

# Fall 2008 International Limousin Genetic Evaluation

## Summary Statistics

The following summary statistics are presented for the Fall 2008 International Limousin Genetic Evaluation. They are for use as a rapid reference in comparing and evaluating Expected Progeny Differences (EPDs) from the genetic evaluation. More detailed information on the EPDs can be found in the Limousin Sire Summary, at [www.limousin.com](http://www.limousin.com).

## Current Sires

	GL* (days)	CED (%)	BW (lbs)	WW (lbs)	YW (lbs)	Milk (lbs)	CEM (%)	SC (cm)	ST (%)	DOC (%)	CW (lbs)	REA (in <sup>2</sup> )	YG (%)	MARB (units)
<b>Average</b>	<b>-0.8</b>	<b>6.5</b>	<b>2.0</b>	<b>39.9</b>	<b>75.3</b>	<b>20.2</b>	<b>2.9</b>	<b>0.3</b>	<b>16.7</b>	<b>13.7</b>	<b>15.7</b>	<b>0.40</b>	<b>-0.07</b>	<b>-0.04</b>
<b>Minimum</b>	<b>-7.9</b>	<b>-9</b>	<b>-9.6</b>	<b>-2</b>	<b>17</b>	<b>-7</b>	<b>-14</b>	<b>-1.3</b>	<b>-9</b>	<b>-24</b>	<b>-53</b>	<b>-0.91</b>	<b>-0.51</b>	<b>-0.28</b>
<b>Maximum</b>	<b>2.9</b>	<b>29</b>	<b>10.1</b>	<b>77</b>	<b>142</b>	<b>44</b>	<b>20</b>	<b>1.9</b>	<b>32</b>	<b>46</b>	<b>80</b>	<b>1.40</b>	<b>0.48</b>	<b>0.46</b>
<b>Std Dev</b>	<b>1.2</b>	<b>4.3</b>	<b>1.9</b>	<b>9.1</b>	<b>14.3</b>	<b>5.4</b>	<b>3.6</b>	<b>0.4</b>	<b>4.1</b>	<b>8.9</b>	<b>14.1</b>	<b>0.23</b>	<b>0.10</b>	<b>0.08</b>
<b>Upper %</b>														
<b>1</b>	-4.0	18	-3.4	62	112	34	11	1.3	25	35	55	0.98	-0.31	0.21
<b>2</b>	-3.5	17	-2.3	60	107	31	10	1.1	24	31	49	0.88	-0.28	0.16
<b>3</b>	-3.3	16	-1.8	58	104	30	10	1.0	24	30	45	0.84	-0.26	0.13
<b>4</b>	-3.1	15	-1.4	57	102	30	9	0.9	24	29	43	0.82	-0.24	0.11
<b>5</b>	-2.9	14	-1.2	56	100	29	9	0.9	23	28	41	0.80	-0.23	0.10
<b>10</b>	-2.3	12	-0.4	52	94	27	7	0.7	22	25	34	0.69	-0.20	0.06
<b>20</b>	-1.7	10	0.6	47	87	25	6	0.6	20	21	26	0.59	-0.16	0.02
<b>30</b>	-1.3	8	1.2	44	82	23	5	0.4	19	19	21	0.52	-0.13	-0.01
<b>40</b>	-1.0	7	1.7	42	78	22	4	0.3	18	16	18	0.45	-0.10	-0.03
<b>50</b>	-0.8	6	2.1	40	75	20	3	0.2	17	14	14	0.39	-0.08	-0.04
<b>60</b>	-0.5	5	2.6	38	71	19	2	0.2	16	12	12	0.33	-0.06	-0.06
<b>70</b>	-0.2	4	3.0	35	68	18	1	0.1	15	10	9	0.27	-0.03	-0.08
<b>80</b>	0.1	3	3.5	33	64	16	0	0.0	13	7	5	0.21	0.01	-0.09
<b>90</b>	0.4	2	4.2	29	58	14	-1	-0.2	12	2	0	0.13	0.06	-0.13
<b>Number</b>	1,143	4,373	4,387	4,387	4,387	4,399	4,373	4,276	2,202	3,705	3,557	3,557	3,557	3,557

Current Sires are those which have sired a calf born within the last two years.

\* GL is for Canadian Sires only

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## Current Dams

	GL* (days)	CED (%)	BW (lbs)	WW (lbs)	YW (lbs)	Milk (lbs)	CEM (%)	SC (cm)	ST (%)	DOC (%)	CW (lbs)	REA (in <sup>2</sup> )	YG (%)	MARB (units)
<b>Average</b>	<b>-0.5</b>	<b>6.4</b>	<b>2.0</b>	<b>36.3</b>	<b>68.8</b>	<b>19.8</b>	<b>2.8</b>	<b>0.2</b>	<b>15.5</b>	<b>11.3</b>	<b>10.8</b>	<b>0.35</b>	<b>-0.08</b>	<b>-0.03</b>
<b>Minimum</b>	-6.4	-9	-6.3	-1	11	-10	-13	-1.1	-1	-29	-51	-0.94	-0.51	-0.60
<b>Maximum</b>	3.1	27	10.6	71	129	48	15	1.6	29	40	70	2.24	0.52	0.58
<b>Std Dev</b>	1.0	3.9	1.8	8.7	13.8	6.1	3.2	0.3	3.9	8.5	12.4	0.22	0.10	0.07
<b>Upper %</b>														
<b>1</b>	-3.3	17	-2.4	57	102	35	11	1.0	25	30	42	0.88	-0.30	0.22
<b>2</b>	-2.9	15	-1.9	54	98	33	10	0.9	24	28	38	0.81	-0.27	0.17
<b>3</b>	-2.6	14	-1.5	53	95	32	9	0.8	23	27	35	0.78	-0.25	0.13
<b>4</b>	-2.4	14	-1.2	52	93	31	9	0.8	22	26	33	0.74	-0.24	0.11
<b>5</b>	-2.2	13	-1.0	51	92	30	8	0.7	22	25	32	0.71	-0.23	0.10
<b>10</b>	-1.7	11	-0.3	48	86	28	7	0.6	21	22	27	0.62	-0.20	0.05
<b>20</b>	-1.2	9	0.6	44	80	25	5	0.4	19	19	21	0.52	-0.16	0.01
<b>30</b>	-0.9	8	1.2	41	76	23	4	0.3	18	16	17	0.46	-0.14	-0.01
<b>40</b>	-0.6	7	1.7	39	72	21	4	0.2	17	14	13	0.39	-0.12	-0.03
<b>50</b>	-0.4	6	2.1	36	69	20	3	0.2	16	11	10	0.34	-0.09	-0.04
<b>60</b>	-0.2	5	2.5	34	65	18	2	0.1	15	9	7	0.29	-0.07	-0.05
<b>70</b>	0.0	4	3.0	32	62	17	1	0.0	14	7	4	0.24	-0.05	-0.07
<b>80</b>	0.2	3	3.5	29	57	15	0	-0.1	12	4	1	0.18	-0.01	-0.09
<b>90</b>	0.6	2	4.2	25	51	12	-1	-0.2	11	0	-4	0.09	0.04	-0.11
<b>Number</b>	10,281	41,287	41,610	41,610	41,609	41,784	41,287	39,958	23,953	31,655	29,050	29,050	29,050	29,050

Current Dams are those females that have had a calf within the last two years.

\* GL is for Canadian Dams only

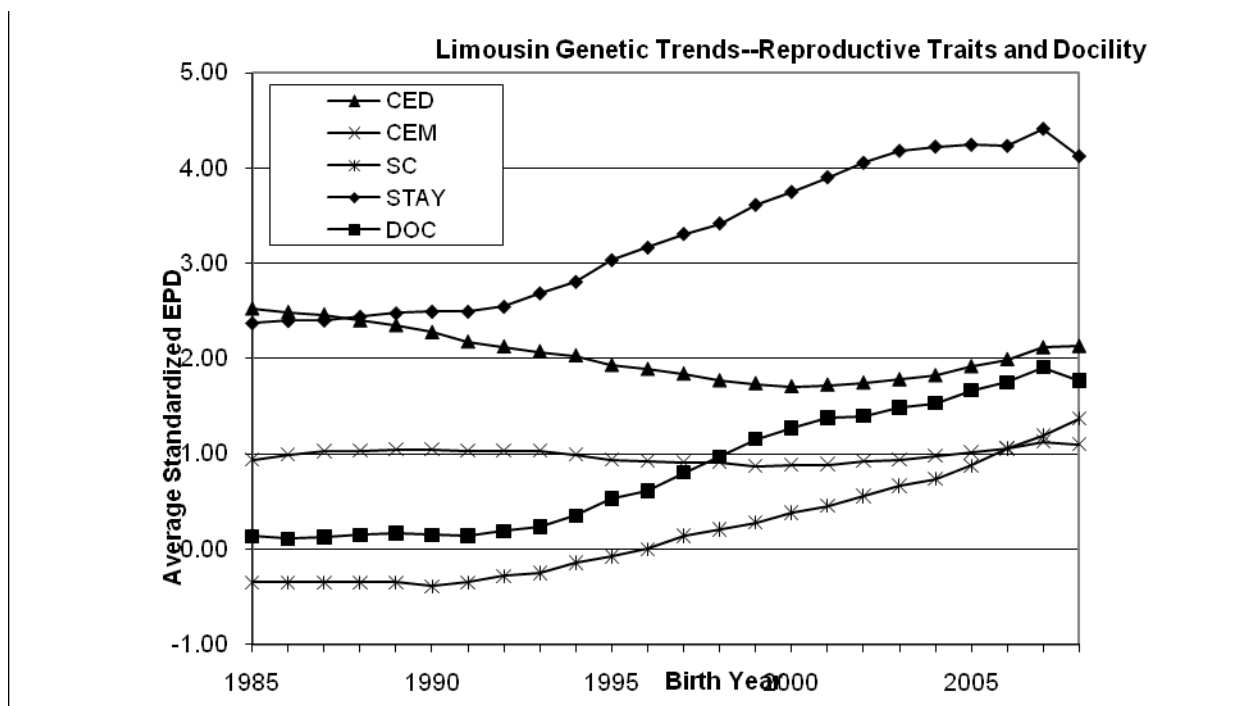
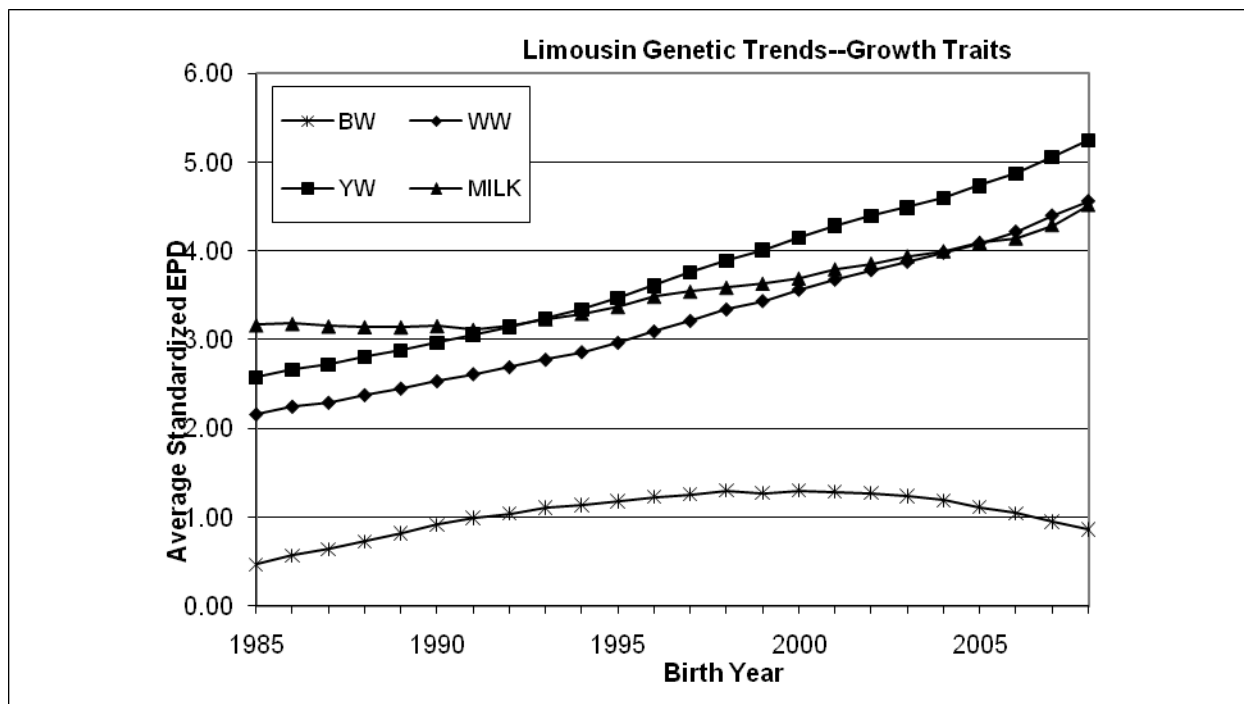
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## 2006-2008 Born Calves

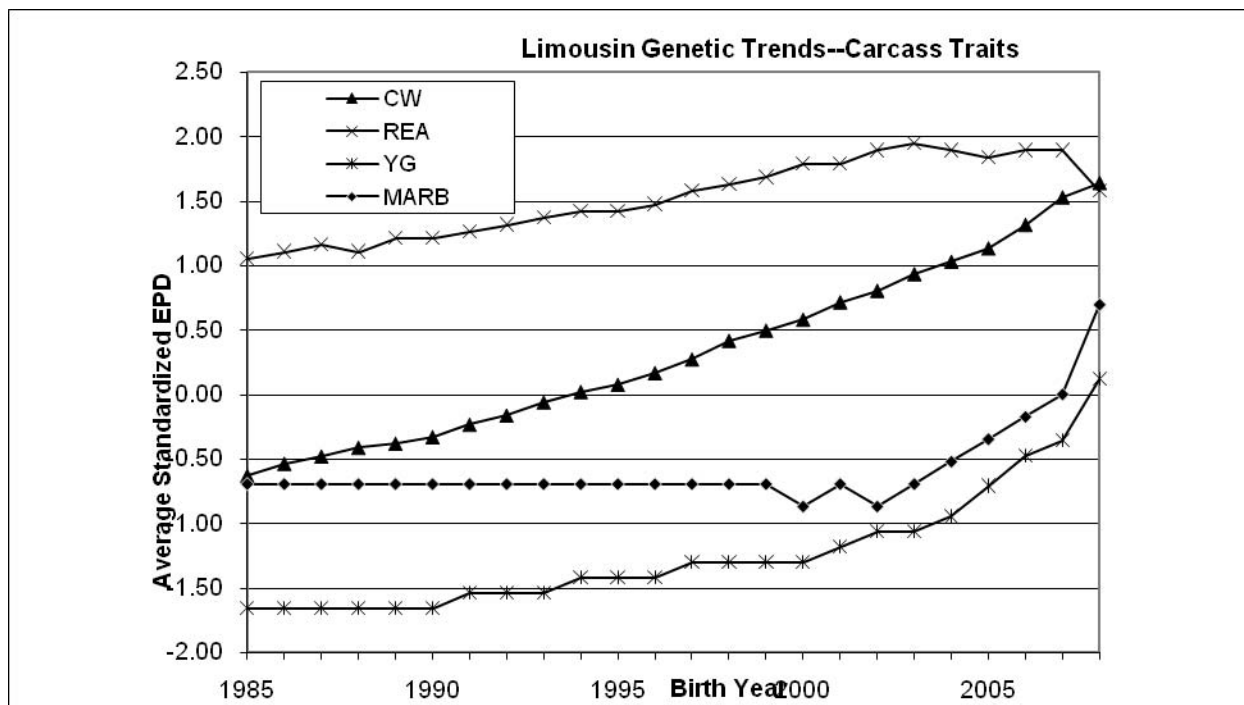
	GL (days)	CED (%)	BW (lbs)	WW (lbs)	YW (lbs)	Milk (lbs)	CEM (%)	SC (cm)	ST (%)	DOC (%)	CW (lbs)	REA (in <sup>2</sup> )	YG (%)	MARB (units)
<b>Average</b>	-1.1	7.2	1.6	40.2	76.1	20.8	3.2	0.3	16.7	14.5	17.9	0.35	-0.03	0.00
<b>Minimum</b>	-7.8	-9	-8.2	-2	24	0	-9	-0.9	3	-22	-61	-1.27	-0.47	-0.33
<b>Maximum</b>	2.8	28	10.6	76	144	43	15	2.0	29	43	101	1.76	0.65	0.62
<b>Std Dev</b>	0.95	3.7	1.8	8.2	13.3	4.8	2.9	0.3	3.5	7.6	13.2	0.25	0.12	0.10
<b>Upper %</b>														
<b>1</b>	-3.6	18	-2.9	59	108	33	11	1.1	25	32	49	0.89	-0.26	0.35
<b>2</b>	-3.2	16	-2.3	57	105	31	10	1.0	24	30	44	0.82	-0.23	0.28
<b>3</b>	-3.0	15	-1.9	56	102	30	9	0.9	24	29	42	0.79	-0.22	0.24
<b>4</b>	-2.8	14	-1.7	55	100	30	9	0.9	23	28	40	0.76	-0.21	0.21
<b>5</b>	-2.7	14	-1.5	54	99	29	8	0.8	23	27	39	0.73	-0.20	0.19
<b>10</b>	-2.3	12	-0.7	51	94	27	7	0.7	21	24	34	0.66	-0.17	0.12
<b>20</b>	-1.9	10	0.2	47	87	25	5	0.6	20	21	29	0.56	-0.13	0.06
<b>30</b>	-1.5	9	0.9	45	83	23	5	0.5	18	19	25	0.49	-0.10	0.03
<b>40</b>	-1.3	8	1.3	42	79	22	4	0.4	18	17	21	0.43	-0.08	0.00
<b>50</b>	-1.0	7	1.8	40	76	21	3	0.3	17	15	18	0.37	-0.05	-0.02
<b>60</b>	-0.8	6	2.2	38	72	20	2	0.2	16	13	14	0.31	-0.02	-0.04
<b>70</b>	-0.6	5	2.6	36	69	18	2	0.2	15	11	11	0.25	0.01	-0.06
<b>80</b>	-0.3	4	3.1	33	65	17	1	0.1	14	8	7	0.17	0.05	-0.08
<b>90</b>	0.1	3	3.7	30	60	15	0	-0.1	13	5	2	0.03	0.13	-0.10
<b>Number</b>	47,139	64,495	65,788	65,788	65,785	66,599	64,495	57,163	3,588	37,162	42,533	42,533	42,533	42,533

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## Standardized Limousin International Genetic Trends



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### Possible Change Values (plus or minus)

Accuracy	CE (%)	GL (days)	BW (lbs)	WW (lbs)	YW (lbs)	CEM (%)	MA (lbs)	SC (cm)	ST (%)	DOC (%)	CW (lbs)	REA (in <sup>2</sup> )	FAT (in)	MARB (units)
.00	8.6	1.8	3.0	16.2	24.7	14.8	14.8	0.70	8.6	15.8	36	0.46	0.07	0.24
.10	7.8	1.6	2.8	15.0	22.0	13.7	13.7	0.62	7.7	14.3	32	0.41	0.06	0.22
.20	6.9	1.4	2.5	13.4	19.4	12.2	12.2	0.56	6.9	12.7	29	0.37	0.05	0.20
.30	6.1	1.2	2.2	11.7	16.8	10.8	10.8	0.49	6.0	11.1	25	0.32	0.04	0.17
.40	5.2	1.1	1.9	10.0	14.2	9.2	9.2	0.42	5.2	9.5	22	0.28	0.04	0.14
.50	4.3	0.9	1.6	8.1	11.5	7.4	7.4	0.35	4.3	7.9	18	0.23	0.03	0.12
.60	3.5	0.7	1.3	6.4	9.0	5.8	5.8	0.28	3.4	6.3	14	0.18	0.02	0.10
.70	2.6	0.6	1.0	4.8	6.4	4.3	4.3	0.21	2.6	4.8	11	0.14	0.02	0.07
.80	1.7	0.4	0.7	3.2	3.9	2.9	2.9	0.15	1.7	3.2	7	0.09	0.01	0.05
.90	0.9	0.3	0.4	1.5	2.1	1.4	1.4	0.08	0.9	1.6	4	0.05	0.01	0.02
1.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00	0.0	0.0	0	0.00	0.00	0.00

Possible Change Values reflect the accuracy of an EPD and provide a measure of potential change associated with EPD of varying accuracy levels. For a given accuracy, the EPD values of 2/3 of the animals are expected to remain within plus or minus change level.

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## Definitions

GL – Gestation Length in days

CED – Calving Ease Direct in % unassisted births

BW – Birth Weight in pounds

WW – Weaning Weight in pounds

YW – Yearling Weight in pounds

PWG – Post-weaning gain in pounds

CEM – Maternal Calving Ease in % unassisted births

Milk – Milk (Maternal Ability) in pounds of weaned calf

TM – Total Maternal in pounds of weaned calf ( $1/2 WW + MA$ )

SC – Scrotal in centimetres

ST – Stayability in percent probability

DOC – Docility in percent probability

CW – Carcass Weight in pounds

REA – Rib-Eye Area in square inches

FAT – backfat EPD in inches

YG – Yield Grade in % USDA Yield Grade Units

MARB – Marbling in USDA Marbling Scores

Std Dev – Standard Deviation, a measure of how much “spread” there is in the population for a particular trait.

## A Note on Standard Curves

The Limousin population (all Limousin Cattle in North America) represents a normal or standard population. This means that the majority of animals will fall in the middle of the curve (near average) and fewer animals will lie towards to outside of the curve for any given trait. The Standard Deviation represents the width or spread of the curve. For any trait, roughly 50% of the cattle will be “above” average, with approximately 2% being more than 2 standard deviations above the average.

