

Protocols on the Upcoming EPD Blanking Lindsay Upperman, Ph.D.

During the 2023 National RAAA Convention, various genetic and breed improvement topics were discussed. However, the subject that received the most discussion, especially during regional and area caucus meetings was the upcoming EPD Blanking Initiative that will go into effect on January 1st, 2024.

In order to gather more data on lowly reported traits at RAAA, the Breed Improvement Committee decided to blank EPDs on animals based on a given accuracy for the trait.

The recommendation stated to blank EPDs on animals in the 2023 calf crop for growth traits with an accuracy less than 0.15, intake less than 0.05 accuracy, carcass traits less than 0.05 accuracy, calving ease traits less than 0.05 accuracy and maternal traits less than 0.01, unless the animal has genomically -enhanced EPDs.

These traits were grouped as follows:

- Growth Traits - Birth Weight, Weaning Weight, Yearling Weight, Average Daily Gain
- Intake - Dry Matter Intake
- Carcass Traits - Back Fat, Carcass Weight, Ribeye Area, Marbling, Retail Cuts
- Calving Ease Traits - Calving Ease Direct, Calving Ease Maternal
- Maternal Traits* – Heifer Pregnancy, Metabolic Energy, Stayability, Milk

*Maternal Traits will not be grouped, each trait will be treated on an individual basis

Due to the groups shown above, the EPDs will be blanked for the group, unless all accuracy values for those traits are above the stated accuracy. This was put into place in order to get to some of the traits that are not reported as often as others. For instance, for growth traits, birth weight and weaning weight are usually reported, especially due to Total Herd Reporting. However, yearling weight is not reported to the same extent. Thus, in order to display the EPDs for birth weight and weaning weight, yearling weight and average daily gain will also need to have an accuracy above 0.15. This can be done by reporting the trait for the given animal in the database. However, in order to help those producers who may not have the ability or ease of collecting some traits, the committee decided to un-blank all EPDs if an animal was genotyped. This includes traits such as heifer pregnancy, metabolic energy, and even dry matter intake that do not currently have genomics incorporated into their EPDs.

Additional Displays Blanked

Due to EPDs being blanked, the indexes that contain a blanked EPD will also be blanked. For example, as carcass traits are involved in the Grid Master Index, if carcass traits are blanked on the given animal, the Grid Master Index as well as the ProS Index will be blanked. Furthermore, the RAAA has tools available that utilize parent EPDs to showcase potential mating outcomes for a given calf crop. Thus, the progeny calculator will also show blanked EPDs, if the given parent

animal has EPDs that are blanked. Also, given EPDs are displayed in show programs throughout the year, these animals will also still have blanked EPDs within these programs.

Overall, the presentation of this initiative at the workshop opened the floor for multiple questions. The majority of producers were focused on specific topics particular to their own operations. For instance, those producers that utilize foreign sires imported into the database, were questioning whether that sire's EPDs would be blanked. In answer, most highly used sires should have accuracy values over the chosen thresholds listed above. Additionally, the foreign sire most likely isn't born in the 2023 calf crop and thus wouldn't be affected. Other questions focused on asking how to improve the accuracy values of given traits. Ultimately, the accuracy of the EPD reflects the amount of information utilized in the calculation for the EPD. Thus, an EPD is estimated based on information such as an animal's actual performance, progeny or other relative's performance, as well as genomic data. Any of this information will help to increase accuracy on your animal's EPDs and ultimately allow all EPDs to be displayed for your calf crop.

In summary, the EPD Blanking Initiative will go into effect the beginning of the new year, January 1st, 2024. This will only affect those animals that fall below the reported accuracy values for the given trait groups in the 2023 calf crop, unless the given animal is genotyped. Ultimately, this initiative is trying to improve the Red Angus breed by gaining more data on lowly reported traits which will provide more reliable EPD estimates to RAAA producers and their customers.