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Hitting the Genetic Lottery

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3, 17, 22, 41, 66 and 9. Those six numbers are the only six that stood between me and \$1.5 BILLION dollar powerball. My father-in-law was one of thousands of Alabamians who made the trip to the Tennessee line for the chance to win. When he text for my numbers, of course, I gave them to him! After all, it was his money who was buying the tickets! As I sat patiently waiting for the numbers to be drawn, I couldn't help but to think about how nice the beaches of the Caribbean sound. 60 seconds later, those beaches were a pipe dream. I then remembered why I chose to go the Breeding and Genetics route with my education. By using tried and true breeding strategies, and genetic technologies we can make better breeding decisions and come close to winning the "genetic lottery" with every calf born.

For most Mississippi beef farmers, the fastest way to hit the genetic lottery with your herd is to buy a better bull. I recommend buying bulls from someone who has invested in outstanding genetics and who has the data to back up their animals. Looking at data can be overwhelming. I always encourage producers to evaluate the data before looking at the bulls. For example, I will go through a sale catalog and mark off bulls that do not fit my criteria before attending the sale. While EPDs are our best tools for comparison, it is important to note that EPDs have the potential to change. However, if a young bull has had his individual data submitted to the breed association and/or had genomic testing performed, the EPD accuracies will be higher, and more reliable.

For producers who purchase multiple bulls during the year, the best way to hit the lottery is by selecting bulls of similar type and kind. Buying full or half siblings can be beneficial as you strive for a consistent calf crop. Remember, siblings may appear similar on paper, but in reality full sibs only share 50% of their genetics and half siblings would only be expected to share 25%. Utilizing A.I. as part of your breeding program definitely has advantages. Having access to the best/most cutting edge genetics your breed of choice has to offer is a fast way to make significant genetic improvement.

EPD values are the best tool we have to make breeding decision. However, just as their name implies they are only "expected". Using heritability estimates,

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For more information about beef cattle production, contact an office of the Mississippi State University Extension Service.