

# BY THE NUMBERS

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## Sire Evaluation Report and National Cattle Evaluation Updates

*Updates to economic assumptions and genomic scores.*

The annual updates to the economic assumptions keep them up to date with recent information to keep selection tools current. If these updates were not made, the assumptions for feed costs or calf prices would not be reflective of the most recent cattle cycle.

In conjunction with the biannual Sire Evaluation Report, additional updates took place June 2, 2023. Each year, alongside the fall Sire Evaluation Report, the main and supplemental sire lists, percentile table, breed averages, genomic scores and economic assumptions for dollar value (\$Value) indexes are updated.

This biannual update will mark the Fall 2023 Fall Sire Evaluation Report, which will update the main and supplemental sire listings as well as expected progeny differences (EPD) averages and percentile ranks for non-parent bulls and females and current sires and current dams.

### Economic assumption update

Each year, costs and revenue prices underlying the bio-economic model, which drive the Association's \$Values, are updated using data provided by CattleFax. This update is based on a seven-year rolling average to account for the ebbs and flows of input costs, cattle markets and other related economic influences. The 2023 economic assumptions are

based on prices recorded from 2016 to 2022. This time horizon mimics the relative costs and revenues of the average cattle cycle.

This year's biggest changes are the result of weaned calf sale price and ration cost. In May 2022 the economic assumptions were based on average prices from 2015-2021, which included a weaned calf price of \$172 per hundredweight (cwt.) for steer calves and \$158 per cwt. for heifer calves. In the May 2023 update, the exchange of 2015 with 2022 lowered the average calf price, and landed the seven-year rolling average at \$167 per cwt. for steer calves and \$152 per cwt. for heifer calves.

Additionally, ration cost and days on feed continued to climb. Ration costs increased from \$178 to \$199 per ton, while time on feed remained steady 246 days for calf-feds and increased slightly from 170 to 171 days on feed for yearling animals. The changes in calf price and ration cost are reflected in the outcome of the maternal weaned calf value (\$M), where calf price is the major revenue driver. Ration costs increased in both the cow-calf and feeding sectors.

Even though the uptick in ration costs decreased profitability in the feedlot value (\$F), a slight increase in quality premiums inside grid value (\$G) resulted in no average change in beef value (\$B) in the population.

Overall, the above updates did not result in substantial changes to individual \$Values. Updates to economic assumptions resulted in correlations above 0.99. Even with these extremely high correlations, some individual animals can change. The largest decrease in \$M, \$B and \$C (combined value) across the 4,177 current sires, bulls who have registered at least one progeny in the last two years, were -\$6, -\$7 and -\$14, respectively.

Breeders can expect sires to rank very similarly when the 2023 assumptions are implemented. For more information, visit <https://www.angus.org/nce/valueindexes>.

### Genomic scores update

While GE-EPDs update on a weekly basis, genomic scores are only updated once a year. The update includes a larger reference population (n= 1,384,603), which genomic scores are ranked against.

Because genomic scores are a by-product of the genetic evaluation, the updates to these genomic scores will not affect the GE-EPDs (genomically enhanced EPDs) themselves. It is always preferable to use GE-EPDs when making selection decisions than genomic scores.

To learn more, visit <https://www.angus.org/AGI/GenomicEnhancedEPDs.pdf>. 