SORTING GATE

Creating a genetic game plan

by Kelli Retallick-Riley, Angus Genetics Inc.



From day-to-day operations to long-term goalsetting, the amount of planning and

decision-making to be done on a cattle operation is endless. For most other businesses, a team of colleagues work together to outline and drive the organization's strategic decisions. However, in the case of most cattle operations, the responsibilities of CEO, CFO, CIO, COO, head of customer service, and director of technology all rest on one person's shoulders. Being involved with an organized cooperative group like the American Angus Association can ease some of the burden these constant decisions may cause.

At Angus Genetics Inc. (AGI), customer service team members and geneticists aim to help producers create a genetic game plan. Using Angus gives commercial producers ample opportunity to plug into the genetic resources on whichever level he or she may wish to participate.

Level 1: Purchase a registered Angus bull

Purchasing a registered Angus bull is the key to initiating a genetic game plan that can be designed through the American Angus Association. Using expected progeny differences (EPDs) and dollar value indexes (\$Values)

alongside sound visual appraisal aids in the selection process.

Whether one is seeking to lower the rate of dystocia at calving or capitalize on carcass quality traits to gain

premiums on sale day, accurate and predictable genetics add value for any breeding objective. With the size and scope of the Angus database, including more than 80 million performance measures and 1 million genotypes, beef producers are left searching far and wide to find a more well-rounded, predictable set of genetic tools.

Level 2: Unlocking the value of the herd sire

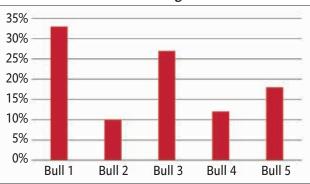
After purchasing your registered Angus bull, it is valuable to know how well he is performing within the operation.

With many herds having multiplesire pastures, it is difficult to know just how much each bull is working and which bull is siring the standouts in the calf crop. Parentage DNA tests can verify which calves match to which sires. Herd reports like the one shown in Fig. 1 would allow producers to see how many cows each individual bull is covering.

Table 1: GeneMax Advantage provides an array of information for commercial producers

Maternal traits	Terminal traits	Smart outlier scores	Economic indexes
Calving ease	Gain	Docility	Cow (maternal)
Weaning wt.	Carcass wt.	Cow cost	Feeder (terminal)
Maternal milk	Marbling	Tenderness	Total (conception > carcass)
Heifer pregnancy	Ribeye area		
Mature wt.	Backfat		

Fig. 1: Percent of calf crop verified back to individual sires within multi-sire breeding schemes



Better understanding of this breakdown can enable better bull management, such as moving bulls out of the herd that are not getting the job done. Verifying the sire of calves also gives a producer the ability to avoid inbreeding of replacement heifers when they are being developed within the herd.

Level 3: Selecting replacement females

Sire verification can refine replacement heifer selection. It gives producers the opportunity to keep females out of their best herd sires.

To level up on DNA technology, commercial producers could invest in GeneMax® Advantage™, a product for use on commercial females to help guide decisions on which heifers are best to keep in the herd. GeneMax Advantage provides Sire Match, five maternal and terminal selection traits, three economic indexes, and three Smart Outlier reporting features.

Table 1 lists the different traits unlocked through testing your females.

Level 4: Benchmarking herd progress

While GeneMax Advantage can aid in selection of replacement heifers, it also can be utilized to benchmark a herd's genetic level and assist in next year's bull purchases. With this type

of data in a commercial producer's hands, it's much easier to pinpoint a herd's strengths and weaknesses. It allows producers to create breeding goals and to select bulls to complement their individual herds more appropriately to foster profitability.

Level 5: Getting paid for your investment

Unlocking a herd's genetic potential is great. Getting paid for that investment is even better. The Association has designed AngusLink^{5M}, a series of value-added programs to help producers in getting paid for their genetic investment. AngusVerified is a claim that helps buyers in the seats differentiate which groups of black calves are sired by registered Angus bulls.

Using registered Angus bulls unlocks the power of the Genetic Merit Scorecard® (GMS). This scorecard promotes the genetic investment herds have made, differentiating their feeder cattle for feedlot efficiency and carcass quality (see "The Proof Is in the Data," page 12). This level completes our genetic game plan.

From conception to carcass, Angus can support an individual operation's game plan. Whether it's by providing genetic services, DNA parentage tests or genetic services like EPDs and GeneMax, the Association is ready to help at any level. For more information on DNA parentage testing or GeneMax Advantage, feel free to call the AGI team at 816-383-5190.

Editor's note: "Sorting Gate" is a regular Angus Beef Bulletin column featuring herd improvement topics for commercial producers using Angus genetics. Author Kelli Retallick-Riley is president of Angus Genetics Inc. (AGI). For additional information on performance programs available through the American Angus Association and AGI, visit www.angus.org and select topics under the "Management" tab.