

Combined Value (\$C) Index



ANGUS
THE BUSINESS BREED

Combined Value (\$C)

aims to characterize profitability differences across the entire chain by combining the two underlying breeding objectives that drive the American Angus Association maternal and terminal economic indices, which are Maternal Weaned Calf Value (\$M) and Beef Value (\$B).

Expressed in dollars per head, \$C includes all 15 traits involved in \$M and \$B. The breeding objective, which drives the \$C model, is built around a 500 head commercial cow herd that replaces 20% of their breeding females per year with replacement heifers retained within their own herd. This same herd then retains ownership on these cull heifers and their steer mates through the feedlot and market those cattle on a quality-based carcass merit grid.

TRAIT	\$M	\$B	\$C
Bull A	+70	+127	+235
Bull B	+51	+140	+233
		Difference	2

\$C is a linear combination of \$M and \$B. The simple formula to calculate \$C on any animal is $\$C = \$M + (1.297 * \$B)$. In the example above, Bull A and Bull B are compared head-to-head. As a result, Bull A and Bull B should produce progeny with similar profitability if heifers are being retained as replacements and remaining calves are fed and marketed on a carcass merit grid.

An effective way to understand how cattle would change if producers solely selected on \$C for the next ten years is to look at the response to selection of individual traits inside of the \$Value. Selection on \$C results in a more favorable combination of traits across the entire production system. Producers selecting on \$C will gain nearly as much increase in weaning weight (WW), yearling weight (YW), carcass weight (CW), marbling (Marb) and ribeye area (RE) as selection on \$B, but with only half as much increase in mature cow weight. As with any breeding program, producers utilizing \$C to make decisions should continue to understand the strengths and weaknesses of their herds as well as their production environment to make the best decisions possible.

EPDs Influencing \$Values

TRAIT	\$M	\$B	\$C
CED	X		X
WW	X		X
*PG (YW-WW)		X	X
CEM	X		X
MILK	X		X
MW	X		X
DOC	X		X
HP	X		X
CLAW	X		X
ANGLE	X		X
DMI			X
CW		X	X
RE		X	X
MARB		X	X
FAT		X	X

TRAIT RESPONSES TO 1 SD OF SELECTION (~10 YEARS)

