Glossary of Terms associated with Beef Cattle Performance Data

GROWTH & MATERNAL EVALUATION

**Expected progeny difference (EPD)** is the estimate of how future progeny of each sire are expected to perform relative to the progeny of other sires listed in the database. EPDs are expressed in units of measure for the trait, plus or minus. Interim EPDs may appear in cases wherein there is insufficient information to allow the calculation of an EPD through National Cattle Evaluation (NCE) procedures. This EPD will be preceded by an "I" and is calculated from pedigree information by the AHIR Department of the Association.

**Accuracy (AC)** is the reliability that can be placed on the EPD. An accuracy of close to 1.0 indicates higher reliability. Accuracy is determined by the number of progeny and ancestral records included in the analysis.

**Birth Weight EPD (BW)**, expressed in pounds, is a predictor of a sire's ability to transmit birth weight to his progeny compared to that of other sires.

**Weaning weight direct EPD (WW)**, expressed in pounds, is a predictor of a sire's ability to transmit weaning growth to his progeny compared to that of other sires.

**Weaning weight maternal EPD (Milk)** is a predictor of a sire's genetic merit for milk and mothering ability as expressed in his daughters compared to daughters of other sires. In other words, it is that part of weaning weight attributed to milk and mothering ability.

**Daus** reflects the number of daughters that have progeny weaning weight records included in the analysis.

**Herds** indicate the number of herds from which daughters are reported.

**Yearling weight EPD (YW)**, expressed in pounds, is a predictor of a sire's ability to transmit yearling growth to his progeny compared to that of other sires.

**Yearling height EPD (YH)** is a predictor of a sire's ability to transmit yearling height, expressed in inches, compared to the that of other sires.

**Mature daughter weight EPD (MW)**, expressed in pounds, is a predictor of the difference in mature size of daughters of a sire compared to the daughters of other sires.

**Mature daughter height EPD (MH)**, expressed in inches, is a predictor of the difference in mature daughter height of daughters of a sire compared to the daughters of other sires.

**Scrotal circumference EPD (SC)**, expressed in centimeters, is a predictor of the difference in transmitting ability for scrotal size compared to that of other sires.
CARCASS EVALUATION

Carcass weight EPD (CW), expressed in pounds is a predictor of the differences in hot carcass weight of a sire's progeny at a given end point compared to progeny of other sires.

Marbling EPD (Marb), expressed as a fraction of the difference in a subjective USDA marbling score of a sire's progeny at a given end point compared to the progeny of other sires.

Ribeye area EPD (RE), expressed in square inches, is a predictor of the difference in ribeye area of a sire's progeny at a given end point compared to the progeny of other sires.

Fat thickness EPD (Fat), expressed in inches, is a predictor of the differences in external fat thickness at the 12th rib (as measured between the 12th and 13th ribs) of a sire's progeny at a given end point compared to the progeny of other sires.

Percent retail product EPD (%RP), is a predictor of the difference in pounds of salable retail product of a given sire's progeny compared to the progeny of other sires.

Group/progeny (Grp/Pg) reflects the number of contemporary groups and the number of carcasses for each sire included in the analysis.

ULTRASOUND BODY COMPOSITION EVALUATION

Intramuscular fat EPD (%IMF), is a predictor of the difference in a sire's progeny for percent intramuscular fat in the ribeye muscle compared to other sires.

Ribeye area EPD (RE), is a predictor of the difference in square inches of ribeye area of a sire's progeny compared to the progeny of other sires.

Fat thickness EPD (FAT), expressed in inches, is a predictor of the difference in external fat thickness at the 12th rib of a sire's progeny compared to the progeny of other sires. It includes the weighted average of 60% of the rib fat measurement and 40% of the rump fat measurement.

Percent retail product EPD (%RP) is a predictor of the difference in pounds of salable retail product of a sire's progeny compared to the progeny of other sires.

Group/progeny (GP/PG) is the number of contemporary groups and number of progeny considered in this analysis.
$VALUE INDEXES

$Value indexes are multi-trait selection indexes, expressed in dollars per head, to assist beef producers by adding simplicity to genetic selection decisions. The $Value is an estimate of how future progeny of each sire are expected to perform, on average, compared to progeny of other sires in the database if the sires were randomly mated to cows and if calves were exposed to the same environment.

Feedlot Value (SF), an index value expressed in dollars per head, is the expected average difference in future progeny performance for postweaning merit compared to progeny of other sires.

Grid Value (SG), an index value expressed in dollars per head, is the expected average difference in future progeny performance for carcass grid merit compared to progeny of other sires.

Beef Value (SB), an index value expressed in dollars per head, is the expected average difference in future progeny performance for postweaning and carcass value compared to progeny of other sires.