

General Trends of the New Shorthorn EPDs

After reviewing this first run of single-step EPDs through the BOLT system, some trends appear to be forming when comparing the new evaluation to our previous EPD runs. While these trends will obviously not apply to all animals in the database, these are some things we have noticed in our review.

Calving Ease Direct: There seems to be a slight increase across the breed for the CED EPD. Breed average for CED has increased.

Birth Weight: Overall, BW EPDs have decreased a slight amount. There have been very few significant movers, but the breed average BW EPD appears to have also decreased.

Weaning Weight: Weaning weights across the breed appear to have decreased a few pounds. Breed average for WW EPDs has declined with this trend.

Yearling Weight: For yearling weight EPDs, the trend appears to be a slight to moderate increase in YW EPD. As expected, the breed average has also increased.

Calving Ease Maternal: There was a noticeable trend of increasing CEM EPDs across the database, which is also reflected in the new breed averages.

Milk: There appears to be a slight increase in Milk EPD from analyzing individual animals, as well as the breed average.

Stayability: In general Stayability EPD values have increased, as noticed in studying the database and the breed averages.

Carcass Weight: Probably the most noticeable movement of all the traits, CW EPDs dropped drastically. You will certainly see a noticeable decrease in this EPD across the breed.

Ribeye Area: Another of the more highly noticeable movements in the breed EPD profile. REA EPDs have increase significantly, and the breed average will also reflect that.

Marbling: MARB EPDs tended to trend downward in our evaluation.

Fat: The FAT EPDs appear to trend in the right direction. With FAT, more negative EPDs indicate less fat cover. Therefore, the new average FAT EPD being a lower negative number is an improvement from the previous evaluation.

Yield Grade: While YG has always been calculated in genetic evaluations, this is the first time it has been published. Like FAT EPDs, lower is generally considered more desirable. A lower YG EPD would indicate a lower numerical yield grade score.

\$Feedlot: The values for \$F appears to be fairly stable, with no major changes in any direction. Of course, there will be some small movements here and there, but breed average remained fairly stable.

\$British Maternal Index: The general trend for \$BMI is upward, with increase being common and an increased breed average.

\$Calving Ease: \$CEZ seems to be following a similar trend line as \$BMI, with increases seen across much of the breed and the breed average.

Of course, not all animals followed trends and their new EPDs could look differently than what is outlined here. There are a few other things to consider if the EPDs on your animals don't quite make sense.

1. We noticed that animals on "extreme" ends of a specific trait tended to shift towards the mean than those that were relatively close to begin with. This was noticed in all traits, but especially in growth traits. Lower growth EPD cattle saw their WW and YW EPDs rise, while the top WW and YW cattle generally saw a bigger downward shift than others. Breed leading animals are still near the top, but now the numbers aren't as high.
2. The added effect of genomics can cause animals to move against the trends. Quite a few more animals have been added to our genomic database since the last GE-EPD run on the old system. In addition, carcass and maternal traits are now also genomically enhanced, in addition to the previous runs only being done for growth traits.
3. Performance data still matters. If a significant amount of data has been turned in since the last EPD run, it can certainly move a bull more than the trend lines indicated.

By being a part of IGS, we are now able to compare our EPDs directly with other breeds that are involved in the evaluation. Being a part of this multi-breed evaluation is part of the reason why we see some shifting our own EPDs. Point #1 above applies to the whole IGS database, not just within our Shorthorns cattle. The Shorthorn breed, when compared to the others in IGS, is a breed with smaller ribeye areas and pretty high marbling. You could say our breed was on the "extreme" ends of both those traits in the IGS group. The breed's shift up in ribeye and down in marbling is an example of the shift back towards the mean of the entire population.

Hopefully, this information will clear up some of your questions regarding the new look of Shorthorn single-step EPDs. If you still have questions, please contact the ASA office.

816-599-7777
matt@shorthorn.org