DNAdvocate

Pfizer Animal Health
Animal Genetics

Genetics: The basis of business for Donnell Cattle Company

For registered Angus seedstock breeder Tommy Donnell, making well-informed management decisions has always been the basis of his operation. That's why two years ago Donnell integrated GeneSTAR® DNA-marker technology into his Graham, Texas operation to ensure the highest-quality animals were reaching commercial beef producers and, eventually, the consumer's dinner table.

Offering higher-quality genetics

Donnell Cattle Company encompasses 3,500 acres and is home to 150 registered Angus cows. Most of these cows, says Donnell, are the second and third generation of embryo transfer tracing back to three or four main donor cows. ET work is one of the many technologies he uses to maintain premier genetics.

"Genetics is the most important aspect of our ranch business," adds Donnell. "We are trying to raise an animal our customers can use to create more value in their commercial operations."

To evolve high-quality animals, Donnell began using GeneSTAR technology to provide additional information about the cattle on the ranch.

"We needed to know as much as possible about our animals and we knew DNA technology could be very reliable," says Donnell about the decision to start using DNA-marker technology. "We've had inquiries from customers who want to know more about the animal's genetics and I believe they are entitled to know everything we know about an animal."

This fall Donnell will offer these high-quality genetics in the Whermann-Donnell cattle sale in Abilene, Texas. The October 15th sale will feature 150 commercial-bred heifers, and 200 GeneSTAR-tested bulls.

"We can see higher prices on animals with good DNA profiles," says Donnell of the animals featured in the sale. "If we know an animal is homozygous for the tenderness gene, commercial producers are willing to pay more because the animal can be sold to an upscale restaurant looking for higher-quality product."

Putting technology to work

At the Donnell Cattle Company ranch, all heifers are DNA tested at weaning to identify individual genetic markers. Although no selection decisions are made immediately, the results are used when making mating decisions.

The two markers Donnell places the greatest emphasis on are tenderness and feed efficiency. This information not only helps make decisions on his operation, but allows commercial producers to make more informed cattle purchases based on which criteria best fit their business.

"At our sales there may be 200 bulls going through the ring, but commercial producers will pick out the bulls that will best suit their operation," explains Donnell. "With genetic marker technology, producers can choose which bulls meet their criteria based on genetic capabilities."

A bright future in genomics

For producers considering DNA-marker technology for their operation, Donnell advises them to become familiar with the technology and build a baseline of herd genetics with DNA-marker testing. Some operations may not be able to justify testing every cow; Donnell recommends starting with replacement heifers and using them to improve future herd genetics.

TOMMY DONNELL

Looking to the future, Donnell also says he is excited about the role Pfizer Animal Genetics will play in the business. He looks to the expertise of Pfizer in science and research to lead animal genomics.

"Pfizer has a lot of resources to take DNA-marker technology to the next level. There are a lot more markers to identify and it will take the expertise and science that a company like Pfizer has to develop reliable and affordable technologies that tell producers more about the animals," he says.

GeneSTAR technology helps fill an important role for Donnell's operation, providing the best animal with the most available information to commercial producers.

"We have a responsibility to produce animals that are well-balanced and optimal in multiple traits of economic importance," notes Donnell. "We try to employ every reliable technology that is available to determine the things we know about the animals and GeneSTAR technology is helping us do that."