

The Florida Bull Test 2016–2017¹

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Test Procedures

The 17th annual Florida Bull Test Sale was held on January 21, 2017 at the conclusion of the 2016–2017 Florida Bull Test. The test evaluated the performance potential and breeding soundness of bulls consigned to the program at the UF/IFAS North Florida Research and Education Center (NFREC). In an ongoing effort to better serve consignors and bull buyers, the 2016–2017 test provided data on individual feed efficiency for each bull, making this the sixth year that this information has been included. After the test, consignors with bulls that met the established benchmarks of the test were then given the opportunity to sell their consignments in the Florida Bull Test Sale. In order to qualify, bulls needed to meet growth performance, structural soundness, and disposition standards. Sale bulls also must have successfully passed a breeding soundness exam to qualify for the auction. Potential buyers and consignors were able to fully evaluate the animals on all parameters including actual performance data, expected progeny differences (EPDs), and carcass ultrasound data.

The 112-day test began on August 17, 2016, with bulls being sorted into contemporary groups based on consignor and breed (8 to 12 bulls per pen). Bulls were then housed in the NFREC Feed Efficiency Facility where they received free-choice access to a total mixed ration and water to achieve a target rate of gain of 4.16 lb per day. On a dry matter (DM) basis, the diet consisted of 42% pelleted soy hulls, 41% pelleted corn gluten feed, 12% loose peanut

hulls, and 5% molasses-based liquid supplement containing vitamins, minerals, and ionophore (monensin). The diet was formulated to contain 16.3% crude protein and 0.51 Mcal/lb of DM net energy of gain (NEg).

After a three-week adaptation period, bulls were weighed on two consecutive days to obtain an accurate average unshrunk weight, which was used as the on-test starting weight. Throughout the test, bulls were inspected daily for any potential health problems. An intermediate unshrunk weight was obtained after 28 days. Bulls were then weighed on two consecutive days for an accurate 56-day weight, completing the feed efficiency portion of the test. On the same day, bulls were removed from the feed efficiency facility and then housed in 3.25-acre pastures where they stayed for the remainder of the test. While pasture grazing, bulls remained in the contemporary groups assigned in the feed efficiency facility pens. In addition to grazing and free-choice bermudagrass hay, bulls were offered free-choice access to the same total mixed ration which was provided in the feed efficiency facility. On day 84 of the test, an additional intermediate unshrunk weight was obtained. At the conclusion of the 112-day feeding period, bulls were weighed again on two consecutive days, December 7 and 8, to determine their final test weights. Animal performance by average daily gain (ADG) was assessed through calculation using only the starting and finishing test weights. Bulls were monitored throughout the test for overall health and were also observed and screened for structural soundness and disposition. Any bull deemed structurally unsound

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with poor conformation or chronic lameness or with poor disposition was disqualified from the sale.

For the third year, the Florida Bull Test offered remote bidding for the sale of bulls through a verified online bidding company. This service allowed consignors to market their bulls to potential buyers who were unable to attend the sale in person. Additionally, a video clip of each bull was made available online as a means of visual evaluation for those who could not visit the NFREC facility before the sale. On the day of the sale, 11 of the 34 registered bidders actively participated in the live auction.

Assessment of Feed Efficiency

Upon arrival at the feed efficiency facility, bulls were tagged with electronic identification (EID) tags to monitor daily feed intake using the GrowSafe system. Average daily gain (ADG) was calculated for the 56-day feed efficiency portion of the test. Residual feed intake (RFI), calculated as the difference between actual feed intake and expected feed intake, was the measure of feed efficiency used to rank the bulls in the test. Daily feed intake was measured for each bull, and RFI was calculated as described by Maddock and Lamb (2009).

Test Rules and Regulations

General Policies and Procedures

1. Bulls must have been born between August 15 and December 31, 2016.
2. All consignors' herds must have been enrolled in their respective breed association performance program. State BCIA programs were accepted for herds whose breed association did not have a performance record program.
3. Bulls must have completed the weaning phase of the performance record program with their contemporary group, and this information must have been presented upon delivery. If data had not yet been returned from the consignor's respective association, a copy of the weight data with the number of contemporaries was requested.
4. Bulls could either be purebred or fullblood, but they must have been registered with their breed association. Composite bulls must have had both sire and dam registered in an acknowledged beef breed association. A registration certificate and pedigree were required at time of bull delivery to the test station. Otherwise, bulls were not accepted.

5. Each bull was required to weigh 2.5 lb per day of age when delivered to the test station. A transit shrink of 1% per hour of transit time was allowed.
6. Bulls must have been weaned a minimum of three weeks prior to delivery.
7. Bulls were required to be structurally sound and show evidence of good growth potential.
8. Birth weights of bulls were required at time of delivery.
9. Consignments were limited to ten bulls per owner or operation. Additional consignments would have been considered on the basis of space availability.
10. There was a limit of 132 bulls for the Florida Bull Test. More than 132 bulls were nominated. As a result, the following selection criteria were used to determine which bulls were accepted:
 - First preference was given to breeders or consignors who were members of the Florida Cattlemen's Association.
 - Secondly, bulls were accepted based on the order in which nominations were received.
11. Bulls originating from embryo transfer must have been designated as such, and the breed of the recipient cow must have been identified.
12. Bulls must have had legible and permanent identification (tattoo or brand) corresponding to the registration paper at delivery.
13. Consignors were informed that horned bulls may be grouped separately. Additionally, it was recommended that bulls be dehorned and healed by time of delivery.

Health Requirements

1. All bulls were required to be in good health. They needed to be accompanied by a health certificate bearing the herd number that indicated they were from an accredited or certified brucellosis-free state or herd or have a negative test for brucellosis no more than 30 days before delivery. Bulls originating from a state that is not tuberculosis (TB)-free were required to be accompanied by a health certificate showing they were from a certified TB-free herd or have had a negative test result for TB no more than 30 days prior to time of delivery.

2. Bulls must have been vaccinated twice with at least 21 days between vaccinations for the following: 5-way leptospirosis, 7- or 8-way clostridium with *Haemophilus somnus*, and IBR/PI3/BVD/BRSV, with the last vaccination occurring at least three weeks prior to delivery. Vaccination for *Pasteurella* was optional. The use of intranasal vaccination against IBR/PI3 was recommended.
3. Consignors were responsible for all examination and treatment costs if veterinary attention was required.
4. Consignors were encouraged to contact their local or state veterinarian for interstate permit and health requirements. An official certificate of veterinary inspection (health paper) was required for each bull.

Test Results

At the conclusion of the test, an overall ranking assessing the parameters of ADG and the weight per day of age (WDA) of each bull was compiled, and an index ratio was generated. The top performing bull and top SimAngus, WF Hercules, was owned by Wells Farm, AL, indexing 133 with an ADG of 4.80 and WDA of 3.59 lb/day. The top Charolais bull, HBR Auto Pilot 477 P, was owned by Rogers Bar HR, MS, ranking 2nd overall and indexing 126 with an ADG of 4.49 and WDA of 3.49 lb/day.

The top Simmental bull, WF Hurracaine, was owned by Wells Farm in Selma, AL. It ranked 5th overall, indexing 122 with an ADG of 4.41 and WDA of 3.30 lb/day. The top Angus bull, LHH Safeguard 021 Z206 C15, owned by Hubert Hightower of Monticello, FL, was ranked 19th overall and indexed 113 with an ADG of 3.53 and WDA of 3.61 lb/day. The top Hereford bull, HRF 20X Copy That G145, was owned by Hickory Ridge Farm in Chipley, FL, and ranked 42nd overall, indexing 106 with an ADG of 3.90 and WDA of 2.77 lb/day.

The top Brahman bull, FF Mr Gibson 613, owned by Ford Farms of Malone, FL, was ranked 97th overall and indexed 92 with an ADG of 3.00 and WDA of 2.81 lb/day. Table 1 summarizes feed efficiency data, and Table 2 summarizes individual feed intake and feed efficiency. Table 3 summarizes individual animal performance.

Table 1. Summary of feed efficiency data for bulls in the 2016–2017 Florida Bull Test.

Item	Daily Intake, lb of DM/day	RFI, lb of DM/day	Feed: Gain
Average	22.63	0.00	7.40
Range	13.15–32.35	-6.04–8.21	3.96–14.65

Sale Summary

The Florida Bull Test Sale was held at the NFREC Beef Unit in Marianna, FL. Eighty-three head of the 129 qualified bulls walked through the sale ring for offer. The sale grossed \$183,450 with an average of \$2,210.24 per lot. Angus bulls averaged \$2,044 on 38 lots while SimAngus bulls averaged \$2,305 on 26 lots. Simmental bulls averaged \$2,400 on 13 lots. Hereford bulls averaged \$2,433 on six lots. The high-selling bull was lot 19, LHH Safeguard 021 Z206 C15, selling for \$3,900. LHH Safeguard 021 Z206 C15 was consigned by Hubert Hightower of FL and purchased by Matt Revell of FL.



Figure 1. Mike Wells from Wells Farm receiving their award for their consignment, WF Hercules, that concluded the test as the Top Indexing SimAngus Bull. Pictured from left to right: Mike Wells of Wells Farm and David Thomas (UF/IFAS NFREC Beef Unit supervisor). Credits: UF/IFAS

Reference

Maddock, T. D. and G. C. Lamb. 2009. *The Economic Impact of Feed Efficiency in Beef Cattle*. AN217. Gainesville: University of Florida Institute of Food and Agricultural Sciences. <http://edis.ifas.ufl.edu/an217>

Table 2. 2016–2017 Florida Bull Test individual bull feed efficiency and feed intake data.

Test ID	Breed	56-Day Daily Feed Intake, lb/day	Feed:Gain	Gain:Feed	56-Day RFI, lb/day	56-Day Feed Efficiency Rank
1453	Charolais	13.15	3.96	0.25	-6.04	1
1451	Charolais	18.10	4.66	0.21	-6.00	2
1473	Simmental	20.50	6.04	0.17	-4.78	3
1476	SimAngus	22.74	5.72	0.17	-4.58	4
1544	Angus	17.12	8.71	0.11	-4.48	5
1450	Charolais	20.84	4.45	0.22	-4.32	6
1548	Angus	13.90	4.81	0.21	-4.10	7
1560	SimAngus	17.29	7.28	0.14	-4.05	8
1496	Simmental	17.80	7.55	0.13	-3.99	9
1577	Simmental	21.39	5.43	0.18	-3.87	10
1545	Angus	17.58	9.38	0.11	-3.83	11
1553	Angus	18.58	7.03	0.14	-3.73	12
1475	SimAngus	18.77	8.98	0.11	-3.26	13
1480	Simmental	18.24	5.46	0.18	-3.17	14
1576	Simmental	23.50	5.50	0.18	-3.15	15
1538	Angus	20.57	6.56	0.15	-2.88	16
1572	Hereford	18.25	6.55	0.15	-2.82	17
1456	Charolais	19.83	5.83	0.17	-2.71	18
1528	SimAngus	20.55	5.75	0.17	-2.49	19
1551	Angus	23.78	7.20	0.14	-2.46	20
1517	SimAngus	23.05	7.37	0.14	-2.35	21
1520	SimAngus	25.67	6.61	0.15	-2.32	22
1506	Angus	21.14	6.18	0.16	-2.29	23
1534	Angus	19.14	5.47	0.18	-2.23	24
1492	Angus	23.67	6.47	0.15	-2.23	25
1463	SimAngus	22.83	6.16	0.16	-2.20	26
1522	Hereford	18.98	6.97	0.14	-1.97	27
1467	Brahman	19.27	5.09	0.20	-1.88	28
1525	SimAngus	22.17	6.38	0.16	-1.87	29
1491	Angus	19.80	8.66	0.12	-1.81	30
1546	Angus	14.56	5.82	0.17	-1.46	31
1539	Angus	19.48	7.93	0.13	-1.45	32
1486	Angus	17.51	8.83	0.11	-1.42	33
1493	SimAngus	20.51	5.22	0.19	-1.41	34
1554	Angus	19.32	8.17	0.12	-1.41	35
1552	Angus	20.89	6.94	0.14	-1.38	36
1569	Simmental	24.71	5.67	0.18	-1.36	37
1521	SimAngus	22.29	7.03	0.14	-1.28	38
1516	SimAngus	22.56	7.66	0.13	-1.15	39
1494	Simmental	20.50	6.40	0.16	-1.14	40
1562	Angus	17.33	10.22	0.10	-1.12	41
1498	SimAngus	23.46	6.75	0.15	-1.05	42
1479	Angus	20.39	6.86	0.15	-1.04	43
1564	Angus	23.24	7.54	0.13	-1.03	44

Test ID	Breed	56-Day Daily Feed Intake, lb/day	Feed:Gain	Gain:Feed	56-Day RFI, lb/day	56-Day Feed Efficiency Rank
1512	Angus	23.46	5.34	0.19	-1.03	45
1575	Hereford	15.51	8.19	0.12	-1.00	46
1488	Angus	21.79	7.87	0.13	-0.92	47
1487	Angus	20.65	8.50	0.12	-0.84	48
1465	Brahman	21.63	5.49	0.18	-0.80	49
1462	Simmental	15.88	7.60	0.13	-0.76	50
1503	SimAngus	25.43	8.14	0.12	-0.76	51
1472	SimAngus	25.40	7.80	0.13	-0.74	52
1563	Angus	17.34	7.47	0.13	-0.70	53
1547	Angus	25.36	7.28	0.14	-0.69	54
1568	SimAngus	23.88	7.13	0.14	-0.66	55
1504	Angus	21.00	5.76	0.17	-0.66	56
1571	SimAngus	29.03	6.25	0.16	-0.64	57
1535	Angus	19.78	7.53	0.13	-0.64	58
1469	Simmental	25.33	6.37	0.16	-0.63	59
1460	SimAngus	16.99	6.30	0.16	-0.56	60
1541	Angus	21.79	8.59	0.12	-0.55	61
1518	SimAngus	26.79	6.45	0.15	-0.35	62
1474	Simmental	25.09	7.49	0.13	-0.33	63
1527	Angus	21.65	6.40	0.16	-0.30	64
1470	Simmental	23.87	8.10	0.12	-0.27	65
1578	Simmental	22.92	8.70	0.11	-0.24	66
1523	Hereford	21.01	7.07	0.14	-0.18	67
1466	Brahman	17.97	8.18	0.12	-0.08	68
1484	Angus	24.99	9.33	0.11	-0.02	69
1540	Angus	22.91	9.33	0.11	0.05	70
1501	SimAngus	28.68	7.47	0.13	0.12	71
1471	SimAngus	27.75	7.14	0.14	0.13	72
1542	Angus	22.90	6.95	0.14	0.19	73
1537	Angus	22.61	5.28	0.19	0.21	74
1461	SimAngus	17.90	5.73	0.17	0.22	75
1536	Angus	22.06	6.37	0.16	0.27	76
1497	SimAngus	25.50	8.16	0.12	0.40	77
1457	Charolais	26.47	5.44	0.18	0.41	78
1458	Charolais	21.27	5.29	0.19	0.50	79
1454	Charolais	21.97	6.51	0.15	0.51	80
1482	Angus	20.38	7.27	0.14	0.55	81
1570	SimAngus	24.51	7.23	0.14	0.61	82
1490	Angus	18.18	9.09	0.11	0.62	83
1515	SimAngus	28.56	6.15	0.16	0.75	84
1519	SimAngus	22.64	8.37	0.12	0.76	85
1505	Angus	24.25	5.53	0.18	0.77	86
1573	Hereford	22.67	6.79	0.15	0.81	87
1526	SimAngus	21.89	8.17	0.12	0.87	88
1464	Simmental	20.40	14.65	0.07	1.03	89

Test ID	Breed	56-Day Daily Feed Intake, lb/day	Feed:Gain	Gain:Feed	56-Day RFI, lb/day	56-Day Feed Efficiency Rank
1524	Hereford	20.14	10.26	0.10	1.11	90
1499	Simmental	24.76	6.32	0.16	1.16	91
1543	Angus	26.45	8.23	0.12	1.16	92
1478	Angus	22.44	7.59	0.13	1.19	93
1566	Angus	22.51	7.66	0.13	1.36	94
1459	Charolais	23.49	6.51	0.15	1.44	95
1481	Simmental	30.26	6.92	0.14	1.45	96
1567	Angus	24.51	6.38	0.16	1.53	97
1511	Angus	25.53	7.15	0.14	1.72	98
1502	SimAngus	27.54	8.12	0.12	1.75	99
1509	Angus	18.15	6.20	0.16	1.77	100
1485	Angus	19.80	9.39	0.11	1.82	101
1452	Charolais	24.31	7.05	0.14	1.83	102
1513	Angus	21.02	5.72	0.17	1.86	103
1565	Angus	25.84	8.36	0.12	1.87	104
1549	Angus	20.05	6.65	0.15	2.00	105
1510	Angus	18.60	7.28	0.14	2.02	106
1455	Charolais	24.28	6.11	0.16	2.29	107
1550	Angus	23.46	7.38	0.14	2.33	108
1533	Angus	23.41	8.63	0.12	2.35	109
1507	Angus	21.72	6.27	0.16	2.48	110
1477	SimAngus	26.31	6.74	0.15	2.58	111
1531	Angus	22.61	10.55	0.09	2.94	112
1529	SimAngus	26.16	8.12	0.12	3.06	113
1468	Simmental	26.26	8.83	0.11	3.17	114
1530	Angus	25.36	10.48	0.10	3.30	115
1514	SimAngus	27.53	8.73	0.11	3.74	116
1557	Angus	28.43	7.73	0.13	3.85	117
1574	Hereford	23.45	9.38	0.11	3.91	118
1559	Angus	30.11	8.33	0.12	3.93	119
1532	SimAngus	22.46	12.83	0.08	4.06	120
1508	Angus	27.24	7.33	0.14	4.10	121
1561	Simmental	28.17	7.55	0.13	4.23	122
1495	Simmental	29.73	6.81	0.15	4.70	123
1500	SimAngus	30.50	9.23	0.11	4.72	124
1483	Angus	30.89	10.65	0.09	4.80	125
1489	Angus	30.11	13.76	0.07	5.34	126
1558	Angus	30.52	7.63	0.13	5.69	127
1556	Angus	30.18	13.52	0.07	7.23	128
1555	Angus	32.35	8.82	0.11	8.21	129

Table 3. 2016–2017 Florida Bull Test individual bull performance in order of final test index.

Test ID	Breed	Arrival Weight, lb	28-Day Weight, lb	56-Day Weight, lb	84-Day Weight, lb	Final Weight, lb	Final ADG, lb/day	Final WDA, lb/day	Final Index	Final Index Ratio	Frame Score
1450	Charolais	814	976	1120	1260	1360	4.48	3.32	7.80	124	7.5
1451	Charolais	816	984	1118	1285	1430	4.73	3.23	7.96	126	6.1
1452	Charolais	760	958	1050	1230	1317.5	4.11	3.04	7.15	113	8.1
1453	Charolais	610	774	858	992	1127.5	4.07	2.94	7.00	111	6.8
1454	Charolais	776	908	992	1085	1202.5	3.57	2.80	6.36	101	6.6
1455	Charolais	714	904	978	1110	1247.5	4.40	2.99	7.39	117	7.3
1456	Charolais	814	970	1058	1145	1270	3.60	3.08	6.67	106	7.0
1457	Charolais	818	1020	1163	1275	1392.5	4.49	3.49	7.98	126	7.6
1458	Charolais	644	790	899	1005	1085	3.67	2.81	6.48	103	7.6
1459	Charolais	752	906	1010	1130	1250	3.95	3.02	6.97	110	6.9
1460	SimAngus	634	736	808	916	992	2.99	2.66	5.65	90	4.4
1461	SimAngus	562	682	784	860	951	3.05	2.55	5.60	89	4.3
1462	Simmental	626	746	801	922	1070	3.45	2.65	6.09	97	4.3
1463	SimAngus	974	1095	1193	1303	1415	3.84	3.09	6.93	110	5.8
1464	Simmental	912	982	1021	1165	1245	2.70	2.71	5.41	86	5.5
1465	Brahman	712	902	1008	1050	1122.5	3.00	2.58	5.58	88	6.6
1466	Brahman	704	812	876	898	960	1.85	2.29	4.14	66	6.2
1467	Brahman	678	838	941	994	1065	3.00	2.81	5.81	92	6.4
1468	Simmental	910	1055	1128	1235	1332.5	3.32	2.98	6.30	100	6.4
1469	Simmental	932	1090	1230	1310	1437.5	3.84	3.18	7.02	111	6.6
1470	Simmental	948	1090	1198	1280	1390	3.19	3.22	6.41	102	6.7
1471	SimAngus	1035	1240	1348	1405	1560	3.84	3.71	7.54	120	6.3
1472	SimAngus	1040	1210	1303	1390	1475	3.17	3.67	6.84	108	5.8
1473	Simmental	1035	1165	1235	1300	1470	3.79	3.30	7.10	112	6.3
1474	Simmental	1080	1150	1248	1335	1460	3.57	3.12	6.69	106	6.8
1475	SimAngus	980	1110	1133	1185	1330	2.81	2.80	5.61	89	6.2
1476	SimAngus	1035	1215	1320	1375	1522.5	3.79	3.20	6.99	111	5.8
1477	SimAngus	754	972	1093	1145	1247.5	3.33	3.35	6.69	106	5.7
1478	Angus	768	938	1013	1095	1200	3.15	3.13	6.28	99	6.6
1479	Angus	774	934	1023	1105	1212.5	3.18	3.28	6.46	102	5.7
1480	Simmental	762	894	992	1070	1152.5	3.10	2.74	5.84	93	6.2
1481	Simmental	1070	1260	1385	1450	1595	4.06	3.47	7.54	119	6.7
1482	Angus	758	850	937	1065	1160	3.39	3.26	6.65	105	5.1
1483	Angus	1040	1240	1330	1445	1547.5	3.39	3.43	6.82	108	5.5
1484	Angus	1035	1215	1278	1375	1465	3.01	3.16	6.18	98	5.4
1485	Angus	712	804	879	996	1087.5	2.92	3.12	6.03	96	5.6
1486	Angus	766	900	946	1015	1150	2.81	2.98	5.79	92	5.6
1487	Angus	854	998	1070	1140	1252.5	2.84	3.16	6.01	95	6.0
1488	Angus	852	1045	1120	1230	1337.5	3.33	3.32	6.64	105	5.7
1489	Angus	1055	1240	1303	1424	1542.5	3.24	3.42	6.66	105	6.0
1490	Angus	674	790	862	932	1027.5	2.48	2.64	5.12	81	4.7
1491	Angus	888	1040	1090	1190	1312.5	3.13	2.75	5.88	93	4.5
1492	Angus	966	1125	1253	1360	1430	3.42	3.20	6.61	105	5.7

Test ID	Breed	Arrival Weight, lb	28-Day Weight, lb	56-Day Weight, lb	84-Day Weight, lb	Final Weight, lb	Final ADG, lb/day	Final WDA, lb/day	Final Index	Final Index Ratio	Frame Score
1493	SimAngus	696	864	977	1050	1167.5	3.67	2.59	6.25	99	5.9
1494	Simmental	832	930	1018	1120	1215	3.37	2.64	6.01	95	5.3
1495	Simmental	806	1025	1138	1200	1315	3.77	2.99	6.76	107	7.3
1496	Simmental	940	1035	1095	1140	1247.5	2.54	2.71	5.25	83	5.6
1497	SimAngus	966	1170	1245	1395	1507.5	3.91	3.40	7.30	116	6.1
1498	SimAngus	902	1080	1178	1275	1407.5	3.79	3.49	7.28	115	6.0
1499	Simmental	852	980	1083	1180	1240	3.37	2.79	6.15	98	6.1
1500	SimAngus	956	1180	1275	1390	1480	3.48	3.39	6.88	109	6.1
1501	SimAngus	1090	1295	1415	1435	1505	2.72	3.26	5.99	95	6.9
1502	SimAngus	982	1145	1268	1360	1515	3.91	3.62	7.52	119	6.5
1503	SimAngus	1035	1200	1318	1420	1555	3.68	3.57	7.26	115	7.3
1504	Angus	716	872	983	1015	1082.5	2.71	2.91	5.62	89	5.4
1505	Angus	786	920	1038	1070	1182.5	3.49	2.58	6.06	96	5.1
1506	Angus	872	1005	1113	1175	1305	3.43	2.81	6.24	99	5.0
1507	Angus	588	736	850	886	988	2.96	2.42	5.38	85	4.3
1508	Angus	812	982	1070	1110	1215	3.15	2.69	5.84	93	5.6
1509	Angus	546	648	723	766	835	2.46	2.22	4.69	74	4.0
1510	Angus	570	708	762	826	867	2.21	2.16	4.38	69	3.9
1511	Angus	860	1010	1125	1210	1292.5	3.28	2.75	6.03	96	4.8
1512	Angus	770	976	1100	1180	1267.5	3.69	2.75	6.44	102	5.1
1513	Angus	556	720	829	848	939	2.82	2.46	5.28	84	4.5
1514	SimAngus	890	1065	1158	1245	1337.5	3.18	2.96	6.14	97	4.6
1515	SimAngus	978	1185	1295	1345	1387.5	3.15	2.93	6.08	96	5.6
1516	SimAngus	964	1100	1170	1230	1372.5	3.28	3.28	6.56	104	6.1
1517	SimAngus	1025	1185	1265	1390	1537.5	4.00	3.34	7.33	116	6.9
1518	SimAngus	1015	1155	1293	1360	1515	4.06	3.33	7.39	117	6.0
1519	SimAngus	876	996	1073	1160	1240	2.85	2.71	5.56	88	6.1
1520	SimAngus	1100	1230	1373	1450	1535	3.39	3.38	6.77	107	6.0
1521	SimAngus	918	1045	1143	1275	1437.5	4.22	3.21	7.43	118	7.1
1522	Hereford	822	940	1013	1120	1227.5	3.28	2.89	6.17	98	5.3
1523	Hereford	794	920	1008	1140	1237.5	3.54	2.95	6.49	103	5.6
1524	Hereford	816	898	954	1055	1205	3.22	2.76	5.98	95	5.4
1525	SimAngus	934	1035	1148	1295	1392.5	3.92	3.08	7.00	111	5.3
1526	SimAngus	808	966	1020	1145	1237.5	3.28	3.23	6.51	103	5.6
1527	Angus	780	934	1023	1080	1165	2.96	2.73	5.69	90	4.5
1528	SimAngus	808	982	1075	1150	1217.5	3.06	3.11	6.17	98	5.8
1529	SimAngus	890	1020	1108	1265	1367.5	3.93	3.30	7.24	115	5.7
1530	Angus	946	1030	1108	1150	1227.5	2.28	2.60	4.88	77	4.9
1531	Angus	848	888	979	1005	1127.5	2.40	2.68	5.08	81	4.3
1532	SimAngus	770	898	932	1065	1177.5	3.07	2.97	6.04	96	4.2
1533	Angus	840	962	1020	1065	1185	2.83	2.76	5.59	89	5.5
1534	Angus	734	858	977	1095	1185	3.61	2.88	6.48	103	5.9
1535	Angus	800	916	987	1075	1150	2.77	2.94	5.71	90	5.2
1536	Angus	796	928	1006	1080	1190	3.38	2.83	6.20	98	5.8

Test ID	Breed	Arrival Weight, lb	28-Day Weight, lb	56-Day Weight, lb	84-Day Weight, lb	Final Weight, lb	Final ADG, lb/day	Final WDA, lb/day	Final Index	Final Index Ratio	Frame Score
1537	Angus	652	842	978	1000	1082.5	3.08	2.84	5.92	94	5.9
1538	Angus	922	1020	1138	1185	1290	2.93	3.04	5.96	95	5.5
1539	Angus	874	962	1033	1140	1260	3.26	2.94	6.20	98	3.6
1540	Angus	946	1065	1155	1260	1370	3.15	3.19	6.34	100	5.1
1541	Angus	896	1030	1115	1220	1342.5	3.30	3.09	6.39	101	5.2
1542	Angus	848	986	1078	1165	1272.5	3.39	2.94	6.33	100	4.8
1543	Angus	992	1155	1250	1335	1400	2.95	3.28	6.23	99	4.8
1544	Angus	984	1055	1115	1130	1237.5	2.08	2.90	4.97	79	6.6
1545	Angus	970	1070	1110	1165	1295	2.59	2.76	5.34	85	5.7
1546	Angus	586	680	734	802	860	2.38	2.44	4.82	76	5.5
1547	Angus	988	1175	1278	1345	1440	3.19	3.42	6.61	105	6.8
1548	Angus	630	746	820	954	1035	3.37	2.65	6.01	95	4.9
1549	Angus	596	732	814	888	963	2.84	2.82	5.66	90	4.8
1550	Angus	744	898	987	1105	1202.5	3.51	2.88	6.39	101	5.1
1551	Angus	1035	1220	1305	1420	1515	3.53	3.61	7.13	113	6.1
1552	Angus	850	996	1073	1120	1190	2.55	2.99	5.54	88	5.6
1553	Angus	934	1015	1105	1245	1350	3.51	3.41	6.92	110	5.5
1554	Angus	794	928	1028	1140	1240	3.08	3.12	6.20	98	5.7
1555	Angus	864	1040	1138	1220	1330	3.55	3.06	6.61	105	5.8
1556	Angus	962	1095	1180	1305	1427.5	3.33	3.34	6.66	106	5.5
1557	Angus	868	1090	1165	1260	1392.5	3.87	3.18	7.05	112	4.5
1558	Angus	824	1035	1155	1210	1340	3.65	3.27	6.92	110	5.5
1559	Angus	978	1195	1275	1380	1482.5	3.66	3.42	7.08	112	5.8
1560	SimAngus	874	1025	1065	1190	1290	3.20	2.82	6.02	95	4.6
1561	Simmental	842	1050	1120	1165	1282.5	3.32	2.93	6.25	99	5.5
1562	Angus	820	876	940	1035	1140	2.63	2.52	5.16	82	4.3
1563	Angus	684	832	866	964	1020	2.54	2.49	5.03	80	4.6
1564	Angus	938	1110	1195	1305	1427.5	3.62	3.20	6.82	108	6.3
1565	Angus	898	1070	1175	1245	1255	2.26	2.80	5.06	80	5.6
1566	Angus	776	936	1008	1120	1170	2.92	2.79	5.71	91	4.9
1567	Angus	760	912	1050	1140	1225	3.48	3.00	6.48	103	5.7
1568	SimAngus	922	1090	1190	1305	1457.5	4.06	3.17	7.23	115	6.1
1569	Simmental	916	1115	1205	1330	1455	4.41	3.30	7.71	122	6.4
1570	SimAngus	892	1080	1145	1235	1330	3.35	2.87	6.21	98	5.0
1571	SimAngus	1095	1300	1420	1540	1697.5	4.80	3.59	8.39	133	7.6
1572	Hereford	834	954	1015	1130	1240	3.40	2.69	6.09	97	5.7
1573	Hereford	802	914	1020	1150	1270	3.90	2.77	6.67	106	5.6
1574	Hereford	724	856	943	1070	1162.5	3.21	2.52	5.73	91	3.9
1575	Hereford	690	758	808	924	1025	2.88	2.60	5.49	87	4.6
1576	Simmental	976	1130	1250	1300	1432.5	3.77	3.19	6.96	110	6.8
1577	Simmental	908	1075	1188	1260	1377.5	3.67	3.08	6.75	107	6.1
1578	Simmental	948	1095	1160	1220	1325	2.79	2.94	5.73	91	5.0