

What is a research EPD?

A *research* EPD is a prelude to a *production* EPD. Expected progeny differences (EPDs) delivered to members every Friday are *production* EPDs. These EPDs are fully functioning in weekly evaluations, are printed on registration certificates, and can be included in custom reports built through AAA Login.

A *research* EPD is a single analysis delivered to the membership enabling the Association to get feedback as a trait is under development prior to going to “production”. A *research* EPD does not get updated weekly but can be updated periodically as more data flows into the database. Once more data is collected, the evaluation will become even more robust, and the research EPD can be moved to production.

What is the functional longevity research EPD?

The functional longevity (FL) research EPD predicts the number of calves a sire’s daughter is expected to produce on average by 6 years of age compared to other sires’ daughters in the population. The word functional is included in this trait’s name because being functional means staying in herd and producing a calf every year.

How is the research EPD interpreted?

The unit of the trait is number of calves produced by 6 years of age, with a higher EPD meaning that on average sires’ daughters are predicted to produce more calves by 6 years of age, compared to a lower EPD.

What is the heritability of this trait?

The heritability estimate of FL is 0.09.

What data is used?

Data within the whole herd reporting program, Inventory Reporting, laid the foundation for this trait. Calving and culling records since 1990 outside of the Inventory Reporting program are also being used in the evaluation. In the genetic evaluation, data from females between 2 and 10 years of age is utilized; females must calve around two years of age to enter the evaluation. Also included are phenotypes from the Canadian Angus Association.

Breeders are encouraged to record and submit breeding, calving and culling records on all cows for as long as they stay in their herd, as this data is valuable for management and studying maternal characteristics.

Which animals have research EPDs?

Herds enrolled in Inventory Reporting will have access to the FL research EPD on eligible females enrolled in the program as of October 25, 2023. In addition, a list of AI sires born after 2010 with an accuracy of 0.50 or greater will be available on Angus.org.

Herds that enroll in Inventory Reporting prior to the release of the production EPD will also have access to the research EPD.

Will the research EPD affect \$M?

As a research EPD, functional longevity will not be incorporated into the maternal weaned calf value (\$M). Current research is ongoing to uncover the appropriate economic weighting this new EPD could potentially play in \$M when FL moves to a production EPD in the future.

What is the best way to submit records for Functional Longevity research?

Participation in Inventory Reporting is the best way to contribute calving and culling records for the FL trait. Ideally, in the future the functional longevity model will be able to leverage only records and data from herds inside of Inventory Reporting, which will continue to add accuracy to this new evaluation.

Primarily spring calving herds should enroll in Inventory Reporting November 1 – January 15.
Primarily fall calving herds should enroll May 1 – July 15.

Where can I find more information on this topic?

For more information on the functional longevity research EPD, other resources are listed below:

- Angus Journal November 2023 *By the Numbers* Article
- Angus University Session at 2023 Angus Convention
- Angus University Webinar on December 5