Spring 2014 International Limousin Genetic Evaluation

Summary Statistics

The following summary statistics are presented for the Spring 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.

Current Sires

	GL* (days)	CED (%)	BW (lbs)	WW (lbs)	YW (lbs)	PWG* (lbs)	Milk (lbs)	CEM (%)	SC (cm)	ST (%)	DOC (%)	CW (lbs)	REA (in^2)	YG (%)	Fat* (in)	MARB (units)
Average	-1.4	8.4	1.9	45.6	82.6	35.7	22.5	4.0	0.4	19.2	17.7	21.5	0.53	-0.09	-0.004	-0.03
Minimum	-6.0	-8.6	-6.5	3.9	29.6	12.8	-1.2	-13.6	-0.9	3.4	-18.4	-29.7	-0.35	-0.51	-0.060	-0.32
Maximum	2.7	31.4	9.4	86.0	135.0	70.6	51.8	19.2	2.2	40.6	47.7	96.9	1.42	0.29	0.160	0.38
Std Dev	1.3	4.6	2.0	10.0	15.7	8.3	6.0	3.9	0.4	4.8	9.8	17.2	0.22	0.10	0.025	0.08
Upper %																
1	-4.9	22	-3.5	70	121	59.8	38	14	1.5	30	40	63	1.08	-0.29	-0.060	0.17
2	-4.3	20	-2.8	67	116	56.2	36	13	1.3	29	38	60	1.01	-0.26	-0.050	0.14
3	-4.1	18	-2.5	65	114	53.9	35	12	1.2	28	37	55	0.96	-0.25	-0.040	0.13
4	-3.7	18	-2.1	64	112	52.8	34	11	1.1	27	36	53	0.93	-0.24	-0.040	0.12
5	-3.6	17	-1.8	63	110	50.8	33	10	1.1	27	34	51	0.90	-0.23	-0.039	0.11
10	-3.1	14	-0.7	59	103	47.0	30	9	0.9	25	31	44	0.83	-0.20	-0.030	0.08
20	-2.4	12	0.4	54	96	41.6	27	7	0.7	23	26	36	0.71	-0.17	-0.020	0.04
30	-2.0	10	1.1	50	90	38.9	25	6	0.6	22	22	31	0.65	-0.14	-0.020	0.01
40	-1.6	9	1.6	48	86	36.6	24	5	0.5	21	20	25	0.58	-0.12	-0.010	-0.02
50	-1.3	8	2.1	45	82	34.8	22	4	0.4	19	17	21	0.53	-0.10	-0.010	-0.04
60	-1.0	7	2.5	43	78	33.3	21	3	0.3	18	15	16	0.47	-0.07	0.000	-0.06
70	-0.7	6	2.9	40	74	31.1	20	2	0.2	17	13	12	0.41	-0.04	0.000	-0.07
80	-0.3	5	3.4	37	70	28.9	18	1	0.1	15	10	7	0.34	0.00	0.010	-0.09
90	0.0	3	4.1	34	64	26.3	15	-1	-0.1	14	6	0	0.25	0.04	0.020	-0.13
Count	669	1,672	1,675	1,675	1,675	669	1,679	1,672	1,607	793	1,421	1,402	1,402	1,402	282	1,376

Current Sires are those males that have sired a calf within the last two 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 (in²)	YG (%)	Fat* (in)	MARB (units)
Average	**-0.9**	**8.0**	**2.0**	**42.4**	**77.4**	**31.4**	**22.0**	**3.8**	**0.3**	**18.7**	**16.5**	**16.7**	**0.48**	**-0.10**	**-0.007**	**-0.03**
Minimum	-5.9	-7.1	-5.8	-1.7	14.7	-8.0	-10.6	-11.3	-0.9	1.4	-24.6	-39.5	-0.25	-0.48	-0.070	-0.33
Maximum	3.1	27.5	9.1	91.5	137.8	65.1	52.1	16.5	1.8	36.2	42.6	81.1	1.23	0.31	0.090	0.37
Std Dev	1.1	4.4	1.8	8.8	14.1	6.7	6.2	3.6	0.3	4.6	9.1	14.5	0.21	0.09	0.015	0.07
Upper %																
1	-3.9	20	-2.6	63	111	48.7	38	12	1.2	32	36	52	0.95	-0.3	-0.040	0.16
2	-3.4	18	-2.0	61	107	46.1	36	11	1.1	30	34	46	0.89	-0.3	-0.030	0.13
3	-3.2	17	-1.7	59	104	44.5	34	11	1.0	29	33	43	0.86	-0.3	-0.030	0.11
4	-3.0	16	-1.4	58	102	43.5	34	10	0.9	28	32	41	0.83	-0.2	-0.030	0.10
5	-2.9	16	-1.1	57	101	42.6	33	10	0.9	27	31	40	0.81	-0.2	-0.030	0.09
10	-2.4	14	-0.4	54	96	40.0	30	9	0.8	25	28	35	0.74	-0.2	-0.020	0.06
20	-1.8	12	0.5	50	89	37.0	27	7	0.6	22	24	29	0.66	-0.2	-0.020	0.02
30	-1.4	10	1.2	47	85	34.6	25	6	0.5	21	21	25	0.60	-0.2	-0.010	0.00
40	-1.1	9	1.7	45	81	32.8	23	5	0.4	20	19	21	0.54	-0.1	-0.010	-0.02
50	-0.8	8	2.1	42	77	31.2	22	4	0.3	18	17	17	0.48	-0.1	-0.010	-0.04
60	-0.6	7	2.5	40	73	29.5	20	3	0.2	17	14	13	0.43	-0.1	-0.010	-0.06
70	-0.3	6	3.0	38	70	27.9	19	2	0.1	16	12	9	0.37	-0.1	0.000	-0.07
80	0.0	4	3.5	35	66	25.9	17	1	0.0	15	9	4	0.30	0.0	0.000	-0.09
90	0.4	3	4.2	31	60	23.1	15	-1	-0.1	13	5	-2	0.22	0.0	0.010	-0.12
Count	6,291	17,433	17,470	17,470	17,470	6,291	17,526	17,433	16,756	9,822	14,592	13,798	13,798	13,798	1,113	13,518

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

* GL is for Canadian Dams only

* PWG is for Canadian Dams only

* Fat is for Canadian Dams only.

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2012-2013 Born Calves

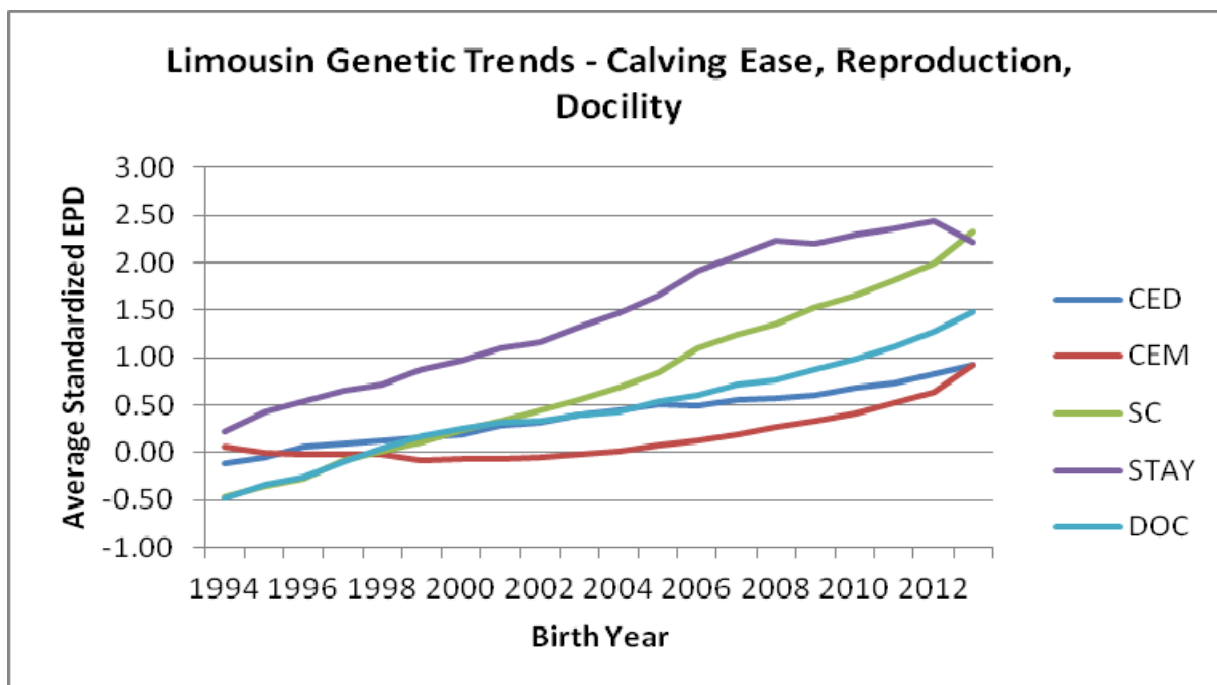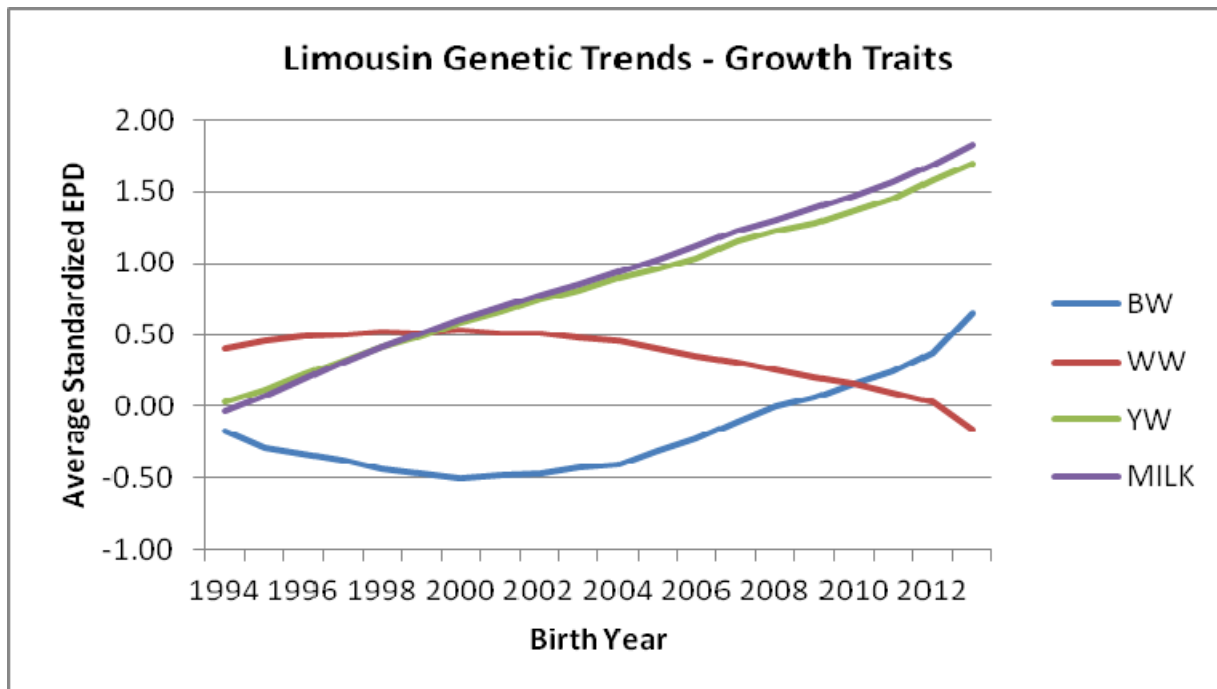|	GL* (days)	CED (%)	BW (lbs)	WW (lbs)	YW (lbs)	PWG* (lbs)	Milk (lbs)	CEM (%)	SC (cm)	ST (%)	DOC (%)	CW (lbs)	REA (in^2)	YG (%)	Fat* (in)	MARB (units)
Average	-1.2	9.3	1.5	46.4	84.3	34.5	22.8	4.8	0.5	19.8	21.5	26.2	0.56	-0.07	-0.004	-0.01
Minimum	-6.7	-5.8	-6.0	11.9	37.9	11.7	1.9	-8.9	-0.8	6.9	-18.3	-31.8	-0.11	-0.36	-0.030	-0.23
Maximum	3.1	27.5	9.6	86.5	137.0	63.0	44.5	15.7	1.8	29.5	43.5	78.0	1.28	0.31	0.040	0.36
Std Dev	0.99	4.3	1.9	8.4	13.0	6.4	4.7	3.3	0.3	4.2	8.9	12.4	0.17	0.08	0.012	0.07
Upper %																
1	-3.7	21	-3.1	67	114	51.7	35	13	1.2	28	39	54	0.94	-0.25	-0.030	0.18
2	-3.3	20	-2.5	64	111	49.4	33	12	1.1	28	37	51	0.89	-0.23	-0.020	0.16
3	-3.1	19	-2.2	62	109	47.9	32	12	1.1	27	36	49	0.87	-0.22	-0.020	0.14
4	-3.0	18	-1.9	61	107	46.7	32	11	1.0	27	36	47	0.85	-0.21	-0.020	0.12
5	-2.9	17	-1.7	60	106	45.9	31	11	1.0	26	35	46	0.83	-0.20	-0.020	0.11
10	-2.5	15	-1.0	57	101	42.8	29	9	0.9	25	33	41	0.77	-0.17	-0.020	0.08
20	-2.1	13	0.0	53	95	39.4	27	8	0.7	24	29	36	0.70	-0.14	-0.010	0.05
30	-1.7	11	0.7	51	91	37.4	25	6	0.6	22	27	33	0.65	-0.12	-0.010	0.03
40	-1.5	10	1.2	48	88	35.6	24	5	0.6	21	25	30	0.61	-0.10	-0.010	0.01
50	-1.2	9	1.7	46	84	34.1	23	5	0.5	20	22	27	0.57	-0.08	0.000	-0.01
60	-0.9	8	2.1	44	81	32.6	21	4	0.4	19	20	24	0.52	-0.06	0.000	-0.03
70	-0.7	7	2.5	42	77	31.0	20	3	0.3	18	17	20	0.47	-0.03	0.000	-0.04
80	-0.3	6	3.0	39	73	29.2	19	2	0.2	16	14	16	0.41	0.00	0.000	-0.06
90	0.0	4	3.7	36	68	26.6	17	1	0.1	14	10	10	0.33	0.04	0.010	-0.09
Count	9,026	17,836	17,958	17,958	17,958	9,026	18,145	17,836	16,160	674	12,737	12,728	12,728	12,728	432	12,560

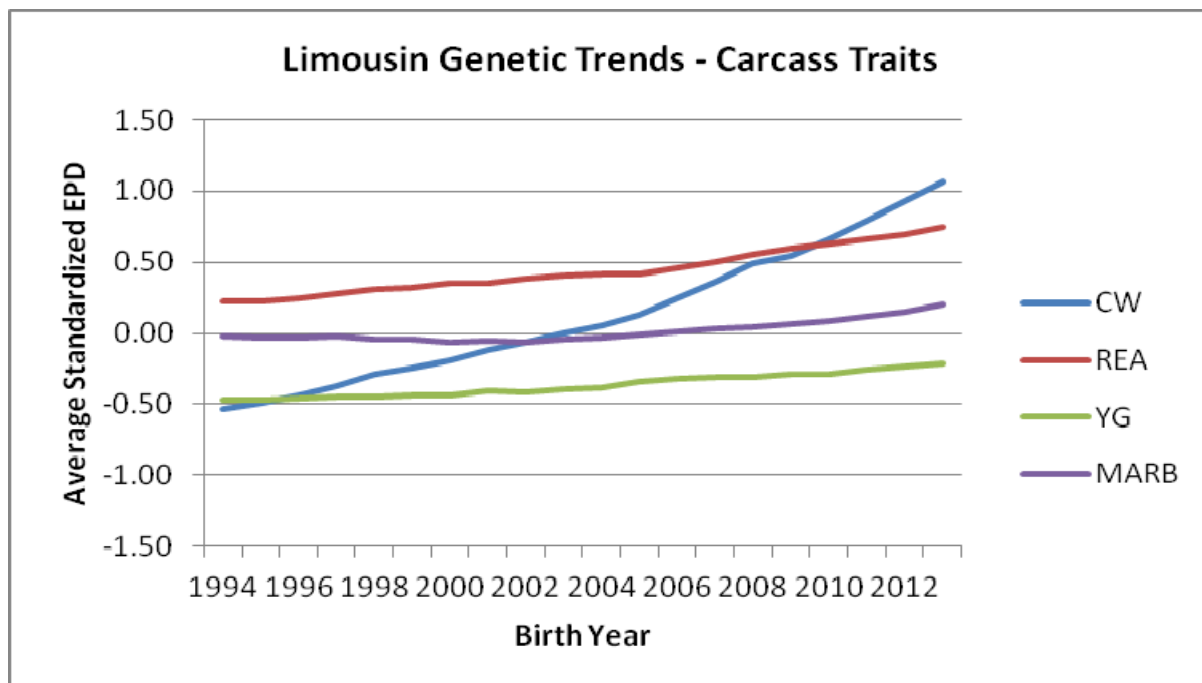* GL is for Canadian Calves only.
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* Fat is for Canadian Calves only.

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Standardized Limousin International Genetic Trends

Limousin Genetic Trends - Growth Traits

Limousin Genetic Trends - Calving Ease, Reproduction, Docility

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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^2)	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.