Using Limousin & Lim-Flex EPDs to Aid Selection

The North American Limousin Foundation (NALF) uses all available information to predict an animal's EPDs. This information includes individual performance, pedigree, progeny and grand progeny performance, and genomic information. All this information is combined into one number that helps producers make genetic improvement in their herd.

Since the spring of 2015, NALF joined International Genetic Solutions (IGS) to form the largest international multi-breed cattle evaluation in the world. The collaboration now includes 21 million animals and over 500,000 genotypes from 23 different breeds. This allows growth and carcass EPDs for Limousin and Lim-Flex to be directly compared against other IGS partners to make selection decisions easier for producers.

Maternal and Growth Traits

Calving Ease Direct (CED): Percent of unassisted births of a bull's calves when he is used on heifers. A higher number is favorable, meaning greater calving ease

Birth weight (BW): Predicts the difference, in pounds, for birth weight of the calf

Weaning weight (WW): Predicts the difference, in pounds, for weaning weight (adjusted to age of dam and a standard 205 day age). This is an indicator of growth from birth to weaning

Yearling weight (YW): Predicts the expected difference, in pounds, for yearling weight (adjusted to a standard 365 day age). This is an indicator of growth from birth to yearling.

Milk (MK): The genetic ability of a sire's daughters to produce milk, expressed in pounds of weaning weight

Total maternal (TM): An index, combining growth and milk information as a predictor of weaning weight performance of calves from a sire's daughters. A greater TM value means a mother that returns comparatively higher weaning weights on her calves. TM = MK + 1/2WW EPD.

Calving ease maternal (CEM): Represented as a percent of unassisted births in a sire's first-calving daughters. A higher number represents more favorable calving ease.

Scrotal Circumference (SC): SC is a good indicator of age at puberty in a bull's daughters. EPDs for scrotal circumference are indicated in centimeters, with higher values indicating genes for larger yearling SC for sons and earlier puberty of daughters.

Stayability (ST): Predicts the genetic difference, in terms of percent probability, that a bull's daughter's will stay productive in the herd to at least six years of age. The stayability EPD is one of the best measures currently available to compare a bull's ability to produce females with reproductive longevity.

Docility (DOC): Predicts genetic differences in the probability that offspring are scored a 1 (docile) or 2 (restless) as opposed to 3, 4, 5, or 6 (nervous to very aggressive). Higher EPD values for docility represent genetics for calmer behavior.

Carcass Traits

Yield grade (YG): Differences in yield grade score, which is a predictor of percent retail product. Smaller values suggest that progeny will have a better lean to fat ratio

Carcass weight (CW): Differences in pounds of hot carcass weight, adjusted to an industry standard endpoint

Ribeye area (REA): Differences in ribeye area in inches, measured between the 12^{th} and 13^{th} rib. Greater ribeye areas are preferable.

Marbling (MB): Predicts the differences in the degree of intramuscular fat within the ribeye, expressed as marbling score units. Greater marbling numbers indicate higher carcass quality grades

Fat Thickness (FT): Differences for fat thickness, in inches, for a carcass over the 12^{th} rib. Smaller numbers are preferred for fat thickness, as excess fat can be detrimental to yield grade.