### **MEMBERSHIP** TIPS

by Jerry Cassady director of member services



#### Empty boxes

When you search the internet regarding beef cattle expected progeny differences (EPDs), you'll get a plethora of options to fulfill your quest for information. You can learn about EPD definitions, accuracy and how to best use these genetic predictions. However, where can you go to find out why your animal's pedigree has empty boxes where EPD numbers should be?

# Why doesn't my animal have EPDs?

There are several reasons why an individual animal may not have EPDs. The obvious first step would be to make sure the animal is registered. EPDs are provided as a service to American Angus Association members and their respective customers for registered animals. The exception to this requirement would be those EPDs provided to unregistered calves within the MaternalPlus® program.

Once registered, a very common reason the EPD boxes remain empty might be that there has been no performance or phenotypic measurement submitted on the animal. For most traditional traits, collecting and submitting phenotypic measurements such as birth and weaning weights on all your animals in proper contemporary groups is the easiest fix to generate EPDs.

Whether or not the animal's parents have true EPDs will also play a role, as it might be an issue with parent-average EPDs. Parent-average EPDs are also referred to as interim EPDs, and only require the sire and dam to possess true EPDs. Interim

EPDs can be calculated on animals that have registered parents and had a weight submitted in a proper contemporary group but may be missing necessary information to provide a true EPD. More on this later, as I'll save the interim EPD discussion for a later article.

Another common reason your animal may not have EPD boxes filled in might be because the calf is alone in a contemporary group (see the "By the Numbers" article in the November 2021 *Angus Journal*). This is common among those producers with a limited number of animals available on their farm or ranch.

These small groups may fail to meet the requirements of a proper contemporary group simply because only one bull or heifer was born within the required age window. Other contemporary grouping issues could be related to data submission dates, acceptable age ranges for that trait, etc.

## What about embryo transfer calves?

Embryo transfer (ET) calves receive a random sample of their genes, half coming from the sire and half from the donor dam. The recipient female that carries and subsequently raises and weans the ET calf contributes only the environment. Conversely, the donor dam contributes only genetic effects, with no contributions to the maternal environment.

By tracking the contributions of the registered Angus recipient's pedigree, the maternal genetic components of the evaluation models can be accounted for. Therefore, ET calves from registered Angus recipient dams allow the potential for the calf's own performance record to be used in EPD calculations.

An exception to this includes ultrasound information submitted on an individual ET animal from an unregistered/commercial recipient dam submitted in a proper contemporary group alongside other animals with unregistered/commercial recipient dams, as this data could be included in the evaluation.

Here is an example. If the ET calf was raised by a registered recipient, that calf is eligible for either interim or true EPDs with his own data being used in the calculation. The calf must have a proper contemporary

group made up of other ET calves also raised by registered recipients. To accurately include performance data on ET calves, it is necessary to characterize the effect the recipient female has had on calf performance.

Having animals registered with empty EPD boxes remains one of the most frequent questions within the Member Services department. As a service to the membership, your Association staff has created a very useful flow chart to better explain why your animal may not have EPDs.

This chart can be found on the website by clicking through Management > Performance Measures > EPD & \$Value Definitions > Why doesn't my animal have EPDs? It can also be found by clicking on the link found at the bottom of pedigree lookup of any registered animal in the registry. This is a front-and-back document, so be sure to print both sides, and keep it close as a resource.

jcassady@angus.org

Editor's note: For more information regarding EPDs, contact the Member Services department at (816) 383-5100 or email me directly at jcassady@angus.org.

#### Expected Progeny Difference

(EPD) is the prediction of how future progeny of each animal are expected to perform relative to the progeny of other animals listed in the database. EPDs are expressed in units of measure for the trait, plus or minus. Interim EPDs may appear on young animals when their performance has yet to be incorporated into the American Angus Association National Cattle Evaluation (NCE) procedures. This EPD will be preceded by an "I" and may or may not include the animal's own performance record for a particular trait, depending on its availability, appropriate contemporary grouping or data edits needed for NCE.

