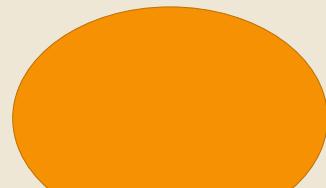


## AB-EPD Adjustments: Why and How?

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North American Limousin Foundation

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## Total Beef Herd



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## Total Beef Herd

~35 million calves

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## Total Beef Herd



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## Total Beef Herd



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## Pedigree Calves



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**Tomato**

Nutrition Facts	
Serving Size	180 g
Amount Per Serving	Calories 32
	Calories from Fat 3
% Daily Value*	
Total Fat 0g	1%
- Saturated Fat 0g	0%
- Trans Fat	0%
Cholesterol 0mg	0%
Sodium 5mg	0%
Total Carbohydrate 7g	2%
- Dietary Fiber 2g	5%
- Sugars 5g	
Protein 2g	
Vitamin A 30% • Vitamin C 38%	
Calcium 2% • Iron 3%	

\*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

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TABLE 1: ADJUSTMENT FACTORS TO ADD TO EPDs OF EIGHTEEN DIFFERENT BREEDS TO ESTIMATE ACROSS BREED EPDs									
Breed	Birth Wt. (lb.)	Weaning Wt. (lb.)	Yearling Wt. (lb.)	Maternal Wt. (lb.)	Marking Score <sup>a</sup>	Ribeye Area (in <sup>2</sup> )	Thickness (in.)	Fat (in.)	Carcass Wt.(lb.)
Angus	0.0	0.0	0.0	0.00	0.00	0.00	0.00	0.00	0.0
Hereford	2.3	3.7	20.1	-1.71	-0.31	-0.07	-0.06	-0.0	59.0
Red Angus	2.5	-31.4	-34.6	3.3	-0.27	0.01	-0.05	-0.0	-9.0
Shorthorn	4.7	-36.6	-17.3	4.1	-0.14	0.37	0.05	7.1	
South Devon	3.3	-11.4	-27.1	3.9	-0.08	0.29	-0.13	-0.0	24.8
Beefmaster	4.7	17.9	0.5	5.9					
Charolais	10.3	41.1	11.8	23.8	0.78	0.05	-0.145	27.8	
Angus	3.3	12.0	4.0	6.3					
Santa Gertrude	5.7	36.3	43.0	17.0	0.54	-0.09	0.080	2.2	
Brangus	1.9	-25.5	-50.0	-0.8	-0.70	0.78	0.092		
Charolais	8.0	34.6	40.4	8.2	-0.31	1.01	-0.206	13.0	
Charolais	3.7	27.7	40.1	1.1	0.34	0.54	-0.083	-16.1	
Gelbvieh	2.8	-22.6	-29.3	2.3	-0.27	0.75		-15.0	
Limousin	2.3	-18.2	-41.3	-13.7	-0.43	1.01	-0.132	-12.0	
Mane-Angou	4.2	-30.5	-38.7	-6.2	-0.57	0.97	-0.167	-15.9	
Sailes	1.8	-7.3	-25.7	5.9	-0.09	0.94	-0.196	-23.5	
Simmental	3.2	-4.1	-12.1	4.4	-0.34	0.49	-0.129	4.4	
Tarentaise	3.4	25.1	5.6	24.2					

<sup>a</sup>Marking score units:  $4.00 = 5.00 \times 10^{-4} \times \text{Sum}^2$

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2015 Born Limousin Bull Performance Data						
	Act. Birth Weight	Adj. 205 day Weight	Adj. 365 day Weight	Adj. Back Fat	Adj. IMF	Adj. REA
Lim-Flex	Average 80.0 Minimum 42.0 Maximum 117.0	674.4 374.8 1054.4	1188.4 817.8 1616.7	0.27 0.04 0.86	3.10 0.60 7.25	14.17 8.77 21.44
Purebred	Average 82.8 Minimum 41.0 Maximum 118.0	646.8 333.7 1043.9	1146.0 679.2 1596.2	0.20 0.03 0.51	2.42 0.75 5.72	15.36 8.76 21.02
Fullblood	Average 79.9 Minimum 65.0 Maximum 98.0	660.9 474.6 895.7	1048.1 702.9 1422.1	0.16 0.08 0.24	3.08 3.02 3.13	14.67 13.46 15.87
Percentage	Average 80.4 Minimum 47.0 Maximum 110.0	656.1 415.5 996.4	1155.8 772.2 1449.7	0.21 0.02 0.60	2.67 1.26 5.60	14.69 9.82 19.30

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Actual BW	Average EPD	Average Wt.	Minimum EPD	Maximum EPD	Count
<70	-0.6	64.3	-8.3	4.2	4899
70-79	0.3	74.7	-6.6	6.0	5023
80-89	1.1	84.1	-4.2	6.4	6842
90-99	2.2	93.5	-1.9	7.6	3011
>100	3.7	105.5	-1.9	10.0	731
Average	1.0	82.1			

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Possible Change										
BIF Accuracy	CED	BW	WW	YW	MK	CEM	SC	CW	REA	MARB
(%)	(lbs.)	(lbs.)	(lbs.)	(lbs.)	(%)	(cm.)	(lbs.)	(in <sup>2</sup> )	(units)	
0	8.6	3.0	16.2	24.7	14.8	8.9	0.70	36	0.46	0.24
0.1	7.8	2.8	15.0	22.0	13.7	8.0	0.62	32	0.41	0.22
0.2	6.9	2.5	13.4	19.4	12.2	7.1	0.56	29	0.37	0.20
0.3	6.1	2.2	11.7	16.8	10.8	6.2	0.49	25	0.32	0.17
0.4	5.2	1.9	10.0	14.2	9.2	5.3	0.42	22	0.28	0.14
0.5	4.3	1.6	8.1	11.5	7.4	4.5	0.35	18	0.23	0.12
0.6	3.5	1.3	6.4	9.0	5.8	3.6	0.28	14	0.18	0.10
0.7	2.6	1.0	4.8	6.4	4.3	2.7	0.21	11	0.14	0.07
0.8	1.7	0.7	3.2	3.9	2.9	1.8	0.15	7	0.09	0.05
0.9	0.9	0.4	1.5	2.1	1.4	0.9	0.08	4	0.05	0.02

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Seedstock Producers										
• When planning hybrid matings, use other breed association tools										

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### Example

	CED	BW	WW	YW	MK	CEM	CW	REA	MARB	FT
<b>AAA EPDs</b>	6	-1.4	63	102	27	11	34	0.26	0	0.021
<b>USMARC Adj.</b>	NA	-3.7	81	143	41	NA	46	-0.75	0.43	0.151
<b>IGS Evaluation</b>	14	-4.6	73	119	29	11	34	0.26	0.19	0.030

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### Use breed association tools

Progeny Calculator - see how a battery of bulls compares if mated to a single female

Cow Registration #:  List My Females  Retrieve this Cow's Information

Column	Color	Definition
EPDs	green	value in the top 25% of the breed
EPDs	red	value in the bottom 25% of the breed
EPDs	black	value in the middle 50% of the breed
ME	blue	one or more growth trait values in the top 25%, none in the bottom 25%
G	red	one or more growth trait values in the bottom 25%
G	green	2 or more carcass trait values in the top 25%, none in the bottom 25%
G	red	2 or more carcass trait values in the bottom 25%

All My Bulls  My Sires  My Semen Inventory  Proven Testet Sires  Genetic Indicator Sires

Select All	446 Bulls	Reset	Growth & Maternal	Carcass
Calculate This Bull	Reg #	Tattoo	Name	G C CED BW WW YW MILK TM CEM SC ST DOC YG CW REA FAT MARB SMTH SIC

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### Summary

- Use the Macro tools for Macro decisions and vice versa
- Use breed association support for planned hybrid matings

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### Questions?

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