

EPDs 101

Basics of EPDs provide framework for understanding.

Story & photo by Shelby Mettlen, former assistant editor

President of Angus Genetics Inc. (AGI) Dan Moser addressed a full room at the Fort Worth Convention Center Nov. 5. Moser gave Angus producers and enthusiasts an introduction to expected progeny differences (EPDs) as part of Angus University's afternoon sessions at the 2017 Angus Convention in Fort Worth, Texas.

EPDs have been around since the 1970s, Moser explained, with the first fetal data from members submitted in 1980. In the past 37 years, the American Angus Association's genetic database, used to generate EPDs, has continued to grow.

Moser began by explaining each EPD individually, and then broke down the Association's \$Value indexes.

Making data useful

"EPDs in general were designed to put information together in a useful form," he said. Records are available on animals in a variety of forms, including pedigrees, actual weights, weights of sires and dams, data on siblings, the animal's own performance, and progeny data. "The idea of the EPD is to weigh all those pieces appropriately to give us an accurate prediction on [the performance of] that animal."

The weighting of different information used in calculating EPDs is different for each animal, he pointed out. The performance of a proven sire is determined by his



"EPDs in general were designed to put information together in a useful form," Dan Moser, president of AGI, explained to the crowd at the 2017 Angus Convention.

progeny; whereas, a calf's performance is determined by its pedigree.

Some producers are interested in actual numbers, but the problem with those is that there are a number of things that separate that value from the animal's actual genetics, Moser said. You're not trying to predict what the bull weighs, he explained, you're trying to predict what his calves will weigh in a different environment.

"The population changes over time," Moser said. "Angus cattle are changing because of your decisions."

"The bottom line is EPDs are the most effective selection criteria," he added.

Contemporary groups

He also introduced the concept of contemporary grouping.

"Probably the most important

concept for Angus breeders to know is to understand contemporary grouping," Moser advised.

When breeders submit a group of records, they're asked to assign a group code. Animals in the same contemporary group have the same ability and opportunity to perform from an environmental standpoint.

A fairly new aspect of contemporary grouping is the ability to define a birth contemporary group, Moser added. Cattle managed significantly differently in the 60 days prior to calving should be in a different

contemporary group, he said.

Moser said the Association's *Sire Evaluation Report* is a great resource for learning more about EPDs. The Spring 2018 report, one of two printed reports provided each year, was published in January. Its forward section containing the explanation of the information, along with tables characterizing the data within, is published in this issue of the *Angus Journal* (see page 219).

Editor's Note: Formerly an assistant editor, Shelby Mettlen is a communications and marketing specialist for Kansas State University's College of Veterinary Medicine and Beef Cattle Institute. This article is part of Angus Media's coverage of the 2017 Angus Convention available online at www.angus.org/Media/News/AngusConvention.aspx.