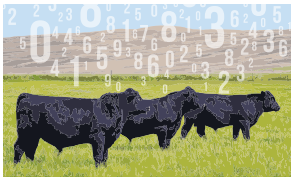
BY THE NUMBERS



by Dan W. Moser

The Value of Your Angus Genetic Evaluation

Sharing information benefits each member and their customers.

Long before I joined Association staff, I attended a beef industry meeting where Iowa Angus breeder, now an Association Director, Dave Nichols was speaking. He asked the audience why the beef and dairy genetics businesses in the U.S. remained primarily independent, family-owned operations, while swine and poultry genetics were dominated by multinational corporations. His answer was beef and dairy seedstock breeders openly share information with each other: pedigrees, production data and genetic evaluation results. Beef and dairy breeders also enjoy relatively open access to genetics. In contrast, genetic information in the swine and poultry industries is largely proprietary, and those purchasing seedstock may have no access to genetic evaluation results that define differences among animals or lines.

A lot has changed about the beef genetics business since I heard Dave's comments over a decade ago. New traits have been added to the evaluation, results are updated weekly, and through genomics, young animals achieve similar expected progeny difference (EPD) accuracy as once required years of progeny records. But the open sharing of information among our membership, one of the strengths of our Association, continues today. By combining our data into a single database owned by the Association, we create the resources needed for the most accurate, timely genetic evaluation possible.

Sharing information

Last year during a trip to Brazil I visited a seedstock ranch that bred Nelore cattle, that country's most prevalent breed, and learned about their genetic evaluation systems. I was surprised to learn there are four different organizations producing EPDs on Nelore cattle in Brazil. Some breeders there belong to, pay fees to and submit data to more than one association or other organization. Browsing a Brazilian Nelore semen catalog, you may see EPDs from any of the four evaluations on different bulls, and of course, the EPDs are not comparable across evaluation systems. Their ability to make genetic progress is severely hampered by this inefficient system.

While the Canadian Angus Association (CAA) has been a long-time genetic evaluation partner to the Association, last year they added their genotypes to our evaluation and began submitting data and receiving EPDs monthly, rather than only two to three times per year. By sharing data across countries, the evaluation for more sparsely recorded traits is enhanced. The significant amount of cow longevity data from CAA, combined with that from our own MaternalPlus® program, should lead to a cow longevity EPD for Angus cattle in the future. Marketing opportunities in both directions are enhanced by comparable EPDs from a single genetic evaluation.

Any animal breeding textbook will describe the four factors that drive genetic improvement: accuracy of genetic information, selection intensity, genetic variation and generation interval. Today's Angus genetic evaluation maximizes those factors to empower breeders to design genetics for their customers' environments and markets. Maximizing the amount of data maximizes accuracy, and the more animals that can be fairly compared when selecting sires, the more intense a breeder's selection can be.

Continued commitment to data collection by Angus breeders into a genetic evaluation with shared results will help ensure beef seedstock production remains in the hands of family operations for generations to come.

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