

# Pan American Hereford Cattle Evaluation

## Genetic Trend

EPDs as of July 1, 2019

### Includes:

Genetic Trend: EPD and \$ Index Means by Birth Year Group  
Averages and Percentile Breakdown - Active Sires  
Averages and Percentile Breakdown - Active Dams  
Averages and Percentile Breakdown - 2017 & 201 Calves



**EPDs as of July 1, 2019**  
**Pan American Hereford Cattle Evaluation**

**Genetic Trend: EPD & \$ Index Means - All Animals - By Birth Year Group Count**

Birth Yr.	Count	CED	BW	WW	YW	DMI	SC	SCF	MM	M&G	CEM	MCW	UDDR	TEAT	CW	FAT	REA	MARB	BMI	BII	CHB	Count
87	24,415	1.8	2.2	25.1	47.0	-0.49	0.2	9.3	12.9	25.5	0.5	61.9	1.05	1.02	42.8	-0.019	0.07	0.06	219.5	254.2	83.4	24,415
88	24,244	1.8	2.5	26.6	48.9	-0.48	0.2	9.0	12.5	25.9	0.8	64.4	1.03	1.01	43.0	-0.018	0.07	0.05	215.9	251.7	83.5	24,244
89	24,633	1.6	2.6	27.6	50.2	-0.46	0.2	9.1	12.3	26.1	1.0	65.7	1.03	1.01	43.3	-0.017	0.07	0.05	216.0	252.7	83.4	24,633
90	27,586	1.6	2.7	28.6	51.5	-0.45	0.3	9.1	12.0	26.3	1.0	65.9	1.04	1.01	43.5	-0.017	0.07	0.05	216.5	254.1	83.8	27,586
91	29,755	1.6	2.8	29.0	52.0	-0.45	0.3	8.9	12.1	26.6	1.1	66.8	1.04	1.01	43.8	-0.017	0.07	0.05	214.4	252.3	84.0	29,755
92	31,065	1.4	2.9	29.8	53.1	-0.44	0.3	8.7	12.2	27.1	1.0	68.2	1.04	1.01	44.1	-0.016	0.07	0.05	212.0	250.4	84.1	31,065
93	33,019	1.5	2.9	30.7	54.0	-0.43	0.3	8.7	12.1	27.5	1.1	68.3	1.04	1.01	44.3	-0.016	0.07	0.05	211.7	250.9	84.3	33,019
94	35,713	1.3	3.1	31.3	54.9	-0.43	0.3	8.5	12.2	27.9	1.0	69.1	1.04	1.01	44.7	-0.015	0.07	0.04	209.7	249.2	84.7	35,713
95	39,963	1.4	3.1	32.1	55.9	-0.42	0.3	8.4	12.4	28.5	1.0	69.9	1.04	1.01	45.0	-0.015	0.08	0.04	208.2	248.4	85.0	39,963
96	45,229	1.3	3.1	33.0	56.9	-0.41	0.3	8.5	12.6	29.2	1.0	70.4	1.04	1.02	45.3	-0.015	0.08	0.04	210.2	251.4	85.2	45,229
97	46,627	1.1	3.2	33.4	57.5	-0.40	0.4	8.4	12.8	29.6	1.0	70.8	1.05	1.02	45.6	-0.015	0.08	0.04	208.7	250.1	85.5	46,627
98	55,195	1.1	3.3	34.1	58.3	-0.39	0.4	8.3	12.9	30.0	1.0	71.1	1.05	1.03	46.0	-0.015	0.09	0.04	208.0	250.1	85.8	55,195
99	57,523	0.9	3.3	34.6	59.0	-0.38	0.4	8.3	13.1	30.4	1.0	72.4	1.05	1.03	46.5	-0.014	0.09	0.04	207.9	250.5	86.1	57,523
00	56,305	0.7	3.4	35.0	59.5	-0.36	0.4	8.2	13.7	31.2	0.8	73.8	1.05	1.02	47.2	-0.013	0.10	0.04	208.0	250.7	86.6	56,305
01	153,338	0.7	3.5	34.8	59.2	-0.37	0.4	8.1	13.8	31.2	1.0	74.0	1.05	1.02	47.5	-0.011	0.09	0.04	206.2	248.7	86.9	153,338
02	144,740	0.5	3.5	35.7	60.4	-0.35	0.5	8.2	14.2	32.1	1.0	74.9	1.05	1.03	48.2	-0.011	0.10	0.04	208.8	252.2	87.5	144,740
03	144,861	0.6	3.5	36.6	61.7	-0.33	0.5	8.4	14.6	32.9	1.0	75.7	1.05	1.03	49.2	-0.010	0.12	0.04	211.7	256.0	88.3	144,861
04	145,411	0.6	3.6	37.5	62.9	-0.29	0.5	8.7	14.9	33.7	1.0	76.4	1.05	1.03	50.0	-0.010	0.13	0.04	217.3	262.7	88.8	145,411
05	140,981	0.4	3.6	38.6	64.5	-0.26	0.5	9.1	15.5	34.8	1.0	77.6	1.06	1.04	51.0	-0.009	0.15	0.04	224.4	271.1	89.7	140,981
06	138,372	0.4	3.6	39.6	65.9	-0.23	0.6	9.4	16.1	35.9	1.0	78.4	1.06	1.04	52.1	-0.007	0.17	0.04	229.6	277.5	90.6	138,372
07	134,254	0.5	3.6	40.7	67.5	-0.20	0.6	9.7	16.6	37.0	1.1	79.4	1.07	1.05	53.2	-0.006	0.18	0.05	235.5	284.9	91.5	134,254
08	131,750	0.5	3.5	41.4	68.5	-0.18	0.6	10.1	17.1	37.8	1.1	79.8	1.07	1.05	54.0	-0.005	0.20	0.05	242.1	292.8	92.1	131,750
09	126,902	0.6	3.5	42.4	69.9	-0.15	0.6	10.5	17.7	38.9	1.2	80.5	1.07	1.06	54.9	-0.004	0.21	0.05	249.6	301.7	92.9	126,902
10	129,809	0.7	3.5	43.3	71.1	-0.12	0.7	10.9	18.2	39.9	1.2	81.4	1.08	1.06	56.0	-0.003	0.23	0.06	256.6	310.0	93.8	129,809
11	129,061	0.8	3.4	44.2	72.3	-0.09	0.7	11.3	18.7	40.9	1.2	81.9	1.09	1.07	56.9	-0.002	0.24	0.06	263.6	318.2	94.4	129,061
12	127,911	1.0	3.3	45.1	73.6	-0.06	0.7	11.9	19.3	41.9	1.2	82.5	1.10	1.08	57.8	-0.001	0.26	0.06	272.1	328.0	95.1	127,911
13	126,547	1.1	3.3	46.0	74.9	-0.03	0.7	12.5	20.0	43.0	1.3	83.3	1.11	1.10	58.9	0.001	0.28	0.06	281.9	339.3	96.0	126,547
14	125,653	1.4	3.2	46.9	76.3	0.00	0.8	13.0	20.8	44.3	1.4	83.8	1.13	1.12	60.0	0.003	0.30	0.07	291.2	350.2	97.0	125,653
15	130,131	1.5	3.2	48.0	77.9	0.04	0.8	13.4	21.3	45.4	1.5	84.9	1.14	1.13	61.1	0.005	0.31	0.08	298.8	359.4	97.9	130,131
16	129,851	1.6	3.1	49.1	79.4	0.07	0.8	13.9	22.1	46.7	1.5	85.9	1.16	1.15	62.3	0.006	0.33	0.08	307.5	370.0	99.1	129,851
17	129,606	1.9	3.0	50.2	81.0	0.10	0.9	14.3	22.6	47.8	1.6	87.0	1.18	1.17	63.4	0.008	0.35	0.09	314.0	378.2	100.0	129,606
18	114,579	2.2	2.9	51.3	82.8	0.14	0.9	14.6	23.3	49.0	1.8	88.1	1.19	1.19	64.6	0.011	0.37	0.10	320.7	386.8	100.9	114,579

## Percentile Breakdowns of EPDs

A percentile chart can be used to get a better idea of how an animal ranks in the current group of equivalent animals in the Hereford population in North America, Argentina and Uruguay. The charts are divided into five-percent increments for each trait. The top five percent are further divided into one-percent increments.

Hereford cattle can be grouped into three very broad categories. The first would be active sires in the Pan American Hereford population. These are bulls who have sired at least ten total calves in the last three years. Your herdsire or potential herdsire can be compared to this population of bulls. Very few bulls rank at the top in every trait because of inherent genetic correlations. With careful evaluation you should be able to find bulls to match your specifications. Note, no animal will fall exactly on all even percentile increments. Simply utilize the even percentile level in which the EPD has exceeded.

Since EPDs may be used to compare animals in addition to active sires, additional information is provided. The average EPDs, ranges and a percentile breakdown for yearling and two-year-old cattle born in 2017 and 2018 are also provided. This table is useful for comparing the EPDs of animals that are typically for sale or a potential herd replacement candidate.

The breakdown chart and EPD ranges for the active cows with a calf reported since Jan. 1, 2017 allow one to compare his herd with all active cows in the Hereford population in North America, Argentina and Uruguay.

American Hereford Association  
EPDs as of July 1, 2019  
Pan American Hereford Cattle Evaluation

Average and Percentile Breakdown - 2017 & 2018 Calves

	Production										Fertility					Maternal					Carcass					\$ Indexes	
	CED	BW	WW	YW	DMI	SC	SCF	MM	M&G	CEM	MCW	UDDR	TEAT	CW	FAT	REA	MARB	BMI	BII	CHB							
Average	2.1	3.0	51	82	0.1	0.9	14.6	23	49	1.7	88	1.2	1.2	64	0.10	0.36	0.10	320	385	101							
Low	-18.1	-7.7	-11	-27	-1.3	-0.9	-11.0	-1	-4	-16.2	-19	0.2	0.0	-3	-0.111	-0.57	-0.84	-69	-20	11							
High	22.7	14.0	87	148	1.8	2.8	32.1	50	86	15.4	184	1.9	2.0	115	0.169	1.32	1.01	591	677	165							
<b>Percentile Breakdown</b>																											
Upper 1%	13.1	-2.6	70	114	-0.7	1.7	23.5	36	66	8.8	33	1.5	1.6	86	-0.041	0.75	0.45	458	539	130							
2%	12.0	-1.2	68	110	-0.5	1.6	22.5	35	64	7.9	46	1.5	1.5	83	-0.031	0.70	0.39	443	523	125							
3%	11.2	-0.7	66	107	-0.4	1.5	22.0	34	63	7.4	51	1.4	1.5	82	-0.031	0.67	0.35	434	513	123							
4%	10.5	-0.4	65	105	-0.4	1.5	21.6	33	62	7.0	54	1.4	1.5	80	-0.031	0.64	0.33	427	505	121							
5%	9.9	-0.1	65	104	-0.3	1.4	21.2	32	61	6.7	56	1.4	1.4	79	-0.031	0.62	0.30	422	499	119							
10%	8.0	0.7	62	99	-0.2	1.3	19.9	30	59	5.6	65	1.4	1.4	76	-0.021	0.56	0.24	402	477	115							
15%	6.8	1.2	60	96	-0.2	1.2	19.0	29	57	4.8	70	1.3	1.3	74	-0.011	0.53	0.20	388	461	112							
20%	5.8	1.6	58	93	-0.1	1.2	18.2	28	56	4.2	74	1.3	1.3	72	-0.011	0.50	0.18	376	448	110							
25%	5.0	1.9	57	91	-0.1	1.1	17.6	27	54	3.7	77	1.3	1.3	70	-0.011	0.47	0.16	366	436	108							
30%	4.3	2.2	56	89	0.0	1.1	17.0	26	53	3.3	80	1.3	1.3	69	-0.001	0.45	0.14	357	426	106							
35%	3.7	2.4	55	88	0.0	1.0	16.4	25	52	2.9	82	1.2	1.2	68	-0.001	0.43	0.12	349	416	105							
40%	3.1	2.6	54	86	0.1	1.0	15.8	25	51	2.5	84	1.2	1.2	67	-0.001	0.41	0.11	340	407	103							
45%	2.5	2.8	53	85	0.1	0.9	15.3	24	50	2.1	87	1.2	1.2	66	0.009	0.39	0.09	332	398	102							
50%	2.0	3.0	52	83	0.1	0.9	14.7	23	49	1.8	89	1.2	1.2	65	0.009	0.37	0.08	323	389	101							
55%	1.4	3.2	51	81	0.2	0.8	14.2	23	49	1.4	91	1.2	1.2	64	0.009	0.35	0.07	314	379	100							
60%	0.9	3.4	50	80	0.2	0.8	13.6	22	48	1.0	93	1.1	1.1	62	0.019	0.33	0.06	306	369	98							
65%	0.3	3.7	48	78	0.2	0.8	13.0	21	46	0.6	95	1.1	1.1	61	0.019	0.31	0.04	296	359	97							
70%	-0.3	3.9	47	76	0.3	0.7	12.4	21	45	0.2	97	1.1	1.1	60	0.019	0.28	0.03	286	348	95							
75%	-0.9	4.1	46	74	0.3	0.7	11.7	20	44	-0.2	100	1.1	1.1	59	0.029	0.26	0.02	275	336	94							
80%	-1.6	4.4	45	72	0.4	0.6	10.9	19	42	-0.7	102	1.1	1.1	57	0.029	0.23	0.00	262	322	92							
85%	-2.5	4.7	43	69	0.4	0.6	10.1	17	41	-1.3	106	1.1	1.0	55	0.029	0.20	-0.01	248	305	90							
90%	-3.6	5.2	41	66	0.5	0.5	9.2	16	38	-2.0	110	1.0	1.0	53	0.039	0.15	-0.03	234	288	87							
95%	-5.3	5.9	37	60	0.6	0.4	7.7	13	34	-3.2	116	1.0	1.0	49	0.049	0.09	-0.07	211	266	83							
100%	-18.1	14.0	-11	-27	1.8	-0.9	-11.0	-1	-4	-16.2	184	0.2	0.0	-3	0.169	-0.57	-0.84	-69	-20	11							

266,999 calves born in 2017 and 2018

American Hereford Association  
EPDs as of July 1, 2019  
Pan American Hereford Cattle Evaluation  
Average and Percentile Breakdown - Active Sires

	Production					Fertility					Maternal					Carcass					\$ Indexes		
	BW	WW	YW	DMI	SC	SCF	MM	M&G	CEM	MCW	UDDR	TEAT	CW	FAT	REA	MARB	BMI	BII	CHB				
<b>Average</b>	2.9	51	83	0.2	0.9	14.4	23	49	1.7	88	1.2	1.2	65	0.011	0.37	0.10	317	383	101				
<b>Low</b>	-17.7	-11	-29	-1.6	-1.0	-11.1	-3	-4	-16.4	-10	0.4	0.4	1	-0.111	-0.45	-0.43	-59	-29	18				
<b>High</b>	22.6	14.3	143	2.1	2.7	40.3	61	91	15.9	177	2.1	2.2	117	0.159	1.30	1.13	708	806	173				
<b>Percentile Breakdown</b>																							
<b>Upper 1%</b>	14.5	-3.7	75	-0.9	2.0	25.7	40	70	10.5	22	1.6	1.6	92	-0.051	0.86	0.51	492	579	138				
<b>2%</b>	13.3	-2.4	72	-0.7	1.8	24.5	38	67	9.3	33	1.5	1.6	89	-0.051	0.80	0.43	475	555	133				
<b>3%</b>	12.5	-1.5	70	-0.6	1.7	23.7	37	66	8.6	39	1.5	1.5	87	-0.041	0.76	0.39	461	542	130				
<b>4%</b>	11.7	-1.0	68	-0.5	1.7	23.2	36	65	8.0	43	1.5	1.5	85	-0.041	0.73	0.36	454	533	127				
<b>5%</b>	11.2	-0.7	67	-0.5	1.6	22.7	35	64	7.6	46	1.5	1.5	84	-0.031	0.70	0.34	446	525	126				
<b>10%</b>	9.2	0.2	64	-0.3	1.5	21.1	32	61	6.3	58	1.4	1.4	80	-0.021	0.63	0.27	420	496	120				
<b>15%</b>	7.8	0.8	62	-0.2	1.3	20.0	31	59	5.5	64	1.3	1.4	77	-0.021	0.58	0.23	403	476	116				
<b>20%</b>	6.7	1.3	60	-0.1	1.3	19.1	29	57	4.8	69	1.3	1.3	75	-0.011	0.54	0.20	389	462	113				
<b>25%</b>	5.8	1.6	58	-0.1	1.2	18.3	28	56	4.2	73	1.3	1.3	73	-0.011	0.50	0.18	378	448	111				
<b>30%</b>	5.0	1.9	57	0.0	1.1	17.5	27	54	3.6	77	1.3	1.3	71	-0.001	0.48	0.15	366	436	108				
<b>35%</b>	4.2	2.2	56	0.0	1.1	16.8	26	53	3.1	80	1.2	1.2	70	-0.001	0.45	0.13	355	423	106				
<b>40%</b>	3.5	2.5	55	0.1	1.0	16.1	25	52	2.7	83	1.2	1.2	68	-0.001	0.42	0.11	344	412	105				
<b>45%</b>	2.8	2.8	53	0.1	0.9	15.4	24	51	2.2	86	1.2	1.2	67	-0.001	0.40	0.10	333	400	103				
<b>50%</b>	2.2	3.0	52	0.2	0.9	14.6	23	50	1.8	89	1.2	1.2	65	0.009	0.37	0.08	322	388	101				
<b>55%</b>	1.4	3.2	51	0.2	0.8	13.9	23	49	1.3	92	1.2	1.2	64	0.009	0.35	0.07	310	375	99				
<b>60%</b>	0.8	3.5	50	0.2	0.8	13.0	22	48	0.9	95	1.1	1.1	63	0.019	0.32	0.05	298	362	98				
<b>65%</b>	0.1	3.7	48	0.3	0.7	12.2	21	46	0.4	98	1.1	1.1	61	0.019	0.30	0.03	285	349	96				
<b>70%</b>	-0.6	4.0	47	0.3	0.7	11.4	20	45	-0.2	101	1.1	1.1	59	0.029	0.27	0.02	272	334	94				
<b>75%</b>	-1.3	4.3	46	0.4	0.6	10.6	19	44	-0.7	104	1.1	1.1	58	0.029	0.24	0.00	259	318	92				
<b>80%</b>	-2.1	4.6	44	0.5	0.6	9.8	18	42	-1.3	108	1.1	1.0	56	0.029	0.20	-0.02	246	303	90				
<b>85%</b>	-3.1	5.0	42	0.5	0.5	8.9	16	40	-2.0	112	1.0	1.0	54	0.039	0.16	-0.04	231	288	87				
<b>90%</b>	-4.4	5.5	39	0.6	0.4	7.6	14	37	-3.0	118	1.0	1.0	50	0.049	0.10	-0.06	213	268	83				
<b>95%</b>	-6.5	6.3	34	0.8	0.2	5.6	11	32	-4.5	126	0.9	0.9	45	0.069	0.01	-0.11	181	236	76				
<b>100%</b>	-17.7	14.3	-11	2.1	-1.0	-11.1	-3	-4	-16.4	177	0.4	0.4	1	0.159	-0.45	-0.43	-59	-29	18				

8,411 sires produced at least 10 calves since January 1, 2017

American Hereford Association  
EPDs as of July 1, 2019  
Pan American Hereford Cattle Evaluation

Average and Percentile Breakdown - Active Dams

	Production					Fertility					Maternal					Carcass					\$ Indexes	
	CED	BW	WW	YW	DMI	SC	SCF	MM	M&G	CEM	MCW	UDDR	TEAT	CW	FAT	REA	MARB	BMI	BII	CHB		
Average	1.3	3.2	47	77	0.0	0.8	13.7	21	45	1.4	84	1.1	1.1	60	0.004	0.30	0.07	302	362	97		
Low	-17.6	-8.6	-9	-22	-1.5	-0.9	-13.7	-21	-14	-22.8	-23	-0.1	-0.1	-1	-0.111	-0.75	-0.48	-114	-77	15		
High	21.2	12.4	83	146	1.5	2.9	32.4	52	84	18.4	204	2.0	2.1	111	0.179	1.34	0.96	573	668	183		
Percentile Breakdown																						
Upper1%	12.8	-3.2	67	109	-0.8	1.6	24.6	37	65	9.3	23	1.5	1.6	83	-0.051	0.720	0.400	469	546	127		
2%	11.5	-1.1	65	105	-0.6	1.5	23.5	35	63	8.2	37	1.5	1.5	80	-0.041	0.660	0.340	451	527	123		
3%	10.6	-0.5	63	103	-0.6	1.4	22.7	34	61	7.6	44	1.4	1.5	79	-0.041	0.630	0.300	440	513	120		
4%	9.9	-0.1	62	101	-0.5	1.4	22.2	33	60	7.1	48	1.4	1.4	77	-0.041	0.610	0.280	430	504	118		
5%	9.3	0.2	62	100	-0.5	1.4	21.8	32	59	6.7	51	1.4	1.4	76	-0.031	0.590	0.260	423	496	117		
10%	7.3	1.0	59	95	-0.4	1.2	20.1	29	56	5.5	59	1.3	1.4	73	-0.021	0.520	0.210	398	467	112		
15%	6.1	1.5	57	91	-0.3	1.1	18.9	28	54	4.7	65	1.3	1.3	70	-0.021	0.480	0.170	381	448	109		
20%	5.1	1.9	55	89	-0.2	1.0	17.9	27	53	4.1	69	1.3	1.3	69	-0.011	0.450	0.150	367	432	107		
25%	4.3	2.2	54	87	-0.2	1.0	17.1	25	51	3.5	72	1.2	1.2	67	-0.011	0.420	0.130	354	418	105		
30%	3.6	2.4	52	85	-0.1	0.9	16.3	24	50	3.1	75	1.2	1.2	66	-0.011	0.390	0.110	343	406	103		
35%	3.0	2.7	51	83	-0.1	0.9	15.6	24	49	2.6	78	1.2	1.2	64	-0.011	0.370	0.100	332	394	101		
40%	2.4	2.9	50	81	-0.1	0.8	14.9	23	48	2.3	81	1.2	1.2	63	-0.001	0.340	0.080	321	383	100		
45%	1.8	3.1	49	79	0.0	0.8	14.3	22	47	1.9	83	1.1	1.1	62	-0.001	0.320	0.070	311	372	99		
50%	1.2	3.3	48	78	0.0	0.8	13.6	21	45	1.5	85	1.1	1.1	61	-0.001	0.300	0.060	301	361	97		
55%	0.7	3.5	47	76	0.1	0.7	12.9	20	44	1.1	88	1.1	1.1	60	-0.001	0.280	0.050	291	350	96		
60%	0.1	3.7	46	74	0.1	0.7	12.2	20	43	0.7	90	1.1	1.1	58	0.009	0.260	0.040	280	338	95		
65%	-0.5	4.0	45	73	0.1	0.6	11.5	19	42	0.3	92	1.1	1.1	57	0.009	0.230	0.030	269	326	93		
70%	-1.1	4.2	43	71	0.2	0.6	10.9	18	41	-0.1	95	1.1	1.0	56	0.019	0.210	0.010	258	314	92		
75%	-1.8	4.4	42	69	0.2	0.6	10.3	17	39	-0.6	97	1.0	1.0	54	0.019	0.180	0.000	247	301	90		
80%	-2.5	4.7	41	66	0.3	0.5	9.6	16	37	-1.2	101	1.0	1.0	53	0.019	0.160	-0.010	239	289	88		
85%	-3.4	5.1	39	63	0.3	0.4	8.8	15	36	-1.8	104	1.0	1.0	51	0.029	0.130	-0.030	227	280	86		
90%	-4.6	5.5	36	59	0.4	0.4	7.8	13	33	-2.7	109	1.0	0.9	48	0.039	0.090	-0.050	212	264	83		
95%	-6.3	6.2	32	53	0.5	0.2	6.2	10	29	-4.1	116	0.9	0.9	44	0.049	0.020	-0.080	187	239	79		
100%	-17.6	12.4	-9	-22	1.5	-0.9	-13.7	-21	-14	-22.8	204	-0.1	-0.1	-1	0.179	-0.750	-0.480	-114	-77	15		

161,349 cows calving since January 1, 2017