



FEELING A LITTLE **FOGGY** ABOUT EPDs AND GENOMIC TECHNOLOGY?

EPDs are:

- A prediction of how an animal's progeny will perform
- A genetic selection tool
- Used to compare animals across different environments

Genomics are:

- Used to parent verify animals for guaranteed pedigrees
- Used to calculate EPDs for animals that don't have a phenotype for a particular trait
- Used to calculate more accurate EPDs, especially for younger animals
- Used to calculate EPDs for new and expensive to measure traits, like High Immune Response



WHAT ARE EPDs?

Expected progeny differences (EPDs) are genetic selection tools that provide producers a measure of an animal's genetic merit for traits that are economically relevant to their operation. Basically, EPDs are a measure of how an animal's progeny can be expected to perform, on average.

An animal's genetics will contribute in part to how it performs. A portion of that performance is also dictated by the environment provided to that animal. The environment includes weather, disease, feed, stress, handling, vaccination protocols, maternal environment, housing, and the animal group dynamics. The environment differs for each herd as geography and producer management plays a large role in environment. EPDs remove the environment from all traits measured and provide producers with an estimate of the genetics that contribute towards each trait.

EPDs: are a universal way of describing the genetic potential of progeny from breeding stock

EPDs: are a genetic selection tool that can help producers reach a breeding selection goal for their herd

EPDs: can help you maintain the traits that you want to keep in your herd

EPDs: can help you avoid traits that you might not wish to use on your cow herd and introduce into your herd

EPDs: can help you maintain the traits that you want to keep in your herd

EPDs: are the only fair way to compare breeding stock across herds and different environments