

Beef Progeny Test

Growth, Ultrasound Muscle Scanning and Carcase Report November 2022





This publication is made possible by sheep and beef farmer investment in the industry. Beef + Lamb New Zealand Genetics is not liable for any damage suffered as a result of reliance on the information contained in this document. Any reproduction is welcome with consent from B+LNZ Genetics and that the source is acknowledged. The content published must fairly and reasonably reflect the report or result as a whole, and not be misleading or deceptive in any way. Content should be stated to be an extract only and does not purport to be the full report or results.

Contents

Introduction	4
Acknowledgements	
Contact	
Understanding the sire report	
Trait values and rankings	
Interpreting the tables	
Results	
Table one: Summary of adjusted progeny averages for growth traits	7
Table Two: Summary of adjusted progeny averages for ultrasound mucle scanning traits	16
Table Three: Summary of adjusted progeny averages for carcase quality traits (processing data)	25
Appendix	34
Trait definitions	34

Introduction

Carcase quality

The Beef Progeny Test (BPT) compares bulls under New Zealand commercial farming conditions. It was established in 2014 on five large properties across New Zealand. Measurements are still undertaken on three of these properties – Whangara Farms, Pamu's Rangitaiki Station and Mendip Hills Station.

Beef Progeny Test: evaluating finishing and/or maternal performance Survival Cow weight Condition score/ fat depth Pregnant/empty Finishing Wet/dry Growth Exit code Ultrasound scans STEERS HEIFERS Processing Ultrasound scans Carcase

Steers are assessed on their finishing performance and carcase traits, while replacement heifers are tracked for their maternal characteristics.

Some bulls are included to provide genetic links to other programmes, where carcase data is being collected (e.g. the Australian Angus Sire Benchmark Programme, Hereford Progeny Test, Angus Sire Alliance and the B+LNZ Genetics Dairy Beef Progeny Test).

Please see our website for copies of past reports <a href="https://www.blnzgenetics.com/progeny-tests/beef-p

Acknowledgements

Progeny Test properties: Whangara Farms (Gisborne), Pamu's Rangitaiki Station (Taupo), the Black family's Mendip Hills Station (North Canterbury), Lone Star Farms' Caberfeidh Station, (South Canterbury) and Tautane Station (Herbertville.

Project co-funders: Beef + Lamb New Zealand, Ministry for Primary Industries, Focus Genetics and Simmental New Zealand.

Industry partners: AbacusBio, Beef Breed Societies, Craig Foote of Breedtech Services and Silver Fern Farms.

Participating herds: Thank you to the numerous bull owners and contributors that have supported the Progeny Test. For a list of sires in each cohort, including copies of earlier reports, please visit our website: www.blnzgenetics.com/progeny-tests

Contact

Days to conception

Anna Boyd, Genetics Operations Specialist – Beef:

Beef + Lamb New Zealand Genetics Email: anna.boyd@blnzgenetics.com

Mobile: 027 201 9956

Understanding the sire report

This report provides an indication on how sires are performing within the Beef Progeny Test and can't be directly compared against BREEDPLAN EBVs, or EBVs from other evaluations. For selection purposes, it is strongly advised that BREEDPLAN or other evaluation EBVs and selection indexes be used.

Trait values and rankings

The progeny averages and rank are displayed for each trait. If there are no values displayed, progeny have not yet been recorded for that trait, or not enough progeny of that sire were recorded for the result to be reliable.

In most cases, higher-ranked sires have a higher value. E.g the top-ranked sire for Weaning Weight has the heaviest weight. For the Ossification trait, lower values are better as they indicate younger physiological maturity at slaughter. Therefore, the top-ranked sire for Ossification has the smallest value. See appendix for trait definitions.

When reviewing rankings, it is important to take into account the corresponding value figure as the difference between rankings may be minimal. E.g. in the example table provided on the next page, there is only a 0.6kg difference between bulls ranked 131 and 141 for 18-month Weight.

Some additional traits are recorded in the trial but not included in the sire report because the trait showed very little sire variation, i.e. - it is not under significant genetic control. These traits include pH, fat colour and meat colour.

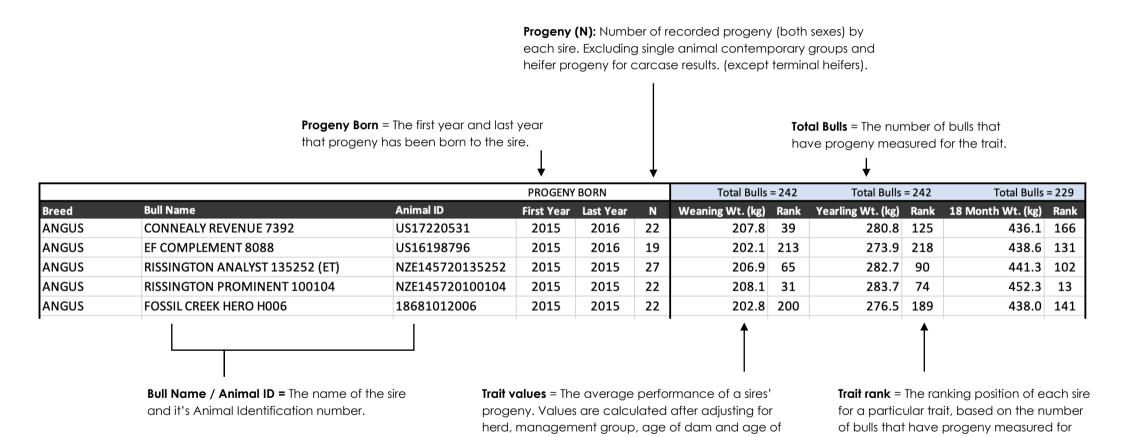
Interpreting the tables

The report has been group into three sections – growth traits, ultrasound muscle scanning traits and carcase quality traits (processing data). Within the tables, the sires have been listed in ascending order by FIRST YEAR (progeny born), then alphabetically by BREED, then BULL NAME.

Bull Name and Animal ID: Both the registered bull name and Animal Identification number have been provided to help identify and search bulls on their relevant databases.

Progeny Born - (First Year/ Last Year): refers to the first year and last year that progeny have been born to the sire and indicates if a sire has been used in more than one mating (sires are often used in multiple matings to provide linkage across years). It provides context when reviewing the number of recorded progeny. E.g. Sires with fewer progeny may have only been used in one mating.

Interpreting the table



animal (based on estimated conception date).

that trait. Rank 1 = the top-ranked sire.

Results

Table one: Summary of adjusted progeny averages for growth traits.

			PROGENY	BORN		Total Bulls	= 242	Total Bulls	= 242	Total Bulls	= 229
Breed	Bull Name	Animal ID	First Year	Last Year	N	Weaning Wt. (kg)	Rank	Yearling Wt. (kg)	Rank	18 Month Wt. (kg)	Rank
ANGUS	CONNEALY REVENUE 7392	US17220531	2015	2016	22	207.8	39	280.8	125	436.1	166
ANGUS	EF COMPLEMENT 8088	US16198796	2015	2016	19	202.1	213	273.9	218	438.6	131
ANGUS	FOSSIL CREEK HERO H006	18681012006	2015	2015	22	202.8	200	276.5	189	438.0	141
ANGUS	G A R MOMENTUM	US17354145	2015	2016	17	205.4	121	282.1	99	445.4	55
ANGUS	GLANWORTH WAIGROUP 1213	1215401213	2015	2015	22	199.8	238	280.2	137	436.9	159
ANGUS	HPCA INTENSITY	US17366506	2015	2016	21	207.8	42	288.2	20	443.8	72
ANGUS	LINTON 13007	NZE20305013007	2015	2015	17	203.4	186	271.0	228	424.3	225
ANGUS	MATAURI OUTLIER F031	14647010F031	2015	2016	32	206.7	74	285.4	44	454.1	10
ANGUS	MATAURI REALITY 839	14647008839	2015	2016	25	206.7	75	282.5	91	434.7	180
ANGUS	NGAPUTAHI EUREKA E38	21095009E38	2015	2016	24	203.2	191	277.3	173	433.7	185
ANGUS	PA SAFEGUARD 021	US16772185	2015	2017	37	203.7	173	282.4	94	443.9	71
ANGUS	PINEBANK 64/10	1199001064	2015	2016	21	205.0	131	275.2	205	428.5	218
ANGUS	RENNYLEA EDMUND E11	AUNORE11	2015	2016	27	206.9	68	287.9	21	442.7	84
ANGUS	RISSINGTON 135057	NZE145720135057	2015	2015	21	205.5	116	281.1	117	432.5	197
ANGUS	RISSINGTON 135262 (ET)	NZE145720135262	2015	2015	22	208.8	20	287.0	30	449.7	26
ANGUS	RISSINGTON ANALYST 135252 (ET)	NZE145720135252	2015	2015	27	206.9	65	282.7	90	441.3	102
ANGUS	RISSINGTON PROMINENT 100104	NZE145720100104	2015	2015	22	208.1	31	283.7	74	452.3	13
ANGUS	RISSINGTON RESOLUTE 120992 (ET)	NZE145720120992	2015	2015	13	205.5	115	282.3	95	436.0	170
ANGUS	S A V BRUISER 9164 (US)	US16396531	2015	2016	17	208.0	34	288.5	18	445.1	56
ANGUS	STORTH OAKS H114	NZE19507012H114	2015	2016	30	204.1	156	284.3	64	443.2	81
ANGUS	STORTH OAKS H2	NZE19507012H2	2015	2016	28	202.4	207	280.8	123	437.7	145
ANGUS	STORTH OAKS H41	NZE19507012H41	2015	2015	17	206.4	84	287.8	22	444.7	63
ANGUS	TANGIHAU KAINO H29	16883012H29	2015	2016	27	204.6	142	279.0	151	438.8	128
				Mir	nimum	197.6		264.7		416.8	
				A	verage	205.2		280.6		440.4	
				Max	cimum:	214.1		296.2		469.4	

			PROGENY	BORN		Total Bulls	= 242	Total Bulls	= 242	Total Bulls	s = 229
Breed	Bull Name	Animal ID	First Year	Last Year	N	Weaning Wt. (kg)	Rank	Yearling Wt. (kg)	Rank	18 Month Wt. (kg)	Rank
ANGUS	TE MANIA 11 553	NZE16932011553	2015	2016	24	206.3	88	279.0	149	438.0	142
ANGUS	TOTARANUI 238 (ET)	NZE12922011238	2015	2016	27	211.2	4	284.9	53	448.1	36
ANGUS	TURIHAUA CRUMP E5	17691009E5	2015	2016	25	201.9	215	281.7	106	436.2	164
ANGUS	TURIHAUA LIBERATION	17691007C27	2015	2015	34	202.9	197	274.1	215	430.4	211
CHAROLAIS	SILVERSTREAM PERFORMER P38EF	083990038F	2015	2016	7	204.6	140	280.4	134	440.2	114
CHAROLAIS	WELCOME SWALLOW EASY GAIN F508	AUCMAF508E	2015	2016	7	206.2	93	284.5	60	449.2	28
HEREFORD	BEECHWOOD TURK	0051100094	2015	2015	12	206.3	89	277.2	176	430.9	207
HEREFORD	BLUESTONE 120061	1683120061	2015	2016	31	203.5	183	277.9	166	433.4	188
HEREFORD	GLENDAN PARK TOP GUN W042 (IMP AUS)	AUFSAW042	2015	2016	8	206.1	98	280.5	131	442.0	93
HEREFORD	KOANUI ROCKET 0219	0216000219	2015	2016	21	205.4	120	278.0	164	441.9	94
HEREFORD	MATARIKI HOLY SMOKE	0281070390	2015	2016	14	210.3	8	283.3	81	443.6	76
HEREFORD	NITHDALE ELVIS 040021	0400040021	2015	2016	14	207.9	37	285.7	41	444.0	69
HEREFORD	OKAWA DAVIS 7046	0617070046	2015	2015	20	205.5	119	283.0	86	441.8	97
HEREFORD	OKAWA MARSHALL 0109	0617100109	2015	2016	15	202.9	194	281.1	119	441.7	100
HEREFORD	OTAPAWA SPARK 3060	0347033060	2015	2015	27	208.0	36	285.4	45	440.2	113
HEREFORD	WAIKAKA TURNING POINT 110015	0328110015	2015	2016	14	206.0	102	281.7	107	442.6	87
HEREFORD	WIRRUNA DAFFY D1 (IMP AUS)	AUWNAD1	2015	2016	22	203.7	172	270.9	229	428.5	219
SIMMENTAL	GLEN ANTHONY Y-ARTA AY02 (ET)	0299AY0002	2015	2016	12	206.1	100	275.0	207	441.0	104
SIMMENTAL	GLENSIDE ATOMIC A5	1312AA0005	2015	2015	12	209.0	18	283.4	78	452.2	14
SIMMENTAL	KERRAH A456	1667AA0456	2015	2016	15	209.9	11	290.6	6	445.8	50
SIMMENTAL	KERRAH XFACTOR AX187 (ET)	1667AX0187	2015	2016	12	207.5	48	289.2	13	435.3	175
SIMMENTAL	KERRAH YES SIR AY393	1667AY0393	2015	2016	15	205.2	125	284.4	62	446.6	48
SIMMENTAL	RISSINGTON AB5185	0049AB5185	2015	2016	10	211.0	5	292.9	3	458.8	2
SIMMENTAL	RISSINGTON NEW STANDARD AU158	049AU0158	2015	2015	15	213.0	2	296.2	1	469.4	1
SIMMENTAL	TOKAWEKA HANDSOME AH801	0079AH0801	2015	2015	15	206.5	78	281.3	113	446.0	49
STABILIZER	FOCUS BIG GENE 121293	N/A	2015	2017	25	208.3	27	282.1	98	442.6	88
STABILIZER	FOCUS FORCEFUL 135159	N/A	2015	2016	20	203.8	170	269.7	234	416.8	229
STABILIZER	FOCUS FOREFRONT 121599	N/A	2015	2016	29	199.1	239	274.1	217	429.4	214
STABILIZER	FOCUS PORTERHOUSE 135361	N/A	2015	2016	30	204.5	144	276.6	186	427.9	221
STABILIZER	FOCUS TRINITY 135263	N/A	2015	2016	18	202.4	208	280.8	124	437.1	155
				Mir	nimum	197.6		264.7		416.8	
				A	verage	205.2		280.6		440.4	
					imum	214.1		296.2		469.4	

			PROGENY	BORN		Total Bulls =	= 242	Total Bulls	= 242	Total Bulls	s = 229
Breed	Bull Name	Animal ID	First Year	Last Year	N	Weaning Wt. (kg)	Rank	Yearling Wt. (kg)	Rank	18 Month Wt. (kg)	Rank
ANGUS	DEER VALLEY ALL IN (US)	US17307074	2016	2017	28	207.4	54	291.9	4	451.6	15
ANGUS	FOCUS 131511	NZE194730131511	2016	2017	21	205.0	130	276.5	190	440.0	116
ANGUS	FOCUS 131539	NZE194730131539	2016	2017	24	204.3	151	278.1	162	430.4	210
ANGUS	FOCUS 143143	NZE194990143143	2016	2017	24	207.6	47	286.1	40	449.2	29
ANGUS	KAKAHU BOND 13007	NZE13300013007	2016	2017	21	204.4	147	284.6	57	442.6	85
ANGUS	KAKAHU JUBILANT 13054	NZE13300013054	2016	2017	22	207.8	43	278.1	158	436.9	158
ANGUS	LINTON 13543	NZE20305013543	2016	2017	18	203.6	176	279.3	144	440.6	107
ANGUS	MEADOWSLEA F540	19134010540	2016	2019	21	206.0	103	284.8	55	438.6	130
ANGUS	MT MABLE FAT BOY 373	12188006373	2016	2017	23	200.4	234	271.8	225	425.3	224
ANGUS	STORTH OAKS EVEREST J20	NZE19507013J20	2016	2017	33	203.9	160	284.2	67	444.1	68
ANGUS	STORTH OAKS JACK J7	NZE19507013J7	2016	2018	31	209.3	15	286.3	39	458.4	3
ANGUS	TE MANIA GARTH G67	VTMG67	2016	2016	25	206.9	67	289.5	11	450.2	21
ANGUS	TE MANIA JONAH 13588	NZE16932013588	2016	2017	29	205.5	117	277.2	175	445.5	54
ANGUS	TURIHAUA SIR CRUMBLE E222	17691009E222	2016	2017	29	206.4	83	283.4	77	444.7	64
ANGUS	TUWHARETOA REGENT D145 (AUS)	AUBNAD145	2016	2018	45	207.7	44	285.3	48	450.2	20
ANGUS	V A R RESERVE 1111 (US)	US16916944	2016	2017	18	206.1	97	276.6	185	435.0	177
ANGUS	WAITANGI D213	NZE18954008D213	2016	2017	24	203.5	181	278.2	155	440.6	106
ANGUS	WHANGARA 12323	NZE13649012323	2016	2017	25	208.6	25	284.8	54	450.8	17
CHAROLAIS	CENTREWOOD 130516	001130516E	2016	2017	14	205.2	126	281.6	109	436.4	161
CHAROLAIS	HEMINGFORD GAMBLER G44	803110044E	2016	2017	6	204.2	154	276.8	183	440.3	111
CHAROLAIS	KAITOKE COMMODORE C22	471070022E	2016	2017	12	208.8	22	284.0	69	444.7	62
CHAROLAIS	LEACHMAN WHITE GOLD P0002X (US)	USM796550	2016	2016	6	206.1	99	281.8	104	437.7	147
CHAROLAIS	SILVERSTREAM GEDDES G102	083110102D	2016	2017	13	201.9	214	284.7	56	429.8	213
CHAROLAIS	SIMCA HILLS VEEDUB	133040035E	2016	2017	6	206.6	76	286.8	32	447.4	43
				Min	nimum	197.6		264.7		416.8	
				Av	verage	205.2		280.6		440.4	
				Max	cimum:	214.1		296.2		469.4	

			PROGENY	BORN		Total Bulls = 242	Total Bulls = 242	Total Bulls = 229
Breed	Bull Name	Animal ID	First Year	Last Year	N	Weaning Wt. (kg) Rank	Yearling Wt. (kg) Rank	18 Month Wt. (kg) Ran
HEREFORD	ARDO FARGO 1154	0277111154	2016	2018	29	200.9 230	269.1 235	431.6 204
HEREFORD	BLUESTONE 080014	1683080014	2016	2017	6	203.6 174	278.8 152	436.8 160
HEREFORD	COLRAINE CODE WORD 13 139	1660130139	2016	2018	17	202.6 204	276.2 195	450.5 18
HEREFORD	EFBEEF U208 FORTUNE Y848 (US)	US43187500	2016	2017	25	202.1 211	273.6 220	421.5 228
HEREFORD	GRASSMERE SPARK 555	0200080555	2016	2017	19	201.3 224	276.5 192	437.5 153
HEREFORD	KOANUI CHIEFLY 2510	0216122510	2016	2018	16	205.9 106	281.7 105	439.1 126
HEREFORD	KOANUI UNANIMOUS 0408	0216100408	2016	2018	12	205.7 109	279.2 145	439.8 117
HEREFORD	LIMEHILLS STAMPER 120719	0677120719	2016	2017	18	207.2 58	280.9 122	441.6 103
HEREFORD	MONYMUSK GALLANT 110089	0272110089	2016	2017	11	203.8 165	275.8 198	443.5 77
HEREFORD	OKAWA MAJOR 2008	0617120008	2016	2017	16	206.5 81	283.5 75	442.5 89
HEREFORD	ORARI GORGE MISCHIEF 120083	0400120083	2016	2017	19	209.7 12	288.4 19	439.2 125
HEREFORD	WIRRUNA ECHUCA E99 (AUS)	AUWNAE99	2016	2018	26	206.6 77	280.9 121	439.3 123
SIMMENTAL	CDI RIMROCK 325Z (US)	US2700121	2016	2017	13	209.0 17	286.6 35	445.1 57
SIMMENTAL	GLENSIDE CATALYST C23	1312AC0023	2016	2016	14	202.2 210	270.8 230	432.6 194
SIMMENTAL	HOOKS YELLOWSTONE 97Y (US)	US2612546	2016	2016	15	207.4 53	277.5 168	438.1 137
SIMMENTAL	KERRAH AX49	1667AX0049	2016	2017	12	204.9 135	279.8 139	436.4 162
SIMMENTAL	KERRAH BANDWAGON B306	1667AB0306	2016	2016	14	201.4 223	267.9 239	434.3 183
SIMMENTAL	KERRAH BANKER B464	1667BB0464	2016	2017	14	204.0 157	283.3 79	443.6 74
SIMMENTAL	MF RUSHMORE AB0008	1308AB0008	2016	2016	2	205.5 114	280.2 135	440.3 112
SIMMENTAL	RISSINGTON AC244	0049AC0244	2016	2016	10	204.7 139	280.6 130	443.7 73
SIMMENTAL	RIVERBEND TAMARACK 60N PF (CAN)	CA618651	2016	2017	12	205.0 127	273.2 221	434.4 182
SIMMENTAL	WAIKITE AB2038	1455AB2038	2016	2017	14	201.2 226	275.7 199	438.5 133
SIMMENTAL	WAIKITE AC2016	1455AC2016	2016	2018	11	206.9 66	282.0 101	444.2 65
SIMMENTAL	WAIKITE AMPLE AA2241	1455AA2241	2016	2017	14	202.3 209	278.6 154	438.1 138
STABILIZER	FOCUS BIG GENE 121292	N/A	2016	2019	41	202.5 205	282.1 97	442.7 83
				Mir	nimum	197.6	264.7	416.8
				A	verage	205.2	280.6	440.4
				Max	kimum	214.1	296.2	469.4

			PROGENY	BORN		Total Bulls	= 242	Total Bulls	= 242	Total Bulls	s = 229
Breed	Bull Name	Animal ID	First Year	Last Year	N	Weaning Wt. (kg)	Rank	Yearling Wt. (kg)	Rank	18 Month Wt. (kg)	Rank
ANGUS	BRAVEHEART OF STERN	1217000784	2017	2018	21	202.9	195	280.4	133	442.1	92
ANGUS	EARNSCLEUGH TUSSOCK 144307	210130144307	2017	2018	21	208.2	29	286.7	33	454.2	9
ANGUS	EMBLAZON 999 (US)	US16665803	2017	2018	20	203.6	178	278.0	165	434.2	184
ANGUS	GLANWORTH WAIGROUP 14163	12154014163	2017	2018	27	203.2	190	284.0	70	441.9	95
ANGUS	GRAMPIANS LOTTERY K13	NZE21150014K13	2017	2018	21	201.9	216	275.5	203	428.3	220
ANGUS	HPCAPROCEED (US)	US16956101	2017	2017	34	208.7	23	280.1	138	435.9	171
ANGUS	KAKAHU 14003	NZE13300014D003	2017	2018	23	207.3	57	284.6	58	444.0	70
ANGUS	LINTON 15077	NZE20305015077	2017	2018	17	203.0	193	280.7	127	440.4	109
ANGUS	PATHFINDER GENESIS G357 (AUS)	AUSMPG357	2017	2017	45	208.3	28	287.6	24	448.8	32
ANGUS	PINEBANK 97/11	1199001197	2017	2018	22	205.0	128	283.1	85	449.7	25
ANGUS	RENNYLEA K163	AUNORK163	2017	2018	26	205.3	123	281.9	103	439.2	124
ANGUS	RISSINGTON PREMIUM CUT C487	NZE14572015C487	2017	2018	18	207.6	45	286.8	31	444.7	61
ANGUS	SEVEN HILLS 129/14	NZE21159014129	2017	2017	32	204.7	137	284.6	59	437.0	157
ANGUS	STORTH OAKS ANGUS PRIME K5	NZE19507014K5	2017	2018	24	201.6	221	275.5	202	425.9	223
ANGUS	STORTH OAKS K122	NZE19507014K122	2017	2019	42	203.7	171	282.5	92	448.6	33
ANGUS	STORTH OAKS K134	NZE19507014K134	2017	2018	21	210.1	10	287.5	25	457.7	5
ANGUS	THOMAS UP RIVER 1614 (US)	US17091363	2017	2018	30	208.0	33	285.0	51	443.3	79
ANGUS	TURIHAUA MYTHOLOGY F236	17691010F236	2017	2018	20	206.3	87	285.0	52	441.7	99
ANGUS	VAR GENERATION 2100 (US)	US17171587	2017	2017	16	202.7	202	276.8	182	434.7	179
ANGUS	WAITAWHETA K44 AB	18938014K44	2017	2018	26	210.5	7	290.6	7	449.8	24
ANGUS	WR JOURNEY-1X74 (US)	US16924332	2017	2018	27	205.6	110	282.3	96	443.3	80
CHAROLAIS	BLELACK DIGGER	UKMBM0038543	2017	2018	17	206.8	70	275.9	196	438.5	134
CHAROLAIS	HEMINGFORD JERICO J95	803140095E	2017	2018	13	203.3	187	275.6	201	439.8	118
CHAROLAIS	SILVERSTREAM FRAMPTON F17	083100017E	2017	2018	13	206.3	92	284.1	68	449.2	30
CHAROLAIS	WHANANAKI APOLLO A78	484050078E	2017	2018	12	203.2	189	275.7	200	438.4	136
				Mir	nimum	197.6		264.7		416.8	
				A	verage	205.2		280.6		440.4	
				Max	kimum	214.1		296.2		469.4	

						Total Bulls	= 242	Total Bulls	= 242	Total Bulls	= 229
Breed	Bull Name	Animal ID	First Year	Last Year	N	Weaning Wt. (kg)	Rank	Yearling Wt. (kg)	Rank	18 Month Wt. (kg)	Rank
HEREFORD	ARDO ACHILLES 120	0277100120	2017	2018	18	200.0	236	270.3	233	433.5	187
HEREFORD	ARDO BISMARCK 4256	0277144256	2017	2018	21	202.8	201	277.3	171	431.6	203
HEREFORD	GRASSMERE GALANT 9	0200140009	2017	2018	24	208.9	19	276.3	194	444.1	67
HEREFORD	INJEMIRA ANZAC K220 (AUS)	AUIHSK220	2017	2017	17	206.5	79	278.2	157	445.8	51
HEREFORD	KOANUI TECHNO 3062	0216133062	2017	2018	21	206.1	95	277.0	178	442.4	90
HEREFORD	MATARIKI 140255	0281140255	2017	2018	22	203.6	175	270.5	231	437.4	152
HEREFORD	ORARI GORGE OLIGARCH 140025	0400140025	2017	2017	10	206.9	64	284.5	61	444.9	58
HEREFORD	SHF ALL STAR 42X A191 (US)	US43379326	2017	2018	18	201.0	229	276.6	187	438.5	135
HEREFORD	TE TAUMATA FOUNDATION 14684	0308140684	2017	2018	21	204.8	136	278.0	163	440.0	115
HEREFORD	TLELL 29F RED CEDAR 8N (CAN)	CA02826570	2017	2018	19	199.8	237	283.2	83	432.5	196
SIMMENTAL	GLENSIDE CRUMPY C4	1312AC0004	2017	2018	17	205.5	118	281.9	102	438.8	129
SIMMENTAL	GLENSIDE DUMP TRUCK D12	1312AD0012	2017	2018	15	207.1	62	284.4	63	447.3	44
SIMMENTAL	HOOKS BEACON 56B (US)	US2854180	2017	2018	14	204.3	152	282.0	100	430.8	209
SIMMENTAL	KERRAH CAPTAIN C400	1667AC0400	2017	2018	15	206.8	72	286.7	34	457.0	6
SIMMENTAL	LEAFLAND CAPTAIN C1	1614AC0001	2017	2018	17	207.5	51	289.0	14	449.5	27
SIMMENTAL	MR NLC UPGRADE U8676 (US)	US2474338	2017	2018	20	206.3	91	283.9	71	447.1	45
SIMMENTAL	RISSINGTON AD372 (ET)	0049AD0372	2017	2018	15	208.0	35	289.4	12	457.9	4
SIMMENTAL	RISSINGTON DESTINED AD8	0049AD0008	2017	2018	16	207.5	50	281.3	112	444.8	59
SIMMENTAL	WAIKITE ZACKARIAS AZ0176	1455AZ0176	2017	2018	18	205.9	104	289.8	10	452.6	12
SIMMENTAL	WS PRIME BEEF Z8 (US)	US2675742	2017	2018	14	203.1	192	279.0	150	437.8	143
STABILIZER	STABILIZER 140082	N/A	2017	2018	20	203.8	168	268.4	238	431.2	206
STABILIZER	STABILIZER 140850	N/A	2017	2019	28	198.5	241	268.6	237	423.9	226
ANGUS	ARDROSSAN HONOUR H255 (AUS)	AUNAQH255	2018	2019	22	204.1	155	271.2	227	436.1	167
ANGUS	BLUE MOUNTAIN BRILLIANZ O5	210530135	2018	2019	18	207.2	59	279.2	146	437.7	148
ANGUS	FOCUS 163069	NZE194990163069	2018	2019	22	203.4	184	283.1	84	438.0	140
ANGUS	GRAMPIANS BUZZ L11	NZE21150015L11	2018	2018	17	204.5	143	281.5	110	436.0	168
ANGUS	KAKAHU 16159	NZE13300016159	2018	2019	21	204.9	133	276.5	188	436.2	163
ANGUS	LD CAPITALIST 316 (USA)	US17666102	2018	2018	24	206.2	94	277.4	169	437.2	154
ANGUS	LINTON 16042	NZE20305016042	2018	2018	30	204.4	148	280.6	128	441.8	98
				Mir	nimum	197.6		264.7		416.8	
				A	verage	205.2		280.6		440.4	
				Max	kimum	214.1		296.2		469.4	

			PROGENY	BORN		Total Bulls	= 242	Total Bulls	= 242	Total Bulls	= 229
Breed	Bull Name	Animal ID	First Year	Last Year	N	Weaning Wt. (kg)	Rank	Yearling Wt. (kg)	Rank	18 Month Wt. (kg)	Rank
ANGUS	MILLAH MURRAH LOCH UP L133 (AUS)	AUNMML133	2018	2019	20	206.3	90	281.2	116	444.8	60
ANGUS	PA FULL POWER 1208 (USA)	US16981588	2018	2019	27	205.8	107	282.9	87	441.8	96
ANGUS	QUAKER HILL MILE HIGH 4EX31 (USA)	US18078212	2018	2019	27	208.4	26	286.3	38	448.5	34
ANGUS	REILAND HILARY H874 (AUS)	AUNLRH874	2018	2019	15	208.2	30	283.3	80	442.9	82
ANGUS	RISSINGTON 160136	NZE145720160136	2018	2019	18	206.0	101	285.2	50	439.8	119
ANGUS	RISSINGTON RESOLVED C116	NZE14572015C116	2018	2019	22	202.9	198	269.0	236	432.3	199
ANGUS	SEVEN HILLS 85/15	NZE21159015085	2018	2019	21	204.3	153	276.8	181	433.2	190
ANGUS	STORTH OAKS L94	NZE19507015L94	2018	2019	26	214.1	1	287.7	23	447.4	42
ANGUS	SYDGEN EXCEED 3223 (USA)	US17501893	2018	2019	31	201.6	219	276.5	191	430.0	212
ANGUS	TE MANIA 15380	NZE16932015380	2018	2019	16	209.1	16	283.9	72	449.1	31
ANGUS	TE MANIA MULLER 16305	NZE16932016305	2018	2019	24	209.6	13	285.4	47	448.1	38
ANGUS	TOTARANUI 15151	NZE12922015151	2018	2018	19	207.8	41	282.8	89	434.6	181
ANGUS	TURIROA 16M013	15603016M013	2018	2019	14	207.1	60	289.9	9	450.4	19
ANGUS	WHENUAPAPA CRUMBLE 8-10	212110108	2018	2019	15	203.8	163	281.3	115	443.6	75
CHAROLAIS	HEMINGFORD ICONIC 19	803130009E	2018	2018	10	207.4	55	284.3	65	450.0	23
CHAROLAIS	PALGROVE XCEPT (AUS)	AUPKX488	2018	2019	11	204.6	141	272.6	223	433.0	192
CHAROLAIS	SILVERSTREAM LANDIS L179	083150179E	2018	2019	13	206.5	80	276.9	180	439.7	120
CHAROLAIS	SPARROWS BRAXTON 519C (USA)	CAMC367500	2018	2019	18	203.8	169	274.3	213	433.0	191
CHAROLAIS	WHANANAKI LEX L24	484150024E	2018	2019	9	203.4	185	277.3	170	437.8	144
HEREFORD	ARDO AJAX 5014	0277155014	2018	2019	20	200.5	233	273.8	219	435.8	172
HEREFORD	CRAIGMORE IKE 140260	0169140260	2018	2019	19	202.8	199	274.9	209	432.0	202
HEREFORD	DAYS ROBIN HOOD H38 (AUS)	AUDAYH38	2018	2019	22	203.2	188	272.9	222	437.6	149
HEREFORD	GRASSMERE GALLANT 152	0200150152	2018	2019	29	205.2	124	275.5	204	436.0	169
HEREFORD	KOANUI LEGIT 6444	0216166444	2018	2019	22	199.0	240	266.6	241	429.0	216
HEREFORD	LIMEHILLS STREAKER 150368	0677150368	2018	2019	25	204.4	150	282.4	93	442.6	86
HEREFORD	OKAWA HOGAN 3156	0617130156	2018	2018	17	206.9	69	278.1	160	439.4	122
HEREFORD	ORARI GORGE PATTON 150051	0400150051	2018	2019	23	202.7	203	271.6	226	429.1	215
HEREFORD	ORARI GORGE QUANTUM 160091	0400160091	2018	2019	17	201.7	218	280.6	129	438.8	127
HEREFORD	WESTHOLM TRUST R 58	0421160058	2018	2019	20	206.4	86	274.4	212	437.7	146
				Mir	nimum	197.6		264.7		416.8	
				A	verage	205.2		280.6		440.4	
				Max	cimum:	214.1		296.2		469.4	

			PROGENY	BORN		Total Bulls	= 242	Total Bulls	= 242	Total Bulls	s = 229
Breed	Bull Name	Animal ID	First Year	Last Year	N	Weaning Wt. (kg)	Rank	Yearling Wt. (kg)	Rank	18 Month Wt. (kg)	Rank
SIMMENTAL	CCR COWBOY CUT 5048Z (USA)	US2703910	2018	2019	13	203.6	179	283.3	82	435.8	173
SIMMENTAL	JANEFIELD ED AE1	1671AE0001	2018	2019	13	207.1	63	280.2	136	435.0	176
SIMMENTAL	POTAWA ADMIRAL	1665AA0007	2018	2018	11	205.9	105	277.1	177	442.2	91
SIMMENTAL	RISSINGTON AA0809	0049AA0809	2018	2019	13	203.5	180	283.5	76	447.0	46
SIMMENTAL	RISSINGTON EXCEED AE203	0049AE0203	2018	2019	11	201.5	222	279.1	147	434.9	178
SIMMENTAL	WAIKITE AD2031	1455AD2031	2018	2019	10	203.5	182	285.3	49	448.1	37
SIMMENTAL	WAIKITE AY0097	1455AY0097	2018	2019	17	207.6	46	291.0	5	456.1	7
SIMMENTAL	WS RED MOON D76 (USA)	US3115609	2018	2019	18	200.4	235	274.9	210	432.0	201
ANGUS	CONNEALY LEGENDARY 644L (USA)	US18534952	2019	2020	18	205.6	111	279.1	148	437.1	156
ANGUS	FOCUS 171293	NZE194730171293	2019	2019	9	203.9	162	279.6	142	440.7	105
ANGUS	KAKAHU LACHLAN 15095	NZE13300015095	2019	2020	29	205.7	108	281.1	118	432.5	195
ANGUS	LINTON 16107	NZE20305016107	2019	2020	19	202.1	212	278.1	161	437.3	153
ANGUS	RISSINGTON 17014	NZE14572017014	2019	2020	19	204.0	159	280.7	126	436.2	165
ANGUS	STORTH OAKS JOURNEY M31	NZE19507016M31	2019	2020	20	201.6	220	274.1	216	430.9	208
ANGUS	STORTH OAKS M10	NZE19507016M10	2019	2020	22	208.6	24	283.7	73	455.0	8
ANGUS	STORTH OAKS M119	NZE19507016M119	2019	2020	17	201.2	227	281.7	108	445.7	52
ANGUS	SYDGEN BLACK PEARL 2006 (USA)	US17236055	2019	2020	23	207.8	38	281.0	120	445.6	53
ANGUS	TE MANIA MATRIX 16018	NZE16932016018	2019	2020	16	201.8	217	281.3	111	433.6	186
ANGUS	WAITANGI M203	NZE18954016M203	2019	2020	14	205.0	132	277.3	174	428.5	217
ANGUS	WAITANGI M214	NZE18954016M214	2019	2020	20	204.4	149	276.8	184	432.1	200
CHAROLAIS	HEMINGFORD NEXT DIRECTION N64	803170064E	2019	2020	19	204.4	146	275.1	206	438.1	139
CHAROLAIS	KAKAHU GERRY 140506	001140506E	2019	2020	11	204.0	158	279.5	143	439.4	121
CHAROLAIS	SILVERSTREAM MANHATTAN M171	083160171D	2019	2020	15	203.8	167	275.8	197	432.7	193
GELBVIEH	GLADSTONE RED BARON PN19 ET (AI)	MCCPN19	2019	2020	10	203.8	166	271.9	224	435.7	174
HEREFORD	LIMEHILLS STARTER 160062	0677160062	2019	2020	30	203.9	161	278.1	159	448.4	35
HEREFORD	MATARIKI 110637	0281110637	2019	2020	22	205.6	112	278.2	156	438.5	132
HEREFORD	MATARIKI JETSON	0281160215	2019	2020	33	203.8	164	286.6	36	441.2	103
HEREFORD	OKAWA STAMPER 160124	0617160124	2019	2020	36	200.9	231	264.7	242	422.2	227
HEREFORD	WIRRUNA MATTY M288 (AUS)	AUWNAM288	2019	2020	31	202.4	206	270.4	232	437.5	150
				Mir	nimum	197.6		264.7		416.8	
				A	verage	205.2		280.6		440.4	
				Max	kimum	214.1		296.2		469.4	

			PROGENY	BORN		Total Bulls	= 242	Total Bulls	= 242	Total Bulls	= 229
Breed	Bull Name	Animal ID	First Year	Last Year	N	Weaning Wt. (kg)	Rank	Yearling Wt. (kg)	Rank	18 Month Wt. (kg)	Rank
LIMOUSIN	MANGATARA 335L	N/A	2019	2020	19	207.4	52	277.0	179	431.2	205
LIMOUSIN	MANGATARA JOOL	N/A	2019	2020	16	197.6	242	267.4	240	426.4	222
SHORTHORN	ORENA BALANCE 15012	209315012	2019	2020	11	204.5	145	277.3	172	440.6	108
SIMMENTAL	GLEN ANTHONY AE12	0299AE0012	2019	2020	29	203.6	177	278.8	153	448.1	39
SIMMENTAL	GLENSIDE FRONTIER F19	1312AF0019	2019	2020	24	210.2	9	282.9	88	451.5	16
SIMMENTAL	HOOKS DELEGATE 64D (USA)	US3132798	2019	2020	31	205.6	113	277.5	167	440.3	110
SIMMENTAL	KERRAH DESTINED D608	1667AD0608	2019	2019	5	207.3	56	286.4	37	446.6	47
SIMMENTAL	KERRAH EPIC E303	1667AE0303	2019	2020	29	210.5	6	294.8	2	444.1	66
SIMMENTAL	OWHATA AE7	1689AE0007	2019	2020	16	206.8	71	287.4	26	450.0	22
SIMMENTAL	RISSINGTON AF184	0049AF0184	2019	2020	23	206.4	85	285.4	46	433.3	189
SIMMENTAL	RISSINGTON AF44	0049AF0044	2019	2020	25	200.7	232	275.0	208	432.5	198
SIMMENTAL	WAIKITE AE2009	1455AE2009	2019	2020	14	211.7	3	290.2	8	453.4	11
SOUTH DEVON	BURTERGILL HENRY 1105	VAN11005 PZ	2019	2020	17	202.9	196	288.7	15	448.0	40
STABILIZER	STABILIZER 165287	N/A	2019	2020	27	201.3	225	287.0	28	443.5	78
STABILIZER	STABILIZER 165292	N/A	2019	2020	33	206.5	82	287.0	29	447.5	41
STABILIZER	STABILIZER 16S38	N/A	2019	2020	12	206.7	73	281.3	114		
ANGUS	CLUNES CROSSING DUSTY M13 (AI) (IMP AUS)	AUQMUM13	2020	2020	21	208.8	21	279.6	141		
ANGUS	FOCUS 173075 (P)	NZE194990173075	2020	2020	30	207.1	61	287.2	27		
ANGUS	LINTON 17070 (P)	NZE20305017070	2020	2020	25	201.0	228	279.7	140		
ANGUS	RISSINGTON SURE FIRE P399	NZE145720180399	2020	2020	26	209.3	14	288.6	17		
HEREFORD	CAPETHORNE 1617	0065160017	2020	2020	25	208.1	32	288.7	16		
HEREFORD	FOULDEN HILL FLAME 11 0155	1731110155	2020	2020	20	204.7	138	285.6	42		
HEREFORD	GLENBRAE NIGHTRIDER 1761	0730170061	2020	2020	28	205.0	129	274.8	211		
HEREFORD	LIMEHILLS ANZAC 170279	0677170279	2020	2020	29	206.1	96	274.2	214		
HEREFORD	OTAPAWA VOODOO 7007	0347177007	2020	2020	26	205.4	122	276.5	193		
SIMMENTAL	GLENSIDE G2	1312180002	2020	2020	21	207.8	40	284.3	66		
SIMMENTAL	KERRAH FUNDAMENTAL F509	1667AF0509	2020	2020	31	207.5	49	285.6	43		
SIMMENTAL	RISSINGTON 180061	0049180061	2020	2020	13	204.9	134	280.5	132		
				Mir	nimum	197.6		264.7		416.8	
				A	verage	205.2		280.6		440.4	
				Max	kimum	214.1		296.2		469.4	

Note: if there are no values displayed, progeny have not yet been recorded for that trait, or there was not enough progeny recorded from that sire for the result to be reliable.

Results

Table Two: Summary of adjusted progeny averages for ultrasound muscle scanning traits.

			PROGENY	BORN				Tota	l Bulls =	: 242			
Breed	Bull Name	Animal ID	First Year	Last Year	N	EMA (cm2)	Rank	Rib Fat (mm)	Rank	Rump Fat (mm)	Rank	IMF (%)	Rank
ANGUS	CONNEALY REVENUE 7392	US17220531	2015	2016	22	65.9	46	4.3	37	5.9	140	3.4	40
ANGUS	EF COMPLEMENT 8088	US16198796	2015	2016	19	66.2	27	3.8	176	6.0	132	3.4	24
ANGUS	FOSSIL CREEK HERO H006	18681012006	2015	2015	22	66.7	11	4.2	61	7.0	7	3.3	61
ANGUS	G A R MOMENTUM	US17354145	2015	2016	17	65.4	87	4.1	108	5.8	153	3.6	11
ANGUS	GLANWORTH WAIGROUP 1213	1215401213	2015	2015	22	65.2	117	4.0	117	5.6	195	2.9	174
ANGUS	HPCA INTENSITY	US17366506	2015	2016	21	65.9	37	4.0	122	5.8	164	3.0	120
ANGUS	LINTON 13007	NZE20305013007	2015	2015	17	65.1	121	4.2	70	5.7	173	3.4	35
ANGUS	MATAURI OUTLIER F031	14647010F031	2015	2016	32	66.2	28	4.2	63	6.4	63	3.1	102
ANGUS	MATAURI REALITY 839	14647008839	2015	2016	25	65.4	98	4.4	20	6.7	19	3.6	8
ANGUS	NGAPUTAHI EUREKA E38	21095009E38	2015	2016	24	64.6	175	3.7	206	5.4	226	2.8	200
ANGUS	PA SAFEGUARD 021	US16772185	2015	2017	37	65.9	45	3.6	221	5.3	235	3.0	118
ANGUS	PINEBANK 64/10	1199001064	2015	2016	21	62.8	241	4.4	22	6.2	91	3.0	110
ANGUS	RENNYLEA EDMUND E11	AUNORE11	2015	2016	27	66.7	12	5.1	1	7.2	3	4.1	1
ANGUS	RISSINGTON 135057	NZE145720135057	2015	2015	21	65.0	128	4.6	5	7.4	2	3.4	36
ANGUS	RISSINGTON 135262 (ET)	NZE145720135262	2015	2015	22	67.6	2	4.3	36	7.0	6	3.7	5
ANGUS	RISSINGTON ANALYST 135252 (ET)	NZE145720135252	2015	2015	27	66.5	17	4.1	72	6.1	105	3.5	20
ANGUS	RISSINGTON PROMINENT 100104	NZE145720100104	2015	2015	22	64.3	205	4.2	59	6.5	49	3.2	65
ANGUS	RISSINGTON RESOLUTE 120992 (ET)	NZE145720120992	2015	2015	13	65.2	115	4.1	86	6.0	122	3.2	71
ANGUS	S A V BRUISER 9164 (US)	US16396531	2015	2016	17	65.0	130	3.9	160	5.8	163	2.5	230
ANGUS	STORTH OAKS H114	NZE19507012H114	2015	2016	30	65.1	122	4.0	134	6.4	60	3.1	87
ANGUS	STORTH OAKS H2	NZE19507012H2	2015	2016	28	64.1	214	3.9	154	6.5	52	3.0	136
ANGUS	STORTH OAKS H41	NZE19507012H41	2015	2015	17	66.7	9	4.0	129	6.2	81	3.2	75
ANGUS	TANGIHAU KAINO H29	16883012H29	2015	2016	27	65.8	49	4.7	4	6.5	41	3.9	3
				Mir	imum	61.1		3.1		5.0		2.2	
				A	erage/	65.1		4.0		6.0		3.0	
				Max	imum	68.2		5.1		7.5		4.1	

			PROGENY	BORN				Tota	al Bulls =	242			
Breed	Bull Name	Animal ID	First Year	Last Year	N	EMA (cm2)	Rank	Rib Fat (mm)	Rank	Rump Fat (mm)	Rank	IMF (%)	Rank
ANGUS	TE MANIA 11 553	NZE16932011553	2015	2016	24	66.0	34	4.3	41	5.9	148	3.4	27
ANGUS	TOTARANUI 238 (ET)	NZE12922011238	2015	2016	27	67.4	3	3.7	209	5.4	224	3.3	45
ANGUS	TURIHAUA CRUMP E5	17691009E5	2015	2016	25	64.5	181	4.4	24	6.9	9	3.0	131
ANGUS	TURIHAUA LIBERATION	17691007C27	2015	2015	34	61.1	242	3.8	191	5.8	165	2.4	235
CHAROLAIS	SILVERSTREAM PERFORMER P38EF	083990038F	2015	2016	7	65.7	59	3.3	241	5.3	231	2.8	186
CHAROLAIS	WELCOME SWALLOW EASY GAIN F508	AUCMAF508E	2015	2016	7	66.3	25	4.2	51	5.8	166	3.0	121
HEREFORD	BEECHWOOD TURK	0051100094	2015	2015	12	63.2	239	3.4	239	5.6	208	2.2	241
HEREFORD	BLUESTONE 120061	1683120061	2015	2016	31	64.1	213	4.1	76	6.1	106	3.0	139
HEREFORD	GLENDAN PARK TOP GUN W042 (IMP AUS)	AUFSAW042	2015	2016	8	65.5	77	3.9	158	6.3	72	2.6	224
HEREFORD	KOANUI ROCKET 0219	0216000219	2015	2016	21	65.3	106	4.2	52	6.9	11	2.7	215
HEREFORD	MATARIKI HOLY SMOKE	0281070390	2015	2016	14	65.9	38	4.4	30	6.6	34	3.6	12
HEREFORD	NITHDALE ELVIS 040021	0400040021	2015	2016	14	67.3	4	4.3	44	6.0	125	3.5	17
HEREFORD	OKAWA DAVIS 7046	0617070046	2015	2015	20	63.4	234	4.1	83	5.8	155	3.3	55
HEREFORD	OKAWA MARSHALL 0109	0617100109	2015	2016	15	64.3	199	4.7	3	6.6	33	3.1	99
HEREFORD	OTAPAWA SPARK 3060	0347033060	2015	2015	27	63.3	237	4.5	15	6.5	51	3.0	113
HEREFORD	WAIKAKA TURNING POINT 110015	0328110015	2015	2016	14	65.9	44	3.5	237	5.7	185	3.0	145
HEREFORD	WIRRUNA DAFFY D1 (IMP AUS)	AUWNAD1	2015	2016	22	65.7	60	4.3	42	6.5	50	3.0	126
SIMMENTAL	GLEN ANTHONY Y-ARTA AY02 (ET)	0299AY0002	2015	2016	12	64.5	189	3.8	186	6.1	100	2.7	205
SIMMENTAL	GLENSIDE ATOMIC A5	1312AA0005	2015	2015	12	66.1	31	3.6	226	5.5	212	2.9	153
SIMMENTAL	KERRAH A456	1667AA0456	2015	2016	15	66.6	15	4.0	138	5.6	196	3.1	90
SIMMENTAL	KERRAH XFACTOR AX187 (ET)	1667AX0187	2015	2016	12	65.9	40	3.5	233	5.5	214	3.0	112
SIMMENTAL	KERRAH YES SIR AY393	1667AY0393	2015	2016	15	65.6	68	3.6	227	5.9	141	2.8	196
SIMMENTAL	RISSINGTON AB5185	0049AB5185	2015	2016	10	66.4	23	3.9	152	6.1	97	3.0	132
SIMMENTAL	RISSINGTON NEW STANDARD AU158	049AU0158	2015	2015	15	68.2	1	4.4	21	6.6	27	3.8	4
SIMMENTAL	TOKAWEKA HANDSOME AH801	0079AH0801	2015	2015	15	65.4	88	3.1	242	5.0	240	2.7	206
STABILIZER	FOCUS BIG GENE 121293	N/A	2015	2017	25	65.6	72	3.5	235	5.0	241	3.0	144
STABILIZER	FOCUS FORCEFUL 135159	N/A	2015	2016	20	64.5	191	4.3	45	6.0	126	3.3	60
STABILIZER	FOCUS FOREFRONT 121599	N/A	2015	2016	29	63.2	240	3.8	198	5.9	142	3.4	28
STABILIZER	FOCUS PORTERHOUSE 135361	N/A	2015	2016	30	64.8	156	3.6	231	5.3	233	3.4	37
STABILIZER	FOCUS TRINITY 135263	N/A	2015	2016	18	66.4	21	5.0	2	7.5	1	3.4	30
				Min	imum	61.1		3.1		5.0		2.2	
				Av	erage	65.1		4.0		6.0		3.0	
				Max	imum	68.2		5.1		7.5		4.1	

			PROGENY	BORN				Tota	al Bulls =	= 242			
Breed	Bull Name	Animal ID	First Year	Last Year	N	EMA (cm2)	Rank	Rib Fat (mm)	Rank	Rump Fat (mm)	Rank	IMF (%)	Rank
ANGUS	DEER VALLEY ALL IN (US)	US17307074	2016	2017	28	65.7	62	3.8	192	5.6	198	2.9	160
ANGUS	FOCUS 131511	NZE194730131511	2016	2017	21	66.4	22	4.4	31	6.6	26	3.5	22
ANGUS	FOCUS 131539	NZE194730131539	2016	2017	24	64.2	207	3.8	175	6.0	124	3.2	77
ANGUS	FOCUS 143143	NZE194990143143	2016	2017	24	65.4	97	4.1	109	5.9	136	3.1	91
ANGUS	KAKAHU BOND 13007	NZE13300013007	2016	2017	21	64.0	216	4.1	106	6.2	80	3.3	51
ANGUS	KAKAHU JUBILANT 13054	NZE13300013054	2016	2017	22	64.4	193	4.0	116	5.8	160	3.3	59
ANGUS	LINTON 13543	NZE20305013543	2016	2017	18	65.1	123	4.0	113	6.4	62	3.0	114
ANGUS	MEADOWSLEA F540	19134010540	2016	2019	21	64.8	160	4.0	133	6.1	104	2.9	167
ANGUS	MT MABLE FAT BOY 373	12188006373	2016	2017	23	64.6	179	4.1	79	5.9	144	2.9	156
ANGUS	STORTH OAKS EVEREST J20	NZE19507013J20	2016	2017	33	65.8	48	4.4	28	6.6	35	3.6	13
ANGUS	STORTH OAKS JACK J7	NZE19507013J7	2016	2018	31	65.3	99	4.0	130	6.0	128	3.5	15
ANGUS	TE MANIA GARTH G67	VTMG67	2016	2016	25	65.8	54	4.5	14	7.0	8	3.5	16
ANGUS	TE MANIA JONAH 13588	NZE16932013588	2016	2017	29	65.4	85	3.8	180	5.8	161	2.9	179
ANGUS	TURIHAUA SIR CRUMBLE E222	17691009E222	2016	2017	29	65.4	93	3.7	212	5.7	182	2.5	233
ANGUS	TUWHARETOA REGENT D145 (AUS)	AUBNAD145	2016	2018	45	66.5	18	4.5	9	6.5	44	3.9	2
ANGUS	V A R RESERVE 1111 (US)	US16916944	2016	2017	18	65.3	102	3.9	153	5.8	168	3.0	140
ANGUS	WAITANGI D213	NZE18954008D213	2016	2017	24	64.6	176	4.1	89	6.1	102	2.6	227
ANGUS	WHANGARA 12323	NZE13649012323	2016	2017	25	65.7	57	4.0	125	6.2	82	3.2	80
CHAROLAIS	CENTREWOOD 130516	001130516E	2016	2017	14	64.5	190	3.8	185	5.4	229	2.5	231
CHAROLAIS	HEMINGFORD GAMBLER G44	803110044E	2016	2017	6	65.3	108	3.9	148	5.8	158	2.9	168
CHAROLAIS	KAITOKE COMMODORE C22	471070022E	2016	2017	12	65.9	42	3.6	220	5.5	215	2.8	190
CHAROLAIS	LEACHMAN WHITE GOLD P0002X (US)	USM796550	2016	2016	6	65.3	110	3.8	177	5.8	170	2.9	173
CHAROLAIS	SILVERSTREAM GEDDES G102	083110102D	2016	2017	13	65.1	126	4.0	124	6.0	121	3.0	138
CHAROLAIS	SIMCA HILLS VEEDUB	133040035E	2016	2017	6	65.5	75	4.0	139	5.9	151	2.8	182
				Mir	nimum	61.1		3.1		5.0		2.2	
				A	verage	65.1		4.0		6.0		3.0	
				Max	kimum	68.2		5.1		7.5		4.1	

			PROGENY	BORN				Tota	l Bulls =	242			
Breed	Bull Name	Animal ID	First Year	Last Year	N	EMA (cm2)	Rank	Rib Fat (mm)	Rank	Rump Fat (mm)	Rank	IMF (%)	Rank
HEREFORD	ARDO FARGO 1154	0277111154	2016	2018	29	63.3	238	4.1	97	6.5	38	3.0	125
HEREFORD	BLUESTONE 080014	1683080014	2016	2017	6	64.6	178	4.2	53	6.7	21	3.2	70
HEREFORD	COLRAINE CODE WORD 13 139	1660130139	2016	2018	17	63.7	226	4.2	62	6.1	99	3.0	116
HEREFORD	EFBEEF U208 FORTUNE Y848 (US)	US43187500	2016	2017	25	64.3	203	3.7	208	5.7	186	3.0	129
HEREFORD	GRASSMERE SPARK 555	0200080555	2016	2017	19	64.3	206	4.2	49	6.1	96	3.1	101
HEREFORD	KOANUI CHIEFLY 2510	0216122510	2016	2018	16	64.4	192	4.4	29	6.8	13	3.0	130
HEREFORD	KOANUI UNANIMOUS 0408	0216100408	2016	2018	12	63.8	225	3.7	213	6.0	123	2.7	207
HEREFORD	LIMEHILLS STAMPER 120719	0677120719	2016	2017	18	66.5	20	3.9	165	6.0	118	2.8	197
HEREFORD	MONYMUSK GALLANT 110089	0272110089	2016	2017	11	65.7	58	4.1	98	6.4	53	3.3	41
HEREFORD	OKAWA MAJOR 2008	0617120008	2016	2017	16	64.2	210	3.6	224	5.6	205	2.9	170
HEREFORD	ORARI GORGE MISCHIEF 120083	0400120083	2016	2017	19	63.6	230	4.4	32	6.6	31	3.0	141
HEREFORD	WIRRUNA ECHUCA E99 (AUS)	AUWNAE99	2016	2018	26	63.7	229	4.5	16	6.7	20	3.5	21
SIMMENTAL	CDI RIMROCK 325Z (US)	US2700121	2016	2017	13	65.4	86	3.8	197	5.6	192	3.4	32
SIMMENTAL	GLENSIDE CATALYST C23	1312AC0023	2016	2016	14	65.8	47	3.9	170	6.3	70	2.8	183
SIMMENTAL	HOOKS YELLOWSTONE 97Y (US)	US2612546	2016	2016	15	66.1	29	3.8	172	6.0	133	3.1	88
SIMMENTAL	KERRAH AX49	1667AX0049	2016	2017	12	65.8	53	3.8	200	5.6	194	2.9	169
SIMMENTAL	KERRAH BANDWAGON B306	1667AB0306	2016	2016	14	66.6	14	4.2	64	6.2	79	3.4	26
SIMMENTAL	KERRAH BANKER B464	1667BB0464	2016	2017	14	65.2	116	4.2	55	6.1	107	3.2	74
SIMMENTAL	MF RUSHMORE AB0008	1308AB0008	2016	2016	2	65.2	119	3.9	156	5.7	181	3.0	143
SIMMENTAL	RISSINGTON AC244	0049AC0244	2016	2016	10	65.6	65	4.1	82	6.4	54	2.9	155
SIMMENTAL	RIVERBEND TAMARACK 60N PF (CAN)	CA618651	2016	2017	12	64.8	155	3.9	150	6.0	119	3.0	146
SIMMENTAL	WAIKITE AB2038	1455AB2038	2016	2017	14	65.5	83	3.9	169	5.5	218	2.6	223
SIMMENTAL	WAIKITE AC2016	1455AC2016	2016	2018	11	65.4	92	4.1	87	6.0	120	2.9	152
SIMMENTAL	WAIKITE AMPLE AA2241	1455AA2241	2016	2017	14	65.3	111	3.7	211	5.8	154	2.7	218
STABILIZER	FOCUS BIG GENE 121292	N/A	2016	2019	41	65.7	61	4.0	126	5.6	204	3.2	76
				Mir	nimum	61.1		3.1		5.0		2.2	
				A	verage	65.1		4.0		6.0		3.0	
				Max	kimum	68.2		5.1		7.5		4.1	

			PROGENY	BORN				Tota	al Bulls =	242			
Breed	Bull Name	Animal ID	First Year	Last Year	N	EMA (cm2)	Rank	Rib Fat (mm)	Rank	Rump Fat (mm)	Rank	IMF (%)	Rank
ANGUS	BRAVEHEART OF STERN	1217000784	2017	2018	21	65.5	76	4.2	56	6.6	28	3.2	66
ANGUS	EARNSCLEUGH TUSSOCK 144307	210130144307	2017	2018	21	66.5	16	4.0	135	6.6	37	3.1	96
ANGUS	EMBLAZON 999 (US)	US16665803	2017	2018	20	63.5	232	3.7	202	5.8	156	2.9	161
ANGUS	GLANWORTH WAIGROUP 14163	12154014163	2017	2018	27	65.0	136	4.0	115	6.2	85	2.8	189
ANGUS	GRAMPIANS LOTTERY K13	NZE21150014K13	2017	2018	21	64.3	202	4.1	94	6.3	76	3.0	122
ANGUS	HPCAPROCEED (US)	US16956101	2017	2017	34	63.9	219	3.9	151	5.6	207	3.4	34
ANGUS	KAKAHU 14003	NZE13300014D003	2017	2018	23	65.4	90	4.0	123	6.0	115	3.0	115
ANGUS	LINTON 15077	NZE20305015077	2017	2018	17	65.1	120	4.3	35	6.8	12	3.2	83
ANGUS	PATHFINDER GENESIS G357 (AUS)	AUSMPG357	2017	2017	45	66.0	32	4.4	18	6.6	32	3.2	72
ANGUS	PINEBANK 97/11	1199001197	2017	2018	22	66.4	24	4.1	81	6.5	43	2.9	162
ANGUS	RENNYLEA K163	AUNORK163	2017	2018	26	66.7	13	4.2	69	5.9	146	3.3	63
ANGUS	RISSINGTON PREMIUM CUT C487	NZE14572015C487	2017	2018	18	66.5	19	4.1	107	6.0	129	3.2	84
ANGUS	SEVEN HILLS 129/14	NZE21159014129	2017	2017	32	64.8	151	4.3	39	6.5	48	3.4	38
ANGUS	STORTH OAKS ANGUS PRIME K5	NZE19507014K5	2017	2018	24	64.8	153	4.6	7	6.7	22	3.4	39
ANGUS	STORTH OAKS K122	NZE19507014K122	2017	2019	42	65.9	36	4.1	85	6.3	67	3.3	52
ANGUS	STORTH OAKS K134	NZE19507014K134	2017	2018	21	65.6	69	3.8	193	5.5	209	2.8	192
ANGUS	THOMAS UP RIVER 1614 (US)	US17091363	2017	2018	30	65.0	133	4.1	96	6.3	77	3.1	93
ANGUS	TURIHAUA MYTHOLOGY F236	17691010F236	2017	2018	20	65.0	132	4.0	131	6.1	110	3.0	142
ANGUS	VAR GENERATION 2100 (US)	US17171587	2017	2017	16	65.1	127	4.1	102	5.8	167	3.3	53
ANGUS	WAITAWHETA K44 AB	18938014K44	2017	2018	26	65.4	91	4.2	57	6.0	127	3.3	43
ANGUS	WR JOURNEY-1X74 (US)	US16924332	2017	2018	27	66.3	26	3.7	203	5.6	206	2.8	201
CHAROLAIS	BLELACK DIGGER	UKMBM0038543	2017	2018	17	65.9	39	3.5	234	5.1	239	2.4	236
CHAROLAIS	HEMINGFORD JERICO J95	803140095E	2017	2018	13	65.0	141	3.7	207	5.1	238	2.6	225
CHAROLAIS	SILVERSTREAM FRAMPTON F17	083100017E	2017	2018	13	65.8	50	3.6	229	5.5	217	2.4	238
CHAROLAIS	WHANANAKI APOLLO A78	484050078E	2017	2018	12	64.8	150	3.7	217	5.4	227	2.7	208
				Mir	imum	61.1		3.1		5.0		2.2	
				Av	erage/	65.1		4.0		6.0		3.0	
				Max	imum	68.2		5.1		7.5		4.1	

			PROGENY	BORN				Tota	l Bulls =	242			
Breed	Bull Name	Animal ID	First Year	Last Year	N	EMA (cm2)	Rank	Rib Fat (mm)	Rank	Rump Fat (mm)	Rank	IMF (%)	Rank
HEREFORD	ARDO ACHILLES 120	0277100120	2017	2018	18	65.1	125	4.1	88	6.3	65	2.8	184
HEREFORD	ARDO BISMARCK 4256	0277144256	2017	2018	21	64.8	157	3.8	173	6.1	103	2.9	147
HEREFORD	GRASSMERE GALANT 9	0200140009	2017	2018	24	64.9	142	3.8	181	6.1	98	2.9	177
HEREFORD	INJEMIRA ANZAC K220 (AUS)	AUIHSK220	2017	2017	17	65.0	138	3.9	157	5.6	203	2.8	191
HEREFORD	KOANUI TECHNO 3062	0216133062	2017	2018	21	64.7	167	3.7	216	5.9	137	2.8	188
HEREFORD	MATARIKI 140255	0281140255	2017	2018	22	64.5	184	4.1	95	6.3	68	2.9	154
HEREFORD	ORARI GORGE OLIGARCH 140025	0400140025	2017	2017	10	65.5	78	4.0	112	6.4	55	3.0	133
HEREFORD	SHF ALL STAR 42X A191 (US)	US43379326	2017	2018	18	65.8	52	3.8	182	5.6	191	3.1	107
HEREFORD	TE TAUMATA FOUNDATION 14684	0308140684	2017	2018	21	64.5	188	4.1	93	5.5	211	2.9	165
HEREFORD	TLELL 29F RED CEDAR 8N (CAN)	CA02826570	2017	2018	19	63.9	220	4.1	105	6.2	92	3.1	89
SIMMENTAL	GLENSIDE CRUMPY C4	1312AC0004	2017	2018	17	65.4	95	4.1	99	6.2	86	2.8	194
SIMMENTAL	GLENSIDE DUMP TRUCK D12	1312AD0012	2017	2018	15	65.4	96	3.8	199	5.7	187	2.9	172
SIMMENTAL	HOOKS BEACON 56B (US)	US2854180	2017	2018	14	64.8	162	4.1	103	5.7	175	3.3	42
SIMMENTAL	KERRAH CAPTAIN C400	1667AC0400	2017	2018	15	67.2	5	4.3	47	6.3	71	2.6	219
SIMMENTAL	LEAFLAND CAPTAIN C1	1614AC0001	2017	2018	17	64.9	146	3.7	205	5.7	172	3.0	135
SIMMENTAL	MR NLC UPGRADE U8676 (US)	US2474338	2017	2018	20	64.9	145	4.0	136	5.6	188	3.1	98
SIMMENTAL	RISSINGTON AD372 (ET)	0049AD0372	2017	2018	15	66.8	8	4.3	38	6.6	30	3.3	44
SIMMENTAL	RISSINGTON DESTINED AD8	0049AD0008	2017	2018	16	65.4	94	4.2	60	6.2	89	2.8	181
SIMMENTAL	WAIKITE ZACKARIAS AZ0176	1455AZ0176	2017	2018	18	65.7	64	3.4	238	5.7	179	2.8	202
SIMMENTAL	WS PRIME BEEF Z8 (US)	US2675742	2017	2018	14	65.3	104	3.8	196	5.4	223	2.8	198
STABILIZER	STABILIZER 140082	N/A	2017	2018	20	63.8	224	3.9	163	5.4	225	2.9	157
STABILIZER	STABILIZER 140850	N/A	2017	2019	28	63.8	223	4.1	84	5.7	183	3.2	79
ANGUS	ARDROSSAN HONOUR H255 (AUS)	AUNAQH255	2018	2019	22	65.5	79	4.4	19	6.0	113	3.3	48
ANGUS	BLUE MOUNTAIN BRILLIANZ 05	210530135	2018	2019	18	64.9	144	3.6	230	5.4	222	2.5	228
ANGUS	FOCUS 163069	NZE194990163069	2018	2019	22	65.6	67	4.4	23	6.7	18	3.2	68
ANGUS	GRAMPIANS BUZZ L11	NZE21150015L11	2018	2018	17	64.4	197	4.5	12	6.4	56	3.3	47
ANGUS	KAKAHU 16159	NZE13300016159	2018	2019	21	64.9	143	3.8	184	6.0	117	2.9	148
ANGUS	LD CAPITALIST 316 (USA)	US17666102	2018	2018	24	65.0	131	4.0	121	6.4	57	3.3	56
ANGUS	LINTON 16042	NZE20305016042	2018	2018	30	64.3	204	4.3	40	6.1	94	3.2	67
				Mir	imum	61.1		3.1		5.0		2.2	
				A	/erage	65.1		4.0		6.0		3.0	
				Max	imum	68.2		5.1		7.5		4.1	

			PROGENY	BORN				Tota	al Bulls =	242			
Breed	Bull Name	Animal ID	First Year	Last Year	N	EMA (cm2)	Rank	Rib Fat (mm)	Rank	Rump Fat (mm)	Rank	IMF (%)	Rank
ANGUS	MILLAH MURRAH LOCH UP L133 (AUS)	AUNMML133	2018	2019	20	64.7	169	3.7	219	5.6	201	3.0	134
ANGUS	PA FULL POWER 1208 (USA)	US16981588	2018	2019	27	65.6	70	4.4	27	6.7	23	3.4	29
ANGUS	QUAKER HILL MILE HIGH 4EX31 (USA)	US18078212	2018	2019	27	65.2	118	4.5	10	6.5	42	3.2	69
ANGUS	REILAND HILARY H874 (AUS)	AUNLRH874	2018	2019	15	65.2	114	3.5	236	5.2	236	2.9	163
ANGUS	RISSINGTON 160136	NZE145720160136	2018	2019	18	65.5	84	4.0	119	5.5	213	3.0	111
ANGUS	RISSINGTON RESOLVED C116	NZE14572015C116	2018	2019	22	64.2	209	4.5	8	6.5	45	3.3	57
ANGUS	SEVEN HILLS 85/15	NZE21159015085	2018	2019	21	65.8	56	4.0	140	6.0	114	3.3	64
ANGUS	STORTH OAKS L94	NZE19507015L94	2018	2019	26	65.9	43	4.0	132	5.7	184	3.2	78
ANGUS	SYDGEN EXCEED 3223 (USA)	US17501893	2018	2019	31	63.4	233	3.8	183	5.8	157	3.0	137
ANGUS	TE MANIA 15380	NZE16932015380	2018	2019	16	64.7	163	4.1	73	6.2	83	3.0	124
ANGUS	TE MANIA MULLER 16305	NZE16932016305	2018	2019	24	65.0	129	4.1	91	6.2	84	3.1	108
ANGUS	TOTARANUI 15151	NZE12922015151	2018	2018	19	64.7	170	3.7	215	5.9	143	2.8	180
ANGUS	TURIROA 16M013	15603016M013	2018	2019	14	64.6	174	3.8	179	5.9	152	3.1	105
ANGUS	WHENUAPAPA CRUMBLE 8-10	212110108	2018	2019	15	65.3	105	3.9	143	6.8	14	2.8	185
CHAROLAIS	HEMINGFORD ICONIC 19	803130009E	2018	2018	10	65.3	100	3.8	194	5.5	221	2.9	149
CHAROLAIS	PALGROVE XCEPT (AUS)	AUPKX488	2018	2019	11	64.9	148	3.4	240	5.2	237	2.4	234
CHAROLAIS	SILVERSTREAM LANDIS L179	083150179E	2018	2019	13	65.3	112	4.0	137	5.9	149	3.1	106
CHAROLAIS	SPARROWS BRAXTON 519C (USA)	CAMC367500	2018	2019	18	65.5	80	3.7	210	5.5	220	2.7	203
CHAROLAIS	WHANANAKI LEX L24	484150024E	2018	2019	9	64.7	164	3.6	228	5.5	219	2.8	195
HEREFORD	ARDO AJAX 5014	0277155014	2018	2019	20	66.1	30	4.3	46	6.5	40	3.1	104
HEREFORD	CRAIGMORE IKE 140260	0169140260	2018	2019	19	64.7	165	3.8	190	6.1	109	2.7	210
HEREFORD	DAYS ROBIN HOOD H38 (AUS)	AUDAYH38	2018	2019	22	64.8	154	4.1	110	6.6	29	2.9	175
HEREFORD	GRASSMERE GALLANT 152	0200150152	2018	2019	29	64.2	211	3.9	161	6.2	88	2.6	221
HEREFORD	KOANUI LEGIT 6444	0216166444	2018	2019	22	63.4	235	4.0	127	6.3	75	2.7	209
HEREFORD	LIMEHILLS STREAKER 150368	0677150368	2018	2019	25	63.7	228	4.5	11	7.1	4	3.6	9
HEREFORD	OKAWA HOGAN 3156	0617130156	2018	2018	17	63.6	231	3.9	146	6.2	87	2.5	232
HEREFORD	ORARI GORGE PATTON 150051	0400150051	2018	2019	23	64.6	177	4.3	43	6.0	134	3.3	54
HEREFORD	ORARI GORGE QUANTUM 160091	0400160091	2018	2019	17	64.4	195	4.2	68	6.1	95	2.7	214
HEREFORD	WESTHOLM TRUST R 58	0421160058	2018	2019	20	64.8	159	3.8	187	5.5	210	2.7	212
		'		Min	imum	61.1		3.1		5.0		2.2	
				Av	erage	65.1		4.0		6.0		3.0	
				Max	imum	68.2		5.1		7.5		4.1	

			PROGENY	BORN				Total Bulls	= 242			
Breed	Bull Name	Animal ID	First Year	Last Year	N	EMA (cm2)	Rank	Rib Fat (mm) Ranl	Rump Fat (mm)	Rank	IMF (%)	Rank
SIMMENTAL	CCR COWBOY CUT 5048Z (USA)	US2703910	2018	2019	13	64.8	161	4.0 114	6.1	108	3.0	123
SIMMENTAL	JANEFIELD ED AE1	1671AE0001	2018	2019	13	64.5	182	3.5 232	5.6	190	2.3	239
SIMMENTAL	POTAWA ADMIRAL	1665AA0007	2018	2018	11	64.4	198	4.1 74	5.8	159	2.9	171
SIMMENTAL	RISSINGTON AA0809	0049AA0809	2018	2019	13	65.3	107	4.1 104	5.8	169	2.9	164
SIMMENTAL	RISSINGTON EXCEED AE203	0049AE0203	2018	2019	11	65.0	140	3.8 189	5.9	138	2.9	166
SIMMENTAL	WAIKITE AD2031	1455AD2031	2018	2019	10	65.1	124	4.0 128	5.9	145	2.7	213
SIMMENTAL	WAIKITE AY0097	1455AY0097	2018	2019	17	66.7	10	3.9 149	6.1	111	2.5	229
SIMMENTAL	WS RED MOON D76 (USA)	US3115609	2018	2019	18	64.5	187	3.9 166	6.2	93	3.3	58
ANGUS	CONNEALY LEGENDARY 644L (USA)	US18534952	2019	2020	18	64.5	183	3.9 162	5.3	234	3.0	127
ANGUS	FOCUS 171293	NZE194730171293	2019	2019	9	64.4	194	4.2 65	6.0	112	3.6	6
ANGUS	KAKAHU LACHLAN 15095	NZE13300015095	2019	2020	29	64.2	208	3.8 195	5.9	135	3.1	94
ANGUS	LINTON 16107	NZE20305016107	2019	2020	19	64.4	196	3.9 147	5.4	230	3.1	85
ANGUS	RISSINGTON 17014	NZE14572017014	2019	2020	19	64.1	215	4.0 111	6.0	131	3.1	100
ANGUS	STORTH OAKS JOURNEY M31	NZE19507016M31	2019	2020	20	64.8	158	4.1 75	6.3	74	3.5	18
ANGUS	STORTH OAKS M10	NZE19507016M10	2019	2020	22	66.8	7	4.6 6	6.5	39	3.5	14
ANGUS	STORTH OAKS M119	NZE19507016M119	2019	2020	17	65.6	71	4.1 77	6.0	130	3.6	7
ANGUS	SYDGEN BLACK PEARL 2006 (USA)	US17236055	2019	2020	23	65.8	51	4.0 118	5.6	193	3.4	25
ANGUS	TE MANIA MATRIX 16018	NZE16932016018	2019	2020	16	65.3	103	4.1 101	6.2	78	3.3	49
ANGUS	WAITANGI M203	NZE18954016M203	2019	2020	14	63.8	222	3.9 159	5.6	199	2.6	220
ANGUS	WAITANGI M214	NZE18954016M214	2019	2020	20	64.9	147	4.1 71	5.9	147	3.4	33
CHAROLAIS	HEMINGFORD NEXT DIRECTION N64	803170064E	2019	2020	19	66.0	33	3.6 223	5.7	177	2.2	242
CHAROLAIS	KAKAHU GERRY 140506	001140506E	2019	2020	11	64.8	152	4.5 13	6.7	17	3.0	117
CHAROLAIS	SILVERSTREAM MANHATTAN M171	083160171D	2019	2020	15	65.0	135	3.8 188	5.0	242	2.6	222
GELBVIEH	GLADSTONE RED BARON PN19 ET (AI)	MCCPN19	2019	2020	10	64.6	173	3.9 164	5.6	189	3.1	97
HEREFORD	LIMEHILLS STARTER 160062	0677160062	2019	2020	30	64.9	149	4.2 66	6.2	90	2.7	217
HEREFORD	MATARIKI 110637	0281110637	2019	2020	22	65.6	74	4.1 92	6.3	73	2.9	150
HEREFORD	MATARIKI JETSON	0281160215	2019	2020	33	63.8	221	4.1 100	6.3	69	2.4	237
HEREFORD	OKAWA STAMPER 160124	0617160124	2019	2020	36	64.5	186	3.6 222	5.8	162	2.6	226
HEREFORD	WIRRUNA MATTY M288 (AUS)	AUWNAM288	2019	2020	31	63.3	236	4.2 50	6.4	59	3.3	50
				Min	imum	61.1		3.1	5.0		2.2	
				Av	erage	65.1		4.0	6.0		3.0	
				Max	imum	68.2		5.1	7.5		4.1	

			PROGENY	BORN				Tota	ıl Bulls =	= 242			
Breed	Bull Name	Animal ID	First Year	Last Year	N	EMA (cm2)	Rank	Rib Fat (mm)	Rank	Rump Fat (mm)	Rank	IMF (%)	Rank
LIMOUSIN	MANGATARA 335L	N/A	2019	2020	19	63.7	227	3.6	225	5.6	202	2.7	211
LIMOUSIN	MANGATARA JOOL	N/A	2019	2020	16	64.2	212	4.1	90	6.7	25	3.1	95
SHORTHORN	ORENA BALANCE 15012	209315012	2019	2020	11	64.7	166	3.9	167	5.9	150	3.6	10
SIMMENTAL	GLEN ANTHONY AE12	0299AE0012	2019	2020	29	65.0	139	3.9	145	6.5	46	2.3	240
SIMMENTAL	GLENSIDE FRONTIER F19	1312AF0019	2019	2020	24	65.7	63	3.9	155	6.4	61	2.8	199
SIMMENTAL	HOOKS DELEGATE 64D (USA)	US3132798	2019	2020	31	64.3	200	4.1	78	5.7	178	3.3	62
SIMMENTAL	KERRAH DESTINED D608	1667AD0608	2019	2019	5	66.9	6	3.7	218	5.5	216	3.0	119
SIMMENTAL	KERRAH EPIC E303	1667AE0303	2019	2020	29	65.9	35	4.0	120	6.1	101	2.9	151
SIMMENTAL	OWHATA AE7	1689AE0007	2019	2020	16	64.5	185	3.7	214	5.3	232	2.9	176
SIMMENTAL	RISSINGTON AF184	0049AF0184	2019	2020	23	64.5	180	3.8	178	5.6	200	2.7	204
SIMMENTAL	RISSINGTON AF44	0049AF0044	2019	2020	25	64.0	218	3.9	168	6.0	116	3.4	31
SIMMENTAL	WAIKITE AE2009	1455AE2009	2019	2020	14	65.9	41	3.7	204	5.4	228	3.0	109
SOUTH DEVON	BURTERGILL HENRY 1105	VAN11005 PZ	2019	2020	17	65.0	137	3.9	171	6.5	47	2.9	158
STABILIZER	STABILIZER 165287	N/A	2019	2020	27	65.8	55	4.2	58	5.9	139	2.9	159
STABILIZER	STABILIZER 165292	N/A	2019	2020	33	64.7	171	4.4	26	6.9	10	3.2	81
STABILIZER	STABILIZER 16S38	N/A	2019	2020	12	65.2	113	3.9	142	5.7	180	3.1	86
ANGUS	CLUNES CROSSING DUSTY M13 (AI) (IMP AUS)	AUQMUM13	2020	2020	21	64.7	168	3.8	174	5.8	171	3.2	73
ANGUS	FOCUS 173075 (P)	NZE194990173075	2020	2020	30	65.3	109	4.4	25	6.8	16	3.1	92
ANGUS	LINTON 17070 (P)	NZE20305017070	2020	2020	25	65.6	73	4.1	80	6.6	36	3.5	19
ANGUS	RISSINGTON SURE FIRE P399	NZE145720180399	2020	2020	26	65.5	82	3.9	144	5.7	174	3.2	82
HEREFORD	CAPETHORNE 1617	0065160017	2020	2020	25	65.3	101	4.2	67	7.0	5	3.5	23
HEREFORD	FOULDEN HILL FLAME 11 0155	1731110155	2020	2020	20	65.5	81	4.2	54	6.4	64	2.7	216
HEREFORD	GLENBRAE NIGHTRIDER 1761	0730170061	2020	2020	28	64.7	172	4.4	33	6.7	24	3.1	103
HEREFORD	LIMEHILLS ANZAC 170279	0677170279	2020	2020	29	65.4	89	4.2	48	6.3	66	2.8	187
HEREFORD	OTAPAWA VOODOO 7007	0347177007	2020	2020	26	64.0	217	4.4	17	6.8	15	3.0	128
SIMMENTAL	GLENSIDE G2	1312180002	2020	2020	21	65.6	66	4.3	34	6.4	58	3.3	46
SIMMENTAL	KERRAH FUNDAMENTAL F509	1667AF0509	2020	2020	31	65.0	134	3.7	201	5.6	197	2.8	193
SIMMENTAL	RISSINGTON 180061	0049180061	2020	2020	13	64.3	201	4.0	141	5.7	176	2.9	178
				Mii	nimum	61.1		3.1		5.0		2.2	
				A	verage	65.1		4.0		6.0		3.0	
				Max	kimum	68.2		5.1		7.5		4.1	

Results

Table Three: Summary of adjusted progeny averages for carcase quality traits (processing data).

			PROGEN\	/ BORN					To	tal Bulls	= 228				
Breed	Bull Name	Animal ID	First Year	Last Year	N	Carcase Wt. (kg)	Rank	Dressing Ra	nk r	Marbling	Rank	Ossification	Rank	Fat Depth (mm)	Rank
ANGUS	CONNEALY REVENUE 7392	US17220531	2015	2016	22	316.4	19	50.3 5	1	389.7	14	145.3	103	7.7	2
ANGUS	EF COMPLEMENT 8088	US16198796	2015	2016	19	314.9	30	50.3 5	2	369.2	76	144.2	180	6.0	119
ANGUS	FOSSIL CREEK HERO H006	18681012006	2015	2015	22	311.0	111	50.4 2	5	371.1	63	144.5	158	6.6	16
ANGUS	G A R MOMENTUM	US17354145	2015	2016	17	313.6	43	50.5 1	3	378.3	40	147.6	7	6.3	48
ANGUS	GLANWORTH WAIGROUP 1213	1215401213	2015	2015	22	309.9	140	50.3 5	4	370.9	64	148.1	4	6.2	59
ANGUS	HPCA INTENSITY	US17366506	2015	2016	21	309.2	152	50.0 11	4	333.3	222	144.7	146	5.2	226
ANGUS	LINTON 13007	NZE20305013007	2015	2015	17	314.2	38	50.6 7		369.5	71	146.2	45	5.5	203
ANGUS	MATAURI OUTLIER F031	14647010F031	2015	2016	32	320.6	3	50.0 12	8	360.1	124	143.7	198	5.7	179
ANGUS	MATAURI REALITY 839	14647008839	2015	2016	25	309.4	147	50.5 2	1	361.7	113	144.6	153	7.3	6
ANGUS	NGAPUTAHI EUREKA E38	21095009E38	2015	2016	24	311.7	95	50.4 2	3	368.1	82	146.8	20	5.4	221
ANGUS	PA SAFEGUARD 021	US16772185	2015	2017	37	318.2	7	50.4 3	7	415.6	1	146.5	32	6.0	109
ANGUS	PINEBANK 64/10	1199001064	2015	2016	21	306.3	207	50.1 10	8	375.4	44	147.1	11	7.3	5
ANGUS	RENNYLEA EDMUND E11	AUNORE11	2015	2016	27	313.4	48	49.9 15	0	398.3	5	146.6	31	7.9	1
ANGUS	RISSINGTON 135057	NZE145720135057	2015	2015	21	310.5	122	50.3 4	7	412.5	2	145.0	128	6.5	22
ANGUS	RISSINGTON 135262 (ET)	NZE145720135262	2015	2015	22	313.1	53	50.3 6	0	372.6	54	145.8	75	6.4	36
ANGUS	RISSINGTON ANALYST 135252 (ET)	NZE145720135252	2015	2015	27	313.2	52	50.0 12	2	359.5	129	143.1	217	6.3	52
ANGUS	RISSINGTON PROMINENT 100104	NZE145720100104	2015	2015	22	311.5	100	49.7 18	2	357.4	140	144.1	183	5.5	214
ANGUS	RISSINGTON RESOLUTE 120992 (ET)	NZE145720120992	2015	2015	13	312.5	76	50.2 8	7	389.6	15	146.7	27	7.5	4
ANGUS	S A V BRUISER 9164 (US)	US16396531	2015	2016	17	308.8	163	49.3 22	4	342.6	202	145.9	67	5.1	228
ANGUS	STORTH OAKS H114	NZE19507012H114	2015	2016	30	314.3	36	50.2 8	1	378.5	39	142.8	221	6.0	108
ANGUS	STORTH OAKS H2	NZE19507012H2	2015	2016	28	309.2	153	49.6 19	8	390.0	13	145.6	86	5.8	158
ANGUS	STORTH OAKS H41	NZE19507012H41	2015	2015	17	313.5	44	49.8 16	4	356.1	146	146.3	39	6.1	81
ANGUS	TANGIHAU KAINO H29	16883012H29	2015	2016	27	312.6	72	49.8 16	3	368.8	78	146.1	49	7.7	3
				Mir	nimum	300.2		48.9		321.1		141.8		5.1	
				A	verage	311.0		50.0		362.3		145.1		6.0	
				Max	kimum	324.6		51.0		415.6		149.6		7.9	

			PROGEN'	/ BORN						Total Bulls	= 228				
Breed	Bull Name	Animal ID	First Year	Last Year	N	Carcase Wt. (kg)	Rank	Dressing (%)	Rank	Marbling	Rank	Ossification	Rank	Fat Depth (mm)	
ANGUS	TE MANIA 11 553	NZE16932011553	2015	2016	24	310.3	128	50.0	119	359.7	126	146.0	56	6.2	61
ANGUS	TOTARANUI 238 (ET)	NZE12922011238	2015	2016	27	315.2	26	50.5	9	375.3	45	146.3	40	6.0	128
ANGUS	TURIHAUA CRUMP E5	17691009E5	2015	2016	25	308.1	185	49.6	197	382.9	25	143.9	194	6.2	73
ANGUS	TURIHAUA LIBERATION	17691007C27	2015	2015	34	309.0	159	49.6	199	375.9	42	145.6	85	5.4	220
CHAROLAIS	SILVERSTREAM PERFORMER P38EF	083990038F	2015	2016	7	308.4	177	50.0	118	373.5	52	146.0	52	6.0	127
CHAROLAIS	WELCOME SWALLOW EASY GAIN F508	AUCMAF508E	2015	2016	7	315.2	25	49.9	151	385.1	23	145.9	63	6.1	86
HEREFORD	BEECHWOOD TURK	0051100094	2015	2015	12	311.5	98	50.1	101	349.9	176	146.3	37	5.5	205
HEREFORD	BLUESTONE 120061	1683120061	2015	2016	31	307.2	197	50.1	97	364.9	96	143.4	204	6.1	85
HEREFORD	GLENDAN PARK TOP GUN W042 (IMP AUS	AUFSAW042	2015	2016	8	307.0	198	49.7	194	349.4	178	144.9	129	5.7	189
HEREFORD	KOANUI ROCKET 0219	0216000219	2015	2016	21	311.1	109	50.3	53	361.5	114	146.0	53	6.2	74
HEREFORD	MATARIKI HOLY SMOKE	0281070390	2015	2016	14	312.8	64	50.2	63	355.3	149	146.0	54	6.3	51
HEREFORD	NITHDALE ELVIS 040021	0400040021	2015	2016	14	312.2	85	50.1	96	355.2	150	145.4	94	6.3	45
HEREFORD	OKAWA DAVIS 7046	0617070046	2015	2015	20	310.0	138	50.1	107	369.5	72	145.0	119	5.9	141
HEREFORD	OKAWA MARSHALL 0109	0617100109	2015	2016	15	309.4	144	49.4	217	365.5	95	144.7	141	6.2	66
HEREFORD	OTAPAWA SPARK 3060	0347033060	2015	2015	27	312.7	70	49.9	159	359.6	128	143.3	209	5.6	196
HEREFORD	WAIKAKA TURNING POINT 110015	0328110015	2015	2016	14	306.8	202	50.2	86	361.9	112	145.1	111	5.5	204
HEREFORD	WIRRUNA DAFFY D1 (IMP AUS)	AUWNAD1	2015	2016	22	305.0	221	50.9	3	346.8	189	144.5	156	5.7	188
SIMMENTAL	GLEN ANTHONY Y-ARTA AY02 (ET)	0299AY0002	2015	2016	12	311.8	91	49.7	180	351.9	166	145.9	66	5.8	172
SIMMENTAL	GLENSIDE ATOMIC A5	1312AA0005	2015	2015	12	314.3	37	49.7	185	381.9	27	144.9	130	6.3	49
SIMMENTAL	KERRAH A456	1667AA0456	2015	2016	15	318.7	6	50.5	10	375.7	43	144.5	161	6.6	20
SIMMENTAL	KERRAH XFACTOR AX187 (ET)	1667AX0187	2015	2016	12	313.0	58	50.2	76	354.0	157	146.0	58	5.7	177
SIMMENTAL	KERRAH YES SIR AY393	1667AY0393	2015	2016	15	308.8	165	50.3	48	354.7	154	147.0	13	5.3	223
SIMMENTAL	RISSINGTON AB5185	0049AB5185	2015	2016	10	319.9	5	49.9	153	370.9	65	147.6	8	6.5	29
SIMMENTAL	RISSINGTON NEW STANDARD AU158	049AU0158	2015	2015	15	324.6	1	49.9	141	383.9	24	146.4	36	6.2	62
SIMMENTAL	TOKAWEKA HANDSOME AH801	0079AH0801	2015	2015	15	317.3	11	50.2	65	361.1	118	146.2	46	5.8	164
STABILIZER	FOCUS BIG GENE 121293	N/A	2015	2017	25	316.5	17	50.4	27	368.5	79	148.2	3	6.0	112
STABILIZER	FOCUS FORCEFUL 135159	N/A	2015	2016	20	304.8	222	50.3	40	357.4	141	145.1	116	5.4	
STABILIZER	FOCUS FOREFRONT 121599	N/A	2015	2016	29	307.5	191	50.3	43	389.0	17	146.9		5.7	178
STABILIZER	FOCUS PORTERHOUSE 135361	N/A	2015	2016	30	311.5	99	50.4	36	343.6	200	141.9	227	5.4	219
STABILIZER	FOCUS TRINITY 135263	N/A	2015	2016	18	310.0	135	50.4	39	354.5	155	146.1	50	7.3	7
				Min	imum	300.2		48.9		321.1		141.8		5.1	
				Av	erage	311.0		50.0		362.3		145.1		6.0	
				Max	imum	324.6		51.0		415.6		149.6		7.9	

			PROGEN'	/ BORN						Total Bulls	= 228				
Breed	Bull Name	Animal ID	First Year	Last Year	N	Carcase Wt. (kg)	Rank	Dressing (%)	Rank	Marbling	Rank	Ossification	Rank	Fat Depth (mm)	
ANGUS	DEER VALLEY ALL IN (US)	US17307074	2016	2017	28	320.5	4	50.6	8	379.0	36	146.0	60	6.3	43
ANGUS	FOCUS 131511	NZE194730131511	2016	2017	21	311.3	104	50.4	31	362.3	110	143.4	208	5.9	133
ANGUS	FOCUS 131539	NZE194730131539	2016	2017	24	311.8	92	50.2	71	394.2	6	145.1	112	5.9	135
ANGUS	FOCUS 143143	NZE194990143143	2016	2017	24	308.8	164	49.8	174	353.1	161	143.4	203	6.5	30
ANGUS	KAKAHU BOND 13007	NZE13300013007	2016	2017	21	312.9	59	50.0	131	352.5	164	146.0	59	5.8	161
ANGUS	KAKAHU JUBILANT 13054	NZE13300013054	2016	2017	22	317.8	10	50.2	74	380.6	30	146.2	42	6.6	18
ANGUS	LINTON 13543	NZE20305013543	2016	2017	18	311.9	89	50.1	105	359.7	127	144.0	186	6.3	57
ANGUS	MEADOWSLEA F540	19134010540	2016	2019	21	308.4	178	49.7	186	365.6	93	145.0	126	6.5	23
ANGUS	MT MABLE FAT BOY 373	12188006373	2016	2017	23	308.7	167	50.3	50	340.7	208	143.1	216	5.5	206
ANGUS	STORTH OAKS EVEREST J20	NZE19507013J20	2016	2017	33	314.2	39	49.9	146	361.2	117	146.9	18	6.8	11
ANGUS	STORTH OAKS JACK J7	NZE19507013J7	2016	2018	31	310.1	131	48.9	228	366.2	89	144.2	178	5.5	211
ANGUS	TE MANIA GARTH G67	VTMG67	2016	2016	25	316.9	15	49.9	147	357.7	138	145.0	121	7.0	9
ANGUS	TE MANIA JONAH 13588	NZE16932013588	2016	2017	29	306.9	201	49.1	225	347.4	185	143.6	200	6.1	95
ANGUS	TURIHAUA SIR CRUMBLE E222	17691009E222	2016	2017	29	312.1	86	50.0	130	333.5	221	144.3	176	5.5	208
ANGUS	TUWHARETOA REGENT D145 (AUS)	AUBNAD145	2016	2018	45	316.9	13	50.7	6	409.4	4	146.8	22	7.0	8
ANGUS	V A R RESERVE 1111 (US)	US16916944	2016	2017	18	311.9	88	50.2	79	359.0	131	144.6	148	6.1	91
ANGUS	WAITANGI D213	NZE18954008D213	2016	2017	24	309.3	149	49.8	172	349.5	177	144.8	140	6.0	104
ANGUS	WHANGARA 12323	NZE13649012323	2016	2017	25	321.1	2	50.3	49	367.2	84	145.0	127	5.8	163
CHAROLAIS	CENTREWOOD 130516	001130516E	2016	2017	14	305.2	217	49.7	188	391.1	9	145.2	107	5.7	186
CHAROLAIS	HEMINGFORD GAMBLER G44	803110044E	2016	2017	6	308.4	175	50.1	91	348.2	184	143.9	188	5.4	217
CHAROLAIS	KAITOKE COMMODORE C22	471070022E	2016	2017	12	310.2	129	49.7	193	364.5	101	145.4	97	5.9	131
CHAROLAIS	LEACHMAN WHITE GOLD P0002X (US)	USM796550	2016	2016	6	312.3	82	50.3	58	371.6	60	143.5	201	6.2	76
CHAROLAIS	SILVERSTREAM GEDDES G102	083110102D	2016	2017	13	312.4	80	50.2	90	364.5	100	144.3	171	5.8	159
CHAROLAIS	SIMCA HILLS VEEDUB	133040035E	2016	2017	6	312.8	65	49.9	140	342.0	204	146.2	43	5.7	184
				Min	imum	300.2		48.9		321.1		141.8		5.1	
				Av	erage/	311.0		50.0		362.3		145.1		6.0	
				Max	imum	324.6		51.0		415.6		149.6		7.9	

			PROGEN	BORN						Total Bulls	= 228				
Breed	Bull Name	Animal ID	First Year	Last Year	N	Carcase Wt. (kg)	Rank	Dressing (%)	Rank	Marbling	Rank	Ossification	Rank	Fat Depth (mm)	Rank
HEREFORD	ARDO FARGO 1154	0277111154	2016	2018	29	309.0	158	50.0	117	344.5	195	144.5	154	5.7	176
HEREFORD	BLUESTONE 080014	1683080014	2016	2017	6	309.1	155	49.7	184	360.7	120	145.9	64	6.0	126
HEREFORD	COLRAINE CODE WORD 13 139	1660130139	2016	2018	17	305.8	212	48.9	226	364.7	98	143.5	202	6.3	56
HEREFORD	EFBEEF U208 FORTUNE Y848 (US)	US43187500	2016	2017	25	306.2	210	50.2	75	362.0	111	146.0	57	5.5	216
HEREFORD	GRASSMERE SPARK 555	0200080555	2016	2017	19	311.0	113	49.5	210	368.4	81	146.7	25	6.3	44
HEREFORD	KOANUI CHIEFLY 2510	0216122510	2016	2018	16	312.5	74	50.1	102	368.5	80	146.3	38	6.3	42
HEREFORD	KOANUI UNANIMOUS 0408	0216100408	2016	2018	12	308.4	176	49.6	202	342.8	201	145.3	99	6.4	33
HEREFORD	LIMEHILLS STAMPER 120719	0677120719	2016	2017	18	311.0	112	50.2	66	350.6	172	142.6	222	6.2	60
HEREFORD	MONYMUSK GALLANT 110089	0272110089	2016	2017	11	308.6	171	49.8	167	336.3	214	145.0	122	5.8	156
HEREFORD	OKAWA MAJOR 2008	0617120008	2016	2017	16	309.0	156	49.4	221	349.4	179	144.8	139	5.5	209
HEREFORD	ORARI GORGE MISCHIEF 120083	0400120083	2016	2017	19	310.0	137	49.6	208	354.8	153	149.1	2	6.4	32
HEREFORD	WIRRUNA ECHUCA E99 (AUS)	AUWNAE99	2016	2018	26	310.8	116	49.5	212	374.3	50	144.5	155	6.1	97
SIMMENTAL	CDI RIMROCK 325Z (US)	US2700121	2016	2017	13	308.7	169	50.2	67	393.8	7	146.6	29	5.6	197
SIMMENTAL	GLENSIDE CATALYST C23	1312AC0023	2016	2016	14	310.5	121	50.4	22	350.3	173	145.0	118	5.6	195
SIMMENTAL	HOOKS YELLOWSTONE 97Y (US)	US2612546	2016	2016	15	317.3	12	50.5	15	354.4	156	144.3	173	6.1	90
SIMMENTAL	KERRAH AX49	1667AX0049	2016	2017	12	306.5	204	50.1	100	361.5	115	146.9	16	5.2	227
SIMMENTAL	KERRAH BANDWAGON B306	1667AB0306	2016	2016	14	310.7	118	50.2	83	379.8	33	144.2	181	6.0	103
SIMMENTAL	KERRAH BANKER B464	1667BB0464	2016	2017	14	305.6	214	49.6	209	365.5	94	146.7	23	6.1	94
SIMMENTAL	MF RUSHMORE AB0008	1308AB0008	2016	2016	2	308.1	184	50.0	129	351.7	169	144.7	145	6.0	121
SIMMENTAL	RISSINGTON AC244	0049AC0244	2016	2016	10	313.0	56	49.9	144	379.7	35	144.4	168	6.1	78
SIMMENTAL	RIVERBEND TAMARACK 60N PF (CAN)	CA618651	2016	2017	12	315.1	28	50.3	57	367.2	85	146.2	47	6.1	87
SIMMENTAL	WAIKITE AB2038	1455AB2038	2016	2017	14	312.3	83	50.1	93	327.6	224	144.5	163	5.8	157
SIMMENTAL	WAIKITE AC2016	1455AC2016	2016	2018	11	313.1	55	49.7	181	366.7	87	143.9	190	6.4	39
SIMMENTAL	WAIKITE AMPLE AA2241	1455AA2241	2016	2017	14	309.4	148	50.3	44	351.9	167	144.9	134	5.9	134
STABILIZER	FOCUS BIG GENE 121292	N/A	2016	2019	41	312.2	84	50.3	42	353.2	160	145.2	108	6.7	14
				Min	imum	300.2		48.9		321.1		141.8		5.1	
				Av	erage/	311.0		50.0		362.3		145.1		6.0	
				Max	imum	324.6		51.0		415.6		149.6		7.9	

			PROGEN'	Y BORN					Total Bulls = 22	8		
Breed	Bull Name	Animal ID	First Year	Last Year	N	Carcase Wt. (kg)	Rank	Dressing Rank (%)	Marbling Ra	nk Ossification Ra	nk Fat Depth (mm)	
ANGUS	BRAVEHEART OF STERN	1217000784	2017	2018	21	314.5	34	50.4 34	375.3 4	145.8 6	9 6.0	117
ANGUS	EARNSCLEUGH TUSSOCK 144307	210130144307	2017	2018	21	315.2	27	50.2 73	379.8 3	146.4 3	3 6.0	111
ANGUS	EMBLAZON 999 (US)	US16665803	2017	2018	20	308.9	162	49.9 158	346.9 18	8 146.6 2	8 6.0	124
ANGUS	GLANWORTH WAIGROUP 14163	12154014163	2017	2018	27	309.4	146	50.0 137	353.3 15	9 146.6 3	0 5.9	137
ANGUS	GRAMPIANS LOTTERY K13	NZE21150014K13	2017	2018	21	300.2	228	49.9 142	323.5 22	7 144.8 13	5.7	191
ANGUS	HPCAPROCEED (US)	US16956101	2017	2017	34	308.3	180	49.5 216	389.3 1	5 147.1 1	2 5.7	180
ANGUS	KAKAHU 14003	NZE13300014D003	2017	2018	23	315.5	22	50.0 134	371.6 5	146.1 5	1 6.7	12
ANGUS	LINTON 15077	NZE20305015077	2017	2018	17	312.7	68	50.1 103	357.4 14	2 145.2 10	9 5.7	183
ANGUS	PATHFINDER GENESIS G357 (AUS)	AUSMPG357	2017	2017	45	315.3	24	49.9 148	346.3 19	2 144.9 13	33 6.3	55
ANGUS	PINEBANK 97/11	1199001197	2017	2018	22	307.3	195	49.4 222	321.1 22	8 144.6 1	6.0	122
ANGUS	RENNYLEA K163	AUNORK163	2017	2018	26	310.6	119	49.9 157	370.8 6	144.5 1	6.2	70
ANGUS	RISSINGTON PREMIUM CUT C487	NZE14572015C487	2017	2018	18	312.4	81	50.1 94	356.2 14	5 144.8 13	38 5.5	215
ANGUS	SEVEN HILLS 129/14	NZE21159014129	2017	2017	32	310.3	127	50.5 13	381.2 2	3 144.2 1	77 7.0	10
ANGUS	STORTH OAKS ANGUS PRIME K5	NZE19507014K5	2017	2018	24	308.7	168	50.3 55	387.9 2	145.7 8	1 6.5	26
ANGUS	STORTH OAKS K122	NZE19507014K122	2017	2019	42	308.8	166	50.0 135	369.5 7	3 144.7 14	12 5.7	185
ANGUS	STORTH OAKS K134	NZE19507014K134	2017	2018	21	315.0	29	50.2 64	355.0 15	1 144.2 1	32 6.0	113
ANGUS	THOMAS UP RIVER 1614 (US)	US17091363	2017	2018	30	313.5	45	50.5 11	380.0 3	2 145.1 1	L5 6.3	54
ANGUS	TURIHAUA MYTHOLOGY F236	17691010F236	2017	2018	20	311.9	90	49.6 207	351.3 17	0 144.0 1	35 5.9	146
ANGUS	VAR GENERATION 2100 (US)	US17171587	2017	2017	16	310.0	139	49.9 154	380.2 3	146.8 2	1 5.9	140
ANGUS	WAITAWHETA K44 AB	18938014K44	2017	2018	26	317.9	9	50.0 126	391.0 1	145.8 7	8 6.2	67
ANGUS	WR JOURNEY-1X74 (US)	US16924332	2017	2018	27	312.1	87	50.3 62	374.4 4	144.4 10	6.1	88
CHAROLAIS	BLELACK DIGGER	UKMBM0038543	2017	2018	17	316.3	20	51.0 2	328.9 22	3 143.2 2	12 5.3	224
CHAROLAIS	HEMINGFORD JERICO J95	803140095E	2017	2018	13	313.4	49	50.1 106	344.3 19	7 143.1 2	L5 5.8	151
CHAROLAIS	SILVERSTREAM FRAMPTON F17	083100017E	2017	2018	13	311.5	97	50.1 99	333.5 22	0 143.7 19	9 5.3	225
CHAROLAIS	WHANANAKI APOLLO A78	484050078E	2017	2018	12	307.9	189	50.1 111	358.2 13	4 143.4 20	5.9	136
				Min	imum	300.2		48.9	321.1	141.8	5.1	
				Av	erage	311.0		50.0	362.3	145.1	6.0)
				Max	imum	324.6		51.0	415.6	149.6	7.9	,

			PROGEN\	/ BORN						Total Bulls	= 228				
Breed	Bull Name	Animal ID	First Year	Last Year	N	Carcase Wt. (kg)	Rank	Dressing (%)	Rank	Marbling	Rank	Ossification	Rank	Fat Depth (mm)	Rank
HEREFORD	ARDO ACHILLES 120	0277100120	2017	2018	18	307.2	196	50.2	89	355.0	152	145.9	68	6.0	107
HEREFORD	ARDO BISMARCK 4256	0277144256	2017	2018	21	306.3	208	49.8	175	369.8	69	142.6	223	6.2	68
HEREFORD	GRASSMERE GALANT 9	0200140009	2017	2018	24	312.9	60	50.2	80	352.9	163	143.2	214	6.4	31
HEREFORD	INJEMIRA ANZAC K220 (AUS)	AUIHSK220	2017	2017	17	310.5	123	49.8	161	348.4	183	146.7	26	5.7	187
HEREFORD	KOANUI TECHNO 3062	0216133062	2017	2018	21	308.9	160	49.8	170	364.8	97	144.5	164	5.5	210
HEREFORD	MATARIKI 140255	0281140255	2017	2018	22	305.1	219	49.9	156	352.3	165	145.0	123	5.4	218
HEREFORD	ORARI GORGE OLIGARCH 140025	0400140025	2017	2017	10	312.7	67	49.7	192	356.1	147	142.8	220	5.8	155
HEREFORD	SHF ALL STAR 42X A191 (US)	US43379326	2017	2018	18	309.4	145	49.8	162	370.7	67	145.8	74	5.5	213
HEREFORD	TE TAUMATA FOUNDATION 14684	0308140684	2017	2018	21	312.8	61	50.0	113	359.0	132	145.4	95	5.9	138
HEREFORD	TLELL 29F RED CEDAR 8N (CAN)	CA02826570	2017	2018	19	309.5	143	50.0	112	361.0	119	144.6	147	6.7	15
SIMMENTAL	GLENSIDE CRUMPY C4	1312AC0004	2017	2018	17	310.1	130	49.7	195	387.1	21	145.8	73	5.9	150
SIMMENTAL	GLENSIDE DUMP TRUCK D12	1312AD0012	2017	2018	15	310.3	125	50.3	59	358.6	133	147.4	10	6.5	28
SIMMENTAL	HOOKS BEACON 56B (US)	US2854180	2017	2018	14	305.1	220	49.8	165	410.5	3	149.6	1	6.6	19
SIMMENTAL	KERRAH CAPTAIN C400	1667AC0400	2017	2018	15	311.3	106	50.1	109	374.0	51	145.5	91	5.9	129
SIMMENTAL	LEAFLAND CAPTAIN C1	1614AC0001	2017	2018	17	312.6	73	49.4	218	356.8	143	143.2	213	5.8	165
SIMMENTAL	MR NLC UPGRADE U8676 (US)	US2474338	2017	2018	20	312.4	78	50.4	35	376.0	41	146.2	41	6.0	120
SIMMENTAL	RISSINGTON AD372 (ET)	0049AD0372	2017	2018	15	313.9	41	49.9	143	355.8	148	145.6	83	6.4	38
SIMMENTAL	RISSINGTON DESTINED AD8	0049AD0008	2017	2018	16	311.3	105	50.0	136	382.1	26	142.6	225	6.2	69
SIMMENTAL	WAIKITE ZACKARIAS AZ0176	1455AZ0176	2017	2018	18	312.7	66	49.8	178	364.6	99	143.9	189	5.7	192
SIMMENTAL	WS PRIME BEEF Z8 (US)	US2675742	2017	2018	14	308.0	187	50.5	14	341.9	205	144.0	184	6.0	115
STABILIZER	STABILIZER 140082	N/A	2017	2018	20	302.3	227	49.4	220	351.8	168	144.5	159	5.7	193
STABILIZER	STABILIZER 140850	N/A	2017	2019	28	307.0	199	50.4	28	363.0	106	143.4	205	6.4	37
ANGUS	ARDROSSAN HONOUR H255 (AUS)	AUNAQH255	2018	2019	22	310.1	133	49.8	177	369.5	70	146.0	61	6.6	17
ANGUS	BLUE MOUNTAIN BRILLIANZ 05	210530135	2018	2019	18	309.7	141	50.2	82	344.3	196	145.5	92	5.6	198
ANGUS	FOCUS 163069	NZE194990163069	2018	2019	22	314.1	40	50.3	41	362.7	108	145.5	88	6.2	65
ANGUS	GRAMPIANS BUZZ L11	NZE21150015L11	2018	2018	17	308.0	186	49.8	166	373.0	53	145.0	124	5.9	147
ANGUS	KAKAHU 16159	NZE13300016159	2018	2019	21	312.4	79	50.4	29	388.0	19	145.7	79	5.8	154
ANGUS	LD CAPITALIST 316 (USA)	US17666102	2018	2018	24	311.2	108	50.1	104	341.8	206	145.2	110	6.4	35
ANGUS	LINTON 16042	NZE20305016042	2018	2018	30	309.2	154	49.5	213	357.6	139	146.7	24	5.7	194
				Min	imum	300.2		48.9		321.1		141.8		5.1	
				Av	erage/	311.0		50.0		362.3		145.1		6.0	
				Max	imum	324.6		51.0		415.6		149.6		7.9	

			Total Bulls = 228												
Breed	Bull Name	Animal ID	First Year	Last Year	N	Carcase Wt. (kg)	Rank	Dressing (%)	Rank	Marbling	Rank	Ossification	Rank	Fat Depth (mm)	Rank
ANGUS	MILLAH MURRAH LOCH UP L133 (AUS)	AUNMML133	2018	2019	20	313.4	46	49.9	155	374.9	47	144.3	175	5.8	173
ANGUS	PA FULL POWER 1208 (USA)	US16981588	2018	2019	27	313.0	57	51.0	1	388.2	18	144.5	162	6.3	53
ANGUS	QUAKER HILL MILE HIGH 4EX31 (USA)	US18078212	2018	2019	27	313.3	50	50.0	125	371.1	62	145.5	89	6.0	102
ANGUS	REILAND HILARY H874 (AUS)	AUNLRH874	2018	2019	15	313.4	47	49.7	189	366.7	88	146.4	34	5.8	166
ANGUS	RISSINGTON 160136	NZE145720160136	2018	2019	18	315.9	21	50.4	24	369.5	74	146.9	15	5.8	169
ANGUS	RISSINGTON RESOLVED C116	NZE14572015C116	2018	2019	22	308.2	182	49.8	168	372.4	55	147.0	14	6.3	40
ANGUS	SEVEN HILLS 85/15	NZE21159015085	2018	2019	21	308.2	183	50.3	56	385.7	22	143.9	193	5.7	190
ANGUS	STORTH OAKS L94	NZE19507015L94	2018	2019	26	316.7	16	50.4	26	380.8	29	144.6	151	5.8	170
ANGUS	SYDGEN EXCEED 3223 (USA)	US17501893	2018	2019	31	308.3	181	50.2	84	390.7	11	147.5	9	6.1	79
ANGUS	TE MANIA 15380	NZE16932015380	2018	2019	16	313.1	54	49.7	179	360.1	123	146.2	44	5.9	145
ANGUS	TE MANIA MULLER 16305	NZE16932016305	2018	2019	24	307.4	194	48.9	227	343.9	199	143.9	191	6.5	25
ANGUS	TOTARANUI 15151	NZE12922015151	2018	2018	19	312.6	71	50.1	95	369.3	75	144.4	167	6.2	71
ANGUS	TURIROA 16M013	15603016M013	2018	2019	14	309.6	142	49.9	149	346.4	191	144.8	135	5.6	202
ANGUS	WHENUAPAPA CRUMBLE 8-10	212110108	2018	2019	15	311.3	103	50.3	61	353.0	162	145.5	90	6.2	64
CHAROLAIS	HEMINGFORD ICONIC 19	803130009E	2018	2018	10	316.9	14	50.5	19	334.3	219	144.6	149	5.8	175
CHAROLAIS	PALGROVE XCEPT (AUS)	AUPKX488	2018	2019	11	310.1	132	50.3	45	326.4	226	142.6	224	5.8	168
CHAROLAIS	SILVERSTREAM LANDIS L179	083150179E	2018	2019	13	313.8	42	50.8	4	335.4	216	148.0	5	6.1	80
CHAROLAIS	SPARROWS BRAXTON 519C (USA)	CAMC367500	2018	2019	18	311.5	96	50.4	38	349.9	175	143.3	210	6.0	106
CHAROLAIS	WHANANAKI LEX L24	484150024E	2018	2019	9	312.5	75	50.5	12	361.5	116	142.0	226	6.1	89
HEREFORD	ARDO AJAX 5014	0277155014	2018	2019	20	305.1	218	50.2	69	348.5	182	145.0	125	6.4	34
HEREFORD	CRAIGMORE IKE 140260	0169140260	2018	2019	19	309.3	150	50.0	121	334.5	218	143.8	196	6.3	50
HEREFORD	DAYS ROBIN HOOD H38 (AUS)	AUDAYH38	2018	2019	22	306.4	205	49.9	138	347.1	186	145.4	96	5.5	207
HEREFORD	GRASSMERE GALLANT 152	0200150152	2018	2019	29	313.2	51	49.8	160	344.1	198	145.8	77	5.9	149
HEREFORD	KOANUI LEGIT 6444	0216166444	2018	2019	22	306.3	209	49.4	219	359.5	130	146.4	35	5.9	139
HEREFORD	LIMEHILLS STREAKER 150368	0677150368	2018	2019	25	308.5	174	49.9	152	362.8	107	145.6	82	6.1	83
HEREFORD	OKAWA HOGAN 3156	0617130156	2018	2018	17	308.9	161	49.6	204	364.5	102	145.3	104	6.0	101
HEREFORD	ORARI GORGE PATTON 150051	0400150051	2018	2019	23	306.7	203	49.8	176	370.7	68	143.0	219	6.5	27
HEREFORD	ORARI GORGE QUANTUM 160091	0400160091	2018	2019	17	307.0	200	49.7	183	365.9	91	145.8	72	6.1	93
HEREFORD	WESTHOLM TRUST R 58	0421160058	2018	2019	20	311.7	94	50.3	46	340.6	209	143.1	218	5.8	171
				Min	imum	300.2		48.9		321.1		141.8		5.1	
				Av	erage/	311.0		50.0		362.3		145.1		6.0	
				Max	imum	324.6		51.0		415.6		149.6		7.9	

			PROGEN'	Y BORN						Total Bulls	= 228				
Breed	Bull Name	Animal ID	First Year	Last Year	N	Carcase Wt. (kg)	Rank	Dressing (%)	Rank	Marbling	Rank	Ossification	Rank	Fat Depth (mm)	
SIMMENTAL	CCR COWBOY CUT 5048Z (USA)	US2703910	2018	2019	13	305.6	213	49.6	200	365.8	92	144.2	179	5.9	142
SIMMENTAL	JANEFIELD ED AE1	1671AE0001	2018	2019	13	309.0	157	50.0	124	353.4	158	145.8	70	5.9	132
SIMMENTAL	POTAWA ADMIRAL	1665AA0007	2018	2018	11	307.4	193	49.7	187	335.5	215	144.6	150	6.7	13
SIMMENTAL	RISSINGTON AA0809	0049AA0809	2018	2019	13	307.9	188	49.6	201	358.2	135	144.3	172	5.5	212
SIMMENTAL	RISSINGTON EXCEED AE203	0049AE0203	2018	2019	11	308.5	173	50.0	123	346.7	190	146.0	55	5.6	200
SIMMENTAL	WAIKITE AD2031	1455AD2031	2018	2019	10	311.4	102	49.7	190	339.5	210	145.0	120	6.0	118
SIMMENTAL	WAIKITE AY0097	1455AY0097	2018	2019	17	314.3	35	50.1	110	345.1	193	145.3	100	5.9	130
SIMMENTAL	WS RED MOON D76 (USA)	US3115609	2018	2019	18	304.2	224	49.8	171	365.9	90	143.4	206	5.9	143
ANGUS	CONNEALY LEGENDARY 644L (USA)	US18534952	2019	2020	18	311.7	93	50.4	33	369.1	77	145.6	84	6.2	75
ANGUS	FOCUS 171293	NZE194730171293	2019	2019	9	307.7	190	49.8	169	390.5	12	144.9	131	5.8	162
ANGUS	KAKAHU LACHLAN 15095	NZE13300015095	2019	2020	29	314.6	32	49.7	191	367.8	83	145.9	65	6.2	63
ANGUS	LINTON 16107	NZE20305016107	2019	2020	19	312.5	77	50.0	127	371.6	61	143.9	187	5.8	174
ANGUS	RISSINGTON 17014	NZE14572017014	2019	2020	19	312.8	63	50.5	20	363.3	105	145.1	117	5.7	181
ANGUS	STORTH OAKS JOURNEY M31	NZE19507016M31	2019	2020	20	315.3	23	50.7	5	363.9	103	145.2	106	6.5	24
ANGUS	STORTH OAKS M10	NZE19507016M10	2019	2020	22	311.2	107	49.3	223	359.8	125	143.2	211	6.2	58
ANGUS	STORTH OAKS M119	NZE19507016M119	2019	2020	17	310.0	136	50.1	98	371.8	58	146.9	19	6.0	98
ANGUS	SYDGEN BLACK PEARL 2006 (USA)	US17236055	2019	2020	23	316.4	18	50.2	77	362.7	109	145.3	101	6.1	92
ANGUS	TE MANIA MATRIX 16018	NZE16932016018	2019	2020	16	309.3	151	49.8	173	379.0	37	145.5	93	6.0	105
ANGUS	WAITANGI M203	NZE18954016M203	2019	2020	14	312.7	69	50.4	32	356.5	144	145.2	105	5.7	182
ANGUS	WAITANGI M214	NZE18954016M214	2019	2020	20	310.0	134	49.6	203	378.8	38	144.8	137	6.2	72
CHAROLAIS	HEMINGFORD NEXT DIRECTION N64	803170064E	2019	2020	19	311.0	114	49.9	139	351.1	171	143.7	197	6.1	82
CHAROLAIS	KAKAHU GERRY 140506	001140506E	2019	2020	11	308.4	179	50.0	115	363.9	104	144.7	144	6.0	125
CHAROLAIS	SILVERSTREAM MANHATTAN M171	083160171D	2019	2020	15	311.4	101	50.5	16	335.1	217	143.8	195	5.8	153
GELBVIEH	GLADSTONE RED BARON PN19 ET (AI)	MCCPN19	2019	2020	10	311.1	110	50.2	85	344.9	194	144.4	166	5.8	160
HEREFORD	LIMEHILLS STARTER 160062	0677160062	2019	2020	30	310.7	117	50.4	30	337.4	213	141.8	228	6.0	123
HEREFORD	MATARIKI 110637	0281110637	2019	2020	22	308.6	172	49.5	211	357.7	137	145.7	80	6.0	116
HEREFORD	MATARIKI JETSON	0281160215	2019	2020	33	318.1	8	50.0	120	327.5	225	144.4	170	6.3	41
HEREFORD	OKAWA STAMPER 160124	0617160124	2019	2020	36	307.5	192	50.2	72	341.1	207	145.1	114	5.6	201
HEREFORD	WIRRUNA MATTY M288 (AUS)	AUWNAM288	2019	2020	31	306.4	206	49.6	206	391.7	8	144.5	165	6.1	77
				Min	imum	300.2		48.9		321.1		141.8		5.1	
				Av	erage	311.0		50.0		362.3		145.1		6.0	
				Max	imum	324.6		51.0		415.6		149.6		7.9	

		PROGENY BORN				Total Bulls = 228										
Breed	Bull Name	Animal ID	First Year	Last Year	N	Carcase Wt. (kg)	Rank	Dressing (%)	Rank	Marbling	Rank	Ossification	Rank	Fat Depth (mm)	Rank	
LIMOUSIN	MANGATARA 335L	N/A	2019	2020	19	305.4	216	49.5	215	338.3	212	145.6	87	6.0	100	
LIMOUSIN	MANGATARA JOOL	N/A	2019	2020	16	306.1	211	50.1	92	339.2	211	143.9	192	5.8	152	
SHORTHORN	ORENA BALANCE 15012	209315012	2019	2020	11	314.5	33	50.2	68	367.0	86	144.9	132	6.3	46	
SIMMENTAL	GLEN ANTHONY AE12	0299AE0012	2019	2020	29	308.6	170	49.9	145	346.9	187	144.5	160	6.1	84	
SIMMENTAL	GLENSIDE FRONTIER F19	1312AF0019	2019	2020	24	310.6	120	50.0	133	358.1	136	146.1	48	6.0	99	
SIMMENTAL	HOOKS DELEGATE 64D (USA)	US3132798	2019	2020	31	303.4	226	49.5	214	349.1	180	144.3	174	5.9	148	
SIMMENTAL	KERRAH DESTINED D608	1667AD0608	2019	2019	5											
SIMMENTAL	KERRAH EPIC E303	1667AE0303	2019	2020	29	304.7	223	49.6	205	342.3	203	148.0	6	5.9	144	
SIMMENTAL	OWHATA AE7	1689AE0007	2019	2020	16	314.7	31	50.5	17	348.7	181	145.8	71	6.6	21	
SIMMENTAL	RISSINGTON AF184	0049AF0184	2019	2020	23	305.5	215	49.7	196	360.6	121	145.8	76	6.1	96	
SIMMENTAL	RISSINGTON AF44	0049AF0044	2019	2020	25	303.9	225	50.2	70	371.9	57	146.0	62	5.8	167	
SIMMENTAL	WAIKITE AE2009	1455AE2009	2019	2020	14	310.9	115	50.2	88	372.1	56	144.7	143	6.3	47	
SOUTH DEVON	BURTERGILL HENRY 1105	VAN11005 PZ	2019	2020	17	310.3	126	50.0	132	350.1	174	145.1	113	6.0	110	
STABILIZER	STABILIZER 165287	N/A	2019	2020	27											
STABILIZER	STABILIZER 165292	N/A	2019	2020	33	312.8	62	50.2	78	360.2	122	145.4	98	5.6	199	
STABILIZER	STABILIZER 16S38	N/A	2019	2020	12	310.4	124	50.0	116	374.7	48	145.3	102	6.0	114	
ANGUS	CLUNES CROSSING DUSTY M13 (AI) (IMP AUS)	AUQMUM13	2020	2020	21											
ANGUS	FOCUS 173075 (P)	NZE194990173075	2020	2020	30											
ANGUS	LINTON 17070 (P)	NZE20305017070	2020	2020	25											
ANGUS	RISSINGTON SURE FIRE P399	NZE145720180399	2020	2020	26											
HEREFORD	CAPETHORNE 1617	0065160017	2020	2020	25											
HEREFORD	FOULDEN HILL FLAME 11 0155	1731110155	2020	2020	20											
HEREFORD	GLENBRAE NIGHTRIDER 1761	0730170061	2020	2020	28											
HEREFORD	LIMEHILLS ANZAC 170279	0677170279	2020	2020	29											
HEREFORD	OTAPAWA VOODOO 7007	0347177007	2020	2020	26											
SIMMENTAL	GLENSIDE G2	1312180002	2020	2020	21											
SIMMENTAL	KERRAH FUNDAMENTAL F509	1667AF0509	2020	2020	31											
SIMMENTAL	RISSINGTON 180061	0049180061	2020	2020	13											
				Min	imum	300.2		48.9		321.1		141.8		5.1		
				Av	erage/	311.0		50.0		362.3		145.1		6.0		
				Max	imum	324.6		51.0		415.6		149.6		7.9		

Note: if there are no values displayed, progeny have not yet been recorded for that trait, or there was not enough progeny recorded from that sire for the result to be reliable.

Appendix

Trait Definitions

Weaning Weight (kg)	Weight at weaning recorded on steer and heifer progeny. Higher values indicate more weight.
Yearling Weight (kg)	Weight at 1 year of age recorded on steer and heifer progeny. Higher values indicate more weight.
18-month Weight (kg)	Weight at 18 months recorded on steer and heifer progeny. Higher values indicate more weight.
Eye Muscle Area (cm²)	Abbreviated as EMA. Area of Eye Muscle as captured at the 12th/13th rib site from ultrasound scanning in both steer and heifer progeny at 18 months of age. Higher values indicate larger eye muscle area.
Rib Fat (mm)	Rib Fat captured at the 12th/13th rib site from ultrasound scanning in both steer and heifer progeny at 18 months of age. Higher values indicate more fat over the ribs.
Rump Fat (mm)	Rump Fat captured at the P8 site from ultrasound scanning both steer and heifer progeny at 18 months of age.
Intramuscular Fat (%)	Abbreviated as IMF. Intramuscular Fat captured at the 12th/13th rib site from ultrasound scanning both steer and heifer progeny at 18 months of age. Higher values indicate more intramuscular fat, which is related to marbling.
Carcase Weight (kg)	Weight of the hot carcase at slaughter recorded on steer progeny and terminal heifers. Higher values indicate a heavier carcase weight.
Dressing %	Calculated by dividing the carcase weight by the on-farm liveweight of the animal prior to transport and expressing the result as a percentage. This percentage represents the meat and skeletal portion of an animal compared to its live weight. It is different from previous reports where we used the plant liveweight (as this was no longer available on all animals) and the average percentage will be lower as it now includes additional gut-fill loss during transport and lairage.
Marbling	Marble score recorded by Silver Fern Farms BeefEQ graders in the chiller on steer progeny and terminal heifers using the Meat Standards Australia (MSA) scale. Higher values indicate more marbling in the carcase. 100 points on the MSA scale is equivalent to 1 Marble score on the AusMeat scale, with a 300 MSA score being equivalent to AusMeat Marble Score 1 (and 400 MSA score equivalent to AusMeat Marble Score 2, etc).
Ossification	Ossification score recorded by Silver Fern Farms Beef EQ graders in the chiller on steer progeny and terminal heifers. Lower values are better as they indicate younger physiological maturity at slaughter.
Fat depth (mm)	Subcutaneous fat measurement at the 12th/13th rib site recorded by Silver Fern Farms Beef EQ graders in the chiller on steer progeny and terminal heifers. Higher values indicate more fat over the ribs.



Beef + Lamb New Zealand Genetics
PO Box 5501, Dunedin 9054 | Email: info@blnzgenetics.com

blnzgenetics.com