

# RED ANGUS GUIDE TO EPDS

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**ProS**..... Profitability and Sustainability is an all-purpose index that predicts average economic differences in all segments in the beef supply chain. This index is a combination of the breeding objectives modeled in the HerdBuilder and GridMaster selection indexes. In this index, replacement heifers are retained from within the herd and all remaining progeny are fed out to slaughter and sold on a quality-based grid. Traits included in this index include calving ease, growth, HPG, STAY, Mature Weight, Dry Matter Intake and carcass traits. The resulting index is expressed in dollars per head born (Index/High Value).

**HB** ..... HerdBuilder is a maternal selection index that predicts the economic differences of animals for traits that are important from conception through weaning. Expressed as dollars per head born, HB is calculated based on the scenario that bulls are mated to heifers and cows, replacement heifers are retained and all remaining progeny are marketed at weaning. Traits included in the HB index include Calving Ease Direct, Calving Ease Maternal, Weaning Weight, Milk, Mature Weight, Heifer Pregnancy and Stayability (Index/High Value).

**GM**..... GridMaster is a selection index that predicts the average economic difference of non-replacement calves through the post-weaning phase of production. GM places selection pressure on growth, feedyard performance and carcass traits. Expressed as dollars per head born, GM is calculated based on the scenario that progeny are fed out to slaughter and marketed on a quality-based carcass grid. Traits included in GM include Average Daily Gain, Carcass Weight, Dry Matter Intake, Marbling, Back Fat and Rib Eye Area (Index/High Value).

**CED** ..... Calving Ease Direct predicts differences in the percent of calves born unassisted out of 2-year-old dams. (Percent/High Value)

**BW** ..... Birth Weight predicts differences in actual birth weight of progeny. (Pounds/Low Value)

**WW** ..... Weaning Weight predicts differences in 205-day weaning weight. (Pounds/High Value)

**YW** ..... Yearling Weight predicts differences in 365-day yearling weight. (Pounds/High Value)

**ADG** ..... Average Daily Gain predicts differences in weight gain between 205 and 365 days of age. (Pounds/High Value)

**DMI** ..... Dry Matter Intake predicts differences in daily feed intake as measured in a feedlot during the post-weaning period. (Pounds/Low Value)

**MILK** ..... Milk predicts differences in weaning weight attributed to the milking ability of the animal's daughters. (Pounds/High Value)

**HPG** ..... Heifer Pregnancy predicts differences in the percent of daughters who are able to conceive and calve at 2 years of age following exposure to breeding. (Percent/High Value)

**CEM** ..... Calving Ease Maternal predicts differences in the percent of daughters who are able to calve unassisted as 2-year-old heifers. (Percent/High Value)

**STAY** ..... Stayability predicts differences in the ability of an animals' retained daughters to remain productive in the herd – calve every year – through 6 years of age. (Percent/High Value)

**MARB** .... Marbling predicts differences in marbling score – amount of intramuscular fat measured at the 13th rib. (Marbling Score Units/High Value)

**YG** ..... Yield Grade predicts differences in USDA Yield Grade, which is calculated using CW, REA and Fat. (Yield Grade Units/Low Value)

**CW** ..... Carcass Weight predicts differences in actual hot carcass weight. (Pounds/High Value)

**REA** ..... Ribeye Area predicts differences in square inches of ribeye area measured at the 13th rib. (Square Inches/High Value)

**FAT** ..... Fat predicts differences in the depth of backfat measured between the 12th and 13th ribs. (Inches/Low Value)