

# Spring 2012

# LIMOUSIN

NORTH AMERICAN LIMOUSIN FOUNDATION

## Statistics and Trends

### Spring 2012 EPD Statistics

#### Current Sires of 2010-2011 Born Calves

	Calving Ease Direct	Birth Weight	Weaning Weight	Yearling Weight	Milking Ability	Calving Ease Maternal	Scrotal Circum.	Stayability	Docility	Carcass Weight	Ribeye Area	Yield Grade	Marbling Score	\$MTI
<b>Count</b>	2,068	2,072	2,072	2,072	2,082	2,068	1,987	1,074	1,761	1,730	1,730	2,082	1,730	1,730
<b>Average</b>	7.6	1.8	44.7	81.5	20.8	3.9	0.4	18.0	16.0	18.7	0.49	-0.07	-0.05	42.5
<b>Std Dev</b>	4.5	1.9	9.9	15.6	5.9	4.2	0.4	4.3	9.1	17.2	0.24	0.10	0.08	4.2
<b>Min</b>	-9.4	-5.7	11.1	25.5	-7.4	-13.3	-1.0	-1.4	-15.3	-38.1	-0.35	-0.50	-0.33	27.0
<b>Max</b>	29.6	10.9	96.0	139.8	51.5	21.1	2.3	37.2	47.0	106.6	1.45	0.30	0.22	59.0

#### Current Dams of 2010-2011 Born Calves

	Calving Ease Direct	Birth Weight	Weaning Weight	Yearling Weight	Milking Ability	Calving Ease Maternal	Scrotal Circum.	Stayability	Docility	Carcass Weight	Ribeye Area	Yield Grade	Marbling Score	\$MTI
<b>Count</b>	20,100	20,144	20,144	20,144	20,194	20,100	19,496	11,856	16,534	15,636	15,636	20,215	15,636	15,630
<b>Average</b>	7.3	1.9	41.8	76.5	20.6	3.8	0.3	17.6	14.4	14.8	0.45	-0.08	-0.06	41.6
<b>Std Dev</b>	4.3	1.8	8.8	13.9	6.2	3.7	0.3	4.2	8.7	14.3	0.21	0.09	0.07	3.7
<b>Min</b>	-8.0	-6.2	0.1	17.8	-13.1	-13.2	-0.9	1.8	-25.7	-47.6	-0.27	-0.45	-0.34	29.0
<b>Max</b>	25.1	11.1	92.0	133.0	57.3	16.3	1.9	33.8	41.6	87.0	1.29	0.35	0.30	59.0

#### 2010-2011 Born Calves

	Calving Ease Direct	Birth Weight	Weaning Weight	Yearling Weight	Milking Ability	Calving Ease Maternal	Scrotal Circum.	Stayability	Docility	Carcass Weight	Ribeye Area	Yield Grade	Marbling Score	\$MTI
<b>Count</b>	21,314	21,470	21,470	21,470	21,652	21,314	19,530	11,856	14,463	14,609	14,609	21,686	14,609	14,594
<b>Average</b>	8.4	1.5	45.4	83.0	20.9	4.7	0.4	17.6	18.5	24.2	0.53	-0.05	-0.04	43.4
<b>Std Dev</b>	4.3	1.8	8.4	13.1	4.7	3.6	0.3	4.2	8.6	13.8	0.19	0.08	0.06	3.6
<b>Min</b>	-5.8	-5.7	14.9	36.2	1.7	-8.0	-1.1	1.8	-23.3	-51.9	-0.20	-0.37	-0.27	30.0
<b>Max</b>	26.4	9.1	97.8	133.1	44.2	16.5	2.4	33.8	42.3	107.1	1.38	0.26	0.26	60.0

#### 2010-2011 Born Lim-Flex Calves

	Calving Ease Direct	Birth Weight	Weaning Weight	Yearling Weight	Milking Ability	Calving Ease Maternal	Scrotal Circum.	Docility	Carcass Weight	Ribeye Area	Yield Grade	Marbling Score	\$MTI
<b>Count</b>	8,385	8,829	8,829	8,829	8,862	8,385	6,251	4,589	6,899	6,899	8,889	6,899	6,889
<b>Average</b>	8.4	0.2	48.2	91.9	24.8	3.1	0.4	13.9	27.0	0.0	0.24	0.33	54.3
<b>Std Dev</b>	2.9	1.7	8.5	13.3	5.2	2.4	0.3	6.8	15.4	0.3	0.20	0.17	6.2
<b>Min</b>	-6.2	-7.0	11.6	32.6	5.4	-4.9	-0.9	-12.7	-50.8	-1.1	-0.33	-0.38	24.0
<b>Max</b>	22.6	8.0	80.1	141.0	43.1	13.3	1.4	39.5	83.8	1.1	0.86	0.96	76.0



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**North American Limousin Foundation Current Sires of 2010-2011 Born Calves**  
**Spring 2012 Genetic Evaluation**

Percentile Level	Calving Ease Direct	Birth Weight	Weaning Weight	Yearling Weight	Milking Ability	Calving Ease Maternal	Scrotal Circum.	Stayability	Docility	Carcass Weight	Ribeye Area	Yield Grade	Marbling Score	\$MTI
1	21	-3.7	70	123	37	15	1.4	28	38	63	1.08	-0.29	0.14	53.0
2	19	-3.0	66	116	35	13	1.2	27	36	57	0.99	-0.26	0.12	52.0
3	17	-2.2	63	113	33	12	1.1	26	34	53	0.95	-0.25	0.11	51.0
4	16	-1.9	62	111	32	12	1.0	25	33	50	0.92	-0.23	0.10	50.0
5	15	-1.6	61	108	31	11	1.0	25	31	48	0.88	-0.22	0.09	50.0
10	13	-0.6	58	102	28	10	0.8	23	28	41	0.79	-0.19	0.06	48.0
15	12	0.0	55	97	26	8	0.8	22	26	37	0.72	-0.17	0.04	47.0
20	11	0.4	52	94	25	7	0.7	21	24	33	0.68	-0.16	0.02	46.0
25	10	0.7	51	92	24	6	0.6	21	22	30	0.64	-0.14	0.00	45.0
30	10	1.0	49	89	23	6	0.6	20	20	27	0.61	-0.13	-0.02	45.0
40	8	1.5	47	85	22	5	0.5	19	18	22	0.54	-0.10	-0.04	43.0
50	7	1.9	44	80	21	4	0.4	18	16	18	0.48	-0.07	-0.06	42.0
60	6	2.3	42	76	19	3	0.3	17	14	14	0.42	-0.04	-0.08	41.0
70	5	2.8	39	73	18	2	0.2	17	12	9	0.35	0.00	-0.10	40.0
80	4	3.3	37	69	16	1	0.0	15	9	5	0.28	0.00	-0.12	39.0
90	2	4.0	33	63	14	-1	-0.1	13	5	-2	0.19	0.04	-0.15	37.0
<b>Count</b>	2,068	2,072	2,072	2,072	2,082	2,068	1,987	1,074	1,761	1,730	1,730	2,082	1,730	1,730
<b>Average</b>	7.6	1.8	44.7	81.5	20.8	3.9	0.4	18.0	16.0	18.7	0.49	-0.07	-0.05	42.5
<b>Std Dev</b>	4.5	1.9	9.9	15.6	5.9	4.2	0.4	4.3	9.1	17.2	0.24	0.10	0.08	4.2
<b>Min</b>	-9.4	-5.7	11.1	25.5	-7.4	-13.3	-1.0	-1.4	-15.3	-38.1	-0.35	-0.50	-0.33	27.0
<b>Max</b>	29.6	10.9	96.0	139.8	51.5	21.1	2.3	37.2	47.0	106.6	1.45	0.30	0.22	59.0

**North American Limousin Foundation Current Dams of 2010-2011 Born Calves**  
**Spring 2012 Genetic Evaluation**

Percentile Level	Calving Ease Direct	Birth Weight	Weaning Weight	Yearling Weight	Milking Ability	Calving Ease Maternal	Scrotal Circum.	Stayability	Docility	Carcass Weight	Ribeye Area	Yield Grade	Marbling Score	\$MTI
1	19	-2.5	63	110	36	13	1.1	29	33	48	0.94	-0.3	0.13	51.0
2	17	-2.0	60	106	34	12	1.0	28	32	44	0.88	-0.3	0.11	50.0
3	16	-1.6	58	103	33	11	0.9	27	31	42	0.84	-0.3	0.09	49.0
4	16	-1.3	57	101	32	11	0.9	26	30	40	0.81	-0.2	0.08	48.0
5	15	-1.1	56	100	31	10	0.9	25	29	38	0.79	-0.2	0.07	48.0
10	13	-0.4	53	95	29	9	0.7	23	26	33	0.72	-0.2	0.04	46.0
15	12	0.1	51	91	27	8	0.6	22	24	30	0.67	-0.2	0.02	45.0
20	11	0.5	49	88	26	7	0.6	21	22	27	0.63	-0.2	0.00	45.0
25	10	0.9	48	86	24	6	0.5	20	20	25	0.59	-0.2	-0.01	44.0
30	9	1.1	46	83	24	6	0.5	19	19	23	0.56	-0.1	-0.02	43.0
40	8	1.6	44	80	22	5	0.4	18	17	18	0.50	-0.1	-0.04	42.0
50	7	2.0	42	76	20	4	0.3	17	15	14	0.44	-0.1	-0.06	41.0
60	6	2.4	40	73	19	3	0.2	16	12	11	0.39	0.0	-0.08	41.0
70	5	2.9	37	69	18	2	0.1	15	10	7	0.33	0.0	-0.09	40.0
80	4	3.4	35	65	16	1	0.0	14	7	3	0.27	0.0	-0.11	39.0
90	2	4.0	31	59	13	-1	-0.1	12	3	-3	0.18	0.0	-0.14	37.0
<b>Count</b>	20,100	20,144	20,144	20,144	20,194	20,100	19,496	11,856	16,534	15,636	15,636	20,215	15,636	15,630
<b>Average</b>	7.3	1.9	41.8	76.5	20.6	3.8	0.3	17.6	14.4	14.8	0.45	-0.08	-0.06	41.6
<b>Std Dev</b>	4.3	1.8	8.8	13.9	6.2	3.7	0.3	4.2	8.7	14.3	0.21	0.09	0.07	3.7
<b>Min</b>	-8.0	-6.2	0.1	17.8	-13.1	-13.2	-0.9	1.8	-25.7	-47.6	-0.27	-0.45	-0.34	29.0
<b>Max</b>	25.1	11.1	92.0	133.0	57.3	16.3	1.9	33.8	41.6	87.0	1.29	0.35	0.30	59.0

**North American Limousin Foundation 2010-2011 Born Calves**  
**Spring 2012 Genetic Evaluation**

Percentile Level	Calving Ease Direct	Birth Weight	Weaning Weight	Yearling Weight	Milking Ability	Calving Ease Maternal	Scrotal Circum.	Stayability	Docility	Carcass Weight	Ribeye Area	Yield Grade	Marbling Score	\$MTI
1	21	-3.4	67	115	34	13	1.3	32	36	58	0.95	-0.24	0.13	52.0
2	19	-2.8	64	111	32	13	1.1	31	34	53	0.90	-0.22	0.11	51.0
3	18	-2.4	62	109	30	12	1.1	31	33	50	0.87	-0.21	0.09	50.0
4	18	-2.1	61	107	30	12	1.0	29	33	48	0.85	-0.20	0.08	50.0
5	17	-1.8	60	106	29	11	1.0	27	32	46	0.83	-0.20	0.07	49.0
10	15	-1.0	57	101	27	10	0.8	24	29	41	0.77	-0.17	0.05	48.0
15	13	-0.4	54	97	25	9	0.8	22	28	38	0.72	-0.15	0.03	47.0
20	12	0.1	53	94	24	8	0.7	21	26	36	0.69	-0.13	0.02	46.0
25	11	0.4	51	92	24	7	0.6	21	25	33	0.66	-0.11	0.01	46.0
30	10	0.7	50	90	23	6	0.6	20	24	31	0.63	-0.09	-0.01	45.0
40	9	1.3	47	86	22	5	0.5	20	21	28	0.58	-0.06	-0.02	44.0
50	8	1.7	45	82	21	4	0.4	19	19	24	0.53	-0.03	-0.04	43.0
60	7	2.1	43	79	20	4	0.3	18	17	21	0.49	0.00	-0.05	42.0
70	6	2.5	41	76	19	3	0.3	17	14	17	0.44	0.00	-0.07	41.0
80	5	3.0	38	72	17	2	0.2	16	11	12	0.37	0.00	-0.09	40.0
90	4	3.6	35	67	15	1	0.0	14	7	6	0.28	0.01	-0.11	39.0
<b>Count</b>	21,314	21,470	21,470	21,470	21,652	21,314	19,530	1,046	14,463	14,609	14,609	21,686	14,609	14,594
<b>Average</b>	8.4	1.5	45.4	83.0	20.9	4.7	0.4	19.0	18.5	24.2	0.53	-0.05	-0.04	43.4
<b>Std Dev</b>	4.3	1.8	8.4	13.1	4.7	3.6	0.3	4.2	8.6	13.8	0.19	0.08	0.06	3.6
<b>Min</b>	-5.8	-5.7	14.9	36.2	1.7	-8.0	-1.1	5.5	-23.3	-51.9	-0.20	-0.37	-0.27	30.0
<b>Max</b>	26.4	9.1	97.8	133.1	44.2	16.5	2.4	34.2	42.3	107.1	1.38	0.26	0.26	60.0

North American Limousin Foundation 2010-2011 Born Lim-Flex Calves  
Spring 2012 Genetic Evaluation

Percentile Level	Calving Ease Direct	Birth Weight	Weaning Weight	Yearling Weight	Milking Ability	Calving Ease Maternal	Scrotal Circum.	Stayability	Docility	Carcass Weight	Ribeye Area	Yield Grade	Marbling Score	\$MTI
1	16	-4.0	68	122	37	10	1.0	23	30	61	0.58	-0.09	0.78	69.0
2	15	-3.4	66	118	35	9	0.9	22	29	57	0.52	0.00	0.71	67.0
3	14	-3.0	64	116	35	8	0.9	22	27	54	0.47	0.00	0.67	66.0
4	14	-2.8	63	115	34	8	0.9	21	26	52	0.43	0.00	0.64	65.0
5	14	-2.6	62	114	34	8	0.8	21	25	51	0.41	0.00	0.62	65.0
10	12	-1.9	60	109	31	6	0.7	21	23	46	0.32	0.00	0.56	62.0
15	11	-1.5	57	106	30	5	0.7	20	21	42	0.27	0.00	0.52	61.0
20	11	-1.1	56	104	29	5	0.6	19	19	40	0.22	0.00	0.48	59.0
25	10	-0.8	54	101	28	5	0.6	19	18	37	0.18	0.02	0.45	58.0
30	10	-0.6	53	99	28	4	0.5	19	17	35	0.14	0.11	0.41	57.0
40	9	-0.1	50	95	26	3	0.4	18	15	31	0.06	0.18	0.36	56.0
50	8	0.3	48	92	25	3	0.4	17	14	28	-0.01	0.23	0.31	54.0
60	8	0.7	46	88	24	2	0.3	16	12	24	-0.09	0.28	0.27	53.0
70	7	1.1	44	85	22	2	0.2	15	11	20	-0.17	0.35	0.23	51.0
80	6	1.6	41	81	21	1	0.2	14	9	16	-0.26	0.42	0.19	49.0
90	5	2.3	38	75	18	0	0.1	13	6	9	-0.39	0.50	0.13	47.0
<b>Count</b>	8,385	8,829	8,829	8,829	8,862	8,385	6,251	175	4,589	6,899	6,899	8,889	6,899	6,889
<b>Average</b>	8.4	0.2	48.2	91.9	24.8	3.1	0.4	16.7	13.9	27.2	-0.03	0.24	0.33	54.3
<b>Std Dev</b>	2.9	1.7	8.5	13.3	5.2	2.4	0.3	2.9	6.8	15.4	0.29	0.20	0.17	6.2
<b>Min</b>	-6.2	-7.0	11.6	32.6	5.4	-4.9	-0.9	8.9	-12.7	-50.8	-1.11	-0.33	-0.38	24.0
<b>Max</b>	22.6	8.0	80.1	141.0	43.1	13.3	1.4	23.2	39.5	83.8	1.05	0.86	0.96	76.0

Limousin Genetic Trends - Average EPDs by Birth Year, 1992-2011

Birth Year	Calving Ease Direct	Birth Weight	Weaning Weight	Yearling Weight	Milking Ability	Calving Ease Maternal	Scrotal Circum.	Stayability	Docility	Carcass Weight	Ribeye Area	Yield Grade	Marbling Score	\$MTI
1992	7.33	1.95	26.91	49.42	15.95	3.01	-0.10	9.92	1.68	-5.43	0.27	-0.05	-0.07	37.5
1993	7.14	2.07	27.80	51.03	16.31	3.04	-0.08	10.42	2.06	-3.95	0.28	-0.05	-0.07	37.8
1994	6.98	2.12	28.62	52.64	16.62	2.90	-0.06	10.88	3.03	-2.85	0.30	-0.05	-0.07	38.1
1995	6.52	2.22	29.70	54.73	16.98	2.71	-0.04	11.71	4.56	-2.06	0.30	-0.05	-0.07	38.2
1996	6.38	2.29	30.94	56.96	17.53	2.66	-0.02	12.20	5.24	-0.87	0.31	-0.06	-0.07	38.6
1997	6.22	2.32	31.99	59.16	17.72	2.70	0.02	12.71	6.90	0.35	0.33	-0.06	-0.07	39.0
1998	5.95	2.36	33.19	61.20	17.94	2.72	0.04	13.05	8.44	2.24	0.34	-0.06	-0.07	39.2
1999	5.83	2.33	34.12	63.08	18.06	2.56	0.07	13.79	9.74	3.17	0.35	-0.07	-0.07	39.3
2000	5.71	2.37	35.20	64.95	18.24	2.64	0.09	14.20	10.43	4.13	0.37	-0.07	-0.08	39.4
2001	5.79	2.33	36.13	66.75	18.75	2.65	0.12	14.80	11.07	5.79	0.37	-0.07	-0.08	39.6
2002	5.85	2.33	37.09	68.27	18.99	2.71	0.14	15.17	11.23	6.89	0.39	-0.07	-0.08	39.8
2003	6.01	2.27	37.93	69.73	19.36	2.81	0.17	15.89	11.94	8.34	0.40	-0.07	-0.07	40.3
2004	6.08	2.23	38.86	71.35	19.58	2.93	0.19	16.45	12.26	9.41	0.40	-0.07	-0.07	40.5
2005	6.44	2.12	39.73	73.13	19.96	3.13	0.23	17.05	13.41	10.92	0.41	-0.06	-0.06	40.9
2006	6.75	2.03	40.67	74.81	19.77	3.34	0.28	17.64	14.04	13.28	0.43	-0.06	-0.06	41.4
2007	7.12	1.94	41.95	76.95	20.10	3.60	0.31	18.09	15.21	15.97	0.45	-0.06	-0.05	41.9
2008	7.49	1.84	42.92	78.51	20.12	3.89	0.34	19.05	15.60	18.40	0.48	-0.06	-0.05	42.3
2009	7.72	1.73	43.70	80.09	20.24	4.15	0.38	18.64	16.67	19.81	0.50	-0.06	-0.04	42.6
2010	8.05	1.64	44.91	81.98	20.71	4.44	0.41	18.74	17.73	22.63	0.52	-0.05	-0.04	43.2
2011	9.16	1.25	46.50	85.10	21.16	5.31	0.48	19.60	20.00	27.01	0.55	-0.05	-0.03	43.8

Lim-Flex® Genetic Trends - Average EPDs by Birth Year, 2003-2011

Birth Year	Calving Ease Direct	Birth Weight	Weaning Weight	Yearling Weight	Milking Ability	Calving Ease Maternal	Scrotal Circum.	Stayability	Docility	Carcass Weight	Ribeye Area	Yield Grade	Marbling Score	\$MTI
2003	7.23	0.20	37.25	72.54	22.33	2.24	0.17	14.65	10.00	10.41	-0.18	0.17	0.23	47.7
2004	7.58	0.15	38.96	75.92	23.32	2.37	0.19	15.11	10.54	13.49	-0.20	0.22	0.29	50.0
2005	7.78	0.04	39.54	77.40	23.27	2.21	0.22	15.66	10.72	14.09	-0.18	0.21	0.30	50.6
2006	7.94	0.03	41.18	80.32	23.38	2.38	0.26	15.19	11.36	16.02	-0.15	0.23	0.30	51.3
2007	8.26	-0.03	42.91	83.46	23.82	2.79	0.29	15.79	11.72	19.23	-0.15	0.24	0.32	52.3
2008	8.43	-0.01	45.16	87.44	24.49	2.88	0.30	16.62	12.19	21.81	-0.14	0.27	0.38	54.8
2009	8.27	0.12	45.93	88.32	24.18	2.96	0.34	16.59	12.50	22.15	-0.10	0.25	0.34	53.9
2010	8.26	0.23	47.46	90.60	24.62	2.96	0.38	16.82	13.52	26.00	-0.04	0.23	0.32	53.7
2011	8.52	0.25	49.40	93.93	25.18	3.30	0.39	16.42	14.44	29.04	0.00	0.24	0.34	55.1

**Limousin Possible Change Values (+ or -) for EPDs of Various Traits**

BIF Accuracy	Calving				Yearling Weight (lbs.)	Calving				Carcass Weight (lbs.)	Ribeye Area (in <sup>2</sup> )	Marbling Score (units)
	Ease Direct (%)	Birth Weight (lbs.)	Weaning Weight (lbs.)	Yearling Weight (lbs.)		Milk (lbs.)	Ease Maternal (%)	Scrotal (cm)	Stayability (%)			
0	8.6	3	16.2	24.7	14.8	8.9	0.7	8.6	15.8	36	0.46	0.24
0.1	7.8	2.8	15	22	13.7	8	0.62	7.7	14.3	32	0.41	0.22
0.2	6.9	2.5	13.4	19.4	12.2	7.1	0.56	6.9	12.7	29	0.37	0.2
0.3	6.1	2.2	11.7	16.8	10.8	6.2	0.49	6	11.1	25	0.32	0.17
0.4	5.2	1.9	10	14.2	9.2	5.3	0.42	5.2	9.5	22	0.28	0.14
0.5	4.3	1.6	8.1	11.5	7.4	4.5	0.35	4.3	7.9	18	0.23	0.12
0.6	3.5	1.3	6.4	9	5.8	3.6	0.28	3.4	6.3	14	0.18	0.1
0.7	2.6	1	4.8	6.4	4.3	2.7	0.21	2.6	4.8	11	0.14	0.07
0.8	1.7	0.7	3.2	3.9	2.9	1.8	0.15	1.7	3.2	7	0.09	0.05
0.9	0.9	0.4	1.5	2.1	1.4	0.9	0.08	0.9	1.6	4	0.05	0.02

***Possible Change***

EPDs are predictions not true values. We can therefore expect that EPDs will change from sire evaluation to sire evaluation, as more information (i.e., progeny data) is included. A possible change value is an estimate of the amount of change (in trait units) that can be expected for a given EPD.

Technically, there is a 68% chance that the real genetic value (an EPD with accuracy of 1.0) for any trait lies between its EPD plus its possible change value and its EPD minus its possible change value. For example, if a sire has a weaning EPD of +25 lb. and a possible change value of 10 lb., we can expect the true genetic value to be between 15 lb. (25-10) and 35 lb. (25+10) 68% of the time. We should not be surprised if his EPD in next year's evaluation is as high as +35 or as low as +15. If next year's EPD should happen to be slightly outside of this range, keep in mind there is a one-third chance of that happening; however, significantly larger deviations are unlikely.

Possible change is simply another way of expressing accuracy of an EPD. High accuracy sires will have small possible changes and vice versa. Many breeders feel that possible change values complement accuracies and help them determine just how thoroughly an animal has been evaluated. The accuracy/possible change chart lists possible changes in EPDs that can be expected with the different levels of accuracy for the various traits.