EPDs. Keenan said the investment in the association's own 50K genomic profile has been worthwhile, because of strong correlations and the high percentage of genetic variation explained.

Speaking for the American Brahman Breeders Association, Chris Shivers explained how Brahman breeders are addressing a specific issue of concern by targeting a GE-EPD for tenderness. Shivers said the effort incorporates pedigree information, phenotypic data based on Warner-Bratzler shear test results and GeneStar® genomic predictions for tenderness.

To see PowerPoint presentations and listen to audio from these speakers, visit the newsroom at [www.bifconference.com](http://www.bifconference.com), the *Angus Journal's* event coverage site for the annual BIF symposium. Coverage of the event is made possible through collaboration with BIF and sponsorship of [LiveAuctions.tv](http://LiveAuctions.tv).



**Editor's Note:** Troy Smith is a freelance writer and a cattleman from Sargent, Neb.