

# ON TARGET



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## *Measuring a wild card*

When the season's first calves arrive, you begin to see results of your genetic decisions, perhaps eager for more or thinking about what a new bull could bring. Poring through bull catalogs and looking at expected progeny differences (EPDs), keep in mind the environment affects what your calves are now and what they will become.

Genotype plus environment equals phenotype. The equation's simplicity lies not in its precision but in stating the relationship, for who can quantify the environment's role from one calf crop to the next?

Perhaps the only solution out on the ranch can be found in averages, once you identify indicators of herd progress. Among weaning weight, overall profitability, annual cow cost, pounds weaned per cow exposed and pounds weaned per acre, each provides insight. None tell where the progress or setback originated because combined effects are so broad.

Consider a 10-lb. improvement in weight of calf weaned per cow exposed. Did that come from fewer open cows, a greater artificial insemination (AI) conception rate, better pasture or not as many health challenges? The answer could be any combination, but which can you most control? If one factor stands out, how did the ranch environment come into play?

These questions are key because your ability to see the success or failure from any decision weighs on whether you stay the course or veer. In the cattle business, feedback on a decision is delayed, imprecise and segmented. Generational turnover is slow and you don't know about carcass merit until harvest, if then. Knowing that, let's find the traits you can actually measure to assure continual genetic improvement.

At its simplest level and given a strong relationship with a progressive seedstock supplier, that registered breeder's attention to detail can sustain your herd's progress over time. Breed average improves and below-average bulls are neutered and finished for beef rather than selling at bull sales. In theory, the average bull keeps getting better and the rising tide lifts all boats in the beef industry. Some say that's what gave us the decade of sharply improved quality grade. Average marbling scores for all major breeds have improved; combine that with longer days on feed and heavier carcass weights and you get 75% of cattle today grading Choice or Prime.

But remember, that's only average now and getting there doesn't take much effort on your part as a commercial bull buyer. You can take charge by selecting above-average bulls that improve your herd's collective genetic merit. EPDs let you objectively evaluate that. Combine each registered bull's numbers into a collective "herd EPD profile" so that you can compare this year's bulls to last, independent of the environment, management or marketing plan. Use cross-breed EPD adjustments from the USDA Meat Animal Research Center to evaluate the entire bull battery, regardless of breed.

You can take it a step further, weighting the EPD profiles by number of cows any particular bull could breed. That lets you see what progress is possible by increasing a bull's exposure to more cows through AI or using an older bull.

Even though you may market calves at weaning, EPDs still provide insight and let you represent your herd genetics to other segments of the supply chain. Compare weaning to yearling growth for an idea of what those genetics offer the stocker operator. A yearling-to-carcass-weight spread shows what your herd's genetics mean to feedyard operators. Check your calves' potential carcass merit by benchmarking their sire's EPDs against the current breed averages.

It's not a perfect system and it won't replace objective cattle measures, but a combined bull-battery EPD provides a simple way to evaluate the impact of your sire selection decisions earlier, and independent of environmental effects. Certainly, those will continue to influence and often limit the expression of genetic potential. Being proactive in taking stock of your genetic resources only helps counter some of the unknown.

As the saying goes, you cannot manage what you cannot measure. In a business where information flow is segmented and delayed, acting now to improve your calves' potential value for the next owner opens more marketing doors. Just "keeping up with average" is getting harder and harder to do without a sustained effort.

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