Association Releases FE Selection Tool

New EPD for feed efficiency will be provided on a weekly basis.

Story by CRYSTAL ALBERS

Angus breeders now have access to the industry's latest advancement in selecting animals for feed efficiency — the residual average daily gain expected progeny difference (RADG EPD).

On Sept. 21 the American Angus Association and Angus Genetics Inc. (AGI) introduced the RADG EPD, which characterizes postweaning efficiency differences in future progeny of Angus breeding stock. The new EPD capitalizes on the use of individual feed intake data, a sizable growth database in Angus cattle, and the latest genomic technology.

"Feed costs are a significant financial component that producers must consider. The residual average daily gain EPD helps both seedstock and commercial cattlemen select Angus genetics expected to gain more on a comparable amount of feed," says Bill Bowman, AGI president and Association chief operating officer (COO).

The RADG EPD is the result of individual intake data captured from

several years of research projects funded through the Angus Foundation and the American Angus Association and conducted by the University of Illinois, North Carolina State University, and Iowa State University. Aided by technological advancements in intake measuring systems, this research — as well as cooperative data from breeders and bull test stations — has provided individual feed intake data that becomes an integral part of the genetic evaluation.

"The RADG EPD is a balanced approach to identifying cattle that — with a given quantity of feed — excel at converting," says Sally Northcutt, Association director of genetic research. "The leveraging of the individual intake data, combined with the genomic information on dry-matter intake in a weekly genetic evaluation will give Angus producers nearly 'real-time' selection of more feed-efficient genetics."

To create the RADG EPD, AGI conducted a genetic evaluation including the individual feed intake data, calf growth measures, and drymatter intake genomic results from the Angus-specific Igenity® profile derived

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from a high-density whole genome scan (HD WGS) with 50,000 markers.

The RADG EPD is reported with other production growth traits and presented in pounds (lb.) per day, with higher values being more favorable.

"We wanted to put this selection tool in industry-friendly terminology that best represented what's being evaluated," Bowman said. "Producers are already familiar with average daily gain, so this should be a relatively easy tool to understand and adopt."

In addition, the use of DNA technology allows calves to be included in the evaluation for RADG EPDs, providing ranchers with tools to more rapidly target economically relevant traits.

"This advancement gives Angus producers the power to make even more-accurate, more-rapid genetic improvements, and provides a significant advantage in the marketplace today, regardless of herd size," Bowman says.

RADG EPDs are calculated on a weekly basis as part of the American Angus Association's National Cattle Evaluation (NCE).

For more information about RADG EPDs or the NCE, see "By The Numbers" on page 168 of the October 2010 *Angus Journal*, contact AGI at 816-383-5100, call your Association regional manager or visit *www.angus.org*.

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Editor's Note: Crystal Albers is assistant director of communications and web editor for the American Angus Association.