

National Sheep Improvement Program EBVs (Estimated Breeding Values)

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EBVs are science based, industry tested measurements of traits that can be passed on to offspring to improve flocks and to make better decisions. EBVs indicate the value of the individual animal, where EPDs in cattle for example (Expected Progeny Differences) indicate the value of an individual animal's progeny.

EBVs are used because you can't always determine these other traits by just looking at the animal. EBVs are the best way to predict if an animal will pass on these important traits to a low degree or a high degree.

Growth Traits

Birth Weight (BWT)

- Estimates direct effect on weight at birth.
- Higher number means that birth weights will be higher with better early lamb survival for twins and triplets. However, it could mean more lambing difficulty. Lower number means that birth weights are lower and lambing difficulty.

Weaning Weight (WWT)

- Estimates preweaning growth commonly taken between 45-90 days of age.
- Higher number is likely always wanted as you want lambs to grow fast.

Postweaning Weight (PWWT)

- Takes preweaning and postweaning to get a 120 day weight.
- Higher numbers indicate fast growth and heavier weights; Lower numbers indicate lower weights.

Yearling Weight (YWT)

- Estimates growth potential to 12 months of age.
- Higher numbers indicate heavier adult body weights and greater feed needs; lower numbers less feed and less adult body weights.

Wool Traits

Fleece Weight (GFW)

- Based on fleece weight and potential for wool production.
- Higher the number the more wool will likely be produced; lower number, less wool.

Fiber Diameter (FD)

- Based on fleece quality, crimp of wool.
- Lower number is desired as it illustrates a finer fleece, higher number coarse fleece.

Staple Length (SL)

- Based on length of the wool fiber.
- Higher number means a longer staple; lower number means a shorter stapled fleece.

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Body Composition (Carcass Traits)

Postweaning Fat Depth (CF)

- Based on carcass fatness between the 12th and 13th rib via ultrasound.
- Higher number indicates a fatter carcass; lower number indicates a leaner/less fat animal.

Postweaning Loin Muscle Depth (EMD)

- Based on loin muscle area between the 12th and 13th rib via ultrasound.
- Higher number indicates a heavier muscled animal with more total pounds of meat; lower number indicates a lighter muscled animal with a lower total pounds of meat.

Maternal Traits

Maternal Weaning Weight (MWWT)

- Estimates mothering ability, mostly on milk production.
- Higher numbers generally mean the mothers were better milk producers; lower number less desirable producers.

Number of Lambs Born (NLB)

- Based on potential for number of lambs born; prolificacy.
- Higher number means more potential for more lambs being born; lower number means lower potential for number of lambs born.

Number of Lambs Weaned (NLW)

- Based on prolificacy and lambs making it all the way to weaning.
- Higher number means more lambs were weaned, lower number less lambs were weaned.

Parasite Resistance

Worm Egg County (WEC)

- Based on worm egg counts at weaning or at early or late post weaning ages.
- Animals with a lower number indicates they have a greater resistance to parasites; higher number indicated less resistance to parasites.
 Lower number is desirable.

Selection Indexes

USA Range Index (%)

- Measurement of both lamb and wool production; Targhee breed.
- Higher number more desirable; lower number less desirable.

USA Maternal Index (%)

- Pounds of lambs weaned per ewe lambing, incorporates number and weight
- Higher number illustrates there were more pounds of total lambs weaned; lower number illustrates there were less pounds of total lambs weaned.

Carcass Index (%)

- Measurement for production of carcasses, incorporating muscle, fat and postweaning weight.
- Higher the number more pounds of product; lower number less pounds of product.

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