

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. Coverage of the event is made possible through collaboration with BIF and sponsorship of LiveAuctions.tv.



Breed Use of Genomic Technology

Breed associations report on genomic-enhanced EPDs.

by Troy Smith, field editor

Breed 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.

Genomic information is being incorporated in the calculation of expected progeny difference (EPD) values, along with individual performance, pedigree and progeny information.

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, 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.



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