Driving the science of better breeding

There's little room for error in the cattle business. Producers need the most advanced information to make smart selection decisions, and Angus Genetics Inc. (AGI) provides it through genomic-enhanced expected progeny differences (GE-EPDs).

GE-EPDs have become the industry standard for herd improvement, building on decades of science-backed genetic evaluation tools originated and maintained through the American Angus Association®, home to the largest and ever-growing single-breed beef cattle database.

EPDs that traditionally contained all pedigree, performance and progeny information now also include results from available genomic, or DNA, tests. Breeders who use genomic technology give buyers access to AGI-generated GE-EPDs that provide:

Increased predictability and decreased risk for young and unproven animals due to enhanced accuracy of EPDs

Better characterization of genetics for difficult-to-measure performance traits (such as carcass traits, maternal traits and feed efficiency)

The ability to make more rapid progress for traits that are important to you, due to:
- **more accurate selection**
- **easier identification of genetic outliers**
- **the ability to propagate young animals with confidence earlier in their lives**

In fact, GE-EPDs on unproven animals have the same amount of accuracy as if they had recorded 8-33 calves, depending on the trait. That's valuable insight, offered regularly through the breed's weekly national cattle evaluation.

Trait	Progeny Equivalent	Trait	Progeny Equivalent
Calving Ease Direct	28	Milk	33
Birth Weight	21	Mature Weight	11
Weaning Weight	26	Mature Height	8
Yearling Weight	21	Carcass Weight	9
Dry Matter Intake	8	Yearling Height	11
Scrotal Circumference	13	Carcass Marbling	9
Docility	10	Carcass Ribeye	12
Heifer Pregnancy	14	Carcass Fat	10

How do you know if EPDs are genomic-enhanced?

Ask your breeder, refer to the registration paper, or look for the AGI GE-EPD logo, Angus GS ™ powered by partner Neogen GeneSeek or the HD50k or i50k by partner Zoetis. These images indicate animals for which low-density or high-density genomic testing has been conducted and incorporated by AGI into GE-EPDs.

www.angus.org