

# Fall 2014 International Limousin Genetic Evaluation

## Summary Statistics

The following summary statistics are presented for the Fall 2014 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)	PWG* (lbs)	Milk (lbs)	CEM (%)	SC (cm)	ST (%)	DOC (%)	CW (lbs)	REA (in <sup>2</sup> )	YG (%)	Fat* (in)	MARB (units)
<b>Average</b>	-1.4	8.3	1.8	46.6	82.6	34.4	22.6	4.1	0.4	19.0	17.5	21.2	0.53	-0.09	-0.004	-0.03
<b>Minimum</b>	-5.9	-8.6	-6.6	4.8	29.8	12.0	-1.8	-13.6	-0.9	3.1	-18.7	-39.4	-0.35	-0.51	-0.06	-0.32
<b>Maximum</b>	2.7	31.4	9.2	87.1	137.6	69.8	51.2	20.8	2.2	39.9	47.8	92.4	1.42	0.30	0.16	0.35
<b>Std Dev</b>	1.3	4.6	2.0	10.0	15.6	8.3	6.0	4.0	0.4	4.6	9.8	17.2	0.22	0.10	0.024	0.08
<b>Upper %</b>																
<b>1</b>	-4.7	22	-3.5	71	119	58.2	37	14	1.4	30	40	63	1.07	-0.31	-0.06	0.17
<b>2</b>	-4.2	20	-2.9	68	116	54.4	36	13	1.3	28	38	59	1.00	-0.27	-0.04	0.14
<b>3</b>	-4.0	18	-2.5	66	113	52.4	35	12	1.2	27	37	56	0.95	-0.26	-0.04	0.13
<b>4</b>	-3.7	17	-2.1	65	111	50.9	34	12	1.1	26	35	52	0.92	-0.24	-0.04	0.12
<b>5</b>	-3.5	16	-1.9	64	110	49.3	33	11	1.1	26	34	49	0.89	-0.23	-0.03	0.11
<b>10</b>	-3.0	14	-0.8	60	104	45.4	30	9	0.9	25	30	44	0.82	-0.20	-0.03	0.08
<b>20</b>	-2.4	12	0.3	55	96	40.4	27	7	0.7	23	26	36	0.71	-0.17	-0.02	0.04
<b>30</b>	-2.0	10	1.0	51	91	37.6	25	6	0.6	21	22	30	0.65	-0.15	-0.02	0.01
<b>40</b>	-1.6	9	1.5	49	86	35.5	24	5	0.5	20	19	25	0.58	-0.12	-0.01	-0.02
<b>50</b>	-1.3	8	2.0	46	82	33.9	22	4	0.4	19	17	20	0.52	-0.10	-0.01	-0.04
<b>60</b>	-1.0	7	2.4	44	78	32.1	21	3	0.3	18	15	15	0.46	-0.07	0.00	-0.06
<b>70</b>	-0.6	6	2.8	41	74	30.0	20	2	0.2	17	13	11	0.40	-0.04	0.00	-0.07
<b>80</b>	-0.3	5	3.3	38	70	27.7	18	1	0.1	15	10	7	0.34	0.00	0.01	-0.10
<b>90</b>	0.0	3	4.1	34	64	24.4	16	-1	-0.1	13	6	0	0.25	0.04	0.02	-0.13
<b>Count</b>	906	1,990	1,993	1,993	1,993	906	1,997	1,990	1,909	1,113	1,681	1,657	1,657	1,657	410	1,620

Current Sires are those males that have sired a calf within the last two and a half years.

\* GL is for Canadian Sires only

\* PWG is for Canadian Sires only

\* Fat is for Canadian Sires only.

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## Current Dams

	GL* (days)	CED (%)	BW (lbs)	WW (lbs)	YW (lbs)	PWG* (lbs)	Milk (lbs)	CEM (%)	SC (cm)	ST (%)	DOC (%)	CW (lbs)	REA (in <sup>2</sup> )	YG (%)	Fat* (in)	MARB (units)
<b>Average</b>	<b>-0.9</b>	<b>7.8</b>	<b>1.9</b>	<b>43.3</b>	<b>77.3</b>	<b>30.6</b>	<b>22.0</b>	<b>3.9</b>	<b>0.3</b>	<b>18.5</b>	<b>16.4</b>	<b>16.3</b>	<b>0.48</b>	<b>-0.10</b>	<b>-0.008</b>	<b>-0.04</b>
<b>Minimum</b>	-5.9	-10.4	-6.0	-0.7	14.9	-8.4	-10.6	-11.2	-0.9	1.6	-24.8	-40.7	-0.25	-0.48	-0.06	-0.33
<b>Maximum</b>	3.0	27.5	9.6	92.8	141.6	63.6	52.1	17.3	1.8	35.7	42.6	81.3	1.27	0.32	0.09	0.35
<b>Std Dev</b>	1.1	4.3	1.8	8.8	14.1	6.6	6.1	3.5	0.3	4.5	9.1	14.5	0.20	0.09	0.014	0.07
<b>Upper %</b>																
<b>1</b>	-3.8	19	-2.6	65	111	47.7	37	13	1.2	31	36	52	0.95	-0.3	-0.03	0.16
<b>2</b>	-3.4	18	-2.1	62	107	45.2	36	12	1.1	29	34	46	1.00	-0.3	-0.03	0.13
<b>3</b>	-3.2	17	-1.7	60	105	43.6	34	11	1.0	28	33	44	0.86	-0.3	-0.03	0.12
<b>4</b>	-3.0	16	-1.4	59	102	42.5	33	10	0.9	27	32	41	0.83	-0.2	-0.03	0.10
<b>5</b>	-2.9	16	-1.2	58	101	41.7	33	10	0.9	27	31	40	0.81	-0.2	-0.03	0.09
<b>10</b>	-2.4	13	-0.4	55	96	39.1	30	9	0.8	25	28	34	0.74	-0.2	-0.02	0.06
<b>20</b>	-1.8	11	0.5	51	89	36.1	27	7	0.6	22	24	29	0.65	-0.2	-0.02	0.02
<b>30</b>	-1.4	10	1.1	48	85	33.7	25	6	0.5	21	21	24	0.59	-0.2	-0.01	0.00
<b>40</b>	-1.1	9	1.6	46	81	31.9	23	5	0.4	19	19	20	0.53	-0.1	-0.01	-0.02
<b>50</b>	-0.8	7	2.0	43	77	30.3	22	4	0.3	18	16	17	0.48	-0.1	-0.01	-0.04
<b>60</b>	-0.6	6	2.4	41	73	28.6	20	3	0.2	17	14	13	0.42	-0.1	-0.01	-0.06
<b>70</b>	-0.3	5	2.9	39	70	27.1	19	2	0.1	16	12	8	0.36	-0.1	0.00	-0.07
<b>80</b>	-0.1	4	3.3	36	66	25.1	17	1	0.0	15	9	4	0.30	0.0	0.00	-0.09
<b>90</b>	0.3	3	4.0	32	60	22.4	15	-1	-0.1	13	5	-2	0.21	0.0	0.01	-0.12
<b>Count</b>	7,930	20,332	20,399	20,399	20,399	7,930	20,465	20,332	19,475	12,721	16,602	15,784	15,784	15,784	1,539	15,445

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

\* GL is for Canadian Dams only

\* PWG is for Canadian Dams only

\* Fat is for Canadian Dams only.

# Fall 2014 International Limousin Genetic Evaluation

## 2012-2014 Born Calves

	GL* (days)	CED (%)	BW (lbs)	WW (lbs)	YW (lbs)	PWG* (lbs)	Milk (lbs)	CEM (%)	SC (cm)	ST (%)	DOC (%)	CW (lbs)	REA (in <sup>2</sup> )	YG (%)	Fat* (in)	MARB (units)
<b>Average</b>	-1.2	9.1	1.5	47.2	83.9	33.5	23.0	4.8	0.5	19.8	21.1	25.9	0.55	-0.07	-0.005	0.00
<b>Minimum</b>	-6.9	-5.3	-5.9	12.7	33.7	11.3	2.0	-9.2	-0.8	6.9	-18.2	-32.3	-0.21	-0.38	-0.03	-0.25
<b>Maximum</b>	3.1	27.5	9.2	105.3	136.4	63.2	48.3	17.3	1.8	32.7	43.6	89.9	1.28	0.31	0.10	0.34
<b>Std Dev</b>	0.97	4.1	1.8	8.4	13.1	6.35	4.7	3.2	0.3	3.8	8.9	13.0	0.18	0.09	0.012	0.07
<b>Upper %</b>																
<b>1</b>	-3.7	21	-3.1	68	115	50.6	37	13	1.2	28	38	57	0.95	-0.25	-0.03	0.18
<b>2</b>	-3.3	19	-2.6	65	112	48.3	33	12	1.1	28	37	52	1.00	-0.23	-0.03	0.16
<b>3</b>	-3.1	18	-2.2	64	109	46.7	32	11	1.1	27	36	50	0.88	-0.22	-0.02	0.15
<b>4</b>	-3.0	17	-2.0	62	107	45.4	32	11	1.0	27	35	48	0.85	-0.21	-0.02	0.13
<b>5</b>	-2.9	17	-1.8	61	106	44.5	31	11	1.0	26	35	47	0.84	-0.20	-0.02	0.12
<b>10</b>	-2.5	15	-1.0	58	101	41.7	29	9	0.9	25	32	42	0.78	-0.17	-0.02	0.09
<b>20</b>	-2.0	12	0.0	54	95	38.5	27	8	0.7	23	29	36	0.70	-0.14	-0.01	0.06
<b>30</b>	-1.7	11	0.7	51	91	36.5	25	6	0.6	22	26	33	0.65	-0.12	-0.01	0.03
<b>40</b>	-1.4	10	1.2	49	87	34.7	24	5	0.6	21	24	29	0.61	-0.10	-0.01	0.01
<b>50</b>	-1.2	9	1.6	47	84	33.2	23	5	0.5	20	21	26	0.56	-0.08	-0.01	-0.01
<b>60</b>	-0.9	8	2.1	45	80	32.1	22	4	0.4	19	19	23	0.51	-0.05	0.00	-0.03
<b>70</b>	-0.7	7	2.5	43	77	30.1	20	3	0.3	18	17	19	0.46	-0.03	0.00	-0.04
<b>80</b>	-0.4	6	2.9	40	73	28.2	19	2	0.2	17	14	15	0.40	0.00	0.00	-0.06
<b>90</b>	0.0	4	3.6	37	67	25.7	17	1	0.1	15	9	9	0.32	0.04	0.01	-0.09
<b>Count</b>	12,198	22,966	23,154	23,154	23,154	12,198	23,372	22,966	20,616	1,567	16,089	15,910	15,910	15,910	884	15,611

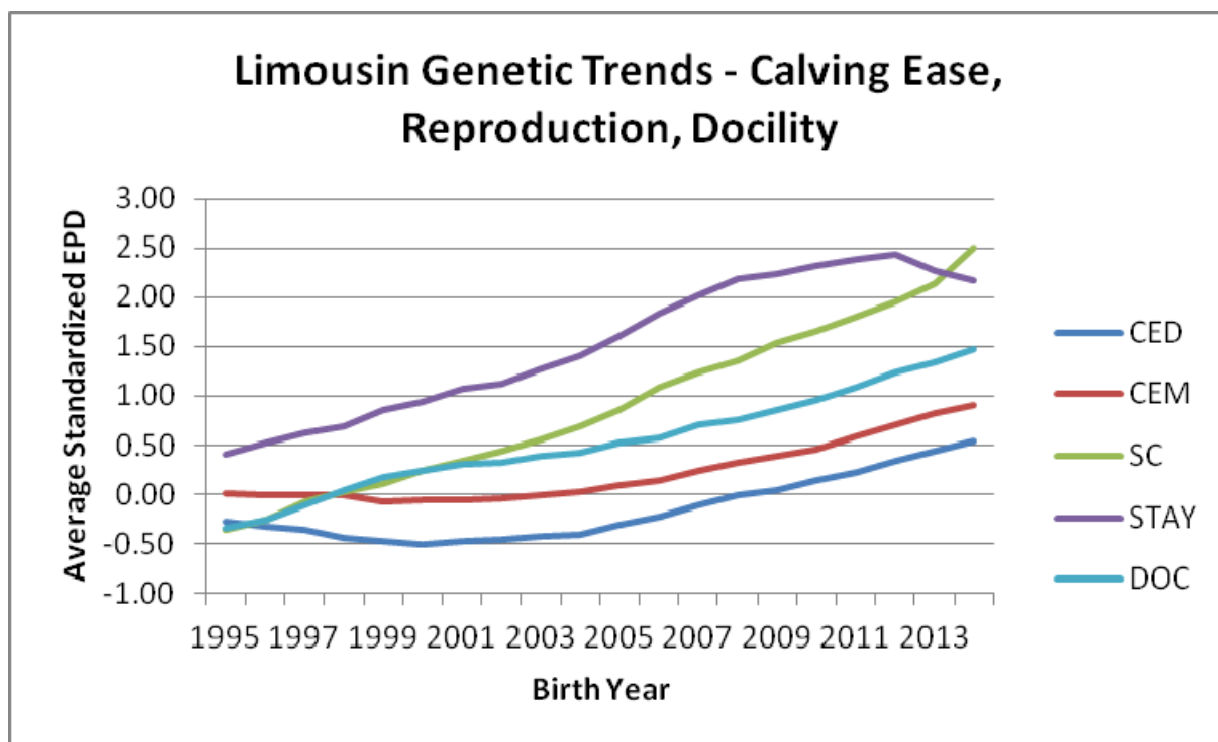
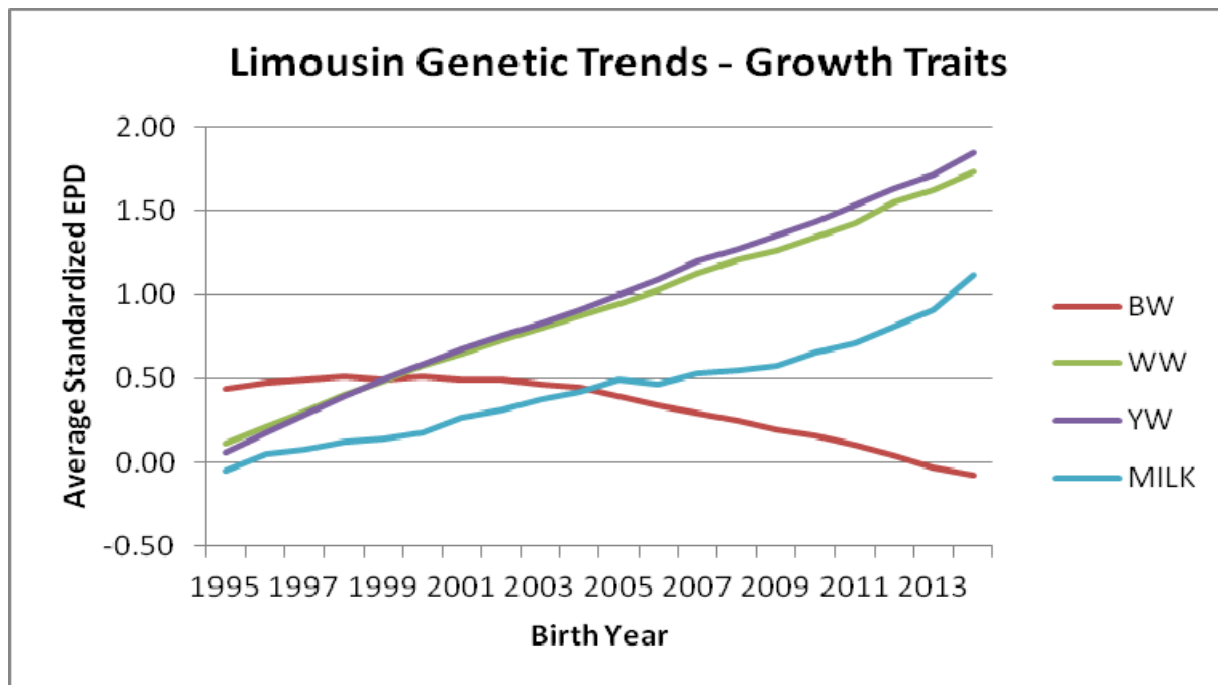
\* GL is for Canadian Calves only.

\* PWG is for Canadian Calves only.

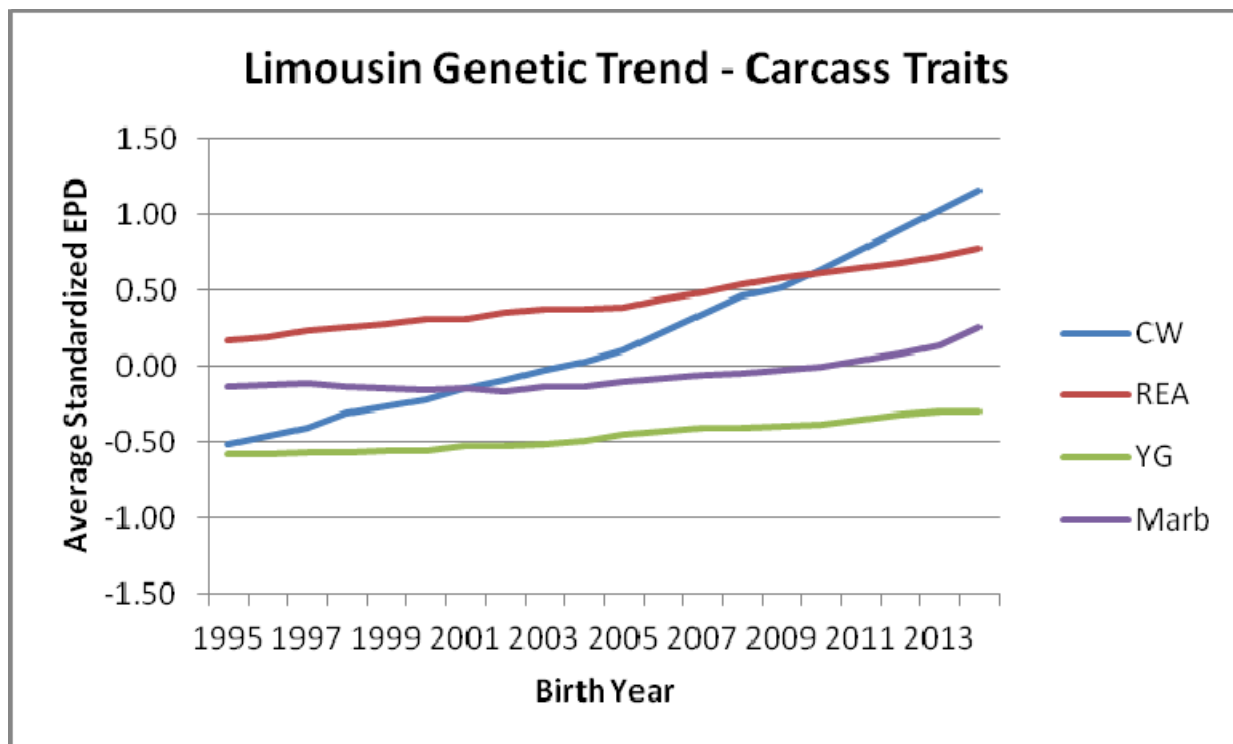
\* Fat is for Canadian Calves only.

# Fall 2014 International Limousin Genetic Evaluation

## Standardized Limousin International Genetic Trends



## Fall 2014 International Limousin Genetic Evaluation



### 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.

# Fall 2014 International Limousin Genetic Evaluation

## 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.

