

2020 ACROSS-BREED EPD ADJUSTMENTS

The table below contains adjustment factors to compare EPDs of **individuals** of different breeds, based on studies by the U. S. Meat Animal Research Center (MARC), Clay Center, Nebraska. Adjustment factors have been calculated by MARC since 1993. These adjustments are different from the last report in 2017, some by a notable amount. Adjustments were updated using EPDs from the most recent national cattle evaluations conducted by eighteen breed associations (current as of December, 2020). Adjustments for some breeds are not available if they are not in the MARC database. The base for comparison is Angus.

These factors should be added to an individual EPD for direct comparison with an individual EPD of a different breed. For instance, consider an Angus sire with Weaning Weight EPD of +50 and a Charolais sire with Weaning Weight EPD of +25. The Charolais adjustment factor is +28, so the adjusted value for the Charolais sire is +53 (25 + 28), 3 lb heavier than the Angus sire's +50 (which is not adjusted since Angus is the basis of comparison). Or, compare a Hereford with Yearling Weight EPD of +90 with a Santa Gertrudis of +10. The Hereford adjustment factor is -41 and the Santa Gertrudis is +35; the result is the Hereford sire's adjusted value is +49 (90 - 41) and the Santa Gertrudis sire's adjusted value is +45 (10 + 35), 4 lb below the Hereford.

These factors are not breed comparisons. They are adjustments to allow comparison of **individuals** of different breeds. Breed comparisons can be seen on this website (<http://beef.tamu.edu>) in the list of publications under "Genetics & Selection". Look for "2020 Sire-Breed Comparisons for EPD Traits". Registry association breed averages can be seen in another publication on the above website under "2020 Breed Averages for EPD Traits".

Other EPD values calculated by some breeds (but for which no across-breed adjustments are available) include various combinations (depending on the breed) of calving ease, heifer pregnancy, 30-month pregnancy, gestation length, days to calving, scrotal circumference, yearling hip height, mature weight, dry matter intake, mature cow maintenance, residual ADG (feed efficiency), mature height, docility, stayability (longevity in the herd), carcass weight, USDA Yield Grade or % retail product (percent lean), tenderness, and \$ Value Indexes. For a complete breed genetic evaluation report, contact the particular breed association or their website.

ACROSS-BREED ADJUSTMENT FACTORS

Breed	Birth Wt	Wean Wt	Yearling Wt	Milk	Marbling	REA	Fat Cover
Angus	0	0	0	0	0	0	0
Beefmaster	+3.8	+24	+2.5	+4			
Brahman	+9.4	+56	+20	+14	-0.69	+0.11	-0.15
Brangus	+2.8	+16	+10	+14			
Braunvieh	+2.1	-14	-41	-1.2	-0.63	+1.17	-0.12
Charolais	+6.0	+28	+20	+8	-0.33	+0.80	-0.20
Chiangus	+2.4	-24	-43	+4	-0.40	+0.53	-0.12
Gelbvieh	+3.2	-10	-17	+7	-0.56	+0.77	-0.11
Hereford	+0.9	-17	-41	-11	-0.35	+0.06	-0.08
Limousin	+1.7	-11	-35	-5	-0.39	+0.61	-0.08
MaineAnjou	+1.8	-28	-58	-8	-0.53	+1.06	-0.17
Red Angus	+2.3	-21	-29	+2	-0.11	+0.29	-0.04
Salers	+2.1	-18	-32	+8	-0.78	+0.53	-0.06
Santa Gertrudis	+4.9	+40	+35	+18	-0.47	+0.21	-0.07
Shorthorn	+3.5	-23	-38	-5	-0.15	+0.32	-0.04
Simmental	+1.7	-16	-26	-3	-0.19	+0.50	-0.07
South Devon	+3.1	-31	-58	+3	-0.37	+0.39	-0.04
Tarentaise	+2.2	+27	-8	+11			

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