

Fall 2010 EPDs

This fall's EPDs brought the challenges of working with CREO, our new registry software provider, and the manner in which they extract the data. This meant re-writing some of the computer language at Angus Genetics Inc. (AGI) where we do our growth traits to handle the changes. Our carcass and reproductive traits are done at Colorado State University (CSU).

When completed, we ended-up with a very solid evaluation with high rank correlations. A rank correlation is an important check on an evaluation as it is a measure to determine if sires are re-ranking. For most all traits, the rank correlations were around .99, which means there was no re-ranking for most traits. For the most part, the means of the

EPDs stayed almost the same with the exception of the carcass traits.

In examining the first run of carcass traits, the Limousin ribeye area (REA) had trended significantly upward, while Lim-Flex had trended downward (see tables). Yield Grade (YG) had improved for Limousin while it had gone down for Lim-Flex®. The opposite was true for marbling EPD. For Limousin, the trend was downward while for Lim-Flex the trend was significantly upward. With this run, we also discovered we were missing some data compared to the Spring 2010 evaluation.

Based on this, we asked CREO to upload the data we sent CSU in the fall of 2009 and completely reconstruct our carcass database. Incorporating the new

data that was sent to CSU, all previously dropped data was now accounted for, and a new analysis was conducted. This did not change the results I outlined above with exception to the rank correlation, which rose dramatically.

We also spot-checked some high accuracy sires and they were unchanged from previous runs. Based on all this information, technical advice by our consulting geneticist, Dr. Bob Weaber, University of Missouri, and review by the Board, everyone felt with confidence we had a good set of EPDs to release despite the changes we saw in means of the carcass EPDs. In some sense, those changes may better reflect the true differences between Limousin and Lim-Flex.

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North American Limousin Foundation 2008-2010 Born Calves Fall 2010 Genetic Evaluation														
Percentile Level	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	
1	19	-2.8	64	113	33	11	1.3	36	60	1.03	-0.29	0.11	52.2	
2	18	-2.2	61	108	31	10	1.2	34	55	0.98	-0.27	0.09	51.2	
3	17	-1.8	60	106	30	10	1.1	34	52	0.94	-0.25	0.08	50.5	
4	16	-1.5	58	104	30	9	1.0	33	50	0.91	-0.24	0.07	50.0	
5	15	-1.3	57	103	29	9	1.0	32	48	0.89	-0.24	0.06	49.6	
10	13	-0.4	54	97	27	8	0.8	30	42	0.81	-0.21	0.03	48.1	
15	12	0.1	52	94	26	7	0.7	27	38	0.77	-0.20	0.01	47.2	
20	11	0.5	50	91	25	6	0.7	26	34	0.73	-0.18	0.00	46.4	
25	10	0.9	49	89	24	6	0.6	24	32	0.69	-0.17	-0.01	45.7	
30	9	1.2	47	87	24	5	0.5	23	29	0.66	-0.16	-0.02	45.1	
35	9	1.4	46	85	23	5	0.5	21	27	0.63	-0.15	-0.03	44.6	
40	8	1.6	45	83	22	4	0.4	20	25	0.60	-0.14	-0.04	44.1	
45	8	1.8	44	81	22	4	0.4	19	23	0.58	-0.13	-0.05	43.6	
50	7	2.0	43	80	21	4	0.4	17	21	0.55	-0.12	-0.06	43.1	
55	7	2.3	42	78	21	3	0.3	16	19	0.52	-0.11	-0.06	42.7	
60	6	2.5	41	77	20	3	0.3	15	17	0.49	-0.10	-0.07	42.2	
65	6	2.7	40	75	19	2	0.2	14	15	0.46	-0.08	-0.08	41.8	
70	5	2.9	39	73	19	2	0.2	12	12	0.43	-0.07	-0.09	41.3	
75	5	3.1	38	71	18	2	0.2	11	10	0.40	-0.06	-0.10	40.8	
80	4	3.4	37	69	17	1	0.1	9	7	0.36	-0.04	-0.11	40.1	
85	4	3.8	35	67	17	1	0.0	7	4	0.32	-0.02	-0.12	39.4	
90	3	4.2	33	64	15	0	0.0	4	0	0.26	0.00	-0.14	38.5	
95	2	4.9	30	60	13	-1	-0.1	-1	-6	0.18	0.04	-0.16	37.2	
Average	7.5	2.0	43.4	80.3	21.2	3.7	0.4	16.8	20.8	0.54	-0.11	-0.05	43.2	
Min	-9.7	-7.1	3.0	26.8	-6.3	-9.4	-1.1	-25.8	-60.1	-0.25	-0.42	-0.28	28.5	
Max	26.9	10.8	91.4	140.5	43.2	17.3	2.0	40.0	77.5	1.30	0.32	0.22	57.1	

**North American Limousin Foundation 2008-2010 Born Lim-Flex Calves
Fall 2010 Genetic Evaluation**

Percentile Level	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
1	17	-4.2	67	122	38	9	1.0	31	70	0.62	-0.15	0.83	71.4
2	15	-3.7	64	118	36	8	1.0	30	64	0.56	-0.09	0.77	69.8
3	15	-3.3	63	116	35	8	0.9	29	61	0.49	-0.04	0.73	68.4
4	14	-3.0	61	114	34	7	0.9	28	59	0.45	0.00	0.71	67.7
5	14	-2.8	60	113	34	7	0.8	28	57	0.41	0.02	0.68	66.9
10	12	-2.2	57	107	32	6	0.7	25	50	0.28	0.09	0.61	64.8
15	12	-1.7	55	103	31	5	0.7	24	45	0.20	0.14	0.58	63.2
20	11	-1.4	53	101	30	5	0.6	22	42	0.13	0.18	0.54	62.0
25	10	-1.1	52	99	29	4	0.6	21	39	0.08	0.22	0.51	60.7
30	10	-0.8	50	96	28	4	0.5	19	36	0.02	0.25	0.48	59.5
35	9	-0.6	49	95	28	4	0.5	18	33	-0.03	0.28	0.46	58.5
40	9	-0.3	48	93	27	3	0.5	17	31	-0.07	0.31	0.43	57.4
45	9	-0.1	47	91	26	3	0.4	16	29	-0.11	0.34	0.40	56.3
50	8	0.1	46	90	26	3	0.4	15	27	-0.15	0.36	0.37	55.3
55	8	0.3	45	88	25	3	0.4	13	24	-0.18	0.39	0.34	54.3
60	8	0.5	44	86	25	2	0.3	12	23	-0.22	0.41	0.31	53.3
65	7	0.7	43	85	24	2	0.3	11	21	-0.26	0.43	0.28	52.3
70	7	0.9	42	83	23	2	0.3	10	18	-0.30	0.45	0.25	51.4
75	6	1.1	41	81	23	1	0.2	8	16	-0.34	0.47	0.22	50.2
80	6	1.4	40	79	22	1	0.2	6	13	-0.38	0.50	0.18	49.1
85	5	1.7	38	76	21	1	0.1	4	10	-0.44	0.53	0.14	47.8
90	5	2.1	36	73	20	0	0.0	1	6	-0.50	0.58	0.09	45.9
95	4	2.7	33	69	18	-1	0.0	-3	-1	-0.61	0.66	0.02	43.5
Average	8.4	0.0	46.2	89.8	25.7	2.9	0.4	13.7	27.4	-0.13	0.35	0.36	55.4
Min	-5.0	-7.7	14.8	44.1	2.4	-6.4	-0.6	-17.5	-43.1	-1.02	-0.27	-0.18	33.4
Max	25.9	6.7	79.2	140.9	45.4	12.7	1.5	33.4	87.2	1.11	1.01	0.94	76.6

Limousin Genetic Trends

Birth Year	CED	BW	WW	YW	MILK	CEM	SC	STAY	DOC	CW	REA	YG	MS	\$MTI
1990	7.91	1.72	25.53	48.39	16.57	3.12	-0.09	10.03	1.61	-9.45	0.26	-0.16	-0.07	37.66
1991	7.54	1.85	26.31	49.81	16.35	3.06	-0.07	10.09	1.80	-7.71	0.27	-0.16	-0.07	38.02
1992	7.30	1.97	27.30	51.51	16.53	2.99	-0.06	10.38	2.12	-6.14	0.29	-0.16	-0.08	38.24
1993	7.11	2.11	28.28	53.26	16.94	2.98	-0.04	10.76	2.69	-5.12	0.30	-0.16	-0.07	38.69
1994	6.99	2.15	29.09	54.84	17.26	2.87	-0.02	11.25	3.40	-5.46	0.29	-0.16	-0.07	38.51
1995	6.55	2.24	30.06	56.79	17.61	2.69	0.00	11.88	4.99	-3.93	0.31	-0.16	-0.08	38.85
1996	6.44	2.30	31.30	58.99	18.19	2.65	0.02	12.33	5.50	-2.78	0.31	-0.16	-0.07	39.12
1997	6.25	2.35	32.38	61.21	18.34	2.67	0.06	13.09	7.23	-0.39	0.33	-0.15	-0.07	39.55
1998	6.02	2.40	33.60	63.26	18.53	2.66	0.08	13.20	7.96	1.96	0.36	-0.15	-0.08	39.71
1999	5.92	2.37	34.49	65.05	18.65	2.55	0.10	13.97	9.28	2.56	0.37	-0.15	-0.08	39.65
2000	5.89	2.44	35.30	66.31	18.77	2.61	0.12	13.98	9.84	3.27	0.39	-0.15	-0.09	39.47
2001	5.93	2.42	36.21	68.01	19.21	2.57	0.14	14.57	10.38	5.88	0.41	-0.14	-0.09	39.91
2002	5.98	2.44	37.21	69.59	19.36	2.62	0.16	14.91	11.06	7.73	0.43	-0.14	-0.09	40.33
2003	6.11	2.37	38.11	71.20	19.73	2.69	0.20	15.55	12.09	9.54	0.44	-0.14	-0.08	40.98
2004	6.16	2.34	39.05	72.93	20.02	2.83	0.22	*PE	12.54	10.44	0.44	-0.13	-0.08	41.04
2005	6.40	2.26	39.86	74.52	20.34	2.93	0.25	*PE	13.64	12.60	0.46	-0.12	-0.07	41.68
2006	6.67	2.18	40.65	75.81	20.19	3.07	0.30	*PE	14.56	14.91	0.48	-0.12	-0.07	42.13
2007	6.91	2.12	41.91	77.81	20.67	3.28	0.34	*PE	15.42	18.21	0.50	-0.11	-0.06	42.76
2008	7.28	2.06	42.97	79.41	20.97	3.51	0.36	*PE	15.42	19.66	0.53	-0.11	-0.06	43.08
2009	7.67	1.90	43.78	81.14	21.34	3.88	0.41	*PE	18.19	22.20	0.57	-0.11	-0.05	43.46
2010	8.20	1.78	44.04	82.02	21.61	4.41	N/A	*PE	N/A	N/A	N/A	N/A	N/A	N/A

Note: *PE=Pedigree Estimate

Lim-Flex Genetic Trends

Birth Year	CED	BW	WW	YW	MILK	CEM	SC	STAY	DOC	CW	REA	YG	MS	\$MTI
1994	6.33	0.45	35.03	63.10	28.23	0.55	-0.23	14.63	5.80	1.46	0.14	0.10	0.06	42.64
1995	7.77	-0.43	30.28	64.00	18.68	2.15	0.02	15.60	-1.57	2.09	-0.10	0.15	0.16	44.59
1996	6.17	0.64	36.79	70.49	20.48	1.10	0.07	12.72	3.51	11.51	-0.29	0.31	0.28	48.91
1997	6.07	0.67	36.39	69.46	26.87	1.03	0.17	13.44	6.45	16.99	-0.30	0.35	0.27	48.38
1998	5.54	0.73	36.60	70.63	23.33	0.30	0.25	13.69	6.71	16.02	-0.24	0.28	0.23	47.28
1999	7.04	-0.26	33.94	68.33	22.12	0.45	0.15	12.85	11.55	15.26	-0.26	0.36	0.23	46.18
2000	7.34	-0.18	33.34	68.36	19.96	0.79	0.18	15.87	9.77	7.76	-0.23	0.28	0.23	46.32
2001	8.12	0.45	35.85	70.46	21.22	0.84	0.17	15.53	6.78	6.45	-0.13	0.18	0.14	44.75
2002	6.91	0.41	37.32	73.89	23.94	1.81	0.34	14.05	11.60	14.36	-0.18	0.29	0.22	47.32
2003	7.22	0.11	37.67	74.08	23.11	2.18	0.21	14.16	11.88	15.24	-0.09	0.25	0.21	47.72
2004	7.47	0.16	39.59	77.98	24.23	2.28	0.22	*PE	12.03	15.75	-0.18	0.30	0.28	50.13
2005	7.78	0.00	39.98	79.09	24.27	2.17	0.24	*PE	13.68	16.53	-0.17	0.29	0.29	50.81
2006	7.94	0.00	41.59	81.88	24.20	2.39	0.27	*PE	12.74	17.61	-0.14	0.28	0.28	51.25
2007	8.14	-0.04	43.52	85.30	24.94	2.62	0.32	*PE	11.27	24.96	-0.17	0.34	0.34	53.73
2008	8.35	0.00	45.78	89.47	25.74	2.69	0.39	*PE	12.75	26.66	-0.15	0.35	0.38	55.91
2009	8.32	0.06	46.43	90.02	25.61	2.85	0.41	*PE	14.66	28.32	-0.09	0.34	0.34	54.79
2010	9.31	-0.04	47.67	92.04	26.19	4.05	N/A	*PE	N/A	N/A	N/A	N/A	N/A	N/A

Note: *PE=Pedigree Estimate