With full-circle genetics, the future is now

Paulo Morales for Progressive Cattleman

Four years ago, Oklahoma rancher Tom Watkins bought his first genetically tested bull. With one look at the numbers from the 12-month-old bull’s genotypically enhanced expected progeny differences, or GE-EPDs, Watkins knew he had come across something good.

Watkins and his wife, Paula, own and operate Yolo Ranch, a 5,000-acre commercial Black Angus operation just south of Ringwood, Oklahoma. They noticed immediately that the level of accuracy offered by these test results was like nothing they had seen before.

Rather than waiting several years for an unproven animal to achieve progeny-proven traditional EPDs, improved accuracy values for the full range of evaluated traits were immediately available in an easy-to-interpret format. Watkins quickly began using GE-EPDs powered by HD 50K testing on bulls acquired for his operation.

“Though we had always seemed to do well, we wanted to see how our animals truly stacked up to others in the market,” explains Watkins. Yolo Ranch began utilizing genomic tests to provide predictions for feedlot gain and marbling, and selection and mating of replacement females, respectively.

“The products are designed to help commercial cow-calf producers make more informed decisions around replacement heifer breeding and feeder cattle marketing in animals that are, at minimum, 75 percent Angus. Additionally, the trio of products enable commercial cow-calf producers to implement an Angus genetics game plan for the efficient production of Certified Angus Beef.

Watkins explains that by considering predictions for traits his animals historically excelled in, such as calving ease and marbling, he was able to make better management decisions around sire selection, culling and selection of replacement females.

“We’re able to see where our weaknesses are,” says Watkins. “We have a number that tells us whether a female is strong on her cow side or feeder side numbers, so we can see if there are discrepancies somewhere. Then the next year, we know to put the female that was weak on a particular side with a registered Angus bull that has GE-EPDs strong in that area. You can build your herd to a tremendous level of accuracy, or perhaps buy young seedstock animals with the numbers for their progeny,” says Watkins.

And it’s now not just cow-calf producers like Watkins who benefit from genomic technology – feeder cattle buyers and feedlot operators are beginning to see more specific genetic information as well.

Andersen explains that genomic test results act as an insurance policy of sorts, ensuring buyers know more about what they’re purchasing and, as a result, reduce the risk in those purchase decisions. Feedlot operations are anticipated to be increasingly able to buy cattle with more assured gain, conversion and grade performance through the finishing process, and Angus seedstock producers’ commercial cow-calf customers are able to buy the most appropriate bulls to best complement their cows through knowing their full genetic merit.

“‘It really is a marketing tool,’” agrees Watkins. “You say to a potential feeder cattle buyer, ‘Here’s the genomic test results on these animals – the genetics are superior, so we know how they’ll perform.’ Buyers can then look at the DNA and say, ‘Wow, I want these steers as opposed to taking a chance on another group of animals without those numbers.’”

In the midst of this transaction is where value-added certification programs come into play. Duane Gangwish is chief operating officer of one such program, Verified Beef’s Reputation Feeder Cattle program, which he describes as a vehicle to market the cattle industry.

“Our job is to document the past of a herd, including health, nutrition and 10-year genetic history, and bring that together to present to buyers of either calves or yearlings so before they buy, they have a full understanding of prior history and genetics,” Gangwish says.

This program uses a unique combination of calf management practices, age and source verification, a relative value score and a six-point evaluation known as the Genetic Merit Scorecard to indicate genetic and performance potential for British and Continental breeds, allowing buyers to easily compare sets of calves.

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Thanks to the introduction of genomic tests for both seedstock and commercial cow-calf operations, a two-pronged cycle now enables commercial producers to genomic test their females, mate them appropriately to tested sires with GE-EPDs and achieve the desired results in expressed productivity. The outcome is dually beneficial as well: Superior replacement heifers go back into the herd, and superior feeder calves are marketed successfully. With increasing numbers of producers and cattle feeders seeing the advantages of genetic information, the folks at Reputation Feeder Cattle plan to grow beyond their current niche.

Another group taking advantage of the opportunities to make better beef through genomics is Top Dollar Angus, owned and operated by Tom Brink. This group helps identify the top Angus feeder calves, assuring feeder cattle buyers they are buying the best in Angus genetics. They do this by using genomic tests, along with $B values from Angus sires, to genetically certify calves. Through this value-add program, the group is able to deliver prices significantly higher than market value back to the commercial cow-calf producer.

Organizations like these are proof that, while seedstock producers can continue to benefit from genomic technology, there's real benefit to commercial cow-calf producers as well.

"I think that once cow-calf producers realize buying Angus bulls based on GE-EPDs and strategically testing replacements offers a competitive edge, they won’t want to give it up," explains Andersen. "Both financially and otherwise – they’ll be more flexible to adapt to changing conditions for their cow herd, their future has less risk and fewer headache from genetic surprises, and greater opportunities exist to more dependably market their feeder cattle for high prices."

Tom Watkins is one producer who needs little convincing. "I don’t think I’ll ever stop – it doesn’t make sense to not take advantage of technology staring you in the face. I think sometimes what stops people from progressing their herds is that they’re stuck in their way of doing things. But money talks, and if I can do it, anybody can," he says.