

# WHAT ARE EBVs?

## ESTIMATED BREEDING VALUES

Estimated Breeding Values (EBVs) are values assigned to animals that predict differences in the performance of their offspring. They are calculated from the animal's own performance and from the performance of its relatives. EBVs can be calculated for any trait that can be measured. They can improve the accuracy of selection.

There are EBVs for growth, reproductive, carcass, fleece, and fitness traits. You can select breeding stock using individual EBVs or use selection indexes that have been developed for specific breed types: e.g., maternal vs. terminal sire breeds.

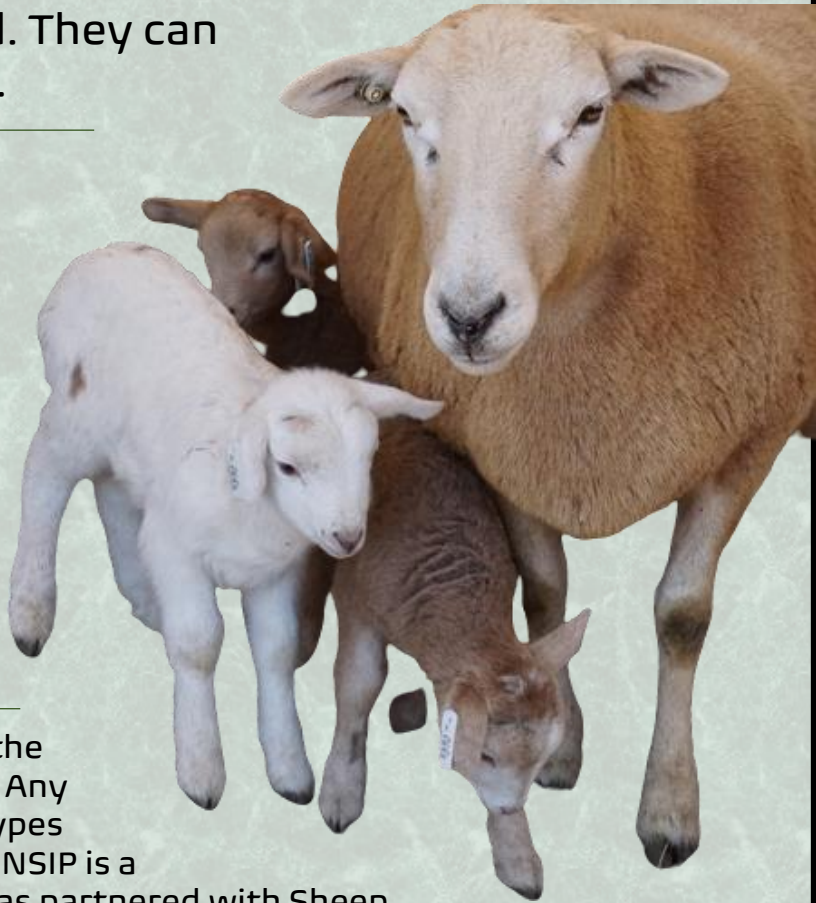


Genomic EBVs are now available to the US sheep industry. Genomics use an animal's unique DNA sequence to more accurately predict their true genetic merit. GEBVs improve the accuracy of EBVs.

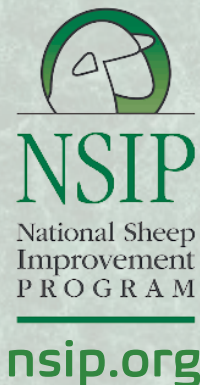
To obtain EBVs on your sheep, you must join the National Sheep Improvement Program (NSIP). Any flock with any breed type or multiple breed types can submit data for evaluation through NSIP. NSIP is a non-profit organization founded in 1986. It has partnered with Sheep Genetics of Australia to provide EBVs to US sheep and goat producers.

You don't have to enroll your flock in NSIP to benefit from EBVs. You can purchase rams for breeding which have strong EBVs for the traits that are important to you. Most economically-

important traits (especially maternal and fitness) cannot easily be determined by visual appraisal. Using EBVs is the proven method of accurately predicting if an animal will pass on important traits such as growth rate, reproductive proficiency, carcass quality, wool quality, and parasite resistance.



EBVs are available for meat goats, too, but unfortunately, there's not much participation in NSIP by goat farms in the US (so far), only five herds.



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