



## 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                 | Calving Ease Maternal | 18                 |
| Weaning Weight        | 26                 | Mature Weight         | 11                 |
| Yearling Weight       | 21                 | Mature Height         | 8                  |
| Dry Matter Intake     | 8                  | Carcass Weight        | 9                  |
| Scrotal Circumference | 13                 | Yearling Height       | 11                 |
| Docility              | 10                 | Carcass Marbling      | 9                  |
| Heifer Pregnancy      | 14                 | Carcass Ribeye        | 12                 |
|                       |                    | 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



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