by Jack Ward, chief operating officer and director of breed improvement

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NRSP Data Release from Olsen Ranch

Below are the National Reference Sire Program (NRSP) results from the 2013-born calves at Olsen Ranch, Harrisburg, Neb.

The American Hereford Association (AHA) NRSP is really one-of-a-kind in the industry, and through various herds, the Association has more than 2,000 head of commercial cows around the U.S. bred to Hereford bulls. The intent of this program is to identify young sires that could be really influential to the Hereford breed. All of the data are used in the Pan-American Cattle Evaluation (PACE), and, in addition, AHA has all of the feedlot cattle genotyped to help with the genomic training and validation.

For breeders interested in participating in the NRSP, see Page 24 of this issue for more information and the nomination form.

Printed here are the expected progeny differences (EPDs) on each of these bulls as well as phenotypic data. It is necessary to give a bit of an explanation of the data and why the EPDs of sires do not match exactly to the phenotypic data. First, this is a young sire test, and included in the test are a couple of highly proven bulls for us to make good comparisons to the Hereford population.

Since these bulls are just young sires with basically pedigrees (P) or interim EPDs (P+) and in some cases genomic-enhanced EPDs (GE-EPDs), then we should not expect these sires to perfectly rank according to EPDs. If this were the case, there would be little value to these tests.

Remember that every time a mating is made, the resulting calf gets a random sampling of genetics from both parents, and even though EPDs give us a good indication of how this sire could perform, we will not totally understand their true genetic value until we get some

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Table 1: 2013-born steer calves at Olsen Ranch

Sire	Registration number	# calves	BW ratio	WW ratio	YW ratio	CH or Pr	Count	CH or Pr %	Hot wt.	Ratio	Marble	Ratio	REA	Ratio	Backfat	Ratio	CYG	Ratio
/S Efficient 0925	43147576	51	104	102	103	21	21	100%	982	108%	539	108%	14.06	108%	0.73	100%	4.05	98%
BOYD Worldwide 9050 ET	42982024	44	102	98	98	21	23	91%	786	86%	485	93%	12.04	88%	0.56	74%	3.55	83%
C&L CT Federal 485T 6Y	43214122	43	101	105	105	21	23	91%	928	102%	475	95%	12.99	100%	0.81	112%	4.40	107%
CK Mr Yank L132	43016411	51	100	102	101	24	24	100%	932	102%	520	104%	13.70	105%	0.75	103%	4.03	98%
CSU Ram Dominator 4203	42531422	124	101	98	96	48	49	98%	859	94%	505	101%	12.56	96%	0.62	85%	3.79	92%
DS Beef 9059	41149734	74	102	101	99	23	24	96%	914	100%	479	96%	13.69	105%	0.58	80%	3.54	86%
DTF Heavy Load 2013 0X51 ET	43132507	35	100	105	106	16	17	94%	861	94%	503	101%	11.55	89%	0.78	107%	4.52	110%
EFBEEF U208 Fortune Y848	43187500	48	98	98	101	17	20	85%	914	100%	456	91%	13.61	104%	0.78	108%	4.07	99%
Genoas Bonanza 11051	43174342	58	93	100	100	18	18	100%	940	103%	506	101%	13.09	100%	0.78	107%	4.33	105%
H5 9027 Advance 161	43190948	45	102	107	106	22	24	92%	963	106%	488	98%	13.56	104%	0.76	105%	4.23	103%
HH Advance 0132X	43073963	58	99	98	100	24	26	92%	940	103%	498	100%	13.09	100%	0.83	115%	4.47	109%
SHF Literal W18 Y90	43181182	40	103	98	103	20	20	100%	944	104%	564	113%	12.68	97%	0.76	105%	4.43	108%
SHF York 19H Y02	43180994	43	100	103	104	23	24	96%	975	107%	488	98%	13.53	104%	0.82	113%	4.42	107%
TH 22R 16S Lambeau 17Y	43171190	37	92	87	90	14	16	88%	863	95%	499	100%	12.32	94%	0.75	103%	4.20	102%

Table 2: EPDs for 2013 NRSP bulls tested at Olsen Ranch

Sire name	CE EPD	CE ACC	BW EPD	BW ACC	WW EPD	WW ACC	YW EPD	YW ACC	MM EPD	MM ACC	MG EPD	MCE EPD	MCE ACC	MCW EPD	MCW ACC	UDDER EPD	UDDER ACC	TEAT EPD	TEAT ACC	SC EPD	SC ACC	FAT EPD	FAT ACC	REA EPD	REA ACC	MARB EPD	MARB ACC	BMI	CEZ	BII	CHB
/S Efficient 0925	4.4	0.32	2.8	0.74	62	0.66	89	0.69	32	0.23	63	2.9	0.28	103	0.44	1.35	P	1.37	P	1.1	0.5	-0.001	0.40	0.46	0.41	0.42	0.37	25	19	19	38
BOYD Worldwide 9050 ET	8.6	0.55	-1.2	0.89	44	0.84	60	0.81	31	0.46	53	6.2	0.42	43	0.59	1.54	0.5	1.66	0.49	1.1	0.62	-0.022	0.49	0.06	0.50	0.21	0.46	25	25	20	26
C&L CT Federal 485T 6Y	4.2	0.39	1.1	0.81	70	0.71	101	0.69	25	0.21	60	2.5	0.3	94	0.43	1.21	P	1.2	P	1.4	0.23	0.097	0.41	0.51	0.42	0.31	0.39	25	19	20	33
CK Mr Yank L132	6.7	0.20	-1.5	0.69	52	0.60	82	0.63	23	0.21	49	6.3	0.18	98	0.40	1.05	P	1.03	P	0.6	0.37	0.026	0.27	0.31	0.30	0.57	0.24	24	22	18	36
CSU Ram Dominator 4203	3.5	0.48	-0.3	0.90	29	0.86	49	0.88	21	0.77	35	3.2	0.42	13	0.77	1.12	0.78	1.11	0.77	1.1	0.54	-0.053	0.80	0.03	0.81	0.22	0.84	24	20	24	20
DS Beef 9059	2.1	0.47	2.0	0.90	43	0.87	70	0.88	11	0.81	33	0.1	0.44	79	0.75	1.24	0.77	1.16	0.76	1.0	0.64	-0.052	0.80	0.86	0.81	0.17	0.84	26	18	25	28
DTF Heavy Load 2013 0X51 ET	6.8	0.21	-0.1	0.61	58	0.48	94	0.51	19	0.23	48	0.6	0.18	71	0.34	1.15	P	1.19	P	0.8	0.21	0.076	0.25	0.18	0.27	0.40	0.23	22	20	16	32
EFBEEF U208 Fortune Y848	5.2	0.30	0.4	0.69	50	0.60	86	0.63	25	0.19	49	0.6	0.25	63	0.43	1.15	P	1.02	P	0.9	0.35	0.075	0.32	0.38	0.35	0.38	0.29	21	19	17	28
Genoas Bonanza 11051	8.5	0.36	-5.1	0.77	47	0.70	75	0.69	27	0.22	50	7.3	0.29	76	0.44	1.17	P	1.26	P	2.1	0.43	0.033	0.40	0.23	0.41	0.40	0.38	36	27	32	29
H5 9027 Advance 161	6.8	0.34	1.1	0.74	60	0.66	97	0.68	31	0.21	61	1.7	0.28	92	0.44	0.88	P	0.89	P	1.5	0.45	0.086	0.44	0.20	0.45	0.08	0.41	22	20	17	25
HH Advance 0132X	4.5	0.39	1.3	0.83	48	0.77	75	0.77	29	0.32	53	2.8	0.3	77	0.46	1.24	P	1.3	P	1.7	0.59	0.077	0.52	-0.18	0.53	0.38	0.5	27	21	24	24
SHF Literal W18 Y90	3.5	0.34	0.9	0.72	43	0.64	90	0.66	22	0.19	43	4.0	0.28	84	0.44	1.21	P	1.18	P	2.1	0.40	-0.009	0.40	-0.07	0.41	0.34	0.37	32	22	30	28
SHF York 19H Y02	6.5	0.34	0.2	0.80	70	0.74	107	0.74	21	0.22	57	2.6	0.29	92	0.44	1.21	P	1.23	P	1.4	0.56	0.019	0.52	0.47	0.53	0.40	0.53	30	21	23	41
TH 22R 16S Lambeau 17Y	7.8	0.34	-2.7	0.79	28	0.71	69	0.70	13	0.19	27	5.0	0.27	69	0.42	1.36	P	1.42	P	0.6	0.45	0.114	0.44	-0.09	0.45	0.33	0.41	19	23	15	15

2014 Olsen feed efficiency: Group 1 – June 23 - Sept. 2

Sire	Final Wt.	Avg. DMI	Rank	ADG	Rank	F:G	Rank	Adj. F:G	Rank	RFI	Rank	RG	Rank	Count
/S Efficient 0925	1,193	27.98	1	5.57	1	5.03	8	4.88	5	0.81	12	0.19	2	18
C&L CT Federal 485T 6Y	1,217	25.89	10	5.44	4	4.84	3	4.59	1	-1.78	1	0.09	5	15
CK Mr Yank L132	1,138	26.71	3	5.30	6	5.06	10	5.08	9	0.53	11	0.03	6	19
CSU Ram Dominator 4203	1,110	26.48	4	5.16	10	5.14	11	5.27	11	0.98	13	-0.06	9	18
DS Beef 9059	1,123	25.99	8	5.47	2	4.77	2	4.85	4	0.19	8	0.26	1	13
EFBEEF U208 Fortune Y848	1,086	24.84	12	5.00	11	4.98	5	5.16	10	-0.21	4	-0.12	11	17
Genoas Bonanza 11051	1,132	25.92	9	5.21	9	4.99	6	5.04	8	-0.01	5	-0.02	8	13
H5 9027 Advance 161	1,188	27.19	2	5.29	7	5.19	12	5.00	6	0.10	7	-0.08	10	23
HH Advance 0132X	1,122	25.11	11	5.36	5	4.73	1	4.82	3	-0.67	2	0.18	3	21
SHF Literal W18 Y90	1,138	26.30	6	4.85	12	5.44	13	5.41	12	0.25	9	-0.42	13	18
SHF York 19H Y02	1,165	26.32	5	5.46	3	4.85	4	4.80	2	-0.30	3	0.17	4	19
TH 22R 16S Lambeau 17Y	1,031	24.28	13	4.85	13	5.04	9	5.43	13	0.31	10	-0.18	12	16
Grand average	**1,139**	**26.11**		**5.25**		**5.01**		**5.02**		**0.00**		**0.00**		**210**

2014 Olsen feed efficiency: Group 2 – Sept. 16 - Nov. 26

Sire	Final Wt.	Avg. DMI	Rank	ADG	Rank	F:G	Rank	Adj. F:G	Rank	RFI	Rank	RG	Rank	Count
/S Efficient 0925	1,484	26.31	5	4.46	2	5.97	2	5.72	2	-0.45	4	0.34	2	5
BOYD Worldwide 9050 ET	1,287	23.81	15	3.66	14	6.61	9	7.08	13	0.04	12	-0.06	10	22
C&L CT Federal 485T 6Y	1,467	25.66	9	4.15	6	6.20	4	5.98	5	-0.65	3	0.09	5	8
CK Mr Yank L132	1,488	26.24	6	3.77	13	7.06	13	6.64	12	-0.05	10	-0.38	14	4
CSU Ram Dominator 4203	1,340	24.59	14	3.91	10	6.40	7	6.62	11	-0.08	9	0.07	7	29
DS Beef 9059	1,446	25.53	11	3.95	8	6.65	11	6.50	8	-0.39	5	-0.09	11	20
DTF Heavy Load 2013 0X51 ET	1,375	26.23	7	4.19	5	6.29	5	6.40	7	0.89	13	0.20	3	17
EFBEEF U208 Fortune Y848	1,560	25.65	10	4.61	1	5.58	1	5.17	1	-2.14	1	0.46	1	4
Genoas Bonanza 11051	1,515	26.64	3	4.32	3	6.17	3	5.84	3	-0.32	6	0.14	4	5
H5 9027 Advance 161	1,532	26.87	2	4.25	4	6.32	6	5.90	4	-0.26	7	0.02	8	3
HH Advance 0132X	1,497	26.43	4	3.95	9	6.75	12	6.36	6	-0.13	8	-0.23	12	5
SHF Literal W18 Y90	1,507	29.12	1	3.56	15	8.36	15	7.92	15	2.99	15	-0.82	15	3
SHF York 19H Y02	1,518	25.97	8	3.81	12	7.08	14	6.57	10	-0.66	2	-0.35	13	6
Grand average	**1,399**	**25.38**		**3.97**		**6.51**		**6.54**		**0.00**		**0.00**		**131**

...Performance Matters continued from page 8

progeny data. GE-EPDs are a tool that has allowed us to have more reliability in the EPDs and the ability to do some sorting earlier in life. In addition, because of the timing of these results, the EPDs would not be always reflective of this data but will be in the future.

Next, when you see these results, I put them as ratios. Ratios are better than actual phenotypes, and EPDs are better than ratios, but the EPDs are based on the data collected from throughout the breed. However, the average ratio for some of these traits is based on some contemporary grouping differences and can cause some differences from the EPDs.

For instance, we at times will use bulls on heifers, and those bulls are compared. At Olsen Ranch and in other test herds, we do have to account for some dam breed differences. These tests are unique in that we do random matings to account for most of this difference, but ultimately you may see some separation in groups, which can affect the ratios. Again, this will always be accounted for in the EPD calculation to give us the true genetic merit of a sire.

In this report, you will find two different sets of feed intake collection (separated mainly by age of dam), and provided are the results for residual gain (RG), feed conversion (F/G) and residual feed intake (RFI). It is interesting to see the various rankings. In addition, for the past two years, AHA has sent six steers from Olsen's to the University of Missouri for harvest and evaluation. These steers would represent both high and low ranking for feed efficiency. This evaluation is part of the work done through the U.S. Department of Agriculture (USDA) feed efficiency project.

New Udder EPDs

With the release of the spring 2015 PACE, you will have noticed the addition of the new traits for udder suspension (UDDR) and teat size (TEAT). You can find detailed information concerning these new traits on Page 32 of this issue and the "Udder Scoring Fact Sheet" posted in the *Hereford.org* "Education Center." As this year's calving season begins, here are a few reminders on how to collect the data:

- These are two different traits, and even though they are highly correlated, a score from 1 to 9 should be given independently for both udder suspension and teat size with 9 being the most ideal.
- These scores should be taken as close after calving as possible because we all realize an udder looks different after a calf has nursed all quarters.
- Each herd should designate an udder scoring person, and all scoring should be done by that one person. It is the ranking of the udders that is important, and you do not need to be concerned with trying to score them perfectly. We want the differences. If you are a large producer and have multiple calving areas with different folks in charge, then have the different groups of cows scored independently and separate them into different contemporary groups when you submit them. HW

American Hereford Association National Reference Sire Program

Responsibilities of Test Herd:

- Select from nominated bulls
- Contact bull owner for semen shipping instructions
- Breed 55-60 cows at a random mating across genotypes
- Breed 30 cows to one reference sire that has been tested in previous years (at the cost of the test herd, semen and shipping at a commercial rate)
- Provide complete data on National Reference Sire Program (NRSP) forms
- Breeding data: Cow ID, specific breed makeup (based on percent), age of cow at breeding time, date bred and sire used
- Birth data: Calf ID, date of birth, weight and calving ease score
- Weaning data: Calf ID, date weaned and weight
- Interim data: Calf ID, date, weight
- Carcass data: Calf ID, carcass weight, marbling score, fat thickness, ribeye area, internal fat and yield grade
- Test herd must provide at least 55% conception rate
- Test herd must retain ownership or partnership at 50% or greater on cattle until they have been harvested

Test Herd Cost:

- All costs will be covered by test herd
- Test herd will pay for the reference sire semen for the 30 cows, and shipping semen will be priced at a commercial rate, data collection will be paid by test herd on all cattle

Responsibilities of Bull Owner:

- Nominate bulls for test sire
- Nominate bulls to American Hereford Association (AHA) by **March 1, 2015**
- Furnish 60 straws of semen and pay shipping cost to test herds
- Pay fees as required

Bull Owner Cost:

- Semen and shipment of semen
- Pay the test herd fee per bull tested when semen is shipped — contact Jack Ward for details

Responsibilities of AHA:

- Receive data and report all data back to bull owner and to test herd

AHA Cost:

There will be no cost to the test herd or the bull owner for the data reporting done by the AHA

Benefits of Test Sires:

- Obtaining high accuracy carcass EPDs (expected progeny differences)
- Obtaining performance data compared to other sires tested in herd contemporaries
- Opportunity to market semen as a NRSP reference sire, after nominated and selected
- Opportunity to test sires next to the top Hereford genetics in the breed

2015 National Reference Sire Feedlot and Carcass Testing Program Nomination Form

Sire Nomination Form

Ranch Name _____ Contact person _____

Address _____

Phone No. _____ E-mail: _____

Test Bull Information: Name and Registration No. _____

Name and Registration No. _____

*I acknowledge that any information or samples I provide to the AHA or through AHA programs may be used by the AHA for any purpose. _____ Signature

*Send application by **March 1, 2015** to:*
American Hereford Association
Jack Ward
P.O. Box 014059
Kansas City, MO 64101-0059

For more information, visit *Hereford.org/nrsp* or contact Jack Ward at 816-842-3757 or jward@hereford.org.