48 BULLS IN TOP 20% ALL INDICES

58 BULLS ABOVE BREED AVERAGE ALL INDICES

KILBURNIE ANGUS

KILBURNIE ANGUS

BULL SALE

Friday, 23 August, 2019

1:00PM START TIME

60 **HIGH INDEXING ANGUS BULLS** 60

AuctionsPlus Sale

www.kilburnieangus.com.au

BULL INDEX AVGS	ABI: +$148	DOM: +$129	HGN: +$172	HGS: +$137
PERCENTILE RANK:	4%	4%	3%	4%

KILBURNIE ANGUS

PRE SALE INDEPENDENT ASSESSMENT AND MEASUREMENT

The bulls being offered for sale will all have undergone a full physical examination by Dr. Joanna Bacon of the Walcha Veterinary Clinic. This examination will not include semen testing. Certificates are available from the Veterinary Clinic on request.

Roger Evans, of Bovine Scanning Services, scanned the two year old bulls for P8 and rib fat, eye muscle area and intramuscular fat at various times over the last twelve months. This information is included in the EBVs published in this catalogue. He will scan the yearling bulls in July and the information will be available on Sale Day.

Roger Evans has structurally scored all older animals currently on Straban. The two year old bulls were scored in May. This raw data is submitted to the Angus Society and provisional Structural EBVs on all animals are available from the Angus data base.

GENOMIC EVALUATION

As of December 2017 EBVs for Angus cattle have been calculated using information from DNA analysis – where it is available.

ALL animals on Straban have had tail hairs extracted and submitted to the Angus Society for DNA extraction. This DNA is analysed and the resulting information is used in two ways. Firstly it is used to verify the parents of the animal. Secondly it is used to provide more accurate EBVs for all animals. The Highrent bulls in the catalogue have also had DNA extracted and paternity verified.

COMPLETENESS OF INFORMATION

In addition to the externally collected information we weigh animals at birth and regularly thereafter, including mature weights. We collect docility scores at weaning. We record joining and pregnancy testing results to underpin our fertility EBVs. We also record male scrotal size.

FURTHER INFORMATION

The scanning information from the young bulls will be processed in the July run of Breedplan. Updated EBVs will be available on the Angus Australia website in early August. We will have scrotal measurement and sale day weight information available for you at the sale. Structural score EBVs are available for Kilburnie bulls on the Angus Australia web site.

Kilburnie 2019 Sale Bulls Index and Percentile Rank Averages

	Indices				EBVS	
	Angus Breeding Index	Domestic Index	Heavy Grain Index	Heavy Grass Index	Retail Beef Yield %	Intra Muscular Fat %
Index Average	148	129	172	137	0.9	3.0
Percentile Rank Average	4%	4%	3%	4%	30%	10%

KILBURNIE ANGUS

60 Performance Recorded Angus Bulls

To be sold at Straban, Walcha, from 1.00pm
Friday, 23rd August, 2019

- ***An AuctionsPlus Simultaneous On Line Auction with on site bidding.***
- By Helmsman Auction
- All animals vaccinated with 7 in 1 and for vibrio and pestivirus.
- Deloused, dewormed and defluked.
- Refreshments will be available at the sale.
- Animals are available for inspection at the sale and before by arrangement.
- **WARM CLOTHING IS RECOMMENDED.**

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KILBURNIE ANGUS

WHY YOU SHOULD BUY A KILBURNIE BULL

At Kilburnie we select our animals using Indices. The Indices put emphasis and weightings on the important traits approximately as shown below.

Calving ease (weighting 10%)
Dead calves are not very profitable. They are also stressful. A calving problem in the middle of the night is not very pleasant – particularly in July.

Growth - Calves that grow rapidly (weighting more than 20%)
On sale day the heavier calves are worth more than the light ones. High EBVs for growth traits in your bulls will result in calves that are heavier on sale day. Meat quality, as measured by the MSA Index, depends on ossification. Your high growth calves will meet target weights earlier. They will grade better.

Fertility - Days to calving (weighting another 20%)
The earlier your cows calve the more time their calves have to grow. It is a shame to have to cull a good cow because she is empty. It does not take a serious cattleman to get 100% calving in September. It takes an expert to get 100% calving in June and July. If you have fertile cows you can calve earlier.

Intramuscular fat (IMF%) (weighting at least 10%, up to 20% if your steers are sold to the quality markets)
Eating quality of meat is heavily influenced by marbling which is why it figures so heavily in the MSA index. Do you get a premium for it now? Probably not. If you start to put marbling into your cow herd you will guarantee avoiding a discount in the future.

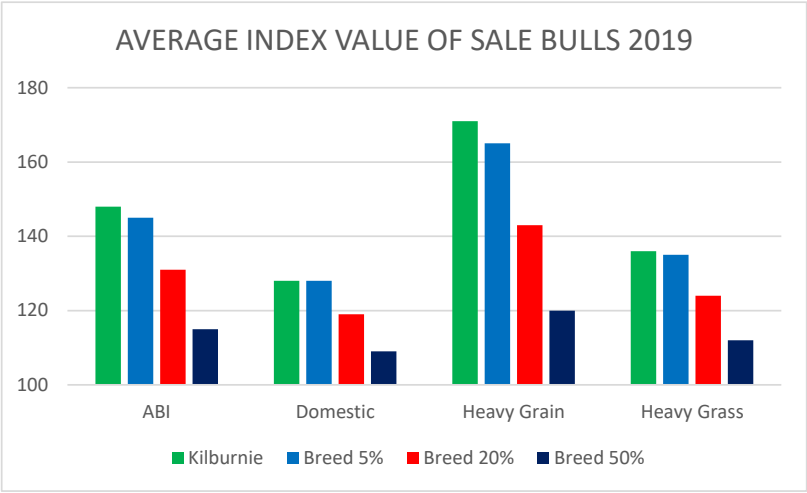
Retail Beef Yield (RBY%) (weighting another 10% or so)
Consumers want good quality meat. They won't pay for fat and bones. Some animals carry a lot of waste product. You will not get a premium when you come to sell weaners or finished cattle that have very little useful meat on them.

How can you compare the performance of the calves you get from Kilburnie bulls with those from other bulls you are looking at?

The easiest way is to see where the bulls rank in the breed.

That is why this catalogue (uniquely) shows you the percentile rankings for all EBVs.

The progeny of a bull in the top 20% will outperform the progeny of an average bull.



Kilburnie bulls are high indexing. They have high percentile rankings for the important economic traits.

KILBURNIE ANGUS

MARBLING (IMF%) IS A VALUABLE TRAIT
KILBURNIE BULLS HAVE HIGH IMF% EBVS

To date premiums have been paid for the breeds of cattle that marble.

The major importation of modern Angus Genetics into Australia occurred forty years ago. These cattle had growth and **marbling** to meet the demand for quality meat from export markets, particularly Japan. It became obvious that 'black' cattle marbled and had better meat quality than other cattle and the well known premiums between (black) Angus, other British breeds, European breeds and Bos Indicus cattle were established. (Why did red Angus and red baldies, black simmies and black limos not make the grade?)

More recently Wagyu cattle have been receiving higher premiums than Angus.

Marbling, as measured by Marble Score, is a major component of the MSA index of Meat Quality.

Some processors (probably) know more about how your cattle marble than you do.

Most carcases are now MSA Graded and therefore have had a Marble Score assessed and recorded. All animals have electronic ear tags which give the PIC of the property on which the animal was born. Thus the quality and the marbling of your slaughtered cattle is known. Depending on the results obtained your animals could be sought after, or avoided, by the processors - or just treated as FAQ .

Already premiums are available for carcases (not cattle breeds) that marble.

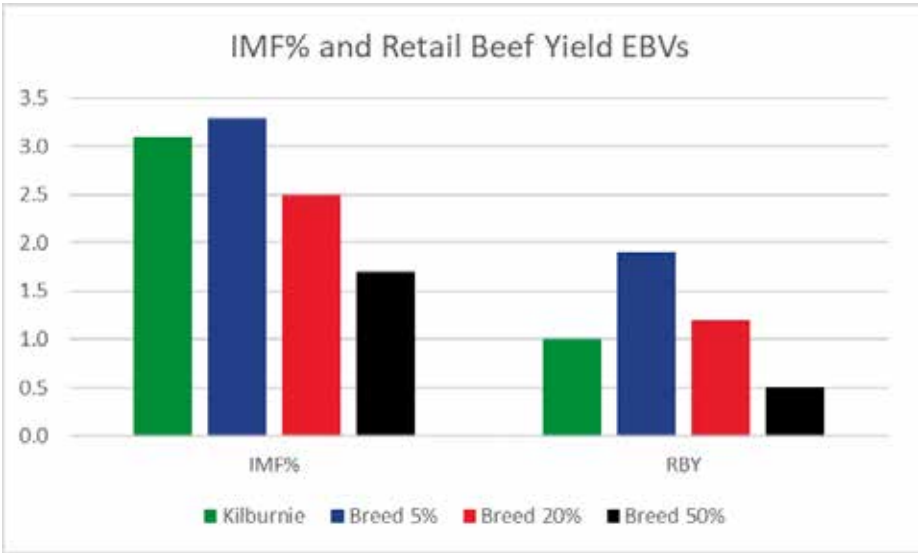
The best known example is the JBS premium for carcases that have been grass fed and meet the specs for the Little Joe brand. The premium is based on marble score and is now 20c/kilo carcase weight, or $60 for a 300 kilo carcase.

You can increase the marbling in the cattle you produce by buying bulls with higher IMF% EBVs. You need to locate the seed stock herds, like Kilburnie, that have high marbling bulls for sale - and buy them.

Kilburnie Bulls have high IMF% EBVs compared to the average Angus bull.

They also have high EBVs for Retail Beef Yield

How does your bull battery compare?



KILBURNIE ANGUS

2019 KILBURNIE SALE BULL BREEDPLAN EBV SUMMARY

GREEN, BLUE, RED AND BLACK

We use **GREEN**, **RED**, **BLUE** and **BLACK** in the following table to indicate where our bulls are relative to the Angus breed.

The **black** figures are in the top half (50%) of the breed. The **red** figures are in the top 20% of the breed. The **blue** figures are in the top 5% of the Angus breed. The **green** figures are in the top 1% of the Angus breed.

Some things stand out when we do this. The coloured numbers are mostly **blue** and **red**. We believe that the indices are the most important figures you are given. We select on two of them - the Heavy Grass Fed and the Australian Breeding Indices. You might like to note that most of the bulls are in the top 20% of the breed, i.e. **green** or **blue** or **red** on all of the indices. Kilburnie Bulls are not average bulls. You should only buy average bulls if they are cheap enough.

Generally our bulls are not specialists for one trait - e.g. carcase, growth or calving ease. They have a balance of attributes. Individual animals are of course exceptional for particular traits. There are some calving ease specialists among the bulls and there are some carcase and growth specialists.

The number of **green**, **blue**, **red** and **black** animals in your herd depends on how many **green**, **blue**, **red** and **black** bulls you have used in the past. If you do not use **green**, **blue**, **red** and **black** bulls then you will not have above average Angus cattle.

Lot	Ident	Sire ID	Dam ID	$ Index				Calv Ease		Birth		Growth			Fertility			Other			Carcase			
				ABI	DOM	GRN	GRS	Dir	Dtrs	GL	BWT	200	400	600	MCW	Milk	DTC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
1	NURN44	USA17328461	NURL85	152	134	167	142	1.4	3.9	-2.8	3.8	55	98	125	108	12	-9.3	3.4	0	0.06	75	4.4	0.9	0.4	0.6	2.1
	Below average birth weight and top 20% growth. Short days to calving is well worth breeding into your cow herd. We used this bull in our 2018 joining. Highly recommended																									
2	NURN12	USA17354145	NURL1	147	136	175	134	0.6	1.2	-5.8	4.8	54	95	116	92	18	-3.8	1.7	43	0.46	75	10.9	-2.1	-3.2	2.0	3.8
	A truly exceptional combination of IMF% and Retail Beef Yield. Calving ease is better than breed average. Docility is extreme. Highly recommended.																									
3	NURN20	WWEL3	NURJ81	160	137	186	145	-1.4	0.0	-6.2	3.7	56	105	132	108	17	-7.9	4.0	-10	0.51	90	9.2	-0.9	-1.1	1.0	3.2
	A low birth weight bull with the right combination of IMF% and EMA. Top 1% all four indices. **One of the highest performance bulls in the Angus breed.** Take the opportunity to grade up now.																									
4	NURN66	USA17354145	NURJ43	126	123	136	121	1.7	1.6	-3.5	2.6	47	81	99	64	20	-1.7	0.2	4	0.51	64	12.2	-0.5	-0.8	1.1	3.3
	Another Momentum son with extreme carcase merit. The mother is one of the soundest cows we have bred. We sold her to The Rock Angus, Wagga Wagga.																									
5	NURN72	NURJ136	NURK25	149	121	173	136	2.4	3.2	-4.8	3.7	47	79	117	84	22	-8.4	2.7	32	0.38	66	5.6	-1.1	-1.1	0.6	3.1
	A low birthweight calving ease grandson of El Grando with good carcase figures. Docility is remarkable.																									
6	NURN90	NURJ136	NURH261	153	129	180	138	1.6	3.6	-5.8	6.1	50	89	121	88	19	-6.6	0.8	-1	-0.01	74	7.2	-2.0	-1.8	0.7	3.5
	High marbling, growth and carcase weight. With better than breed average calving ease this bull will make a valuable contribution to most commercial herds.																									
The EBVs in this table are from the Mid June 2019 Angus Australia BREEDPLAN analysis			Top 1%	157	135	182	145	5.0	4.5	-9.7	0.4	61	109	146	140	26	-8.9	3.8	31	-0.48	85	11.0	3.1	3.2	2.6	4.0
			Top 5%	145	128	165	135	3.9	3.5	-7.8	1.7	56	100	133	124	22	-7.6	3.1	24	-0.30	77	9.0	2.0	2.1	1.9	3.3
			Top 20%	131	119	143	124	2.4	2.2	-5.8	3.0	51	91	120	106	19	-6.0	2.4	14	-0.07	69	7.0	1.0	0.9	1.2	2.5
			Top 50%	115	109	120	113	0.4	0.5	-4.0	4.3	45	81	106	91	15	-4.3	1.8	4	0.18	60	5.1	0.0	-0.2	0.5	1.7

Lot	Ident	Sire ID	Dam ID	$ Index				Calv Ease		Birth		Growth				Fertility			Other				Carcase			
				ABI	DOM	GRN	GRS	Dir	Dtrs	GL	BWT	200	400	600	MCW	Milk	DTC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
7	NURN108	NURK118	NURK59	129	119	131	127	3.4	3.2	-10.2	1.1	42	81	102	61	18	-6.1	1.4	-6	0.62	54	5.2	2.2	3.1	-0.6	2.3
	His sire was a bull we used because of his structural soundness and low birth weight. This bull will be very safe and useful over your heifers.																									
8	NURN124	NURJ136	NURH107	150	121	175	135	4.0	3.5	-7.1	1.9	41	78	112	89	24	-9.1	3.0	14	0.92	59	6.4	-0.7	-0.8	0.4	3.2
	A calving ease bull with good muscling and marbling. Used over your heifers you will increase the IMF in your herd. The days to calving EBV is in the top 5% of the breed. H107 is also the mother of Lot 53.																									
9	NURN138	NURL52	NURL139	142	125	158	132	1.3	2.0	1.0	5.7	52	94	124	88	23	-8.1	2.3	16	0.14	66	3.7	-1.6	-2.0	1.0	2.1
	Top 10% on all four indices. A herd improver with a very solid pedigree based on the best Te Mania bloodlines.																									
10	NURN122	NURL52	NURG81	138	123	151	131	2.1	1.2	-2.9	4.4	53	91	120	93	15	-6.7	0.3	38	-0.20	71	7.2	-0.8	-1.6	0.5	2.3
	A combination of high growth and moderate calving ease and birth weight. The sort of good all round performance that will serve you well.																									
11	NURN106	NURL6	NURK81	124	116	145	112	1.8	1.6	-2.3	2.9	44	73	90	52	16	-5.0	0.7	-2	0.71	60	6.6	0.2	-2.3	0.0	4.2
	Exceptional marbling. We think you should be putting marbling into your herd and this animal will do so - starting with your heifers.																									
12	NURN126	NURL6	NURL99	128	117	140	120	2.4	1.9	-5.9	4.1	42	75	97	84	18	-7.3	2.3	-11	0.49	53	8.0	0.1	-0.2	1.1	2.3
	A good carcase bull that will add calving ease to your herd.																									
13	NURN128	NURL52	NURX8	125	121	129	121	3.2	2.2	-2.1	1.4	37	73	89	48	25	-6.7	3.1	20	0.35	51	9.6	-0.2	-1.0	1.9	1.8
	N128 is the thirteenth natural calf of X8. He is eminently suited for use over your heifers - and their calves should be with you for a long time. Fertile and long lived.																									
14	NURN148	NURL154	NURK109	116	112	123	114	0.2	-0.9	-1.1	3.9	44	86	112	92	18	-3.1	1.6	-15	-0.24	52	8.9	-2.0	-2.6	1.6	1.7
	A red bull - with better than average black Angus EBVs. If you are running an Angus/Hereford herd you could stabilise the colour using this bull.																									
15	NURN86	USA1612741	NURH51	112	114	121	110	1.9	1.1	-5.2	3.2	43	83	105	102	12	-2.0	2.4	28	0.37	54	8.4	-2.2	-3.6	2.0	1.8
	The second red bull on offer. If you are running red cattle, including Herefords, these red bulls will give you Angus performance without changing the colour of your animals. You get black baldy vigour with red animals.																									
16	NURP168	NURG20	NURK31	155	135	180	143	-3.4	-0.6	-7.0	5.8	61	106	142	118	18	-4.8	1.8	2	-0.23	94	11.5	-2.1	-4.0	3.0	2.6
	A very acceptable Grando son with moderate birth weight combined with outstanding growth and carcase EBVs.																									
17	NURP166	NURG20	NURM3	173	146	211	154	-2.1	2.3	-5.3	6.7	64	111	150	132	14	-4.3	3.5	7	0.18	91	11.1	-4.0	-5.2	3.3	3.5
	This is a very serious carcase and growth bull. Depite being a yearling bull he is physically big enough to use over young cows.																									
18	NURP28	USA16350631	NURM1	148	132	169	138	3.0	3.5	-8.9	2.8	56	102	134	119	26	-4.7	3.3	11	0.41	86	7.7	-1.3	-2.4	1.2	2.8
	All indices in the top 5% of the breed. Top 20% or better for calving ease, growth, carcase weight, retail beef yield and marbling. A very well balanced high performance bull.																									
19	NURP48	USA16350631	NURM13	166	140	189	156	2.6	2.4	-6.4	5.5	70	122	167	154	26	-4.6	2.3	6	0.38	98	7.4	-1.3	-2.4	1.1	2.5
	G A R Twinhearts is the father of lots 18 to 20. Their common feature is calving ease, extreme growth and more than adequate carcase EBVs.																									
20	NURP54	USA16350631	NURM13	174	144	202	161	3.2	2.7	-7.1	5.6	67	120	163	141	27	-5.3	2.1	-4	0.46	97	9.5	-1.1	-2.6	1.2	2.9
	It is possible to breed Angus steers that will finish off grass, at carcase weights above 300 kilograms, at under 21 months old. This bull will give the extra growth and marbling needed to do so.																									
21	NURP58	NURM204	NURM13	169	139	203	153	-3.9	0.3	-4.8	6.8	70	120	162	149	19	-6.0	3.8	8	0.90	100	11.2	-1.7	-3.7	2.0	3.2
	M13, a daughter of Pathfinder Genesis, is the mother of this and the two previous bulls. These calves have a highly desirable combination of growth and carcase quality.																									
22	NURP74	NURM204	NURK45	147	127	169	131	-1.9	0.9	-1.3	3.0	49	86	104	75	15	-11.2	2.5	-17	1.18	67	7.9	1.3	0.5	-0.1	3.5
	A low birth weight bull with high values of IMF and EMA. Use him over your heifers to help you breed your replacement heifers. Days to calving (fertility) EBV in the top 1%.																									
23	NURP22	VTML839	NURM89	165	140	190	153	1.4	0.8	-4.7	5.3	70	124	168	161	21	-6.0	2.7	-7	-0.28	96	4.6	-3.8	-4.3	1.9	2.0
	An exceptionally high indexing bull bred from Te Mania Lewins by Twinhearts. Above average calving ease and a moderate birth weight.																									
24	NURP165	NURG20	NURK31	166	138	200	148	-3.6	-0.6	-5.7	8.1	63	107	146	134	15	-6.5	1.9	2	-0.10	97	11.1	-1.8	-4.2	3.1	3.0
	These next six bulls are part of an intentional exercise to produce very high growth Angus bulls with outstanding carcase attributes. The birth weights may look forbidding - calving ease is less so.																									
25	NURP62	NURM204	NURM13	169	135	206	151	-3.4	0.5	-4.5	6.9	62	110	152	140	17	-6.0	3.7	-2	1.05	93	10.5	-1.0	-2.1	1.5	3.7
	Another son of the outstanding growth rate M13 cow. This bull is a growth and carcase powerhouse.																									
26	NURP160	NURG20	NURK31	180	144	224	159	-3.3	-0.5	-5.6	8.8	72	126	174	166	16	-5.1	3.5	12	-0.11	112	8.2	-3.9	-4.6	2.4	3.6
	On his numbers this is the outstanding Grando son on the sale. Use him this year on a smallish group of larger, older cows. Use him maximally on those cows thereafter.																									
The EBVs in this table are from the Mid June 2019 Angus Australia BREEDPLAN analysis			Top 1%	157	135	182	145	5.0	4.5	-9.7	0.4	61	109	146	140	26	-8.9	3.8	31	-0.48	85	11.0	3.1	3.2	2.6	4.0
			Top 5%	145	128	165	135	3.9	3.5	-7.8	1.7	56	100	133	124	22	-7.6	3.1	24	-0.30	77	9.0	2.0	2.1	1.9	3.3
			Top 20%	131	119	143	124	2.4	2.2	-5.8	3.0	51	91	120	106	19	-6.0	2.4	14	-0.07	69	7.0	1.0	0.9	1.2	2.5
			Top 50%	115	109	120	113	0.4	0.5	-4.0	4.3	45	81	106	91	15	-4.3	1.8	4	0.18	60	5.1	0.0	-0.2	0.5	1.7

Lot	Ident	Sire ID	Dam ID	$ Index				Calv Ease		Birth		Growth				Fertility			Other			Carcase			
				ABI	DOM	GRN	GRS	Dir	Dtrs	GL	BWT	200	400	600	MCW	Milk	DTC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
27	NURP180	NURG20	NURK31	160	134	195	143	-3.9	-0.7	-4.0	8.5	65	111	153	146	12	-4.4	2.5	2	-0.08	99	9.3	-3.6	-5.1	2.9	3.1
	Only a handful of bulls in the Angus breed have higher marbling and meat yield than this bull. Your customers (the processors) are always right - meet their demands.																								
28	NURP4	WWEL115	NURH99	171	144	198	155	2.6	2.8	-5.7	4.2	55	98	129	90	21	-8.2	3.5	-10	0.80	75	10.5	-1.3	-1.4	1.5	3.2
	Calving ease in the top 20% of the breed. An outcross to the preceding bulls (with a little less growth) but still retaining the rare combination of meat quality and yield that we are striving for.																								
29	NURP44	NURL152	NURG34	156	131	178	145	-4.6	1.5	-2.9	8.8	66	117	158	152	17	-4.8	3.9	-10	-0.04	93	10.1	-0.9	-1.3	1.8	2.3
	From birth P44 was visually the most outstanding calf of his drop. His father was one of the most heavily muscled bulls we have bred.																								
30	NURP56	DBLL292	NURJ105	150	132	170	139	-0.7	1.4	-4.7	4.7	60	104	135	114	23	-6.0	3.3	20	0.25	83	9.1	-1.0	-2.0	1.5	2.7
	Another outstanding combination of carcase quality and growth but with moderate calving ease and birthweight. The mother is a Grando (NURG20) daughter.																								
31	NURP184	USA17354145	NURJ105	143	127	165	132	0.1	0.9	-3.3	4.1	53	94	119	83	23	-5.4	1.5	15	0.48	77	10.0	-0.3	-1.4	0.4	3.6
	Top 20% of the breed on all indices plus EMA and IMF% EBVs. Better than average birthweight and growth. Goes back to Grando through his daughter J105.																								
32	DOJP116	USA16295688	DOJK31	145	135	164	135	3.0	3.7	-1.6	4.1	59	103	123	105	19	-6.2	2.2	11	-0.04	72	5.7	-0.7	-0.6	0.1	3.2
	G A R Prophet always breeds well. This son of his, bred at Highrent, has all indices and IMF% EBV in the top 10% of the breed. Top 5% calving ease.																								
33	DOJP145	NURM208	DOJL37	150	139	168	141	1.9	2.1	-5.7	6.4	59	107	133	125	14	-4.8	2.1	-10	-0.10	85	8.7	-2.3	-1.8	1.9	2.2
	Another very high growth bull bred in one of the districts leading commercial herds from a Kilburnie bred son of Pathfinder Genesis.																								
34	NURP36	NORK522	NURJ43	142	126	163	130	2.6	2.4	-8.6	2.9	51	92	117	116	17	-6.8	3.1	12	0.50	78	5.5	1.3	0.3	0.1	3.2
	A high marbling bull with exceptional growth and ready to use over your heifers. Improve the meat quality in your animals without taking any risks on calving ease.																								
35	NURP86	NURM204	NURL113	131	112	157	118	-1.6	0.6	-5.0	1.2	50	91	121	103	25	-5.6	1.9	5	0.53	77	4.0	-0.3	-1.4	-0.9	4.2
	A very high EBV for IMF%. Put a lot of marbling into your animals without risking birth weight or growth.																								
36	NURP164	NURM112	NURM183	145	120	165	135	2.8	2.7	-7.4	2.3	53	94	134	114	22	-5.7	1.8	11	0.14	77	3.7	0.0	-0.2	-0.5	3.1
	In the top 20% marbling, growth and calving ease. M112 is one of the safest grandsons of G20 that we have bred.																								
37	NURP16	NURL152	NURG81	148	126	166	143	-1.3	0.5	-5.6	5.1	63	114	161	144	21	-1.2	2.1	17	-0.18	98	8.0	-2.6	-2.1	1.4	2.3
	L152 was one of the most heavily muscled bulls that we have bred. His mother is one of our outstanding donor cows. A growth bull with good carcase EBVs.																								
38	DOJP100	NURL152	DOJK131	134	121	144	130	-0.3	2.7	-7.0	5.0	56	98	131	110	15	-4.4	3.0	-12	0.21	78	3.8	-0.4	0.0	0.7	2.0
	Less birthweight than the preceding bull, in the top 20% growth with a moderate mature weight.																								
39	NURP66	NURL152	NURM171	144	123	158	135	0.3	2.1	-4.9	3.0	51	88	116	84	19	-8.2	2.5	-10	0.40	74	6.2	0.9	2.3	-0.5	3.0
	A low birth weight bull with a high IMF% EBV. He should raise the marbling in the steers that you produce and hopefully produce premiums for you in the future.																								
40	NURP32	NURM204	NURM17	146	135	162	138	-0.7	1.9	-3.8	4.1	57	97	120	83	21	-5.5	2.8	3	0.56	79	11.1	-1.7	-1.1	1.7	2.8
	Top 20% marbling and yield. Moderate birth weight, high growth and low mature weight. These come from the maternal grandfather Bartel E7.																								
41	NURP50	NURM204	NURM175	159	121	196	139	-5.5	0.1	-3.7	6.9	60	109	153	132	23	-8.1	2.9	-4	0.92	92	5.3	-0.1	-0.9	-0.7	4.2
	IMF%, carcase weight and growth are all in the top 1% of the breed. Use on cows. Breeding high IMF% into your herd could lead to premiums in the long run.																								
42	NURP20	USA16350631	NURM5	150	128	173	139	3.1	2.1	-6.6	2.9	58	111	149	139	28	-5.3	2.6	-3	-0.03	79	1.5	-2.2	-1.5	0.2	2.8
	These Twinhearts sons are an opportunity to buy into low birth weight, high growth rate genetics. This bull has top 20% IMF% and above average days to calving (fertility) EBVs.																								
43	NURP40	NURL152	NURM171	155	132	177	144	0.6	2.3	-5.5	4.1	59	102	136	111	19	-6.6	2.6	-10	0.16	83	6.7	-1.0	-0.2	0.3	3.1
	Lots 43 and 44 are flush brothers from a very good Bartel E7 daughter. Marbling comes from E7, muscling from the father. Moderate birth weight and high growth.																								
44	NURP38	NURL152	NURM171	153	129	174	142	0.3	2.1	-5.3	4.2	57	99	133	108	19	-6.6	2.5	-10	0.18	81	6.7	-0.9	-0.1	0.3	3.1
	Top 5% all indices, moderate birth weight, high growth rates and IMF%. If you have well grown heifers these bulls could be used safely on them.																								
45	NURP46	NURL52	NURM9	148	122	169	134	-2.6	0.0	-4.3	6.8	59	102	132	116	16	-11.5	2.6	27	0.56	75	4.0	1.8	0.3	-0.6	2.7
	High IMF% and growth. Note that the very high fertility EBV of -11.4 is in the top 1% of the breed. We run cows on hard country so that the lowly fertile ones cull themselves.																								
46	NURP72	DBLL292	NURJ105	158	123	195	137	-2.4	0.8	-3.8	6.1	60	103	140	126	18	-9.8	3.2	-1	0.70	73	2.1	0.6	0.1	-1.3	4.4
	Topbos Leading Edge is a very high quality Prophet son. Mating him to our soundest El Grando daughter has produced this bull with high IMF% and high growth EBVs.																								
The EBVs in this table are from the Mid June 2019 Angus Australia BREEDPLAN analysis			Top 1%	157	135	182	145	5.0	4.5	-9.7	0.4	61	109	146	140	26	-8.9	3.8	31	-0.48	85	11.0	3.1	3.2	2.6	4.0
			Top 5%	145	128	165	135	3.9	3.5	-7.8	1.7	56	100	133	124	22	-7.6	3.1	24	-0.30	77	9.0	2.0	2.1	1.9	3.3
			Top 20%	131	119	143	124	2.4	2.2	-5.8	3.0	51	91	120	106	19	-6.0	2.4	14	-0.07	69	7.0	1.0	0.9	1.2	2.5
			Top 50%	115	109	120	113	0.4	0.5	-4.0	4.3	45	81	106	91	15	-4.3	1.8	4	0.18	60	5.1	0.0	-0.2	0.5	1.7

Lot	Ident	Sire ID	Dam ID	$ Index				Calv Ease		Birth		Growth			Fertility			Other			Carcase			
				ABI	DOM	GRN	GRS	Dir	Dtrs	GL	BWT	200	400	600	MCW	Milk	DTC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
47	NURP96	VTML107	NURM33	152	129	164	143	2.6	2.6	-8.3	2.7	55	94	123	91	25	-8.8	2.5	17	0.39	71	6.5	2.0	2.8	-0.5	2.8
	Top 20% birth weight, growth and IMF%. Use with confidence over your heifers and improve the meat quality in your herd.																									
48	NURP60	NURM204	NURK45	162	135	198	143	-1.0	1.2	-6.9	4.0	53	100	131	116	17	-7.9	2.4	-17	0.98	80	8.7	-1.4	-2.6	1.2	3.7
	A high performance animal with a very well balanced set of EBVs. A flush brother to lot 53. The sort of genetic package that we are proud to produce and offer for sale today.																									
49	NURP70	NURM204	NURK45	151	130	174	135	-0.1	1.5	-4.3	2.4	49	88	109	91	22	-10.9	2.5	-9	0.79	70	8.7	0.3	-0.3	0.6	3.2
	Low birth weight flush brother to lot 52. Fertility is one of the most important determinants of profitability and this bull has a fertility EBV in the top 1% of the breed.																									
50	NURP2	NURM204	NURH51	155	134	190	138	0.3	1.6	-7.3	4.3	53	97	127	115	21	-4.3	4.7	3	0.44	69	10.0	-1.8	-2.5	1.5	4.2
	This bull has a red gene. Very high IMF% and meat yield. Moderate birth weight. Adequate growth in the top 20% of the breed.																									
51	NURP18	NURM204	NURG49	141	127	162	128	-1.0	0.9	-4.2	3.8	51	89	106	75	21	-10.0	2.0	21	0.43	68	7.6	0.0	-0.5	0.2	3.3
	Low birth weight. An attractive mix of growth, fertility and marbling.																									
52	NURP24	NURM112	NURK95	129	116	140	125	0.3	1.0	-4.6	4.8	53	97	134	113	17	-3.5	2.2	32	0.24	71	3.5	-2.0	-2.2	1.0	1.8
	This bull has good growth and carcase EBVs. The progeny of M112 have in general been very docile animals.																									
53	NURP26	VTML839	NURH107	160	127	194	141	1.0	1.0	-3.7	5.5	54	100	138	149	18	-8.6	3.2	0	0.47	77	5.9	-1.1	-0.4	0.0	3.5
	High IMF% and growth and reasonable birth weight. The high fertility EBV traces back to the mother who is a rising seven year old cow due to calve to V A R Legend in six week time. Lot 8 is H107's calf from 2017.																									
54	NURP190	NURG20	NURK31	153	132	182	138	-3.8	-0.7	-4.4	6.2	56	101	135	117	17	-4.9	1.0	12	-0.39	82	9.7	-3.5	-4.3	3.2	2.9
	In evaluating these Grando sons note that they are lean but not lowly fertile. The Days to Calving EBVs suggest the daughters will have better than average fertility for Angus cattle.																									
55	NURP188	USA16956101	NURJ105	137	114	165	120	-1.5	1.7	-3.0	3.3	46	84	109	84	22	-8.6	2.7	-2	1.10	69	3.4	1.5	1.0	-1.6	4.5
	This son of Proceed will lift the marbling in your herd. He should be safe over your heifers and your first calvers for many years as he should not grow into a big bull.																									
56	NURP102	VTML228	NURL95	133	121	149	122	3.0	2.9	-0.5	2.0	41	75	97	76	17	-8.2	2.1	1	0.08	52	7.1	-1.4	-2.3	1.4	2.4
	Low birth weight. You can start on the path to high marbling and high yielding Angus cattle very safely with this bull.																									
57	NURP112	VTML228	NURL119	146	134	164	137	3.1	2.8	-3.5	2.8	51	90	119	83	24	-5.2	3.8	9	0.32	77	10.0	-4.0	-4.8	3.2	2.2
	Another low birth weight bull to lead you safely into the world of superior carcase quality and performance.																									
58	NURP98	NURM170	NURM11	145	133	164	136	3.8	2.6	-5.7	3.3	54	100	125	99	20	-4.4	0.7	1	0.13	77	6.6	-2.2	-1.4	0.8	3.0
	Low birth weight and high marbling are features of this grandson of Ayrvale Bartel. Growth is another strong feature.																									
59	NURP116	NURM170	NURM93	156	134	179	143	5.3	4.6	-2.5	3.1	54	100	127	111	20	-7.6	3.6	8	0.80	84	8.3	1.0	0.7	-0.6	3.4
	Another low birth weight bull with exceptional marbling. He too is grandson of Ayrvale Bartel.																									
60	NURP120	NURM204	NURL151	152	133	184	137	-1.1	1.8	-5.2	5.8	60	104	135	114	17	-4.6	2.2	11	0.19	77	7.0	-3.0	-3.3	1.3	3.8
	Top 5% all indices. Marbling in the top 5%, carcase weight and yield in the top 20%. With a moderate birth weight EBV this bull will make a valuable contribution to your breeding programme.																									
61	NURP174	NURM198	NURK25	127	109	138	120	2.9	3.1	-7.2	3.0	48	80	113	95	22	-7.5	2.0	12	0.40	67	2.5	0.3	0.1	-0.5	2.5
	Low birth weight and above average growth. IMF in the top 20% of the breed. A suitable bull to end this unique catalogue.																									
The EBVs in this table are from the Mid June 2019 Angus Australia BREEDPLAN analysis			Top 1%	157	135	182	145	5.0	4.5	-9.7	0.4	61	109	146	140	26	-8.9	3.8	31	-0.48	85	11.0	3.1	3.2	2.6	4.0
			Top 5%	145	128	165	135	3.9	3.5	-7.8	1.7	56	100	133	124	22	-7.6	3.1	24	-0.30	77	9.0	2.0	2.1	1.9	3.3
			Top 20%	131	119	143	124	2.4	2.2	-5.8	3.0	51	91	120	106	19	-6.0	2.4	14	-0.07	69	7.0	1.0	0.9	1.2	2.5
			Top 50%	115	109	120	113	0.4	0.5	-4.0	4.3	45	81	106	91	15	-4.3	1.8	4	0.18	60	5.1	0.0	-0.2	0.5	1.7
Kilburnie 2019 Sale Bull Average EBVs				148	128	171	136	0.4	1.7	-4.9	4.4	55	98	129	108	19	-6.3	2.5	5	0.35	77	7.4	-1.0	-1.5	0.9	3.0

KILBURNIE ANGUS

67 HIGH INDEXING ANGUS BULLS

Currently 25 EBVs and 4 $indices are available for recorded Australian Angus animals. Each EBV also has an associated accuracy. In some situations you may need all of this information to make your decisions about animals. In general we do not think all the data is always necessary.

I work with the EBVs a lot. I have some ideas of whether a CED is more important than a BWT, and whether a CED of 4.7 is good or bad. Many of the people I talk to are not quite so sure.

In this short form catalogue we show you what we think is some of the most important information about the bulls. The table below gives you a bull's lot number, his father and maternal grandfather, selected EBVs without accuracies and our comments on the bull.

The indices are the most important information that you can get about an animal. They are an attempt to put all the EBV information into $ terms. The EBVs shown are those that have the most impact on the value of the indices. I understand things reasonably easily when they are in dollars.

LOT 1 MURRAY SURE FIRE N44^{PV} IDENT: NURN44 GRADE: HBR BORN: 3/08/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

CONNEALY IN SURE 8524

SIRE: G A R SURE FIRE

CHAIR ROCK 5050 G A R 8086

TE MANIA EMPEROR E343

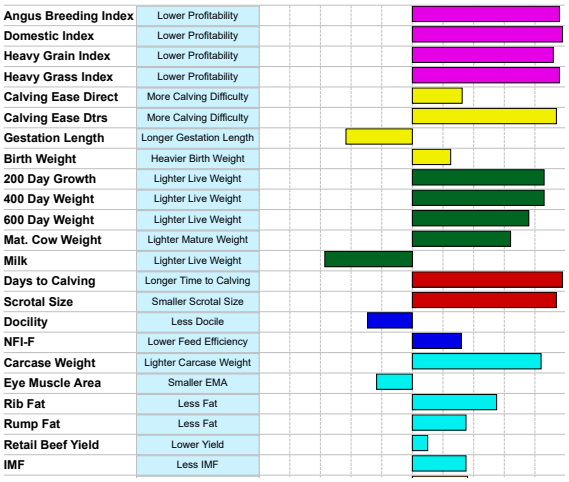
DAM: MURRAY EMPEROR L85

MURRAY YW129 Z49

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$151	Domestic Index +$133	Heavy Grain Index +$166	Heavy Grass Index +$142
Percentile	2	2	4	2

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+1.5	+4.0	-2.8	+3.9	+55	+98	+126	+108	+13
Acc	61%	50%	84%	74%	72%	70%	71%	68%	63%
Percentile	33	2	72	40	7	7	11	18	71

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-9.1	+3.4	+0	-0.35	+75	+4.4	+0.8	+0.4	+0.6	+2.0
44%	73%	58%	59%	64%	63%	65%	63%	59%	62%
1	3	64	4	8	62	25	33	45	35



Traits observed: GL,CE,BWT,200WT(x2),400WT(x2),600WT,SC,Scan(EMA,Rib,Rump,IMF),DOC,Genomics(CE,S-Step)

Notes: Below average birth weight and top 20% growth. Short days to calving is well worth breeding into your cow herd. We used this bull in our 2018 joining. Highly recommended

Purchaser ..... $.....

LOT 2 MURRAY MOMENTUM N12^{PV} IDENT: NURN12 GRADE: HBR BORN: 27/07/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

G A R PROGRESS

SIRE: G A R MOMENTUM

G A R BIG EYE 1770

BALDRIDGE DOWNLOAD Z013

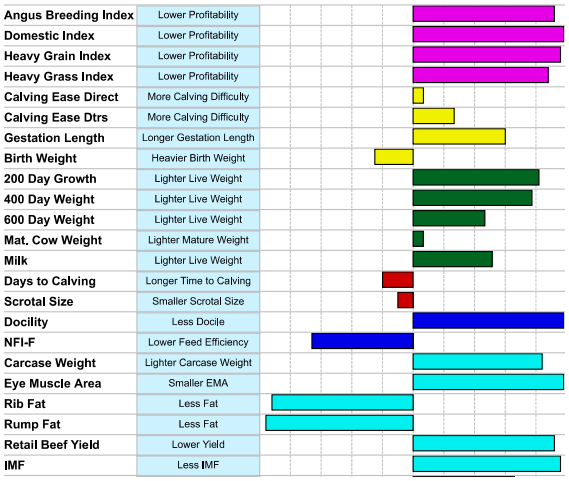
DAM: MURRAY DOWNLOAD L1

MURRAY AMBUSH 28 G34

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$148	Domestic Index +$137	Heavy Grain Index +$176	Heavy Grass Index +$134
Percentile	3	1	2	6

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+0.7	+1.3	-5.7	+4.8	+54	+95	+116	+93	+18
Acc	61%	48%	72%	74%	72%	71%	72%	68%	63%
Percentile	45	35	21	62	9	11	27	45	24

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-3.7	+1.7	+43	+0.42	+75	+11.2	-2.2	-3.3	+2.1	+3.8
41%	73%	57%	54%	64%	64%	66%	63%	59%	63%
62	55	1	84	8	1	97	98	3	2



Traits observed: BWT,200WT(x2),400WT(x2),600WT,SC,Scan(EMA,Rib,Rump,IMF),DOC,Genomics(CE,S-Step)

Notes: A truly exceptional combination of IMF% and Retail Beef Yield. Calving ease is better than breed average. Docility is extreme. Highly recommended.

Purchaser ..... $.....

LOT 3 MURRAY LOTTO N20PV — IDENT: NURN20 — GRADE: HBR — BORN: 29/07/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

AYRVALE GENERAL G18

SIRE: ESSLEMONT LOTTO L3

ESSLEMONT JENNY J8

MURRAY EL GRANDO G20

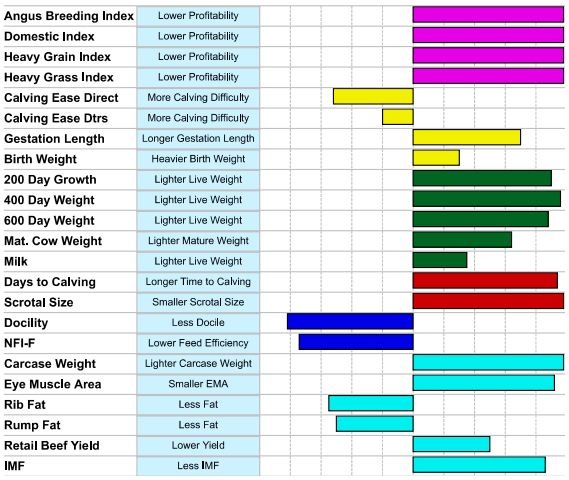
DAM: MURRAY GRANDO J81

MURRAY INFINITY F6

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$158	Domestic Index +$138	Heavy Grain Index +$184	Heavy Grass Index +$143
Percentile	1	1	1	1

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-1.5	-0.1	-6.3	+3.7	+56	+105	+130	+106	+16
Acc	*60%*	*41%*	*84%*	*74%*	*73%*	*71%*	*72%*	*65%*	*58%*
Percentile	77	63	15	35	5	2	7	21	42

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-7.8	+4.0	-11	+0.24	+90	+8.8	-1.2	-1.3	+1.1	+3.2
42%	*73%*	*60%*	*59%*	*63%*	*63%*	*65%*	*62%*	*58%*	*62%*
4	1	92	63	1	6	85	80	23	7



Traits observed: *GL,CE,BWT,200WT(x2),400WT(x2),600WT,SC,Scan(EMA,Rib,Rump,IMF),DOC,Genomics(CE,S-Step)*

Notes: A low birth weight bull with the right combination of IMF% and EMA. Top 1% all four indices. One of the highest performance bulls in the Angus breed. Take the opportunity to grade up now.

Purchaser ..... $.....

LOT 4 MURRAY MOMENTUM N66PV — IDENT: NURN66 — GRADE: HBR — BORN: 17/08/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

G A R PROGRESS

SIRE: G A R MOMENTUM

G A R BIG EYE 1770

GARDENS WAVE

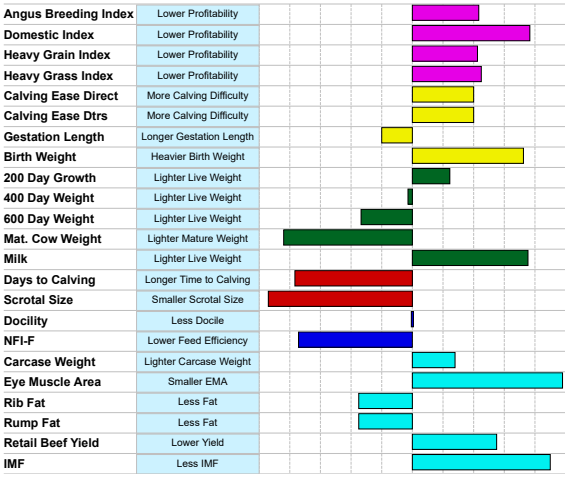
DAM: MURRAY WAVE J43

TE MANIA QUEANBEYAN D113

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$124	Domestic Index +$122	Heavy Grain Index +$134	Heavy Grass Index +$120
Percentile	32	13	30	30

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+1.8	+1.7	-3.8	+2.6	+47	+81	+98	+64	+20
Acc	*63%*	*50%*	*73%*	*75%*	*73%*	*71%*	*72%*	*69%*	*64%*
Percentile	28	28	53	14	38	51	69	92	12

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-1.7	+0.3	+4	+0.51	+64	+12.1	-0.3	-0.7	+1.0	+3.3
43%	*74%*	*61%*	*54%*	*65%*	*64%*	*66%*	*63%*	*60%*	*63%*
88	97	50	90	36	1	60	65	25	5



Traits observed: *BWT,200WT(x2),400WT(x2),600WT,SC,Scan(EMA,Rib,Rump,IMF),DOC,Genomics(CE,S-Step)*

Notes: Another Momentum son with extreme carcase merit. The mother is one of the soundest cows we have bred. We sold her to The Rock Angus, Wagga Wagga.

Purchaser ..... $.....

LOT 5 MURRAY M GRANDO J136 N72PV — IDENT: NURN72 — GRADE: HBR — BORN: 19/08/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

MURRAY EL GRANDO G20

SIRE: MURRAY GRANDO J136

MURRAY PREDESTINED F22

MURRAY INCENTIVE H130

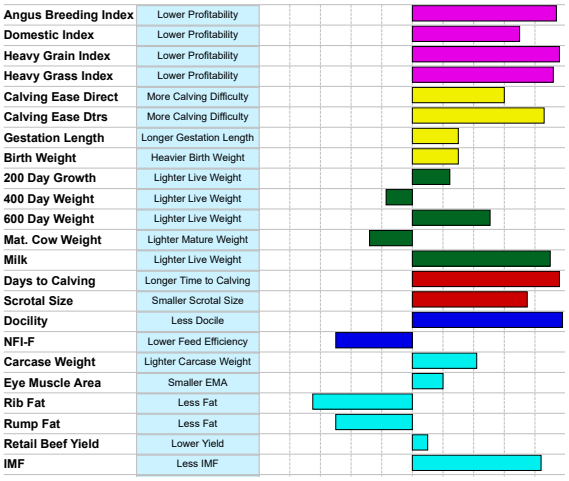
DAM: MURRAY H130 K25

MURRAY BLACK LABEL G49

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$149	Domestic Index +$122	Heavy Grain Index +$173	Heavy Grass Index +$135
Percentile	3	13	2	5

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+2.4	+3.1	-4.9	+3.8	+47	+79	+115	+83	+22
Acc	*55%*	*38%*	*71%*	*74%*	*70%*	*69%*	*72%*	*66%*	*57%*
Percentile	20	8	33	37	38	59	29	66	5

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-8.4	+2.7	+32	+0.40	+65	+5.6	-1.1	-1.0	+0.6	+3.2
44%	*71%*	*57%*	*56%*	*64%*	*63%*	*66%*	*63%*	*61%*	*62%*
2	13	1	82	33	40	83	73	45	7



Traits observed: *CE,BWT,200WT(x2),400WT(x2),600WT,SC,Scan(EMA,IMF),DOC,Genomics(CE,S-Step)*

Notes: A low birthweight calving ease grandson of El Grando with good carcase figures. Docility is remarkable.

Purchaser ..... $.....

LOT 6 MURRAY M GRANDO N90[SV] IDENT: NURN90 GRADE: APR BORN: 26/08/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

MURRAY EL GRANDO G20

SIRE: MURRAY GRANDO J136

MURRAY PREDESTINED F22

TE MANIA DEEGAN D309

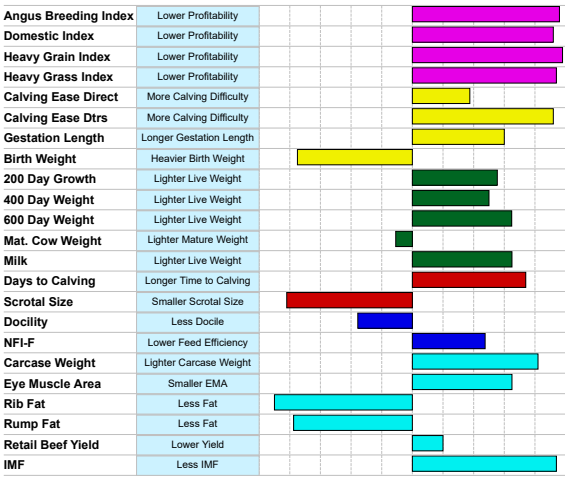
DAM: MURRAY DEEGAN H261

MURRAY ROCKND X373

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$151	Domestic Index +$129	Heavy Grain Index +$178	Heavy Grass Index +$137
Percentile	2	4	2	4

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+1.6	+3.5	-5.8	+6.2	+50	+89	+120	+89	+19
Acc	*56%*	*40%*	*84%*	*71%*	*71%*	*69%*	*70%*	*67%*	*58%*
Percentile	31	5	20	89	22	25	19	53	18

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-6.5	+0.8	-1	-0.06	+74	+7.3	-2.1	-1.9	+0.8	+3.4
46%	*66%*	*56%*	*58%*	*65%*	*64%*	*67%*	*64%*	*62%*	*63%*
13	90	68	24	9	16	96	90	35	4



Traits observed: *GL,CE,BWT,200WT(x2),400WT(x2),600WT,SC,Scan(EMA,Rib,Rump,IMF),DOC,Genomics(CE,S-Step)*

Notes: High marbling, growth and carcase weight. With better than breed average calving ease this bull will make a valuable contribution to most commercial herds.

Purchaser ..... $ .....

We want to put growth, marbling and meat yield into the bulls that we are producing.

These attributes are often thought to be in conflict with (or antagonistic to) other important attributes. Growth is in conflict with birthweight, calving ease and small mature size. Marbling, fat and fertility are often believed to be positively related to body fat and in conflict with meat yield.

You need to look for the animals that break these links. Previously many of us have looked for high growth bulls with good calving ease and small mature cow size. Fewer of us have appreciated the need to find animals that break the links between marbling and meat yield.

We are now breeding animals that appear to do so.

LOT 7 MURRAY K118 N108[PV] IDENT: NURN108 GRADE: HBR BORN: 4/09/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

MURRAY AMBUSH 28 G24

SIRE: MURRAY G24 K118

MURRAY BERKLEY F7

PA POWER TOOL 9108

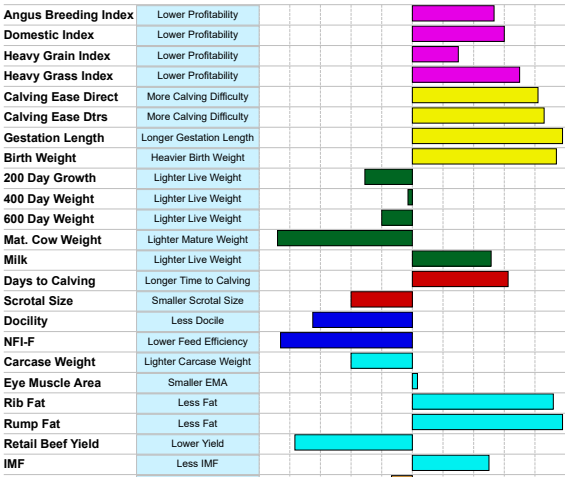
DAM: MURRAY POWER TOOL K59

MURRAY DEEGAN H57

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$129	Domestic Index +$119	Heavy Grain Index +$131	Heavy Grass Index +$127
Percentile	23	20	35	15

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+3.4	+3.2	-10.1	+1.1	+42	+81	+103	+63	+18
Acc	*55%*	*38%*	*71%*	*73%*	*69%*	*67%*	*69%*	*65%*	*57%*
Percentile	9	8	1	3	66	51	57	92	24

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-5.9	+1.5	-6	+0.43	+54	+5.2	+2.2	+3.1	-0.6	+2.3
43%	*70%*	*52%*	*51%*	*61%*	*59%*	*63%*	*60%*	*56%*	*59%*
20	65	83	85	70	48	4	1	88	25



Traits observed: *CE,BWT,200WT(x2),400WT(x2),600WT,SC,Scan(EMA,Rib,IMF),DOC,Genomics(CE,S-Step)*

Notes: His sire was a bull we used because of his structural soundness and low birth weight. This bull will be very safe and useful over your heifers.

Purchaser ..... $ .....

LOT 8 MURRAY M GRANDO J136 N124PV — IDENT: NURN124 — GRADE: HBR — BORN: 13/09/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

MURRAY EL GRANDO G20

SIRE: MURRAY GRANDO J136

MURRAY PREDESTINED F22

CIRCLE A INCENTIVE

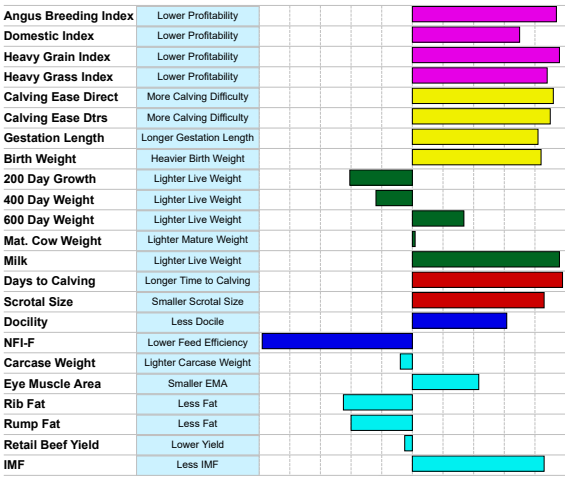
DAM: MURRAY INCENTIVE H107

MURRAY BERKLEY F11

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$149	Domestic Index +$121	Heavy Grain Index +$175	Heavy Grass Index +$134
Percentile	3	15	2	6

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+4.1	+3.5	-7.0	+2.1	+41	+78	+113	+91	+24
Acc	*56%*	*40%*	*72%*	*73%*	*71%*	*69%*	*70%*	*67%*	*59%*
Percentile	4	5	9	8	70	62	33	49	2

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-8.9	+3.0	+14	+0.86	+59	+6.4	-0.7	-0.9	+0.4	+3.2
45%	*65%*	*58%*	*57%*	*65%*	*63%*	*66%*	*63%*	*62%*	*62%*
1	7	19	99	54	28	73	70	53	7



Traits observed: *CE,BWT,200WT(x2),400WT(x2),600WT,DOC,Genomics(CE,S-Step)*

Notes: A calving ease bull with good muscling and marbling. Used over your heifers you will increase the IMF in your herd. The days to calving EBV is in the top 5% of the breed. H107 is also the mother of Lot 57.

Purchaser ..... $.....

LOT 9 MURRAY M EMPEROR N138PV — IDENT: NURN138 — GRADE: HBR — BORN: 3/10/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

TE MANIA EMPEROR E343

SIRE: MURRAY EMPEROR L52

MURRAY BLACK LABEL G49

MURRAY AFRICA J122

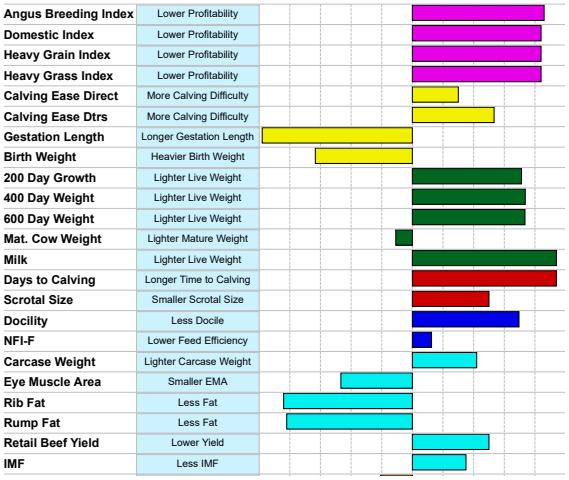
DAM: MURRAY M AFRICA L139

MURRAY TEN X J99

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$143	Domestic Index +$125	Heavy Grain Index +$160	Heavy Grass Index +$133
Percentile	6	8	7	7

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+1.2	+2.0	+0.9	+5.8	+52	+94	+125	+88	+23
Acc	*57%*	*40%*	*71%*	*72%*	*69%*	*67%*	*68%*	*65%*	*56%*
Percentile	37	23	98	83	14	13	12	56	3

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-8.1	+2.4	+16	+0.17	+66	+3.6	-1.6	-1.9	+0.9	+2.2
42%	*62%*	*53%*	*51%*	*60%*	*59%*	*62%*	*59%*	*55%*	*58%*
3	20	15	54	29	75	91	90	30	30



Traits observed: *CE,BWT,200WT(x2),400WT(x2),DOC,Genomics(CE,S-Step)*

Notes: Top 10% on all four indices. A herd improver with a very solid pedigree based on the best Te Mania bloodlines.

Purchaser ..... $.....

LOT 10 MURRAY M EMPEROR N122PV — IDENT: NURN122 — GRADE: HBR — BORN: 13/09/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

TE MANIA EMPEROR E343

SIRE: MURRAY EMPEROR L52

MURRAY BLACK LABEL G49

S S OBJECTIVE T510 0T26

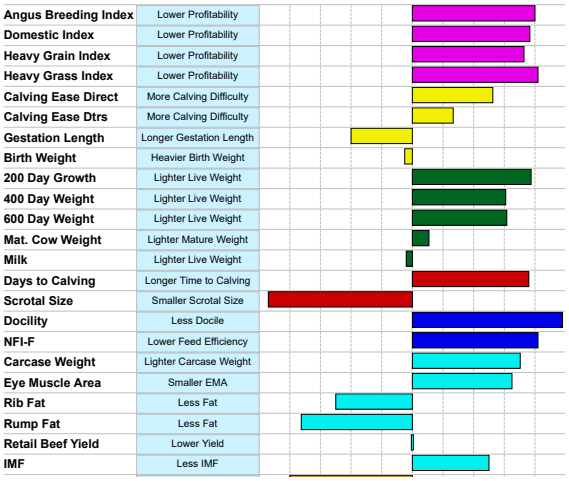
DAM: MURRAY OBJECTIVE G81

LAWSONS GAR NEW DESIGN 1407 A1173

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$137	Domestic Index +$123	Heavy Grain Index +$150	Heavy Grass Index +$130
Percentile	11	12	14	10

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+2.0	+1.2	-3.0	+4.4	+53	+91	+119	+92	+15
Acc	*61%*	*47%*	*73%*	*76%*	*72%*	*70%*	*73%*	*67%*	*61%*
Percentile	25	38	68	53	11	20	21	47	52

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-6.8	+0.3	+38	-0.32	+72	+7.1	-0.9	-1.7	+0.5	+2.3
46%	*66%*	*62%*	*54%*	*64%*	*62%*	*65%*	*63%*	*59%*	*61%*
10	97	1	5	13	19	78	87	50	25



Traits observed: *CE,BWT,200WT(x2),400WT(x2),600WT,DOC,Genomics(CE,S-Step)*

Notes: A combination of high growth and moderate calving ease and birth weight. The sort of good all round performance that will serve you well.

Purchaser ..... $.....

LOT 11 MURRAY M DOWNLOAD N106[PV] IDENT: NURN106 GRADE: HBR BORN: 3/09/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

BALDRIDGE DOWNLOAD Z013

SIRE: MURRAY DOWNLOAD L6

MURRAY AMBUSH 28 G34

PA POWER TOOL 9108

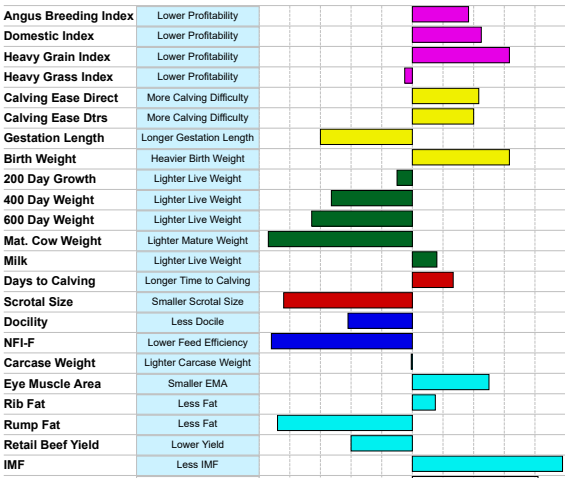
DAM: MURRAY POWER TOOL K81

MURRAY INCENTIVE H99

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$124	Domestic Index +$117	Heavy Grain Index +$146	Heavy Grass Index +$113
Percentile	32	25	18	48

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+1.8	+1.6	-2.5	+2.9	+44	+74	+90	+51	+17
Acc	*56%*	*37%*	*70%*	*74%*	*70%*	*68%*	*72%*	*65%*	*57%*
Percentile	28	30	77	18	55	74	83	97	33

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-5.0	+0.8	-2	+0.57	+60	+6.7	+0.1	-2.3	+0.1	+4.2
40%	*71%*	*54%*	*51%*	*61%*	*59%*	*63%*	*59%*	*55%*	*58%*
35	90	71	93	50	24	45	94	65	1



Traits observed: *CE,BWT,200WT(x2),400WT(x2),600WT,SC,Scan(EMA,Rib,Rump,IMF),DOC,Genomics(CE,S-Step)*

Notes: Exceptional marbling. We think you should be putting marbling into your herd and this animal will do so - starting with your heifers.

Purchaser ..... $ .....

LOT 12 MURRAY M DOWNLOAD N126[PV] IDENT: NURN126 GRADE: HBR BORN: 13/09/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

BALDRIDGE DOWNLOAD Z013

SIRE: MURRAY DOWNLOAD L6

MURRAY AMBUSH 28 G34

MURRAY INGENUITY J94

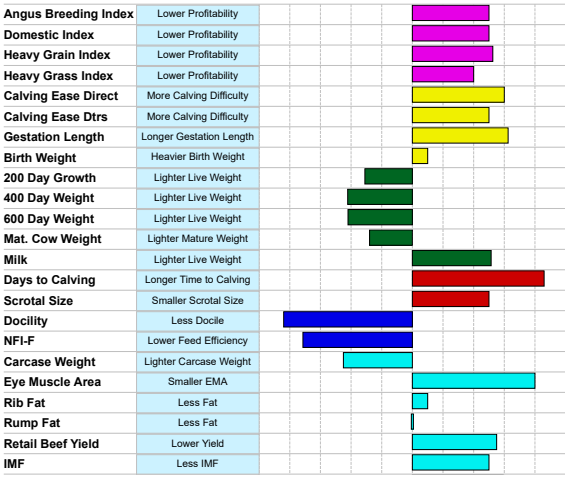
DAM: MURRAY M INGENUITY L99

MURRAY INCENTIVE H121

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$127	Domestic Index +$116	Heavy Grain Index +$138	Heavy Grass Index +$119
Percentile	27	28	26	33

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+2.4	+1.9	-5.8	+4.1	+42	+74	+97	+84	+18
Acc	*54%*	*35%*	*70%*	*71%*	*69%*	*66%*	*67%*	*62%*	*54%*
Percentile	20	25	20	45	66	74	71	64	24

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-7.2	+2.3	-10	+0.40	+53	+8.1	+0.0	-0.4	+1.2	+2.2
38%	*62%*	*49%*	*50%*	*60%*	*58%*	*61%*	*58%*	*54%*	*57%*
7	25	91	82	72	9	50	58	20	30



Traits observed: *CE,BWT,200WT(x2),400WT(x2),600WT,DOC,Genomics(CE,S-Step)*

Notes: A good carcase bull that will add calving ease to your herd.

Purchaser ..... $ .....

LOT 13 MURRAY M EMPEROR N128[SV] IDENT: NURN128 GRADE: HBR BORN: 15/09/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

TE MANIA EMPEROR E343

SIRE: MURRAY EMPEROR L52

MURRAY BLACK LABEL G49

C A FUTURE DIRECTION 5321

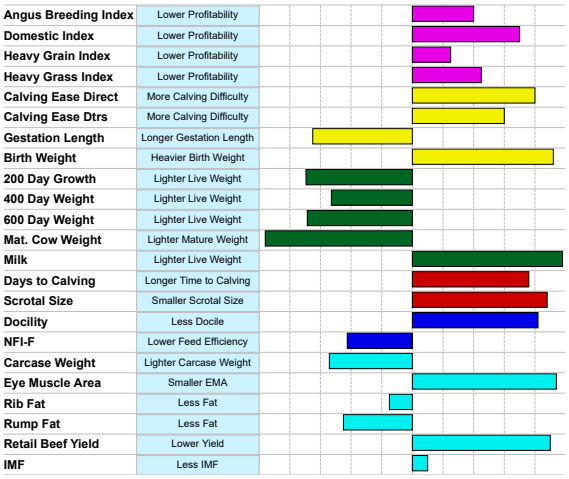
DAM: MURRAY DIRECTION X8

MURRAY V504

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$126	Domestic Index +$122	Heavy Grain Index +$130	Heavy Grass Index +$121
Percentile	28	13	36	28

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+3.2	+2.2	-2.1	+1.4	+37	+73	+89	+47	+24
Acc	*61%*	*46%*	*74%*	*75%*	*71%*	*69%*	*72%*	*66%*	*62%*
Percentile	11	20	83	4	85	76	84	98	2

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-6.8	+3.1	+20	+0.26	+51	+9.6	-0.2	-1.0	+1.9	+1.8
45%	*65%*	*58%*	*54%*	*63%*	*61%*	*64%*	*62%*	*58%*	*60%*
10	6	9	66	77	3	55	73	5	45



Traits observed: *CE,BWT,200WT(x2),400WT(x2),600WT,DOC,Genomics(CE,S-Step)*

Notes: N128 is the thirteenth natural calf of X8. He is eminently suited for use over your heifers - and their calves should be with you for a long time. Fertile and long lived.

Purchaser ..... $ .....

LOT 14 MURRAY M RED ENDORSE N148 (RED)PV IDENT: NURN148 GRADE: HBR BORN: 14/10/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

BROWN ENDORSEMENT W7671 (RED)

SIRE: MURRAY RED ENDORSEMENT L154 (RED)

MURRAY STATEMENT J19

STRATHEWEN RED DAIQUIRI H40 (RED)

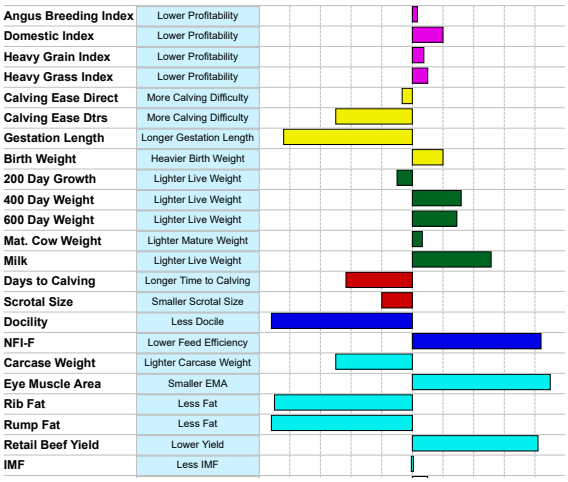
DAM: MURRAY RED DAQUIRI H40 K109 (RED)

MURRAY BLACK LABEL H149

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$116	Domestic Index +$112	Heavy Grain Index +$123	Heavy Grass Index +$114
Percentile	48	40	45	45

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
Angus	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+0.2	-0.9	-1.1	+3.9	+44	+86	+112	+93	+18
Acc	*49%*	*29%*	*67%*	*69%*	*66%*	*64%*	*68%*	*61%*	*51%*
Percentile	53	75	92	40	55	34	35	45	24

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-3.1	+1.6	-15	-0.25	+52	+9.0	-2.1	-2.6	+1.6	+1.7
32%	*55%*	*43%*	*46%*	*56%*	*54%*	*58%*	*55%*	*50%*	*53%*
72	60	96	8	75	5	96	96	10	50



Traits observed: *CE,BWT,200WT(x2),400WT(x2),600WT,DOC,Genomics(CE,S-Step)*

Notes: A red bull - with better than average black Angus EBVs. If you are running an Angus/Hereford herd you could stabilise the colour using this bull.

Purchaser ..... $.....

LOT 15 MURRAY LEGEND N86 (RED)PV IDENT: NURN86 GRADE: HBR BORN: 24/08/2017

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

BECKTON EPIC R397 K (RED)

SIRE: BROWN BLW LEGEND A1965 (RED)

HXC PATRICIA ROSE 102Y (RED)

TE MANIA DAIQUIRI D19

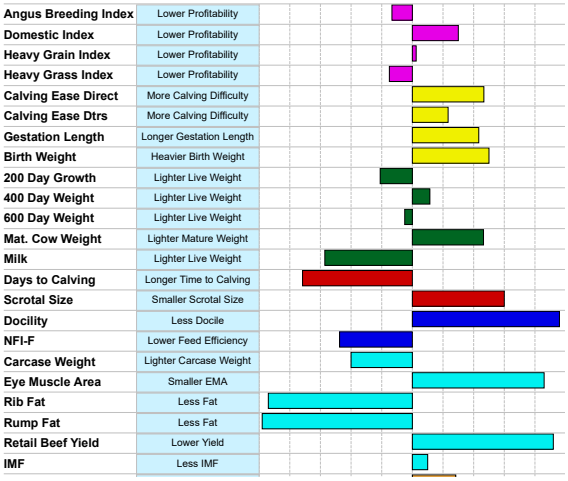
DAM: MURRAY RED DAIQUIRI H51 (RED)

STRATHEWEN YORKSHIRE DREAM C85

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$112	Domestic Index +$114	Heavy Grain Index +$121	Heavy Grass Index +$109
Percentile	57	35	48	60

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
Angus	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+1.9	+1.0	-5.1	+3.2	+43	+83	+105	+103	+13
Acc	*54%*	*36%*	*83%*	*73%*	*67%*	*66%*	*69%*	*64%*	*56%*
Percentile	27	42	30	25	61	45	53	25	71

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-2.0	+2.4	+28	+0.34	+54	+8.5	-2.2	-3.6	+2.0	+1.8
34%	*69%*	*47%*	*46%*	*58%*	*56%*	*58%*	*56%*	*51%*	*53%*
86	20	2	75	70	7	97	99	4	45



Traits observed: *GL,CE,BWT,200WT(x2),400WT(x2),600WT,SC,Scan(EMA,Rib,Rump,IMF),DOC,Genomics(CE,S-Step)*

Notes: The second red bull on offer. If you are running red cattle, including Herefords, these red bulls will give you Angus performance without changing the colour of your animals. You get black baldy vigour with red animals.

Purchaser ..... $.....

LOT 16 MURRAY GRANDO P168PV IDENT: NURP168 GRADE: HBR BORN: 11/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

HYLINE RIGHT TIME 338

SIRE: MURRAY EL GRANDO G20

TE MANIA QUEANBEYAN D113

TUWHARETOA REGENT D145

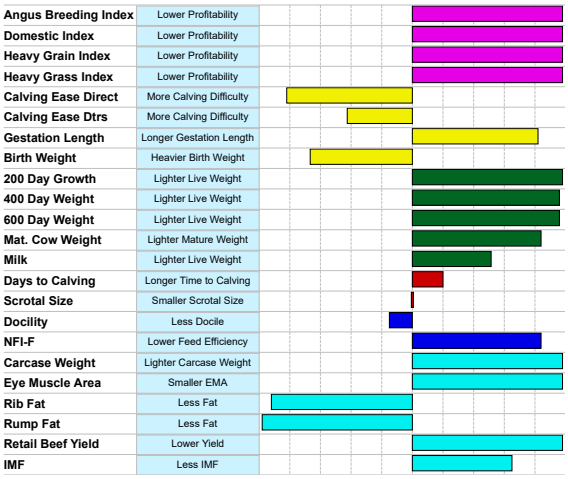
DAM: MURRAY REGENT K31

MURRAY TWINHEARTS H87

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$156	Domestic Index +$135	Heavy Grain Index +$181	Heavy Grass Index +$144
Percentile	1	1	1	1

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
Angus	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-3.4	-0.7	-7.0	+5.9	+61	+106	+142	+119	+18
Acc	*59%*	*48%*	*73%*	*72%*	*72%*	*70%*	*71%*	*69%*	*63%*
Percentile	91	73	9	85	1	2	2	7	24

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-4.8	+1.8	+2	-0.19	+94	+11.8	-2.1	-4.0	+3.1	+2.6
52%	*65%*	*60%*	*59%*	*66%*	*64%*	*67%*	*65%*	*61%*	*64%*
40	50	58	13	1	1	96	99	1	18



Traits observed: *BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: A very acceptable Grando son with moderate birth weight combined with outstanding growth and carcase EBVs.

Purchaser ..... $.....

The three bulls below are an interesting contrast. In their own way each of them has something unique to offer you.

The Twinhearts son, P48 lot 19 on the next page, is an outstanding combination of calving ease, growth and carcase weight. The Twinhearts son, P28 lot 18, is definitely a very special heifer bull with low calving ease, birthweight and growth. The Grando son, P166 lot 17 immediately below, has exceptional growth with RBY% and IMF% both in the top 5% of the breed.

It is unusual for animals to have high growth and low birthweight. It is also unusual for animals to have high IMF% and high retail beef yield. These traits are antagonistic.

LOT 17 MURRAY GRANDO P166[PV] IDENT: NURP166 GRADE: HBR BORN: 10/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

HYLINE RIGHT TIME 338

SIRE: MURRAY EL GRANDO G20

TE MANIA QUEANBEYAN D113

H P C A PROCEED

DAM: MURRAY PROCEED M3

MURRAY WAVE J43

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$171	Domestic Index +$145	Heavy Grain Index +$208	Heavy Grass Index +$154
Percentile	1	1	1	1

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-2.1	+2.2	-5.3	+6.8	+65	+111	+150	+131	+14
Acc	*59%*	*46%*	*73%*	*73%*	*73%*	*71%*	*71%*	*68%*	*64%*
Percentile	83	20	27	94	1	1	1	2	61

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-4.1	+3.4	+7	+0.02	+91	+11.2	-4.2	-5.3	+3.4	+3.4
49%	*67%*	*60%*	*59%*	*67%*	*65%*	*68%*	*65%*	*62%*	*65%*
53	3	39	34	1	1	99	99	1	4

Traits observed: *BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: This is a very serious carcase and growth bull. Depite being a yearling bull he is physically big enough to use over young cows.

Purchaser ..... $.....

LOT 18 MURRAY TWINHEARTS P28[PV] IDENT: NURP28 GRADE: HBR BORN: 27/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

S S OBJECTIVE T510 0T26

SIRE: G A R TWINHEARTS 8418

G A R YIELD GRADE 2015

PATHFINDER GENESIS G357

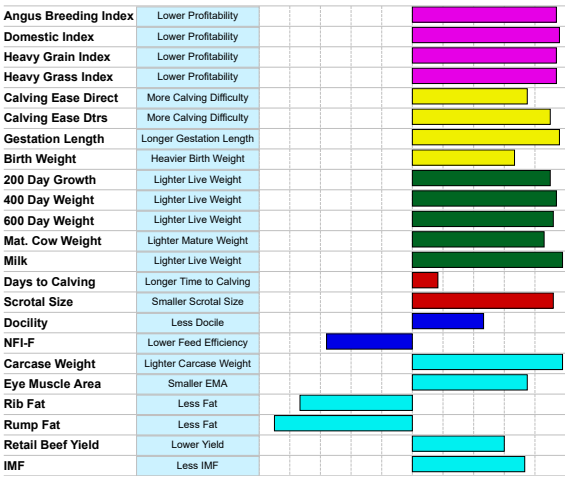
DAM: MURRAY GENESIS M1

MURRAY AMBUSH 28 G34

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$150	Domestic Index +$132	Heavy Grain Index +$172	Heavy Grass Index +$140
Percentile	3	2	3	2

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+3.0	+3.5	-9.2	+2.8	+56	+103	+137	+122	+26
Acc	*53%*	*46%*	*71%*	*73%*	*71%*	*69%*	*69%*	*66%*	*63%*
Percentile	13	5	2	17	5	3	3	6	1

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-4.6	+3.4	+11	+0.28	+87	+7.5	-1.3	-2.4	+1.2	+2.8
46%	*66%*	*60%*	*54%*	*64%*	*63%*	*65%*	*63%*	*59%*	*62%*
43	3	27	69	1	14	87	94	20	13



Traits observed: *BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: All indices in the top 5% of the breed. Top 20% or better for calving ease, growth, carcase weight, retail beef yield and marbling. A very well balanced high performance bull.

Purchaser ..... $.....

LOT 19 MURRAY TWINHEARTS P48[PV] IDENT: NURP48 GRADE: HBR BORN: 29/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

S S OBJECTIVE T510 0T26

SIRE: G A R TWINHEARTS 8418

G A R YIELD GRADE 2015

PATHFINDER GENESIS G357

DAM: MURRAY GENESIS M13

MURRAY POWER TOOL K81

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$167	Domestic Index +$140	Heavy Grain Index +$192	Heavy Grass Index +$156
Percentile	1	1	1	1

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+2.6	+2.4	-6.5	+5.6	+70	+122	+168	+156	+26
Acc	*52%*	*45%*	*71%*	*72%*	*70%*	*69%*	*69%*	*66%*	*63%*
Percentile	18	17	13	80	1	1	1	1	1

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-4.6	+2.3	+6	+0.28	+99	+7.3	-1.4	-2.5	+1.1	+2.6
46%	*66%*	*59%*	*54%*	*64%*	*63%*	*65%*	*63%*	*59%*	*62%*
43	25	43	69	1	16	88	95	23	18

Traits observed: *BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: G A R Twinhearts is the father of this and the next two bulls. Their common feature is calving ease, extreme growth and more than adequate carcase EBVs.

Purchaser ..... $.....

LOT 20 MURRAY TWINHEARTS P54[PV] IDENT: NURP54 GRADE: HBR BORN: 31/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

S S OBJECTIVE T510 0T26

SIRE: G A R TWINHEARTS 8418

G A R YIELD GRADE 2015

PATHFINDER GENESIS G357

DAM: MURRAY GENESIS M13

MURRAY POWER TOOL K81

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$173	Domestic Index +$144	Heavy Grain Index +$201	Heavy Grass Index +$161
Percentile	1	1	1	1

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+3.2	+2.7	-7.3	+5.5	+68	+120	+163	+142	+27
Acc	*52%*	*45%*	*71%*	*72%*	*71%*	*69%*	*70%*	*66%*	*63%*
Percentile	11	13	7	78	1	1	1	1	1

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-5.4	+2.1	-4	+0.29	+98	+9.5	-1.1	-2.6	+1.2	+2.9
46%	*67%*	*59%*	*55%*	*64%*	*63%*	*66%*	*63%*	*60%*	*63%*
28	35	77	70	1	3	83	96	20	12

Traits observed: *BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: It is possible to breed Angus steers that will finish off grass, at carcase weights above 300 kilograms, at under 21 months old. This bull will give the extra growth and marbling needed to do so.

Purchaser ..... $.....

LOT 21 MURRAY M204 P58[PV] IDENT: NURP58 GRADE: HBR BORN: 31/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

H P C A PROCEED

SIRE: MURRAY PROCEED M204

MURRAY WAVE J43

PATHFINDER GENESIS G357

DAM: MURRAY GENESIS M13

MURRAY POWER TOOL K81

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$169	Domestic Index +$139	Heavy Grain Index +$202	Heavy Grass Index +$153
Percentile	1	1	1	1

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-4.0	+0.3	-5.0	+7.0	+70	+121	+164	+151	+20
Acc	*45%*	*34%*	*72%*	*72%*	*71%*	*67%*	*68%*	*64%*	*58%*
Percentile	94	55	32	95	1	1	1	1	12

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-5.9	+3.8	+8	+0.66	+101	+11.1	-1.9	-3.8	+2.0	+3.1
39%	*63%*	*58%*	*52%*	*62%*	*59%*	*63%*	*59%*	*54%*	*58%*
20	1	36	96	1	1	95	99	4	8

Traits observed: *BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: M13, a daughter of Pathfinder Genesis, is the mother of this and the two previous bulls. These calves have a highly desirable combination of growth and carcase quality.

Purchaser ..... $.....

LOT 22 MURRAY M204 P74[PV] IDENT: NURP74 GRADE: HBR BORN: 5/08/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

H P C A PROCEED

SIRE: MURRAY PROCEED M204

MURRAY WAVE J43

EXAR EXPAND 1241

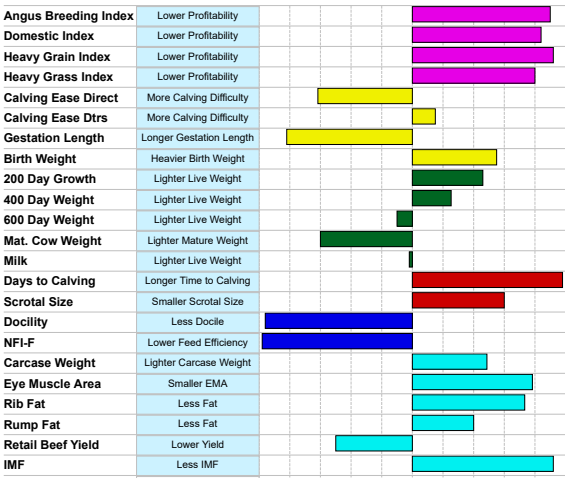
DAM: MURRAY EXPAND K45

MURRAY UPSHOT H37

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$145	Domestic Index +$126	Heavy Grain Index +$166	Heavy Grass Index +$130
Percentile	5	7	4	10

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-1.6	+0.9	-1.3	+3.0	+49	+85	+103	+73	+15
Acc	*47%*	*36%*	*73%*	*73%*	*71%*	*68%*	*68%*	*64%*	*58%*
Percentile	78	43	90	20	27	38	57	83	52

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-11.2	+2.4	-17	+0.98	+67	+7.9	+1.3	+0.5	-0.1	+3.4
41%	*63%*	*59%*	*51%*	*61%*	*58%*	*62%*	*58%*	*54%*	*57%*
1	20	98	99	26	11	13	30	75	4



Traits observed: *BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: A low birth weight bull with high values of IMF and EMA. Use him over your heifers to help you breed your replacement heifers. Days to calving (fertility) EBV in the top 1%.

Purchaser ..... $.....

LOT 23 MURRAY LEWINS P22[PV] IDENT: NURP22 GRADE: HBR BORN: 26/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

TE MANIA JENKINS J89

SIRE: TE MANIA LEWINS L839

TE MANIA MOONGARA H33

MURRAY THUNDERBIRD K30

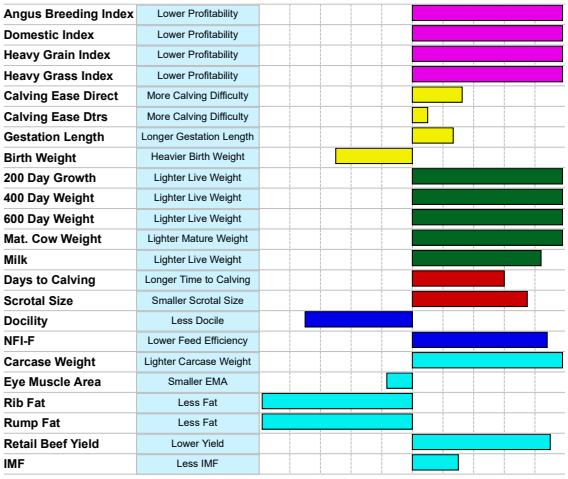
DAM: MURRAY M THUNDERBIRD M89

MURRAY REGENT K75

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$164	Domestic Index +$140	Heavy Grain Index +$189	Heavy Grass Index +$152
Percentile	1	1	1	1

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+1.4	+0.8	-4.7	+5.4	+70	+124	+167	+163	+21
Acc	*41%*	*33%*	*84%*	*71%*	*67%*	*65%*	*66%*	*63%*	*53%*
Percentile	34	45	37	77	1	1	1	1	8

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-5.9	+2.6	-7	-0.33	+97	+4.6	-3.8	-4.2	+1.8	+2.1
35%	*61%*	*46%*	*47%*	*57%*	*55%*	*59%*	*56%*	*51%*	*54%*
20	15	85	5	1	58	99	99	6	33



Traits observed: *GL,CE,BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: An exceptionally high indexing bull bred from Te Mania Lewins by Twinhearts. Above average calving ease and a moderate birth weight.

Purchaser ..... $.....

LOT 24 MURRAY GRANDO P165[PV] IDENT: NURP165 GRADE: HBR BORN: 10/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

HYLINE RIGHT TIME 338

SIRE: MURRAY EL GRANDO G20

TE MANIA QUEANBEYAN D113

TUWHARETOA REGENT D145

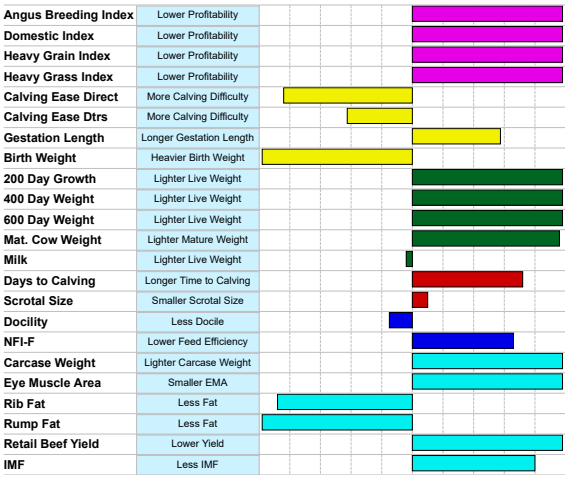
DAM: MURRAY REGENT K31

MURRAY TWINHEARTS H87

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$166	Domestic Index +$138	Heavy Grain Index +$201	Heavy Grass Index +$149
Percentile	1	1	1	1

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-3.6	-0.7	-5.6	+8.3	+63	+107	+147	+136	+15
Acc	*59%*	*48%*	*73%*	*72%*	*72%*	*70%*	*71%*	*69%*	*63%*
Percentile	92	73	23	99	1	1	1	2	52

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-6.4	+2.0	+2	-0.09	+98	+11.1	-1.9	-4.3	+3.2	+3.0
52%	*66%*	*60%*	*59%*	*66%*	*64%*	*68%*	*65%*	*61%*	*64%*
14	40	58	21	1	1	95	99	1	10



Traits observed: *BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: These next six bulls are part of an intentional exercise to produce very high growth Angus bulls with outstanding carcase attributes. The birth weights may look forbidding - calving ease is less so.

Purchaser ..... $.....

LOT 25 MURRAY M204 P62[PV] IDENT: NURP62 GRADE: HBR BORN: 1/08/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

H P C A PROCEED

SIRE: MURRAY PROCEED M204

MURRAY WAVE J43

PATHFINDER GENESIS G357

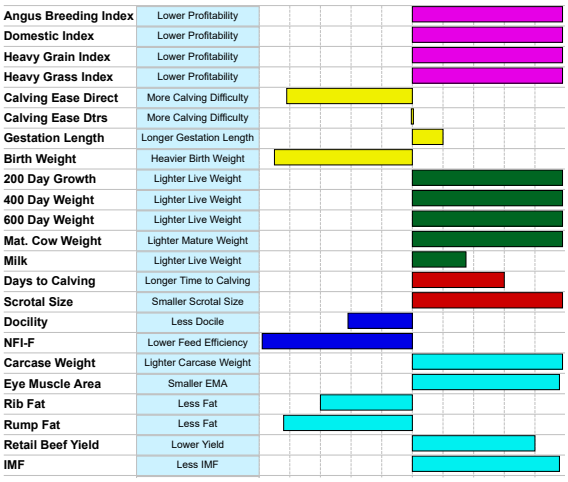
DAM: MURRAY GENESIS M13

MURRAY POWER TOOL K81

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$168	Domestic Index +$134	Heavy Grain Index +$205	Heavy Grass Index +$150
Percentile	1	1	1	1

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-3.5	+0.4	-4.6	+7.0	+62	+110	+153	+141	+18
Acc	*45%*	*34%*	*72%*	*72%*	*71%*	*68%*	*68%*	*64%*	*58%*
Percentile	91	53	38	95	1	1	1	1	24

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-5.8	+3.6	-2	+0.77	+94	+10.4	-1.1	-2.2	+1.5	+3.7
40%	*63%*	*58%*	*52%*	*62%*	*59%*	*63%*	*59%*	*55%*	*58%*
22	2	71	98	1	2	83	93	12	2



Traits observed: *BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: Another son of the outstanding growth rate M13 cow. This bull is a growth and carcase powerhouse.

Purchaser ..... $.....

LOT 26 MURRAY GRANDO P160[PV] IDENT: NURP160 GRADE: HBR BORN: 8/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

HYLINE RIGHT TIME 338

SIRE: MURRAY EL GRANDO G20

TE MANIA QUEANBEYAN D113

TUWHARETOA REGENT D145

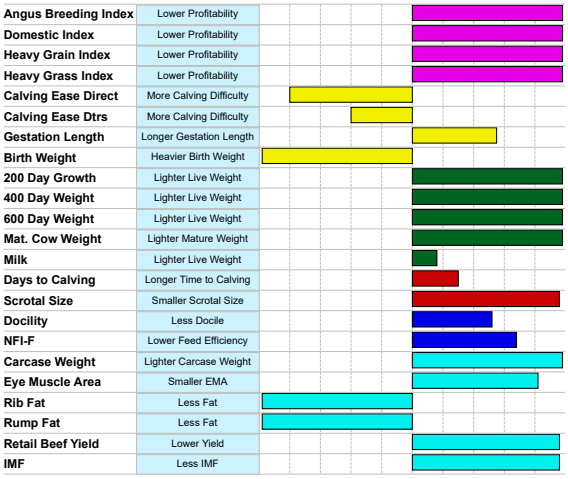
DAM: MURRAY REGENT K31

MURRAY TWINHEARTS H87

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$180	Domestic Index +$144	Heavy Grain Index +$224	Heavy Grass Index +$159
Percentile	1	1	1	1

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-3.3	-0.6	-5.4	+8.9	+72	+125	+174	+167	+15
Acc	*59%*	*48%*	*73%*	*72%*	*72%*	*70%*	*71%*	*69%*	*63%*
Percentile	90	71	25	99	1	1	1	1	52

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-5.1	+3.4	+12	-0.13	+111	+8.3	-4.0	-4.8	+2.5	+3.6
52%	*66%*	*60%*	*59%*	*66%*	*64%*	*67%*	*65%*	*61%*	*64%*
33	3	24	18	1	8	99	99	1	2



Traits observed: *BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: On his numbers this is the outstanding Grando son on the sale. Use him this year on a smallish group of larger, older cows. Use him maximally on those cows thereafter.

Purchaser ..... $.....

LOT 27 MURRAY GRANDO P180[PV] IDENT: NURP180 GRADE: HBR BORN: 15/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

HYLINE RIGHT TIME 338

SIRE: MURRAY EL GRANDO G20

TE MANIA QUEANBEYAN D113

TUWHARETOA REGENT D145

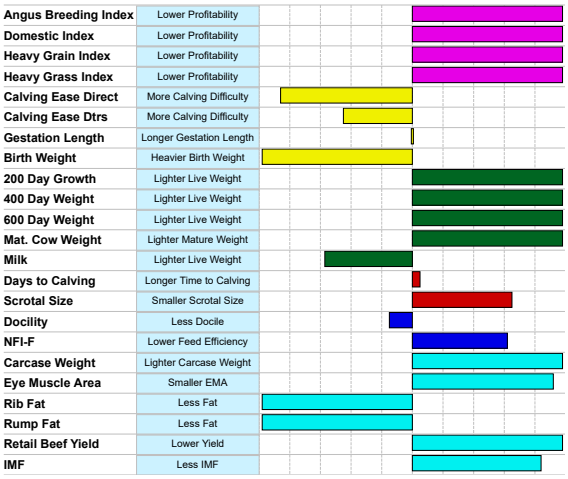
DAM: MURRAY REGENT K31

MURRAY TWINHEARTS H87

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$161	Domestic Index +$134	Heavy Grain Index +$197	Heavy Grass Index +$144
Percentile	1	1	1	1

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-3.9	-0.8	-3.9	+8.6	+65	+111	+154	+147	+12
Acc	*59%*	*48%*	*73%*	*72%*	*72%*	*70%*	*71%*	*69%*	*63%*
Percentile	93	74	52	99	1	1	1	1	79

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-4.3	+2.5	+2	-0.04	+99	+9.3	-3.6	-5.1	+3.0	+3.1
52%	*66%*	*60%*	*59%*	*66%*	*64%*	*68%*	*65%*	*61%*	*64%*
50	18	58	26	1	4	99	99	1	8



Traits observed: *BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: Only a handful of bulls in the Angus breed have higher marbling and meat yield than this bull. Your customers (the processors) are always right - meet their demands.

Purchaser ..... $.....

P4 lot 28 is a very special bull in that he has below breed average birth weight, high growth and low mature weight and he also has RBY% and IMF% EBVs in the top 20% of the breed.

Low birth weight and high growth rate, alsomeat yield and marbling, are antagonistic. Additionally there is an antagonism between leanness and fertility.

P4 lot 28 is a lean bull with a short days to calving EBV. He ticks all the boxes.

At Kilburnie we are trying to breed Angus cattle with calving ease and growth, meat yield and marbling plus leanness and fertility.

LOT 28 MURRAY GENERAL P4PV — IDENT: NURP4 — GRADE: HBR — BORN: 21/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

AYRVALE GENERAL G18

SIRE: ESSLEMONT GENERAL L115

ESSLEMONT HAYLEY H4

CIRCLE A INCENTIVE

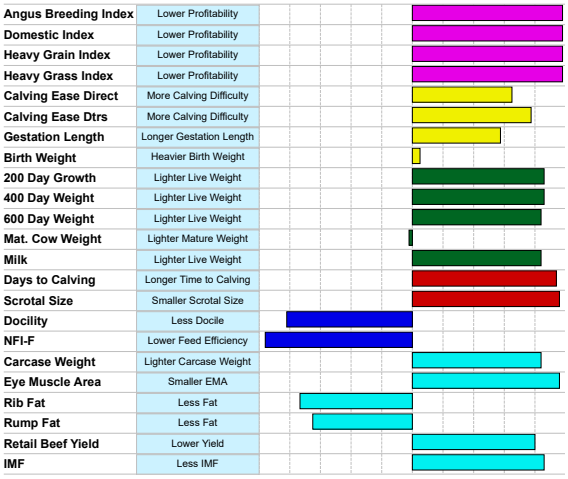
DAM: MURRAY INCENTIVE H99

TE MANIA QUEANBEYAN D113

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$169	Domestic Index +$143	Heavy Grain Index +$195	Heavy Grass Index +$154
Percentile	1	1	1	1

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+2.7	+2.7	-5.9	+4.1	+55	+98	+128	+89	+21
Acc	*48%*	*39%*	*84%*	*74%*	*71%*	*69%*	*69%*	*65%*	*60%*
Percentile	16	13	19	45	7	7	9	53	8

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-8.2	+3.5	-10	+0.60	+74	+10.6	-1.4	-1.5	+1.5	+3.1
43%	*65%*	*56%*	*53%*	*63%*	*60%*	*64%*	*61%*	*56%*	*59%*
3	2	91	95	9	2	88	83	12	8



Traits observed: *GL,CE,BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: Calving ease in the top 20% of the breed. An outcross to the preceding bulls (with a little less growth) but still retaining the rare combination of meat quality and yield that we are striving for.

Purchaser ..... $ .....

LOT 29 MURRAY L152 P44PV — IDENT: NURP44 — GRADE: HBR — BORN: 28/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

RITO 12E7 OF 5F56 RITO 5M2

SIRE: MURRAY RITO 12E7 L152

MURRAY WAVE J53

B/R AMBUSH 28

DAM: MURRAY AMBUSH 28 G34

TE MANIA QUEANBEYAN D113

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$156	Domestic Index +$131	Heavy Grain Index +$178	Heavy Grass Index +$146
Percentile	1	2	2	1

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-4.6	+1.5	-2.9	+8.8	+66	+117	+160	+154	+17
Acc	*47%*	*39%*	*84%*	*71%*	*71%*	*69%*	*69%*	*65%*	*60%*
Percentile	95	32	70	99	1	1	1	1	33

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-4.6	+3.9	-10	-0.17	+94	+10.1	-1.0	-1.4	+1.9	+2.2
43%	*64%*	*55%*	*54%*	*63%*	*60%*	*64%*	*61%*	*57%*	*60%*
43	1	91	14	1	2	80	82	5	30

Traits observed: *GL,CE,200WT(x2),DOC,Genomics(S-Step)*

Notes: From birth P44 was visually the most outstanding calf of his drop. His father was one of the most heavily muscled bulls we have bred.

Purchaser ..... $ .....

LOT 30 MURRAY LEADING EDGE P56[PV] IDENT: NURP56 GRADE: HBR BORN: 31/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

G A R PROPHET

SIRE: TOPBOS LEADING EDGE L292

STRATHEWEN BERKLY BLACKBIRD F04

MURRAY EL GRANDO G20

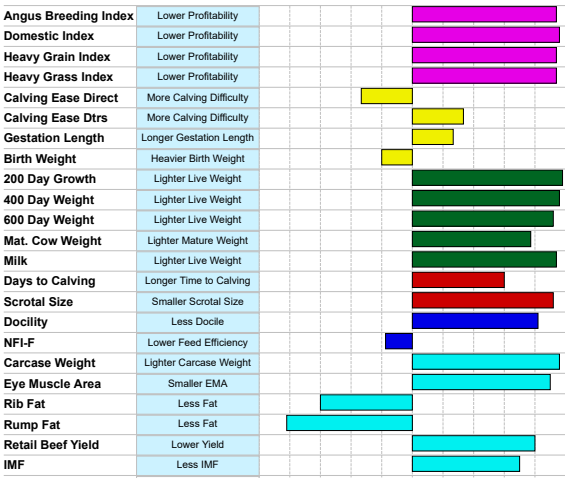
DAM: MURRAY GRANDO J105

MURRAY REGENT G101

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$148	Domestic Index +$131	Heavy Grain Index +$168	Heavy Grass Index +$138
Percentile	3	2	4	3

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-0.7	+1.4	-4.5	+4.8	+59	+103	+134	+115	+23
Acc	*46%*	*38%*	*72%*	*73%*	*71%*	*68%*	*68%*	*64%*	*58%*
Percentile	67	33	40	62	2	3	4	10	3

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-6.1	+3.3	+20	+0.24	+83	+9.2	-1.0	-2.0	+1.5	+2.6
41%	*63%*	*58%*	*52%*	*61%*	*59%*	*62%*	*59%*	*55%*	*58%*
18	4	9	63	2	4	80	91	12	18



Traits observed: *BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: Another outstanding combination of carcase quality and growth but with moderate calving ease and birthweight. The mother is a Grando (NURG20) daughter.

Purchaser ..... $.....

LOT 31 MURRAY MOMENTUM P184[PV] IDENT: NURP184 GRADE: HBR BORN: 19/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

G A R PROGRESS

SIRE: G A R MOMENTUM

G A R BIG EYE 1770

MURRAY EL GRANDO G20

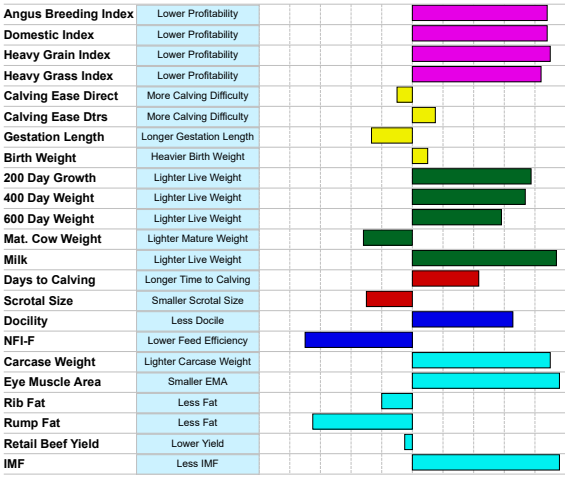
DAM: MURRAY GRANDO J105

MURRAY REGENT G101

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$142	Domestic Index +$127	Heavy Grain Index +$163	Heavy Grass Index +$131
Percentile	7	6	6	9

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+0.2	+1.0	-3.6	+4.0	+53	+93	+117	+81	+23
Acc	*61%*	*50%*	*72%*	*73%*	*73%*	*71%*	*72%*	*69%*	*64%*
Percentile	53	42	58	43	11	15	25	70	3

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-5.5	+1.5	+14	+0.41	+76	+9.9	-0.3	-1.3	+0.4	+3.6
43%	*68%*	*59%*	*54%*	*65%*	*64%*	*66%*	*63%*	*60%*	*63%*
27	65	19	83	6	3	60	80	53	2



Traits observed: *BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: Top 20% of the breed on all indices plus EMA and IMF% EBVs. Better than average birthweight and growth. Goes back to Grando through his daughter J105.

Purchaser ..... $.....

LOT 32 HIGHRENT PROPHET P116[SV] IDENT: DOJP116 GRADE: APR BORN: 27/07/2018

GENETIC STATUS: AMF,CAF,DDF,NHF

C R A BEXTOR 872 5205 608

SIRE: G A R PROPHET

G A R OBJECTIVE 1885

MURRAY AMBUSH 28 G24

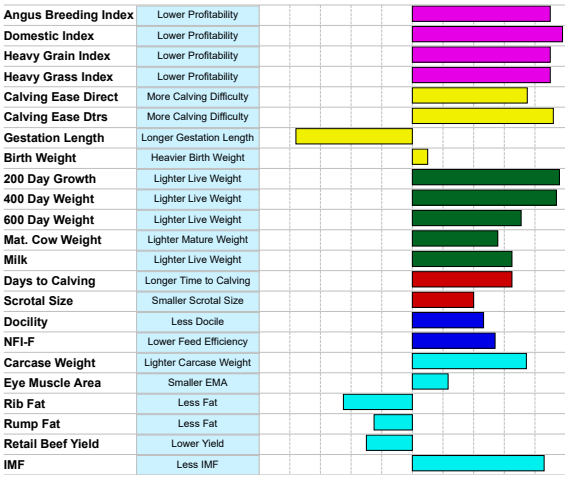
DAM: HIGHRENT G24 K31

HIGHRENT H95

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$145	Domestic Index +$135	Heavy Grain Index +$165	Heavy Grass Index +$135
Percentile	5	1	5	5

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+3.0	+3.7	-1.6	+4.0	+60	+103	+123	+105	+19
Acc	*61%*	*49%*	*84%*	*73%*	*70%*	*69%*	*70%*	*69%*	*63%*
Percentile	13	4	88	43	1	3	15	22	18

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-6.2	+2.1	+11	-0.03	+73	+5.9	-0.8	-0.8	+0.1	+3.3
46%	*64%*	*54%*	*54%*	*63%*	*61%*	*64%*	*62%*	*58%*	*61%*
16	35	27	28	11	35	75	68	65	5



Traits observed: *GL,CE,BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: G A R Prophet always breeds well. This son of his, bred at Highrent, has all indices and IMF% EBV in the top 10% of the breed. Top 5% calving ease.

Purchaser ..... $.....

LOT 33 HIGHRENT M208 P145[SV] IDENT: DOJP145 GRADE: APR BORN: 27/07/2018

GENETIC STATUS: AMF,CAF,DDF,NHF

PATHFINDER GENESIS G357

SIRE: MURRAY GENESIS M208

MURRAY EXPAND K45

MURRAY TWINHEARTS H100

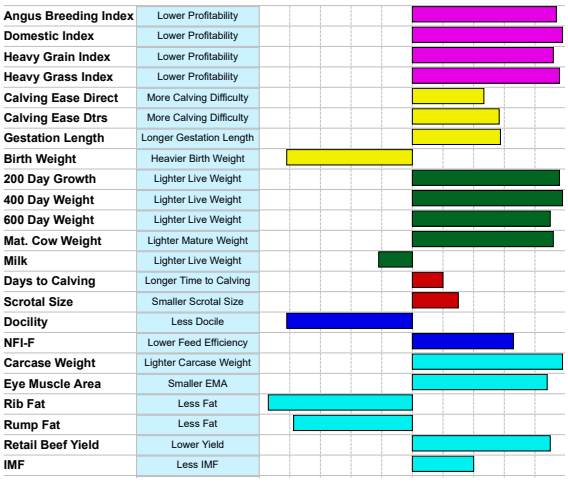
DAM: HIGHRENT H100 L37

HIGHRENT G24 J10

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$149	Domestic Index +$138	Heavy Grain Index +$166	Heavy Grass Index +$141
Percentile	3	1	4	2

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+2.5	+2.4	-5.9	+6.0	+58	+106	+132	+122	+14
Acc	*53%*	*34%*	*70%*	*71%*	*68%*	*65%*	*66%*	*63%*	*53%*
Percentile	19	17	19	86	3	2	6	6	61

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-4.6	+1.9	-10	-0.29	+84	+8.7	-2.3	-1.8	+1.9	+2.1
38%	*58%*	*46%*	*47%*	*58%*	*55%*	*59%*	*56%*	*51%*	*54%*
43	45	91	7	1	6	97	88	5	33



Traits observed: *CE,BWT,200WT(x2),Genomics(CE,S-Step)*

Notes: Another very high growth bull bred in one of the districts leading commercial herds from a Kilburnie bred son of Pathfinder Genesis.

Purchaser ..... $.....

LOT 34 MURRAY KODAK P36[PV] IDENT: NURP36 GRADE: HBR BORN: 28/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

RENNYLEA EDMUND E11

SIRE: RENNYLEA KODAK K522

RENNYLEA EISA ERICA F810

GARDENS WAVE

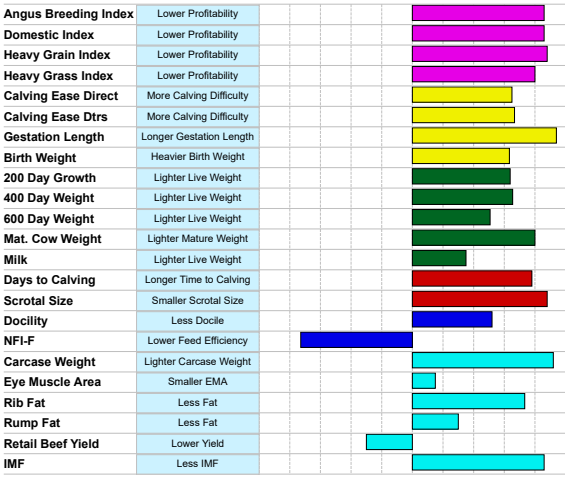
DAM: MURRAY WAVE J43

TE MANIA QUEANBEYAN D113

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$145	Domestic Index +$124	Heavy Grain Index +$167	Heavy Grass Index +$133
Percentile	5	10	4	7

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+2.6	+2.4	-8.8	+3.0	+52	+93	+124	+121	+17
Acc	*51%*	*41%*	*73%*	*75%*	*73%*	*72%*	*72%*	*66%*	*59%*
Percentile	18	17	2	20	14	15	13	6	33

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-6.4	+3.2	+12	+0.51	+79	+5.2	+1.2	+0.2	+0.0	+3.2
44%	*68%*	*63%*	*58%*	*64%*	*63%*	*66%*	*63%*	*59%*	*62%*
14	4	24	90	4	48	15	40	70	7



Traits observed: *BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: A high marbling bull with exceptional growth and ready to use over your heifers. Improve the meat quality in your animals without taking any risks on calving ease.

Purchaser ..... $.....

Yearling bulls have a lot to offer. They need to be treated a little differently from the way in which you treat two year old bulls.

We have to feed these bulls to get them to a working age for you. Our general rule of thumb is that yearling bulls should be around 500 kilos in weight when we sell them. We think it is more dangerous to have them over weight at this age than it is to have them under weight.

These yearling bulls all have a scrotal measurement more than 32 cms.

LOT 35 MURRAY M204 P86PV — IDENT: NURP86 — GRADE: HBR — BORN: 10/08/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

H P C A PROCEED

SIRE: MURRAY PROCEED M204

MURRAY WAVE J43

TE MANIA EMPEROR E343

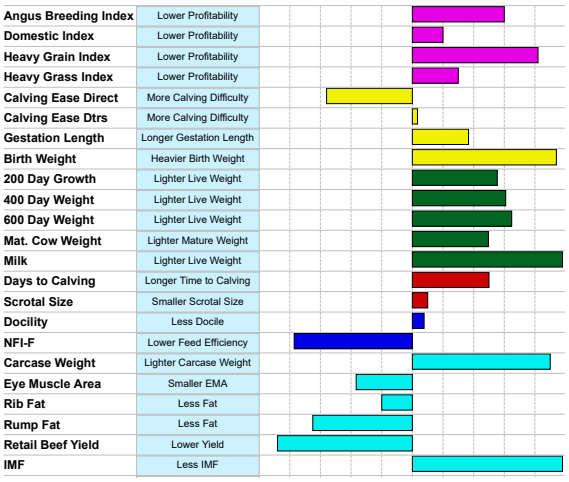
DAM: MURRAY EMPEROR L113

MURRAY B27 G110

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$130	Domestic Index +$111	Heavy Grain Index +$156	Heavy Grass Index +$117
Percentile	20	45	9	38

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-1.6	+0.6	-5.1	+1.2	+50	+90	+120	+101	+25
Acc	*45%*	*37%*	*73%*	*73%*	*70%*	*67%*	*67%*	*64%*	*56%*
Percentile	78	48	30	3	22	22	19	29	1

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-5.6	+1.9	+5	+0.49	+76	+4.1	-0.3	-1.5	-0.9	+4.2
40%	*62%*	*56%*	*51%*	*61%*	*58%*	*61%*	*58%*	*54%*	*57%*
25	45	46	89	6	67	60	83	94	1



Traits observed: *CE,BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: A very high EBV for IMF%. Put a lot of marbling into your animals without risking birth weight or growth.

Purchaser ..... $ .....

LOT 36 MURRAY M112 P164PV — IDENT: NURP164 — GRADE: HBR — BORN: 10/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

MURRAY GRANDO J136

SIRE: MURRAY M GRANDO J136 M112

MURRAY OBJECTIVE G81

PATHFINDER GENESIS G357

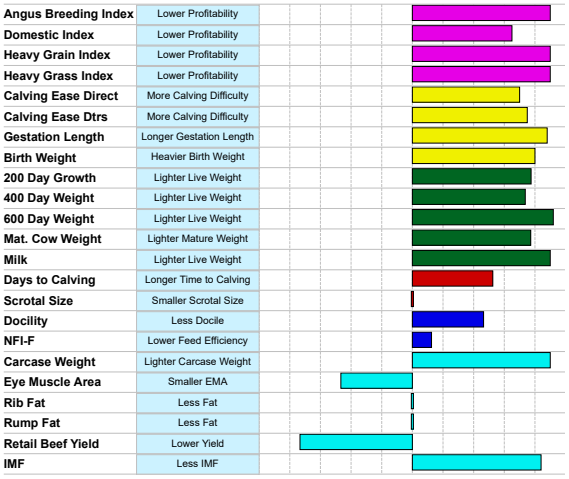
DAM: MURRAY GENESIS M183

MURRAY DEEGAN G116

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$145	Domestic Index +$119	Heavy Grain Index +$165	Heavy Grass Index +$135
Percentile	5	20	5	5

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+2.8	+2.6	-7.4	+2.3	+54	+94	+136	+117	+22
Acc	*53%*	*36%*	*69%*	*69%*	*69%*	*66%*	*67%*	*62%*	*56%*
Percentile	15	14	7	10	9	13	3	9	5

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-5.6	+1.9	+11	+0.07	+77	+3.6	-0.1	-0.3	-0.5	+3.1
40%	*62%*	*50%*	*52%*	*61%*	*59%*	*62%*	*59%*	*55%*	*58%*
25	45	27	40	5	75	53	55	87	8



Traits observed: *BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: In the top 20% marbling, growth and calving ease. M112 is one of the safest grandsons of G20 that we have bred.

Purchaser ..... $ .....

LOT 37 MURRAY L152 P16PV — IDENT: NURP16 — GRADE: HBR — BORN: 24/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

RITO 12E7 OF 5F56 RITO 5M2

SIRE: MURRAY RITO 12E7 L152

MURRAY WAVE J53

S S OBJECTIVE T510 0T26

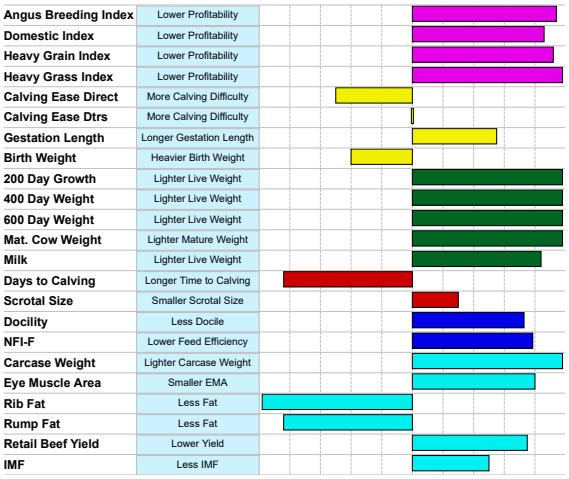
DAM: MURRAY OBJECTIVE G81

LAWSONS GAR NEW DESIGN 1407 A1173

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$148	Domestic Index +$125	Heavy Grain Index +$166	Heavy Grass Index +$142
Percentile	3	8	4	2

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-1.5	+0.4	-5.6	+5.1	+63	+113	+161	+145	+21
Acc	*47%*	*39%*	*84%*	*73%*	*71%*	*69%*	*69%*	*65%*	*60%*
Percentile	77	53	23	70	1	1	1	1	8

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-1.1	+2.1	+17	-0.28	+98	+8.0	-2.6	-2.2	+1.5	+2.3
43%	*64%*	*56%*	*52%*	*62%*	*60%*	*63%*	*60%*	*56%*	*59%*
92	35	14	7	1	10	98	93	12	25



Traits observed: *GL,CE,BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: L152 was one of the most heavily muscled bulls that we have bred. His mother is one of our outstanding donor cows. A growth bull with good carcase EBVs.

Purchaser ..... $ .....

LOT 38 HIGHRENT RITO P100[SV] IDENT: DOJP100 GRADE: APR BORN: 18/07/2018

GENETIC STATUS: AMF,CAF,DDF,NHF

RITO 12E7 OF 5F56 RITO 5M2

SIRE: MURRAY RITO 12E7 L152

MURRAY WAVE J53

MURRAY AMBUSH 28 G24

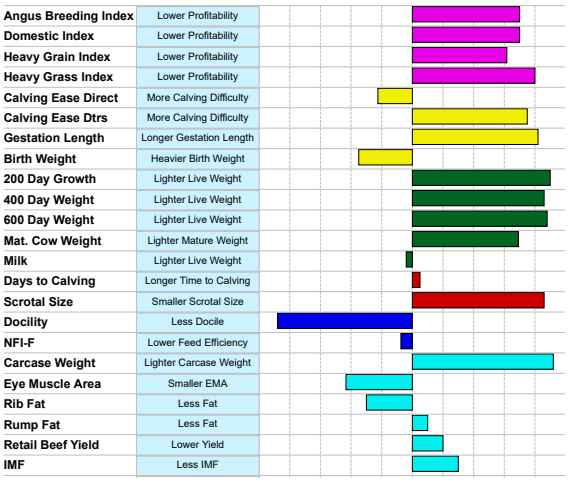
DAM: HIGHRENT G24 K131

HIGHRENT C42

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$134	Domestic Index +$121	Heavy Grain Index +$144	Heavy Grass Index +$130
Percentile	15	15	19	10

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-0.4	+2.7	-7.1	+4.9	+56	+98	+132	+110	+15
Acc	*51%*	*33%*	*83%*	*70%*	*67%*	*64%*	*65%*	*62%*	*54%*
Percentile	63	13	9	65	5	7	6	15	52

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-4.4	+3.1	-12	+0.13	+78	+3.7	-0.3	+0.1	+0.6	+2.0
37%	*57%*	*41%*	*46%*	*57%*	*55%*	*59%*	*56%*	*51%*	*54%*
47	6	94	48	4	73	60	43	45	35



Traits observed: *GL,CE,BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: Less birthweight than the preceding bull, in the top 20% growth with a moderate mature weight.

Purchaser ..... $.....

LOT 39 MURRAY L152 P66[PV] IDENT: NURP66 GRADE: HBR BORN: 1/08/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

RITO 12E7 OF 5F56 RITO 5M2

SIRE: MURRAY RITO 12E7 L152

MURRAY WAVE J53

AYRVALE BARTEL E7

DAM: MURRAY BARTEL M171

MURRAY OBJECTIVE G81

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$145	Domestic Index +$123	Heavy Grain Index +$159	Heavy Grass Index +$135
Percentile	5	12	8	5

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+0.2	+2.1	-4.9	+3.1	+52	+88	+117	+85	+20
Acc	*43%*	*37%*	*69%*	*71%*	*68%*	*65%*	*66%*	*62%*	*56%*
Percentile	53	22	33	23	14	28	25	62	12

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-8.2	+2.5	-10	+0.34	+75	+6.4	+0.8	+2.2	-0.4	+3.0
40%	*61%*	*50%*	*51%*	*60%*	*58%*	*61%*	*58%*	*54%*	*57%*
3	18	91	75	8	28	25	4	85	10

Traits observed: *BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: A low birth weight bull with a high IMF% EBV. He should raise the marbling in the steers that you produce and hopefully produce premiums for you in the future.

Purchaser ..... $.....

LOT 40 MURRAY M204 P32[PV] IDENT: NURP32 GRADE: HBR BORN: 28/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

H P C A PROCEED

SIRE: MURRAY PROCEED M204

MURRAY WAVE J43

AYRVALE BARTEL E7

DAM: MURRAY BARTEL M17

MURRAY OBJECTIVE G81

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$145	Domestic Index +$133	Heavy Grain Index +$160	Heavy Grass Index +$136
Percentile	5	2	7	4

	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-0.8	+1.9	-3.9	+4.3	+57	+96	+119	+84	+22
Acc	*47%*	*39%*	*72%*	*73%*	*71%*	*68%*	*68%*	*64%*	*58%*
Percentile	68	25	52	50	4	10	21	64	5

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-5.6	+2.7	+3	+0.48	+79	+11.1	-1.7	-1.1	+1.7	+2.8
41%	*63%*	*59%*	*52%*	*62%*	*59%*	*62%*	*59%*	*55%*	*58%*
25	13	54	89	4	1	93	75	8	13

Traits observed: *BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: Top 20% marbling and yield. Moderate birth weight, high growth and low mature weight. These come from the maternal grandfather Bartel E7.

Purchaser ..... $.....

LOT 41 MURRAY M204 P50[PV] IDENT: NURP50 GRADE: HBR BORN: 29/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

H P C A PROCEED

SIRE: MURRAY PROCEED M204

MURRAY WAVE J43

PATHFINDER GENESIS G357

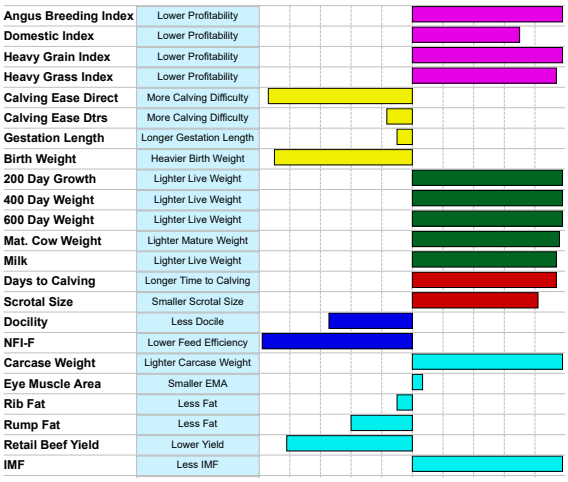
DAM: MURRAY GENESIS M175

MURRAY DEEGAN G116

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$156	Domestic Index +$119	Heavy Grain Index +$192	Heavy Grass Index +$138
Percentile	1	20	1	3

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-5.6	+0.1	-3.8	+6.9	+60	+109	+152	+132	+23
Acc	*45%*	*34%*	*84%*	*72%*	*71%*	*67%*	*68%*	*65%*	*56%*
Percentile	97	58	53	95	1	1	1	2	3

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-8.2	+2.8	-4	+0.77	+92	+5.2	+0.0	-0.8	-0.8	+4.1
39%	*63%*	*56%*	*51%*	*61%*	*58%*	*62%*	*58%*	*54%*	*57%*
3	10	77	98	1	48	50	68	93	1



Traits observed: *GL,CE,BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: IMF%, carcase weight and growth are all in the top 1% of the breed. Use on cows. Breeding high IMF% into your herd could lead to premiums in the long run.

Purchaser ..... $ .....

LOT 42 MURRAY TWINHEARTS P20[PV] IDENT: NURP20 GRADE: HBR BORN: 26/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

S S OBJECTIVE T510 0T26

SIRE: G A R TWINHEARTS 8418

G A R YIELD GRADE 2015

CHERYLTON STEWIE D19

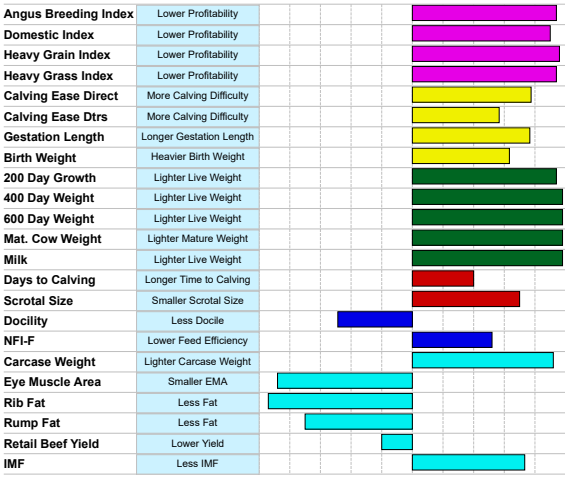
DAM: MURRAY STEWART M5

MURRAY THUNDERBIRD K3

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$149	Domestic Index +$128	Heavy Grain Index +$172	Heavy Grass Index +$138
Percentile	3	5	3	3

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+3.1	+2.1	-6.8	+2.7	+58	+111	+149	+140	+28
Acc	*52%*	*46%*	*83%*	*72%*	*71%*	*69%*	*70%*	*68%*	*63%*
Percentile	12	22	11	15	3	1	1	1	1

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-5.3	+2.7	-3	-0.03	+79	+1.5	-2.2	-1.5	+0.1	+2.8
46%	*66%*	*57%*	*55%*	*64%*	*63%*	*66%*	*63%*	*60%*	*63%*
30	13	74	28	4	94	97	83	65	13



Traits observed: *GL,CE,BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: These Twinhearts sons are an opportunity to buy into low birth weight, high growth rate genetics. This bull has top 20% IMF% and above average days to calving (fertility) EBVs.

Purchaser ..... $ .....

LOT 43 MURRAY L152 P40[PV] IDENT: NURP40 GRADE: HBR BORN: 28/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

RITO 12E7 OF 5F56 RITO 5M2

SIRE: MURRAY RITO 12E7 L152

MURRAY WAVE J53

AYRVALE BARTEL E7

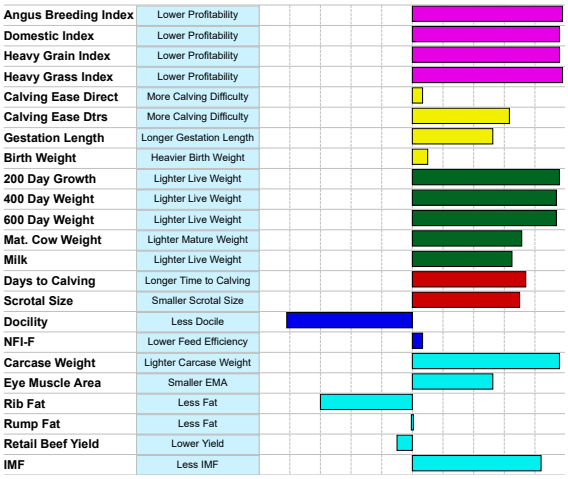
DAM: MURRAY BARTEL M171

MURRAY OBJECTIVE G81

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$156	Domestic Index +$131	Heavy Grain Index +$177	Heavy Grass Index +$145
Percentile	1	2	2	1

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+0.6	+2.2	-5.6	+4.2	+59	+102	+138	+111	+19
Acc	*54%*	*40%*	*65%*	*66%*	*65%*	*62%*	*62%*	*59%*	*54%*
Percentile	47	20	23	48	2	4	3	14	18

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-6.5	+2.6	-10	+0.11	+83	+6.7	-1.0	-0.2	+0.3	+3.0
40%	*57%*	*50%*	*48%*	*57%*	*55%*	*58%*	*55%*	*52%*	*54%*
13	15	91	45	2	24	80	50	55	10



Traits observed: *BWT,200WT(x2),DOC,Genomics(CE)*

Notes: Lots 43 and 44 are flush brothers from a very good Bartel E7 daughter. Marbling comes from E7, muscling from the father. Moderate birth weight and high growth.

Purchaser ..... $ .....

LOT 44 MURRAY L152 P38PV — IDENT: NURP38 — GRADE: HBR — BORN: 28/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

RITO 12E7 OF 5F56 RITO 5M2

SIRE: MURRAY RITO 12E7 L152

MURRAY WAVE J53

AYRVALE BARTEL E7

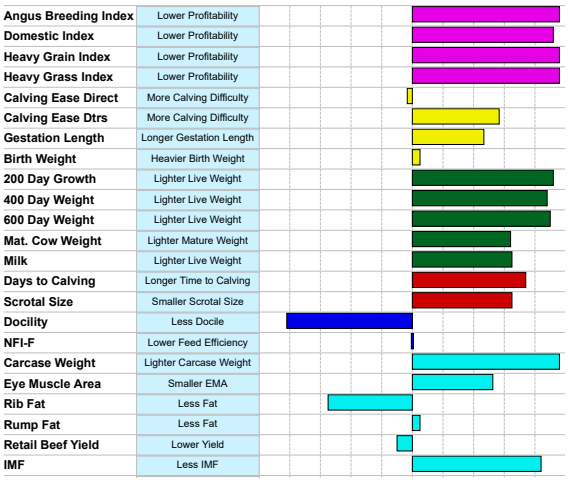
DAM: MURRAY BARTEL M171

MURRAY OBJECTIVE G81

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$153	Domestic Index +$129	Heavy Grain Index +$174	Heavy Grass Index +$142
Percentile	2	4	2	2

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+0.3	+2.1	-5.4	+4.3	+57	+100	+135	+109	+19
Acc	*54%*	*40%*	*65%*	*66%*	*65%*	*62%*	*62%*	*59%*	*54%*
Percentile	52	22	25	50	4	5	4	17	18

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-6.5	+2.5	-10	+0.14	+81	+6.6	-0.9	-0.1	+0.3	+3.0
40%	*57%*	*50%*	*48%*	*57%*	*55%*	*58%*	*55%*	*52%*	*54%*
13	18	91	50	2	25	78	48	55	10



Traits observed: *BWT,200WT(x2),DOC,Genomics(CE)*

Notes: Top 5% all indices, moderate birth weight, high growth rates and IMF%. If you have well grown heifers these bulls could be used safely on them.

Purchaser ..... $.....

LOT 45 MURRAY L52 P46PV — IDENT: NURP46 — GRADE: HBR — BORN: 29/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

TE MANIA EMPEROR E343

SIRE: MURRAY EMPEROR L52

MURRAY BLACK LABEL G49

EXAR EXPAND 1241

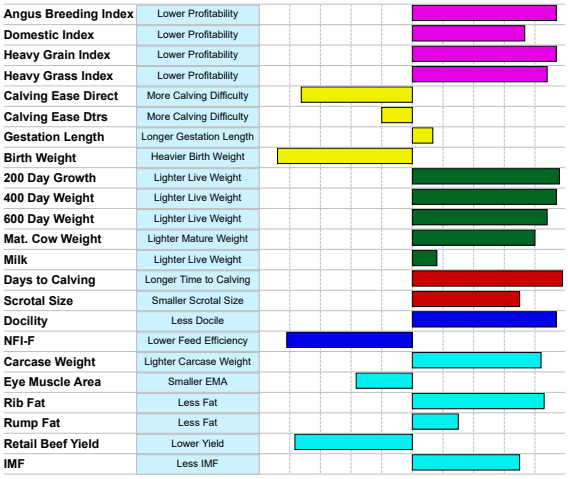
DAM: MURRAY EXPAND M9

MURRAY BERKLEY G32

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$149	Domestic Index +$122	Heavy Grain Index +$170	Heavy Grass Index +$134
Percentile	3	13	3	6

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-2.6	-0.1	-4.5	+6.9	+59	+102	+133	+116	+16
Acc	*52%*	*42%*	*84%*	*74%*	*71%*	*68%*	*69%*	*66%*	*58%*
Percentile	86	63	40	95	2	4	5	10	42

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-11.6	+2.5	+26	+0.46	+76	+3.8	+1.9	+0.5	-0.7	+2.7
45%	*64%*	*54%*	*54%*	*63%*	*61%*	*65%*	*61%*	*58%*	*60%*
1	18	3	87	6	72	6	30	91	15



Traits observed: *GL,CE,BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: High IMF% and growth. Note that the very high fertility EBV of -11.4 is in the top 1% of the breed. We run cows on hard country so that the lowly fertile ones cull themselves.

Purchaser ..... $.....

LOT 46 MURRAY LEADING EDGE P72PV — IDENT: NURP72 — GRADE: HBR — BORN: 4/08/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

G A R PROPHET

SIRE: TOPBOS LEADING EDGE L292

STRATHEWEN BERKLY BLACKBIRD F04

MURRAY EL GRANDO G20

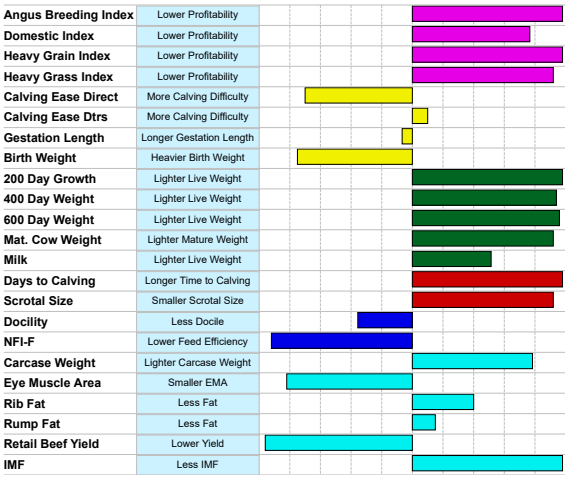
DAM: MURRAY GRANDO J105

MURRAY REGENT G101

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$156	Domestic Index +$121	Heavy Grain Index +$192	Heavy Grass Index +$135
Percentile	1	15	1	5

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-2.5	+0.7	-3.6	+6.0	+59	+101	+138	+125	+19
Acc	*46%*	*38%*	*72%*	*73%*	*71%*	*68%*	*68%*	*64%*	*58%*
Percentile	86	47	58	86	2	4	3	4	18

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-9.8	+3.1	-1	+0.62	+72	+2.2	+0.5	+0.1	-1.3	+4.4
42%	*63%*	*58%*	*52%*	*62%*	*59%*	*62%*	*59%*	*55%*	*58%*
1	6	68	95	13	90	33	43	98	1



Traits observed: *BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: Topbos Leading Edge is a very high quality Prophet son. Mating him to our soundest El Grando daughter has produced this bull with high IMF% and high growth EBVs.

Purchaser ..... $.....

Lot 46 P72 at the bottom of the preceding page, is a full (flush) brother to Lot 30 P56. Despite being brothers, they are genetically different animals and will produce different characteristics in their offspring

Use lot 46 and you should get higher marbling but lower yielding steers. His daughters should also be more fertile. If you use lot 30 the calves should be lighter at birth and more docile.

I find it remarkable that it is possible to pinpoint these differences between the animals ***without*** even looking at them. However that is what modern genomic technology is all about and you should use this information.

LOT 47 MURRAY LONGSHOT P96^{PV} IDENT: NURP96 GRADE: HBR BORN: 19/08/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

G A R PROPHET

SIRE: TE MANIA LONGSHOT L107

TE MANIA BARUNAH J1125

PATHFINDER GENESIS G357

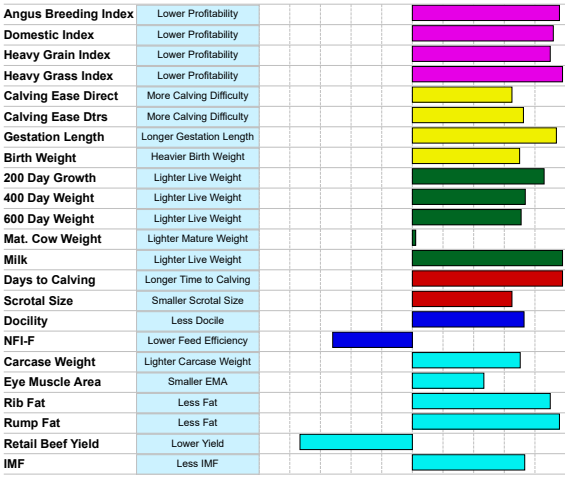
DAM: MURRAY GENESIS M33

MURRAY AMBUSH 28 G34

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$152	Domestic Index +$130	Heavy Grain Index +$165	Heavy Grass Index +$143
Percentile	2	3	5	1

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+2.6	+2.6	-8.3	+2.7	+55	+94	+122	+90	+24
Acc	*46%*	*38%*	*84%*	*72%*	*70%*	*68%*	*67%*	*64%*	*57%*
Percentile	18	14	3	15	7	13	16	51	2

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-8.8	+2.4	+13	+0.31	+71	+6.3	+2.0	+2.9	-0.6	+2.9
40%	*63%*	*53%*	*52%*	*61%*	*58%*	*62%*	*59%*	*54%*	*58%*
1	20	22	72	15	30	5	2	88	12



Traits observed: *GL,CE,BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: Top 20% birth weight, growth and IMF%. Use with confidence over your heifers and improve the meat quality in your herd.

Purchaser ..... $.....

LOT 48 MURRAY M204 P60^{PV} IDENT: NURP60 GRADE: HBR BORN: 1/08/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

H P C A PROCEED

SIRE: MURRAY PROCEED M204

MURRAY WAVE J43

EXAR EXPAND 1241

DAM: MURRAY EXPAND K45

MURRAY UPSHOT H37

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$162	Domestic Index +$134	Heavy Grain Index +$196	Heavy Grass Index +$143
Percentile	1	1	1	1

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-0.8	+1.2	-7.2	+4.0	+53	+99	+131	+114	+17
Acc	*47%*	*36%*	*74%*	*73%*	*71%*	*68%*	*68%*	*64%*	*58%*
Percentile	68	38	8	43	11	6	6	11	33

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-7.8	+2.4	-17	+0.87	+80	+8.6	-1.4	-2.6	+1.2	+3.6
41%	*63%*	*59%*	*50%*	*61%*	*58%*	*62%*	*58%*	*54%*	*57%*
4	20	98	99	3	7	88	96	20	2

Traits observed: *BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: A high performance animal with a very well balanced set of EBVs. A flush brother to lot 53. The sort of genetic package that we are proud to produce and offer for sale today.

Purchaser ..... $.....

LOT 49 MURRAY M204 P70[PV] IDENT: NURP70 GRADE: HBR BORN: 3/08/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

H P C A PROCEED

SIRE: MURRAY PROCEED M204

MURRAY WAVE J43

EXAR EXPAND 1241

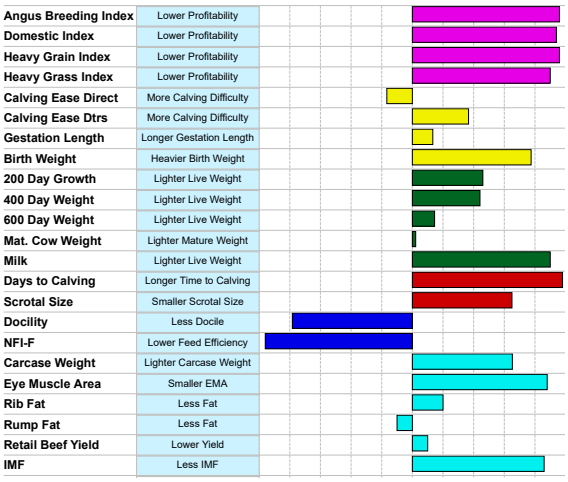
DAM: MURRAY EXPAND K45

MURRAY UPSHOT H37

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$149	Domestic Index +$129	Heavy Grain Index +$170	Heavy Grass Index +$134
Percentile	3	4	3	6

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+0.1	+1.6	-4.2	+2.3	+50	+87	+108	+88	+22
Acc	*47%*	*36%*	*74%*	*73%*	*71%*	*68%*	*68%*	*65%*	*58%*
Percentile	55	30	45	10	22	31	45	56	5

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-10.9	+2.4	-9	+0.68	+69	+8.7	+0.3	-0.3	+0.6	+3.1
41%	*63%*	*59%*	*51%*	*62%*	*58%*	*62%*	*59%*	*54%*	*57%*
1	20	89	97	20	6	40	55	45	8



Traits observed: *BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: Low birth weight flush brother to lot 52. Fertility is one of the most important determinants of profitability and this bull has a fertility EBV in the top 1% of the breed.

Purchaser ..... $.....

LOT 50 MURRAY M204 P2[PV] IDENT: NURP2 GRADE: HBR BORN: 20/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

H P C A PROCEED

SIRE: MURRAY PROCEED M204

MURRAY WAVE J43

TE MANIA DAIQUIRI D19

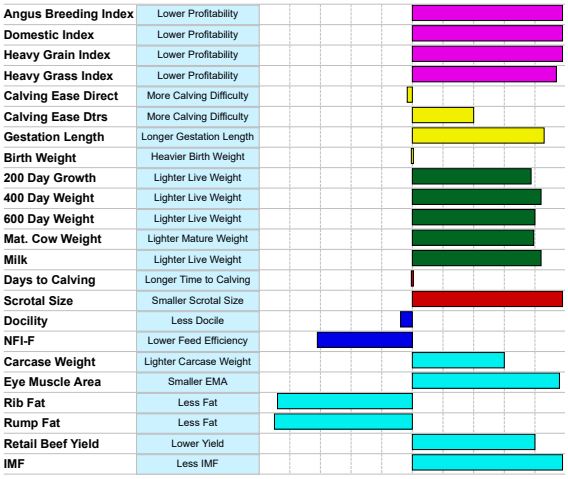
DAM: MURRAY RED DAIQUIRI H51 (RED)

STRATHEWEN YORKSHIRE DREAM C85

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$156	Domestic Index +$134	Heavy Grain Index +$191	Heavy Grass Index +$139
Percentile	1	1	1	3

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+0.2	+1.6	-7.3	+4.4	+53	+97	+127	+114	+21
Acc	*47%*	*38%*	*84%*	*74%*	*71%*	*68%*	*68%*	*65%*	*58%*
Percentile	53	30	7	53	11	8	10	11	8

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-4.5	+4.7	+3	+0.40	+69	+10.1	-1.7	-2.4	+1.5	+4.2
40%	*63%*	*59%*	*51%*	*62%*	*59%*	*62%*	*59%*	*55%*	*58%*
45	1	54	82	20	2	93	94	12	1



Traits observed: *GL,CE,BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: This bull has a red gene. Very high IMF% and meat yield. Moderate birth weight. Adequate growth in the top 20% of the breed.

Purchaser ..... $.....

LOT 51 MURRAY M204 P18[PV] IDENT: NURP18 GRADE: HBR BORN: 26/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

H P C A PROCEED

SIRE: MURRAY PROCEED M204

MURRAY WAVE J43

TE MANIA RED LABEL Z1023 (RED)

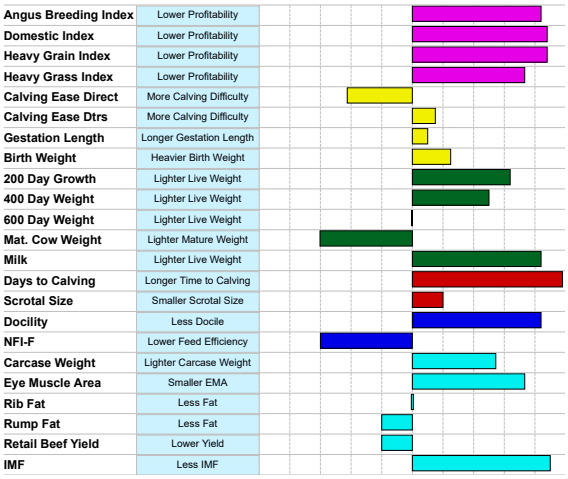
DAM: MURRAY BLACK LABEL G49

MURRAY 1407 Y6

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$141	Domestic Index +$125	Heavy Grain Index +$161	Heavy Grass Index +$127
Percentile	8	8	6	15

Angus	MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN								
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-1.1	+0.9	-4.3	+4.0	+52	+88	+107	+75	+21
Acc	*48%*	*37%*	*85%*	*74%*	*72%*	*68%*	*69%*	*65%*	*59%*
Percentile	73	43	43	43	14	28	48	80	8

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-9.9	+2.0	+21	+0.32	+68	+7.7	-0.1	-0.6	+0.2	+3.3
40%	*64%*	*60%*	*50%*	*62%*	*59%*	*62%*	*59%*	*55%*	*58%*
1	40	8	73	23	13	53	63	60	5



Traits observed: *GL,CE,BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: Low birth weight. An attractive mix of growth, fertility and marbling.

Purchaser ..... $.....

LOT 52 MURRAY M112 P24PV — IDENT: NURP24 — GRADE: HBR — BORN: 27/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

MURRAY GRANDO J136

SIRE: MURRAY M GRANDO J136 M112

MURRAY OBJECTIVE G81

C BAR D ALTERNATIVE K903

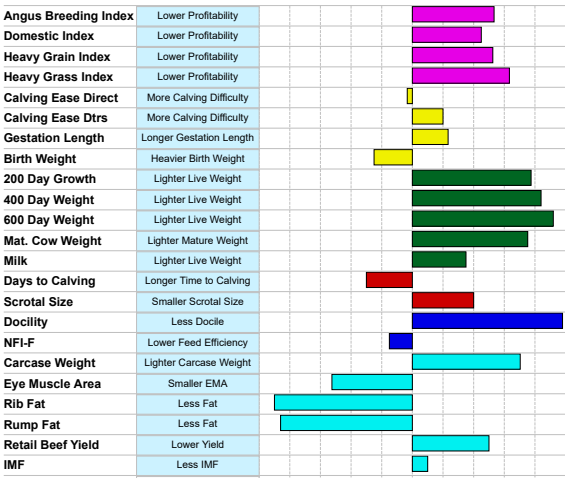
DAM: MURRAY ALTERNATIVE K95

PRIME POLLY E99

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$127	Domestic Index +$115	Heavy Grain Index +$138	Heavy Grass Index +$124
Percentile	27	30	26	20

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+0.3	+1.0	-4.7	+4.7	+53	+96	+133	+113	+17
Acc	*36%*	*29%*	*83%*	*70%*	*67%*	*64%*	*65%*	*62%*	*54%*
Percentile	52	42	37	60	11	10	5	12	33

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-3.4	+2.1	+32	+0.21	+70	+3.6	-2.0	-2.2	+1.0	+1.8
38%	*60%*	*45%*	*48%*	*58%*	*56%*	*60%*	*56%*	*53%*	*55%*
67	35	1	59	18	75	95	93	25	45



Traits observed: *GL,CE,BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: This bull has good growth and carcase EBVs. The progeny of M112 have in general been very docile animals.

Purchaser ..... $.....

LOT 53 MURRAY LEWINS P26PV — IDENT: NURP26 — GRADE: HBR — BORN: 27/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

TE MANIA JENKINS J89

SIRE: TE MANIA LEWINS L839

TE MANIA MOONGARA H33

CIRCLE A INCENTIVE

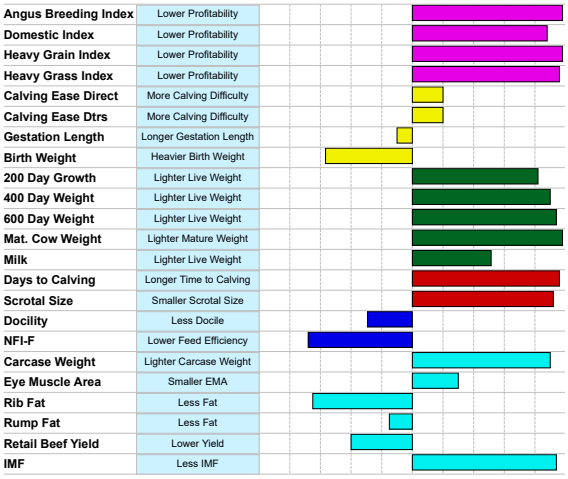
DAM: MURRAY INCENTIVE H107

MURRAY BERKLEY F11

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$159	Domestic Index +$126	Heavy Grain Index +$192	Heavy Grass Index +$140
Percentile	1	7	1	2

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+1.0	+1.1	-3.9	+5.4	+53	+99	+136	+147	+17
Acc	*45%*	*36%*	*84%*	*73%*	*69%*	*67%*	*68%*	*65%*	*58%*
Percentile	40	40	52	77	11	6	3	1	33

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-8.7	+3.1	+0	+0.42	+76	+5.9	-0.9	-0.2	-0.1	+3.5
40%	*64%*	*52%*	*50%*	*60%*	*58%*	*61%*	*58%*	*54%*	*57%*
1	6	64	84	6	35	78	50	75	3



Traits observed: *GL,CE,BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: High IMF% and growth and reasonable birth weight. The high fertility EBV traces back to the mother who is a rising seven year old cow due to calve to V A R Legend in six week time. Lot 7 is H107's calf from 2017.

Purchaser ..... $.....

LOT 54 MURRAY GRANDO P190PV — IDENT: NURP190 — GRADE: HBR — BORN: 22/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

HYLINE RIGHT TIME 338

SIRE: MURRAY EL GRANDO G20

TE MANIA QUEANBEYAN D113

TUWHARETOA REGENT D145

DAM: MURRAY REGENT K31

MURRAY TWINHEARTS H87

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$152	Domestic Index +$132	Heavy Grain Index +$181	Heavy Grass Index +$137
Percentile	2	2	1	4

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-3.8	-0.8	-4.4	+6.2	+56	+101	+135	+120	+17
Acc	*59%*	*48%*	*73%*	*72%*	*72%*	*70%*	*71%*	*69%*	*63%*
Percentile	93	74	42	89	5	4	4	7	33

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-4.8	+1.0	+12	-0.40	+82	+9.8	-3.5	-4.4	+3.2	+2.9
51%	*65%*	*60%*	*59%*	*66%*	*64%*	*67%*	*64%*	*61%*	*64%*
40	85	24	3	2	3	99	99	1	12

Traits observed: *BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: In evaluating these Grando sons note that they are lean but not lowly fertile. The Days to Calving EBVs suggest the daughters will have better than average fertility for Angus cattle.

Purchaser ..... $.....

LOT 55 MURRAY PROCEED P188PV IDENT: NURP188 GRADE: HBR BORN: 20/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

G A R PROGRESS

SIRE: H P C A PROCEED

G A R 28 AMBUSH L119

MURRAY EL GRANDO G20

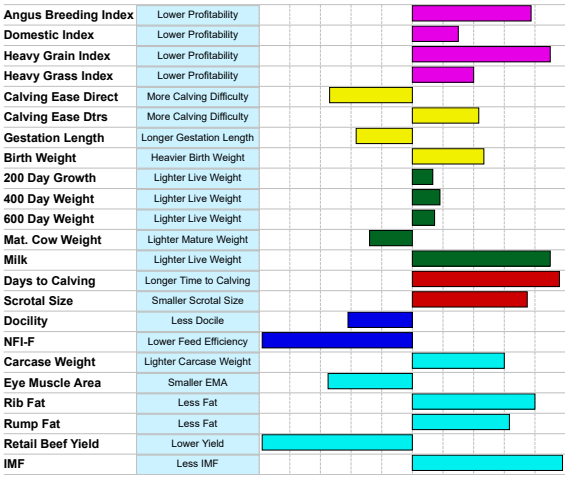
DAM: MURRAY GRANDO J105

MURRAY REGENT G101

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$137	Domestic Index +$115	Heavy Grain Index +$165	Heavy Grass Index +$121
Percentile	11	30	5	28

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-1.5	+1.7	-3.2	+3.2	+46	+84	+108	+82	+22
Acc	*60%*	*46%*	*72%*	*73%*	*73%*	*71%*	*72%*	*68%*	*63%*
Percentile	77	28	65	25	43	41	45	68	5

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-8.7	+2.8	-2	+1.02	+69	+3.5	+1.5	+1.0	-1.5	+4.5
43%	*68%*	*60%*	*54%*	*65%*	*64%*	*66%*	*63%*	*60%*	*62%*
1	10	71	99	20	76	10	18	98	1



Traits observed: *BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: This son of Proceed will lift the marbling in your herd. He should be safe over your heifers and your first calvers for many years as he should not grow into a big bull.

Purchaser ..... $ .....

Is the IMF% EBV of 4.5 a big deal?

How many bulls with higher IMF% EBVs AND reasonable $ indices will you be able to inspect and possibly buy this year?

My search of the Angus data base found only 275 N or P bulls that meet these specifications*. Most of them are a long way south of Walcha.

If you are serious about marbling (yield, growth and fertility) then perhaps you should organise a trip to Straban on August 23. Or settle down in front of your computer and log in to AuctionsPlus.

* Search the Angus database for male animals (born in 2017 or 2018) with IMF% EBV 4.5 or better, and in the top 50% of all indices.

LOT 56 MURRAY LANDLINK P102PV IDENT: NURP102 GRADE: HBR BORN: 21/08/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

TE MANIA JENKINS J89

SIRE: TE MANIA LANDLINK L228

TE MANIA MITTAGONG J808

TE MANIA EMPEROR E343

DAM: MURRAY EMPEROR L95

MURRAY 1407 Y6

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$132	Domestic Index +$121	Heavy Grain Index +$148	Heavy Grass Index +$122
Percentile	18	15	16	25

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+3.0	+2.9	-0.6	+2.0	+41	+75	+97	+77	+17
Acc	*56%*	*42%*	*72%*	*71%*	*69%*	*66%*	*67%*	*64%*	*57%*
Percentile	13	10	94	8	70	71	71	77	33

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-8.1	+2.1	+1	+0.11	+52	+7.0	-1.4	-2.3	+1.4	+2.4
42%	*63%*	*52%*	*52%*	*60%*	*59%*	*62%*	*59%*	*55%*	*58%*
3	35	61	45	75	20	88	94	13	23

Traits observed: *CE,BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: Low birth weight. You can start on the path to high marbling and high yielding Angus cattle very safely with this bull.

Purchaser ..... $ .....

LOT 57 MURRAY LANDLINK P112PV — IDENT: NURP112 — GRADE: HBR — BORN: 27/08/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

TE MANIA JENKINS J89

SIRE: TE MANIA LANDLINK L228

TE MANIA MITTAGONG J808

ARDROSSAN EXACT E162

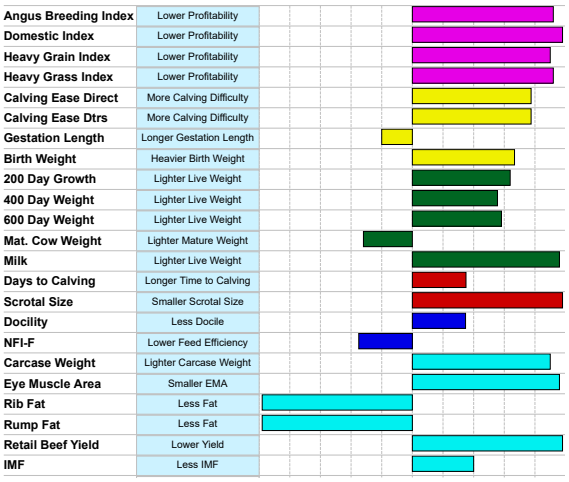
DAM: MURRAY EXACT L119

MURRAY TEN X J93

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$144	Domestic Index +$133	Heavy Grain Index +$160	Heavy Grass Index +$135
Percentile	5	2	7	5

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+3.1	+2.9	-3.4	+2.9	+51	+89	+117	+82	+24
Acc	*53%*	*36%*	*71%*	*70%*	*67%*	*65%*	*66%*	*63%*	*54%*
Percentile	12	10	62	18	18	25	25	68	2

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-5.3	+3.8	+9	+0.23	+76	+10.0	-4.0	-4.7	+3.2	+2.1
38%	*61%*	*50%*	*50%*	*59%*	*57%*	*61%*	*57%*	*53%*	*56%*
30	1	33	62	6	2	99	99	1	33



Traits observed: *CE,BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: Another low birth weight bull to lead you safely into the world of superior carcase quality and performance.

Purchaser ..... $.....

LOT 58 MURRAY M170 P98PV — IDENT: NURP98 — GRADE: HBR — BORN: 20/08/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

AYRVALE BARTEL E7

SIRE: MURRAY BARTEL M170

MURRAY OBJECTIVE G81

CHERYLTON STEWIE D19

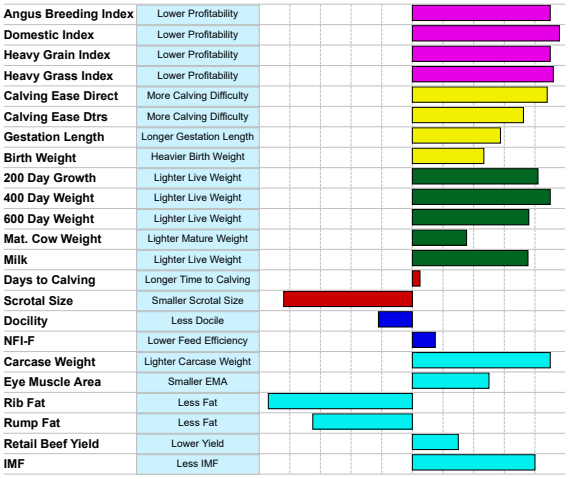
DAM: MURRAY STEWART M11

MURRAY THUNDERBIRD K3

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$144	Domestic Index +$132	Heavy Grain Index +$163	Heavy Grass Index +$135
Percentile	5	2	6	5

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+3.7	+2.6	-6.1	+3.4	+53	+99	+124	+96	+20
Acc	*44%*	*39%*	*69%*	*71%*	*68%*	*65%*	*66%*	*64%*	*56%*
Percentile	6	14	17	28	11	6	13	38	12

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-4.2	+0.5	+1	+0.07	+76	+6.7	-2.3	-1.5	+0.8	+3.0
41%	*62%*	*51%*	*52%*	*60%*	*58%*	*61%*	*58%*	*54%*	*57%*
52	95	61	40	6	24	97	83	35	10



Traits observed: *CE,BWT,200WT(x2),DOC,Genomics(S-Step)*

Notes: Low birth weight and high marbling are features of this grandson of Ayrvale Bartel. Growth is another strong feature.

Purchaser ..... $.....

LOT 59 MURRAY M170 P116PV — IDENT: NURP116 — GRADE: HBR — BORN: 30/08/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

AYRVALE BARTEL E7

SIRE: MURRAY BARTEL M170

MURRAY OBJECTIVE G81

PATHFINDER GENESIS G357

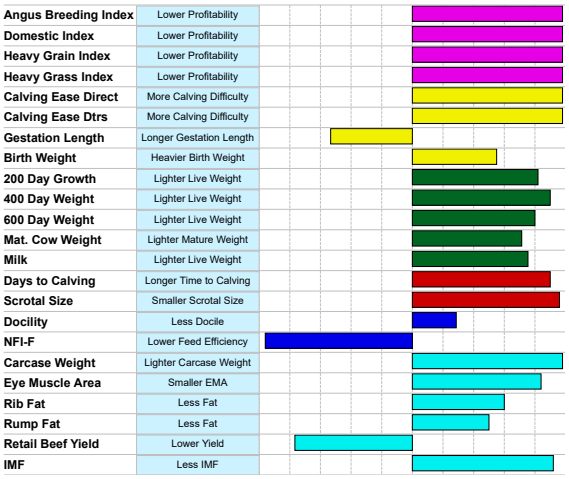
DAM: MURRAY GENESIS M93

MURRAY BERKLEY F11

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$157	Domestic Index +$134	Heavy Grain Index +$179	Heavy Grass Index +$144
Percentile	1	1	1	1

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+5.2	+4.6	-2.9	+3.2	+55	+101	+129	+111	+20
Acc	*56%*	*42%*	*71%*	*72%*	*70%*	*67%*	*68%*	*65%*	*58%*
Percentile	1	1	70	25	7	4	8	14	12

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-7.4	+3.5	+8	+0.60	+84	+8.3	+0.9	+0.6	-0.6	+3.4
44%	*63%*	*54%*	*54%*	*62%*	*60%*	*63%*	*60%*	*56%*	*59%*
6	2	36	95	1	8	23	28	88	4



Traits observed: *CE,BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: Another low birth weight bull with exceptional marbling. He too is grandson of Ayrvale Bartel.

Purchaser ..... $.....

LOT 60 MURRAY M204 P120[PV] IDENT: NURP120 GRADE: HBR BORN: 4/09/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

H P C A PROCEED

SIRE: MURRAY PROCEED M204

MURRAY WAVE J43

MURRAY AFRICA J122

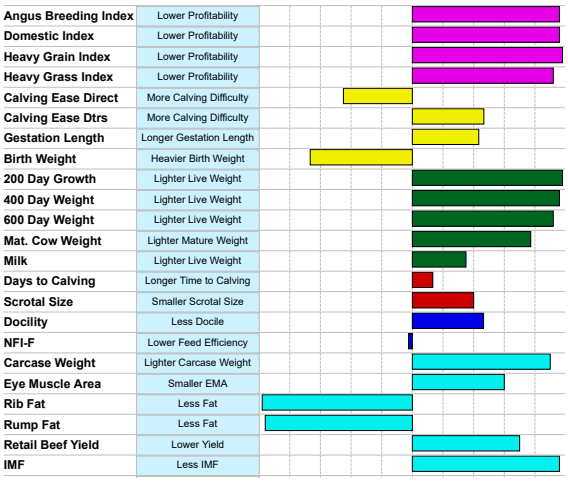
DAM: MURRAY M AFRICA L151

MURRAY CONSENSUS J79

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$151	Domestic Index +$132	Heavy Grain Index +$182	Heavy Grass Index +$136
Percentile	2	2	1	4

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	-1.2	+1.8	-5.4	+5.8	+60	+103	+134	+112	+18
Acc	*54%*	*35%*	*72%*	*72%*	*70%*	*67%*	*67%*	*64%*	*55%*
Percentile	74	27	25	83	1	3	4	13	24

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-4.5	+2.1	+11	+0.05	+77	+7.0	-3.0	-3.3	+1.3	+3.8
38%	*62%*	*55%*	*49%*	*60%*	*57%*	*61%*	*57%*	*52%*	*56%*
45	35	27	38	5	20	99	98	15	2



Traits observed: *CE,BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: Top 5% all indices. Marbling in the top 5%, carcase weight and yield in the top 20%. With a moderate birth weight EBV this bull will make a valuable contribution to your breeding programme.

Purchaser ..... $ .....

LOT 61 MURRAY M198 P174[PV] IDENT: NURP174 GRADE: HBR BORN: 12/07/2018

GENETIC STATUS: AMFU,CAFU,DDFU,NHFU

H P C A PROCEED

SIRE: MURRAY PROCEED M198

MURRAY WAVE J43

MURRAY INCENTIVE H130

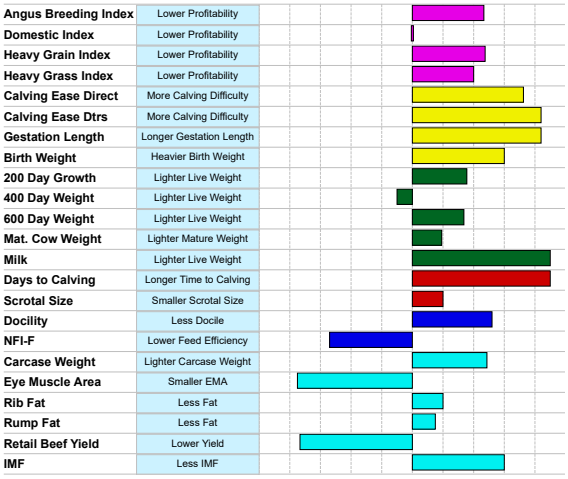
DAM: MURRAY H130 K25

MURRAY BLACK LABEL G49

SELECTION INDEXES				
Selection Index	Angus Breeding Index +$128	Domestic Index +$110	Heavy Grain Index +$140	Heavy Grass Index +$120
Percentile	25	48	24	30

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN									
	CED	CEM	GL	BWT	200	400	600	MCW	MILK
EBV	+2.8	+3.1	-7.4	+3.1	+48	+81	+113	+96	+22
Acc	*52%*	*35%*	*68%*	*69%*	*68%*	*66%*	*67%*	*64%*	*56%*
Percentile	15	8	7	23	32	51	33	38	5

DC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
-7.6	+2.1	+12	+0.35	+67	+2.4	+0.4	+0.3	-0.6	+2.6
39%	*62%*	*48%*	*49%*	*59%*	*57%*	*61%*	*57%*	*53%*	*56%*
5	35	24	76	26	88	35	35	88	18



Traits observed: *BWT,200WT(x2),DOC,Genomics(CE,S-Step)*

Notes: Low birth weight and above average growth. IMF in the top 20% of the breed. A suitable bull to end this unique catalogue.

Purchaser ..... $ .....

KILBURNIE ANGUS

REFERENCE SIRE BREEDPLAN EBV SUMMARY

GREEN, BLUE, RED AND BLACK

We use **GREEN**, **RED**, **BLUE** and **BLACK** in the following table to indicate where our bulls are relative to the Angus breed.

The **black** figures are in the top half (50%) of the breed. The **red** figures are in the top 20% of the breed. The **blue** figures are in the top 5% of the Angus breed. The **green** figures are in the top 1% of the Angus breed.

Some things stand out when we do this. The coloured numbers are mostly **blue** and **red**. We believe that the indices are the most important figures you are given. We select on two of them - the Heavy Grass Fed and the Australian Breeding Indices. You might like to note that most of the bulls are in the top 20% of the breed, i.e. **green** or **blue** or **red** on all of the indices. Kilburnie Bulls are not average bulls. You should only buy average bulls if they are cheap enough.

Generally the bulls are not specialists for one trait - e.g. carcase, growth or calving ease. They have a balance of attributes. Individual animals are of course exceptional for particular traits. There are some calving ease specialists among the bulls and there are some carcase and growth specialists.

The number of **green**, **blue**, **red** and **black** animals in your herd depends on how many **green**, **blue**, **red** and **black** bulls you have used in the past. If you do not use **green**, **blue**, **red** and **black** bulls then you will not have above average Angus cattle.

ID	Name	Sire Ident	Dam Ident	$ Index				Calv Ease		Birth		Growth				Fertility			Other		Carcase				
				ABI	DOM	GRN	GRS	Dir	Dtrs	GL	Bwt	200	400	600	MCW	Milk	DTC	SS	DOC	NFI-F	CWT	EMA	RIB	P8	RBY	IMF
DBLL292	TOPBOS LEADING EDGE L292 PV	USA16295688	VSNF04	160	137	181	150	0.3	1.8	-5.4	6.7	73	124	161	145	21	-6.7	2.2	13	0.23	88	4.5	0.2	-0.6	-0.2	2.7
	Leading Edge is a high growth rate son of G A R Prophet going back to a Berkley daughter. He inherits more than adequate marbling from his father. He is being tested in Cohort 8 of the Angus Sire Benchmarking Program (ASBP) and is being used in a number of other herds in Australia.																									
NORK522	RENNYLEA KODAK K522 SV	NORE11	NORF810	152	127	184	133	5.0	3.4	-6.7	1.5	46	86	109	110	13	-10.8	4.3	-8	0.86	67	3.0	3.1	0.8	-0.8	4.0
	Rennylea Kodak is being tested in cohort 7 of the ASBP and he has more than 800 progeny recorded. We used him to introduce more marbling into our herd. His calving ease and low birthweight have been useful attributes in our breeding programme.																									
NURG20	MURRAY EL GRANDO G20 SV	USA13058662	VTMD113	174	144	212	155	-5.6	1.6	-6.9	7.4	66	112	154	141	12	-5.7	4.3	2	-0.16	94	11.7	-4.4	-4.9	4.0	3.1
	Grando is a very high indexing, high growth bull that we bred. He has an extraordinary combination of marbling and meat yield and we have tried to capitalise on this in our breeding programme. There is increased demand (and some premiums) for animals that marble. In general high marbling animals have low meat yield. We fully expect that in the long term there will be premiums for animals that marble and yield. The main risk in this is that high yielding animals carry less fat and there is some anecdotal evidence that fertility and fat are positively related. Grando is very lean for an Angus bull but still has a better than breed average days to calving EBV.																									
The EBVs in this table are from the Mid June 2019 Angus Australia BREEDPLAN analysis			Top 1%	157	135	182	145	5.0	4.5	-9.7	0.4	61	109	146	140	26	-8.9	3.8	31	-0.48	85	11.0	3.1	3.2	2.6	4.0
			Top 5%	145	128	165	135	3.9	3.5	-7.8	1.7	56	100	133	124	22	-7.6	3.1	24	-0.30	77	9.0	2.0	2.1	1.9	3.3
			Top 20%	131	119	143	124	2.4	2.2	-5.8	3.0	51	91	119	106	19	-6.0	2.4	14	-0.07	69	7.0	1.0	0.9	1.2	2.5
			Top 50%	115	109	120	112	0.4	0.5	-4.0	4.3	45	81	106	91	15	-4.3	1.8	4	0.18	60	5.1	0.0	-0.2	0.5	1.7

ID	Name	Sire Ident	Dam Ident	$ Index ABI	$ Index DOM	$ Index GRN	$ Index GRS	Calv Ease Dir	Calv Ease Dtrs	Birth GL	Birth Bwt	Growth 200	Growth 400	Growth 600	Growth MCW	Fertility Milk	Fertility DTC	Other SS	Other DOC	Other NFI-F	Carcase CWT	Carcase EMA	Carcase RIB	Carcase P8	Carcase RBY	Carcase IMF
NURJ136	MURRAY GRANDO J136 PV This son of Grando performed exceptionally well in ASBP cohort 6. His progeny had the second highest MSA index values and marbling. In addition they were amongst the lowest birth weight animals. Again, as with Grando, there is an exceptional combination of IMF%, yield and fertility, combined with moderate birth weight and a very low mature weight. His mother was strong in those attributes.	NURG20	NURF22	171	142	200	154	3.3	3.9	-9.2	3.4	49	87	120	75	23	-7.6	3.9	10	0.83	69	11.4	-1.4	-1.6	2.0	3.5
NURK118	MURRAY G24 K118 PV K118 was a structurally sound bull with a short gestation length and good calving ease. We used him to breed sound bulls, with a low birth weight, to be used over heifers. The calves offered here meet these specifications.	NURG24	NURF7	123	117	127	117	4.9	5.6	-12.0	0.3	39	73	87	78	15	-8.9	2.3	-8	0.67	57	4.5	1.1	1.5	0.1	2.0
NURL152	MURRAY RITO 12E7 L152 PV L152 was a heavily muscled bull that impressed visually from birth. We used him lightly and he has produced some good looking, well muscled calves.	USA17131890	NURJ53	148	126	164	141	-5.9	0.7	-4.8	6.5	63	110	150	125	16	-5.0	3.9	-15	-0.01	93	9.6	-1.1	-1.1	1.9	2.0
NURL154	MURRAY RED ENDORSEMENT L154 (RED) # This bull was the pick of our red calves born in 2015 and we chose to use him as the back up to AI over our red cows.	USA1331520	NURJ19	109	114	107	111	1.4	-0.1	-2.9	2.5	47	86	104	79	15	-3.5	1.4	-7	0.14	55	7.7	-0.8	-2.1	1.3	1.3
NURL52	MURRAY EMPEROR L52 SV We have bred many calves from this docile, low birth weight son of Te Mania Emperor. His mother is an older cow that has bred well for us.	VTME343	NURG49	139	121	153	128	2.8	2.3	-2.9	3.6	43	79	101	64	19	-11.6	2.3	33	0.47	57	5.0	1.4	-0.3	0.0	2.3
NURL6	MURRAY DOWNLOAD L6 PV Another attractive light birth weight bull that we used to breed calving ease bulls.	USA17314910	NURG34	112	113	118	107	2.3	2.4	-5.1	2.1	39	68	79	57	18	-6.3	1.2	12	0.45	52	7.9	0.4	-0.8	1.0	2.4
NURM112	MURRAY M GRANDO J136 M112 PV The strengths of Grando are still apparent in this grandson of his. He is in the top 5% on all indices. Birthweight and growth are in the desirable 20% of the breed, mature weight is below average. Carcase EBVs are good and the EBV for docility is worth noting.	NURJ136	NURG81	151	128	172	141	2.7	2.3	-6.0	1.9	51	91	126	93	19	-5.9	2.5	29	0.47	69	6.7	-0.5	-0.6	0.5	3.1
NURM170	MURRAY BARTEL M170 PV A high performing son of Ayrvale Bartel out of a good proven older cow. Used sparingly in our herd as a yearling.	HIOE7	NURG81	153	135	168	144	5.9	4.5	-7.2	1.5	53	93	119	79	23	-7.5	2.0	6	0.35	75	8.7	-0.9	0.3	0.5	2.8
NURM198	MURRAY PROCEED M198 PV A son of Proceed that we used lightly in our 2017 joining.	USA16956101	NURJ43	126	115	143	119	0.1	2.2	-4.9	4.6	49	82	108	88	17	-3.9	1.4	4	0.60	66	6.6	-0.9	-0.5	0.5	3.3
NURM204	MURRAY PROCEED M204 PV We used this high marbling son of Proceed in our 2017 joining. He is currently being progeny tested in Cohort 8 of the ASBP. We used him because of his combination of marbling and yield.	USA16956101	NURJ43	156	134	193	138	-3.7	1.1	-3.9	5.1	60	105	134	117	19	-6.0	3.2	0	0.78	88	9.9	-2.5	-3.4	1.5	4.2
NURM208	MURRAY GENESIS M208 PV A high performance son of Pathfinder Genesis. The Genesis daughters have been exceptionally fertile. The days to calving EBV of this bull suggests that his daughters will also be fertile animals.	SMPG357	NURK45	159	141	171	150	2.3	2.8	-6.1	5.5	54	101	126	118	15	-8.3	3.0	-12	1.11	79	12.1	1.7	0.5	1.9	1.5
USA1612741	BROWN BLW LEGEND A1965 (RED) # Legend is one of the higher performing Red Angus bulls that we have been able to source from the United States. His progeny, including lot 15 NURN86, have been well structured animals.	USA1042135	USA1439149	81	98	70	88	3.7	1.7	-2.6	2.3	43	77	92	72	14	-1.6	0.4	11	0.46	60	3.7	-1.6	-3.1	0.6	0.9
USA16295688	G A R PROPHET SV Prophet has been one of the most important bulls to come into Australia. He has proven to be one of the higher marbling bulls in the breed with a lot of growth and a moderate mature weight. We used two of his sons in our 2017 joining and a third son in our 2018 joining.	USA13009379	USA15129456	152	135	169	142	1.4	2.3	-1.1	3.4	65	108	131	83	26	-6.8	0.8	8	0.41	72	6.1	0.8	1.3	-1.4	3.9
USA16350631	G A R TWINHEARTS 8418 SV Twinhearts is still, rightly, one of the highest indexing bulls in Australia. It is the combination of growth curve and carcase EBVs that has made this possible. In addition to the sons being offered here we have a number of daughters that we are flushing and which should produce some exciting calves in due course.	USA0T26	USA15129465	171	148	203	157	4.5	3.5	-6.8	3.0	65	122	161	136	33	-4.0	1.8	-4	-0.06	92	7.7	-3.9	-4.7	1.9	3.2
USA16956101	H P C A PROCEED # As with G A R Momentum we used Proceed because of his extremely high marbling. We are usually reluctant to single trait select. However in this case the marbling more than makes up for the lower values of other EBVs. This is reflected in the index values. With the exception of the Heavy Grass Index all other indices are in the top 5% of the breed. He has rewarded us with some exceptional calves and his genes (including for marbling) are being spread in our herd.	USA16290873	USA16503489	143	125	176	126	-2.1	2.1	-5.9	4.0	51	90	114	93	19	-4.8	1.6	5	1.18	64	7.6	-0.8	-1.3	0.3	4.8
USA17328461	G A R SURE FIRE SV Sure Fire is a useful source of outcross genetics for us. He has both adequate IMF% and meat yield. His fat EBVs are above average despite the high meat yield. We still have to see whether his daughters are more fertile than average. Again we like the combination of birth weight, growth and mature weight. For our long fed markets we would like a bit more growth.	USA16205036	USA16431932	160	143	181	146	3.4	5.7	-4.1	1.8	49	90	108	87	15	-9.3	3.9	9	0.54	69	8.8	0.2	-0.2	1.6	2.8
The EBVs in this table are from the Mid June 2019 Angus Australia BREEDPLAN analysis			Top 1%	157	135	182	145	5.0	4.5	-9.7	0.4	61	109	146	140	26	-8.9	3.8	31	-0.48	85	11.0	3.1	3.2	2.6	4.0
			Top 5%	145	128	165	135	3.9	3.5	-7.8	1.7	56	100	133	124	22	-7.6	3.1	24	-0.30	77	9.0	2.0	2.1	1.9	3.3
			Top 20%	131	119	143	124	2.4	2.2	-5.8	3.0	51	91	119	106	19	-6.0	2.4	14	-0.07	69	7.0	1.0	0.9	1.2	2.5
			Top 50%	115	109	120	112	0.4	0.5	-4.0	4.3	45	81	106	91	15	-4.3	1.8	4	0.18	60	5.1	0.0	-0.2	0.5	1.7

ID	Name	Sire Ident	Dam Ident	$ Index ABI	$ Index DOM	$ Index GRN	$ Index GRS	Calv Ease Dir	Calv Ease Dtrs	Birth GL	Birth Bwt	Growth 200	Growth 400	Growth 600	Growth MCW	Fertility Milk	Fertility DTC	Fertility SS	Other DOC	Other NFI-F	Carcase CWT	Carcase EMA	Carcase RIB	Carcase P8	Carcase RBY	Carcase IMF
	G A R MOMENTUM PV	USA16290873	USA16734804	**129**	**127**	**153**	**119**	**0.9**	0.3	-2.8	**2.7**	**47**	**87**	98	64	**22**	-0.8	0.0	**19**	0.80	**68**	**13.1**	-0.6	-2.1	**0.6**	**4.8**
USA17354145	We used Momentum because of his high IMF% EBV and also his relatively high retail beef yield. He was joined to some of our cows with high growth EBVs. Momentum and Proceed (below) are half brothers. Their father, G A R Progress, was born in 2008 and is still the highest marbling bull in the United States. He was a DD carrier so is no longer much used.																									
	TE MANIA LONGSHOT L107 SV	USA16295688	VTMJ1125	**129**	**117**	**138**	**123**	**4.9**	**2.5**	**-5.1**	**1.2**	**50**	**83**	99	51	**20**	**-7.2**	0.2	**10**	0.63	54	**5.2**	**2.7**	**3.6**	-2.7	**4.0**
VTML107	We managed to obtain semen from some of the sires sold at the 2017 Te Mania sale including from this bull that was purchased by Alpine Angus. Longshot is a son of G A R Prophet and we were particularly attracted to his marbling and his growth curve. We have bred some exceptionally high marbling progeny from him.																									
	TE MANIA LANDLINK L228 SV	VTMJ89	VTMJ808	**142**	**132**	**157**	**134**	**5.4**	**4.5**	-1.4	**1.4**	**47**	**85**	**109**	65	**33**	**-6.0**	1.7	-4	0.40	**70**	**11.6**	-3.1	-4.2	**2.6**	**2.4**
VTML228	Landlink is a grandson of G A R Twinhearts. The attractions for us of this bull include his extreme growth curve, low birth weight, above average growth and modest mature weight. The combination of a short days to calving (fertility) EBV and high meat yield were additional attractions.																									
	TE MANIA LEWINS L839 PV	VTMJ89	VTMH33	**165**	**134**	**199**	**148**	**3.7**	**2.6**	**-6.9**	**2.5**	**58**	**108**	**150**	**157**	**25**	**-6.3**	**2.8**	**6**	0.21	**87**	**7.2**	-2.7	-2.7	**0.8**	**3.4**
VTML839	Lewins was initially purchased by Ian McLeod of Wahgunya, Woodstock. This bull is also a grandson of G A R Twinhearts who has been one of the highest indexing bulls in Australia for a long time. Twinhearts semen was not readily available so we used Lewins and Landlink to give us increased access to the Twinheart genes. Lewins has 600 day growth in the top 1% of the breed while still having a low birthweight EBV. He has high marbling and above average retail beef yield.																									
	ESSLEMONT GENERAL L115 PV	HIOG18	WWEH4	**168**	**142**	**199**	**152**	**2.2**	**1.5**	**-4.5**	**3.6**	**51**	**97**	**132**	**94**	**25**	**-6.4**	**4.0**	0	0.63	**64**	**10.4**	-3.3	-3.7	**2.5**	**3.2**
WWEL115	This is another bull with the growth curve that we have been trying to breed into our herd. Below average birth weight, top 20% growth and a low mature weight make this bull an attractive proposition. With both marbling and meat yield in the top 20% of the breed this bull has a lot of valuable genes to pass on to his progeny. We will be interested to see how his progeny grow out.																									
	ESSLEMONT LOTTO L3 PV	HIOG18	WWEJ8	**159**	**129**	**189**	**142**	-3.2	-1.4	**-5.7**	**4.2**	**59**	**105**	**138**	**111**	**22**	**-8.1**	**3.4**	**4**	0.76	**92**	**8.8**	**1.0**	**0.0**	-0.2	**4.0**
WWEL3																										
			Top 1%	**157**	**135**	**182**	**145**	**5.0**	**4.5**	**-9.7**	**0.4**	**61**	**109**	**146**	**140**	**26**	**-8.9**	**3.8**	**31**	**-0.48**	**85**	**11.0**	**3.1**	**3.2**	**2.6**	**4.0**
	The EBVs in this table are from the Mid June 2019 Angus Australia BREEDPLAN analysis		Top 5%	**145**	**128**	**165**	**135**	**3.9**	**3.5**	**-7.8**	**1.7**	**56**	**100**	**133**	**124**	**22**	**-7.6**	**3.1**	**24**	**-0.30**	**77**	**9.0**	**2.0**	**2.1**	**1.9**	**3.3**
			Top 20%	**131**	**119**	**143**	**124**	**2.4**	**2.2**	**-5.8**	**3.0**	**51**	**91**	**119**	**106**	**19**	**-6.0**	**2.4**	**14**	**-0.07**	**69**	**7.0**	**1.0**	**0.9**	**1.2**	**2.5**
			Top 50%	**115**	**109**	**120**	**112**	**0.4**	**0.5**	**-4.0**	**4.3**	**45**	**81**	**106**	**91**	**15**	**-4.3**	**1.8**	**4**	**0.18**	**60**	**5.1**	**0.0**	**-0.2**	**0.5**	**1.7**

KILBURNIE ANGUS

A BRIEF DESCRIPTION OF EBVS & $INDEX VALUES

ACCURACY (%) Provides an indication of the reliability of an EBV. As more performance information becomes available on an animal (or it's progeny, or relatives) then the accuracy of it's EBVs for particular traits will increase.

TRAITS OBSERVED Indicates those traits that have been recorded and are contributing to the EBV's calculated for an animal. (These should appear directly below the table displaying the animals EBV's).

CALVING EASE DIR (%) Estimates of the genetic differences between animals in the ability of their calves from 2 year old heifers to be delivered without assistance.

CALVING EASE DTRS (%) Estimates of the genetic differences between animals in the ability of their 2 year old daughters to calve without assistance.

GESTATION LENGTH (DAYS) Estimates of the genetic differences between animals in the number of days from the date of conception to the calf birth date.

BIRTH WT (KG) Estimates of the genetic differences between animals in calf birth weight.

200-DAY WT (KG) Estimates of the genetic differences between animals in liveweight at 200 days of age.

400-DAY WT (KG) Estimates of the genetic differences between animals in liveweight at 400 days of age.

600-DAY WT (KG) Estimates of the genetic differences between animals in liveweight at 600 days of age.

MATURE COW WEIGHT (KG) Estimates of the genetic differences between animals in cow weight at 5 years of age.

MILK (KG) Estimates of the genetic differences between animals in milk production, expressed as variation in 200-day weight of daughter's calves.

SCROTAL SIZE (CM) Estimates of the genetic differences between animals in scrotal circumference at 400 days of age.

DAYS TO CALVING Estimates of the genetic differences in female fertility, expressed as the number of days from the start of the joining period until subsequent calving.

CARCASE WEIGHT (KG) Estimates of the genetic differences between animals in carcase weight, adjusted to 650 days of age.

EYE MUSCLE AREA (CM^2) Estimates of the genetic differences between animals in eye muscle area at the 12/13th rib site, in a 300kg carcase.

RIB FAT (MM) Estimates of the genetic differences between animals in fat depth at the 12/13th rib site, in a 300kg carcase.

RUMP FAT (MM) Estimates of the genetic differences between animals in fat depth at the P8 rump site, in a 300kg carcase.

RETAIL BEEF YIELD % (RBY%) Estimates of the genetic differences between animals in percentage retail beef yield, in a 300kg carcase.

INTRA-MUSCULAR FAT % (IMF%) Estimates of the genetic differences between animals in percentage intramuscular fat (marbling) at the 12/13th rib site, in a 300 kg carcase.

NET FEED INTAKE TRIAL (KG/DAY) Estimates of the genetic differences between animals for feed efficiency.

ANGUS BREEDING Estimates the genetic differences between animals in net profitability per cow, joined in a typical commercial self-replacing herd using Angus bulls. This selection index is not specific to a particular production system or market end-point, but identifies animals that will improve overall profitability in the majority of commercial grass and grain finishing beef production systems. The index is particularly suited to commercial producers who sell progeny into different markets, or to seedstock producers supplying bulls to commercial clients who produce for a range of different production systems and market end points.

DOMESTIC Estimates the genetic differences between animals in net profitability per cow joined in a commercial selfreplacing herd targeting the domestic supermarket trade, with progeny finished using either grass, grass supplemented by grain or grain finishing systems.

HEAVY GRAIN Estimates the genetic differences between animals in net profitability per cow joined in a commercial selfreplacing herd targeting pasture grown steers with a 200 day feedlot finishing period for the grain fed high quality, highly marbled markets.

HEAVY GRASS Estimates the genetic differences between animals in net profitability per cow joined in a commercial selfreplacing herd targeting pasture finished heavy steers.

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NB. Actual $Index Values for individual animals are sensitive to the assumptions used in the BREEDOBJECT analysis used to calculate the selection index.
For a more detailed explanation of Group BREEDPLAN EBV's and Accuracies, please refer to www.angusaustralia.com.au for a more detailed explanation. NB. EBVs and $Index Values are calculated using software developed by the Animal Genetics and Breeding Unit (AGBU), a joint institute of NSW Agriculture and The University of New England. Ongoing research and development at AGBU is supported by funding provided by Meat and Livestock Australia.

MID-JULY 2019 ANGUS AUSTRALIA BREEDPLAN
REFERENCE TABLES

BREED AVERAGE EBVs

	Calving Ease		Birth		Growth					Fertility		Carcase						Other		Structure					Selection Indexes			
	CEDir	CEDtrs	GL	BW	200	400	600	MCW	Milk	SS	DTC	CWT	EMA	RIB	P8	RBY	IMF	NFI-F	DOC	FA	FC	RA	RH	RS	ABI	DOM	GRN	GRS
Brd Avg	+0.2	+0.4	-4.0	+4.3	+44	+81	+106	+91	+15	+1.8	-4.2	+59	+5.1	+0.0	-0.2	+0.4	+1.7	+0.14	+4	+0	-1	-2	-0.3	-0.4	+114	+109	+119	+111

* Breed average represents the average EBV of all 2017 drop Angus and Angus influenced animals analysed in the Mid-July 2019 Angus Australia BREEDPLAN genetic evaluation.

PERCENTILE BANDS TABLE

% Band	Calving Ease		Birth		Growth					Fertility		Carcase						Other		Structure					Selection Indexes			
	CEDir	CEDtrs	GL	BW	200	400	600	MCW	Milk	SS	DTC	CWT	EMA	RIB	P8	RBY	IMF	NFI-F	DOC	FA	FC	RA	RH	RS	ABI	DOM	GRN	GRS
	Less Calving Difficulty	Less Calving Difficulty	Shorter Gestation Length	Lighter Birth Weight	Heavier Live Weight	Heavier Live Weight	Heavier Live Weight	Heavier Mature Weight	Heavier Live Weight	Larger Scrotal Size	Shorter Time to Calving	Heavier Carcase Weight	Larger EMA	More Fat	More Fat	Higher Yield	More IMF	Greater Feed Efficiency	More Docile	More Sound	More Sound	More Sound	More Sound	More Sound	Greater Profitability	Greater Profitability	Greater Profitability	Greater Profitability
1%	+5.0	+4.5	-9.7	+0.4	+61	+109	+146	+139	+26	+3.8	-8.9	+85	+11.1	+3.1	+3.2	+2.6	+4.0	-0.51	+31	+21	+24	+14	+4.7	+0.4	+157	+135	+182	+145
5%	+3.9	+3.5	-7.8	+1.6	+56	+100	+133	+124	+22	+3.1	-7.6	+77	+9.0	+2.1	+2.1	+1.9	+3.3	-0.33	+24	+16	+18	+11	+3.5	+0.4	+145	+128	+165	+135
10%	+3.3	+2.9	-6.9	+2.3	+54	+96	+127	+115	+21	+2.8	-6.8	+73	+8.0	+1.5	+1.6	+1.6	+3.0	-0.22	+19	+13	+15	+9	+2.7	+0.4	+138	+124	+155	+130
15%	+2.8	+2.5	-6.3	+2.7	+52	+93	+123	+110	+19	+2.6	-6.3	+71	+7.4	+1.2	+1.2	+1.3	+2.7	-0.16	+16	+11	+13	+7	+2.4	+0.4	+134	+121	+149	+127
20%	+2.4	+2.2	-5.8	+3.0	+51	+91	+120	+106	+19	+2.4	-5.9	+69	+7.0	+1.0	+0.9	+1.2	+2.5	-0.10	+14	+10	+11	+6	+2.0	+0.4	+130	+119	+143	+124
25%	+2.0	+1.9	-5.4	+3.2	+49	+89	+117	+103	+18	+2.3	-5.6	+67	+6.6	+0.8	+0.7	+1.0	+2.3	-0.05	+12	+8	+9	+5	+1.6	+0.3	+128	+117	+139	+122
30%	+1.7	+1.6	-5.1	+3.5	+48	+87	+114	+100	+17	+2.2	-5.3	+66	+6.3	+0.6	+0.5	+0.9	+2.2	-0.01	+10	+7	+8	+3	+1.3	+0.3	+125	+115	+134	+120
35%	+1.3	+1.3	-4.8	+3.7	+48	+86	+112	+98	+17	+2.1	-5.0	+64	+5.9	+0.4	+0.3	+0.8	+2.0	+0.03	+8	+6	+6	+2	+1.1	+0.3	+122	+114	+131	+118
40%	+1.0	+1.1	-4.5	+3.9	+47	+84	+110	+95	+16	+2.0	-4.8	+63	+5.6	+0.3	+0.2	+0.7	+1.9	+0.07	+7	+4	+5	+1	+0.8	+0.2	+120	+112	+127	+116
45%	+0.7	+0.8	-4.2	+4.1	+46	+83	+108	+93	+16	+1.9	-4.5	+62	+5.4	+0.1	+0.0	+0.6	+1.8	+0.11	+5	+3	+3	+0	+0.4	+0.2	+117	+111	+123	+114
50%	+0.4	+0.5	-4.0	+4.3	+45	+81	+106	+91	+15	+1.8	-4.3	+60	+5.1	+0.0	-0.2	+0.5	+1.7	+0.14	+4	+2	+1	-1	+0.1	+0.1	+115	+109	+120	+112
55%	+0.1	+0.3	-3.7	+4.5	+44	+80	+104	+88	+15	+1.7	-4.0	+59	+4.8	-0.2	-0.3	+0.3	+1.5	+0.18	+3	+1	-1	-2	-0.1	+0.0	+113	+108	+116	+111
60%	-0.2	+0.0	-3.5	+4.7	+43	+79	+102	+86	+14	+1.6	-3.8	+57	+4.5	-0.3	-0.5	+0.2	+1.4	+0.22	+1	-1	-3	-3	-0.5	-0.1	+110	+106	+113	+109
65%	-0.6	-0.2	-3.2	+4.9	+42	+77	+100	+84	+14	+1.5	-3.5	+56	+4.2	-0.5	-0.7	+0.1	+1.3	+0.25	+0	-2	-5	-4	-0.9	-0.2	+108	+105	+109	+107
70%	-0.9	-0.5	-2.9	+5.1	+41	+75	+97	+81	+13	+1.4	-3.2	+54	+3.9	-0.6	-0.9	+0.0	+1.2	+0.29	-2	-4	-8	-6	-1.4	-0.4	+105	+103	+105	+105
75%	-1.3	-0.9	-2.6	+5.3	+40	+74	+95	+78	+13	+1.3	-2.9	+52	+3.6	-0.8	-1.1	-0.1	+1.0	+0.34	-3	-6	-11	-7	-1.7	-0.5	+102	+101	+101	+102
80%	-1.8	-1.3	-2.3	+5.6	+39	+72	+92	+75	+12	+1.1	-2.5	+50	+3.2	-1.0	-1.3	-0.3	+0.8	+0.38	-5	-9	-14	-9	-2.1	-0.9	+98	+99	+96	+100
85%	-2.4	-1.7	-1.9	+5.9	+37	+69	+89	+71	+11	+1.0	-2.1	+47	+2.8	-1.2	-1.6	-0.4	+0.6	+0.43	-7	-13	-17	-12	-2.9	-1.3	+94	+96	+90	+96
90%	-3.2	-2.3	-1.4	+6.3	+35	+66	+84	+66	+10	+0.8	-1.5	+42	+2.2	-1.5	-1.9	-0.7	+0.4	+0.50	-9	-19	-21	-15	-4.1	-1.7	+89	+93	+82	+92
95%	-4.5	-3.3	-0.5	+6.9	+31	+60	+76	+58	+9	+0.5	-0.5	+36	+1.4	-1.9	-2.5	-1.0	+0.1	+0.61	-13	-26	-26	-20	-5.8	-2.8	+79	+87	+69	+84
99%	-7.4	-5.2	+1.3	+8.2	+24	+50	+60	+41	+6	-0.1	+1.5	+25	-0.1	-2.8	-3.5	-1.7	-0.4	+0.84	-20	-35	-33	-29	-10.7	-5.5	+53	+72	+33	+64
	More Calving Difficulty	More Calving Difficulty	Longer Gestation Length	Heavier Birth Weight	Lighter Live Weight	Lighter Live Weight	Lighter Live Weight	Lighter Mature Weight	Lighter Live Weight	Smaller Scrotal Size	Longer Time to Calving	Lighter Carcase Weight	Smaller EMA	Less Fat	Less Fat	Lower Yield	Less IMF	Lower Feed Efficiency	Less Docile	Less Sound	Less Sound	Less Sound	Less Sound	Less Sound	Lower Profitability	Lower Profitability	Lower Profitability	Lower Profitability

* The percentile bands represent the distribution of EBVs across the 2017 drop Angus and Angus influenced animals analysed in the Mid-July 2019 Angus Australia BREEDPLAN genetic evaluation.

KILBURNIE ANGUS

BUYING BULLS

A SENSIBLE APPROACH TO BUYING BULLS.

The three problems that you have to solve when buying bulls are:

1. What attributes you need to improve your herd.
2. Where you can best buy bulls that will help you put those attributes into your herd.
3. How to acquire the best value bulls at the sale you go to.

The attributes you need to make your cattle operation more profitable.

If you have calving problems you probably need to buy some low birth weight bulls. If your cattle do not meet market weights at the correct time you may need some more growth. If the information that you get from your MSA feedback, or the feedlot you sold your steers to, suggest you need more marbling you should be looking for bulls that will improve that characteristic (IMF%) in your calves.

You have to decide what attributes you want in your cattle. You need to find out whose bulls can provide those requisites, be it calving ease, growth, marbling or whatever.

If you do not have particular attributes that you want to focus on then we think you should concentrate on the index values.

Identify where you can buy bulls that will help you put those attributes into your herd.

The biggest fixed cost you incur in buying bulls is taking a day off other work and travelling to the relevant sale. You can go to a lot of sales but each extra one is another fixed cost. It is sensible to look at the offerings from different vendors to see which are most likely to provide the sorts of bulls that you need. You can do this by accessing hard copies of catalogues or you can get the information directly off the Angus Australia web site where on line catalogues are made available by some (but not all) producers.

Get the best value bulls at the sales you choose to go to.

Use the standard "better bull buying" sum to work out differences in value on the bulls that interest you. As a quick rule of thumb every $1 difference in the index value of two bulls is equivalent to a $100 difference in the value of the animals to you. If the index value for one bull is $10 greater than another then you should be willing to pay an extra $1000 for the higher indexing bull.

If you choose to go to a normal (sequential) Auction Sale you have a (self-inflicted) problem. You have to make a decision on bulls one at a time. You have to guess what the price of the bulls is going to be before the bidding starts. Once the sale has started you have to continuously guess what the prices of the bulls that are still to be sold are going to be. You have to be making an awful lot of guesses about prices which effectively means that you cannot do the sums above.

If you are at an AuctionsPlus Simultaneous Auction or a Helmsman Auction you can bid on the bull that offers you best value throughout the sale. **Kilburnie** is one of very few sales that offers you this choice. Throughout our sale you have full information on all of the bulls being offered for sale and can adjust your bid(s) accordingly.

This is another very good reason why you should come to our sale. When the bidding starts you call the shots.

KILBURNIE ANGUS

AUCTIONSPLUS BIDDING ON SITE AT STRABAN

Our sale will be run live on AuctionsPlus as a simultaneous sale. All lots will be on sale all the time until the hammer falls. You will be able to bid at any time on any bull in the catalogue. You may submit bids directly from your own computer or through your agent. There is limited internet service at the selling centre so you should not rely on being able to use your computer at the selling complex to lodge bids directly. There will be mobile telephone service from the selling complex so you can talk to someone else to lodge bids directly from another location.

We recommend that you register with our agents, Landmark Boulton, at the sale and submit your bids directly to them so that they can lodge them with AuctionsPlus. We will keep a whiteboard up to date with current prices of all lots displayed. We will have a few computers on hand which will be linked to AuctionsPlus and have the detailed sale information available on them as well.

If, as suggested, you bid through Landmark Boultons at the sale, the system will work as follows:

1. On arrival you register as a buyer with the Landmark staff to receive a buyer number and a supply of bid cards.
2. All animals are displayed for inspection in the adjacent yards. Information on the animals is available in the catalogues and on supplementary sheets. You are free to go and inspect the animals at any time during the sale.
3. When the sale commences all of the animals are on sale simultaneously. You may bid on any animal, regardless of lot order, by filling in a bid card with your buyer number, the relevant lot number and the price you are offering. Hand your card to one of the Landmark staff and they will have it submitted to AuctionsPlus.
4. To have your bid accepted it must be at least $500 greater than the existing offer.
5. If you have any concerns about the procedure either ask the agents or the Kilburnie staff – or just watch the proceedings for the first ten minutes.

The terms and conditions applying at the sale are those applying to AuctionsPlus sales.

BIOSECURITY INFORMATION

Like the majority of producers on the Northern Tablelands we automatically have a J-BAS rating of 7. To maintain this status we, like everyone else, will have to have 50 animals tested for Johnes during the next twelve months. You can minimise the risk of bringing disease into your herd by only buying animals from herds with some form of recognised Animal Health program.

Some of the animals being offered for sale spent part of their early lives on properties other than Straban. We have National Cattle Health Declarations for all of these animals. We will provide all purchasers of bulls with a National Cattle Health Declaration.

You will know that MLA and your local LLS are encouraging us all to be aware of biosecurity. We support those moves and are implementing systems to improve biosecurity on Straban.

KILBURNIE ANGUS

A MAINTAINANCE AND SAFETY MANUAL FOR YOUR NEW INVESTMENT

If you want to own cows and calves you probably have to own bulls.

Bulls are unreliable, dangerous and potentially expensive animals. They should be monitored regularly and not taken for granted. Three possible sources of problems with bulls are physical damage, disease transmission and mating failure. The average working life of a bull bought as a two year old is believed to be about two and a half years. This is equivalent to about 100 calves. If you buy a yearling bull and look after him this can be increased.

We try to minimise the risk to you of physical damage by breeding genetically docile stock and handling them quietly and firmly. On leaving Kilburnie the bulls should be tractable and you should aim to keep them that way. They have been exposed to people, motor bikes and dogs. They have had limited exposure to horses. You should continue to handle them quietly and safely.

The main disease control measures that we undertake are vaccination against clostridial diseases and leptospirosis (7 in 1). The bulls have also been vaccinated against vibriosis and pestivirus. The bulls have been tested PI negative for pestivirus. We have a biosecurity rating of J-BAS 7. There are no major disease issues which cannot be controlled. Your veterinary surgeon is the best source of advice on this issue.

Mating failure can arise from lack of libido, inadequate sperm quantity or quality and injury. We run the bulls in large mobs and social dominance (fighting) effects distort any attempts by us to assess libido. Sperm quantity and quality can vary markedly within a short period because of nutritional and disease status. An annual veterinary examination shortly before joining is very desirable.

The bulls on sale today include yearling bulls. They will work like little Trojans given the chance. If they are in a paddock with a bigger, older bull they will be dominated by him. Give them and yourself a fair go. Do not waste your investment. We work on one yearling bull to twenty or thirty cows. Join two yearlings to your best standard mating mob of forty or fifty cows and then rotate them to your second best mob after the first cycle.

Age is the great leveller for bulls. They get big and cumbersome, they may get arthritic and they may get a corkscrew penis (usually poll cattle) or a broken penis (usually horned cattle). As they age they can become bad tempered for all sorts of reasons. I know of no way in which these potential issues can be identified in young bulls. In older bulls the only way to know of these problems is to observe the bull in action. This may take the form of an annual serving ability test or simple observation by you during mating. You need your vet to arrange the former. You need time and common sense to undertake the latter. If you rely on observation you will probably only pick up problems during joining and that could be too late to avoid a delayed and protracted calving.

If you want to reduce the risk of an unsuccessful mating without the effort involved in continual monitoring we suggest that you at least multiple join and rotate bulls during joining. The object is to expose the cow to as many different bulls as is possible.

When you buy a two year old bull you should plan to use him for two or at most three joinings. When you buy a yearling you should plan to use him for three or at most four joinings. This reduces the risk of having a bull failure which is both costly and irritating.

KILBURNIE ANGUS

DATA SOURCES

The information presented in the document '***2019 KILBURNIE SALE BULL BREEDPLAN EBV SUMMARY***' on pages 4 to 7 were extracted by us from information in the June 2019 Angus BREEDPLAN Analysis.

The Index Values and EBVs given for each sale bull on pages 8 to 30 were obtained from a data extract from the July 2019 Angus BREEDPLAN Analysis.

The bar graphs for each sale bull were extracted from the June 2019 Angus Breedplan Analysis.

The information presented in the document '***REFERENCE SIRE EBV SUMMARY***' on pages 4 to 7 were extracted by us from information in the June 2019 Angus BREEDPLAN Analysis.

DISCLAIMER

Animal details included in this catalogue, including but not limited to pedigree, DNA information, Estimated Breeding Values (EBVs) and Index values, are based on information provided by the breeder or owner of the animal.

While all reasonable care has been taken to ensure that the information provided in this catalogue was correct at the time of publication, neither the vendor, Angus Australia nor the selling agents assume any responsibility for the accuracy or the completeness of the information, nor the outcome (including consequential loss) of any action based on this information.

KILBURNIE ANGUS

INSURANCE

There will be facilities at the sale to insure your bulls.

TRANSPORT

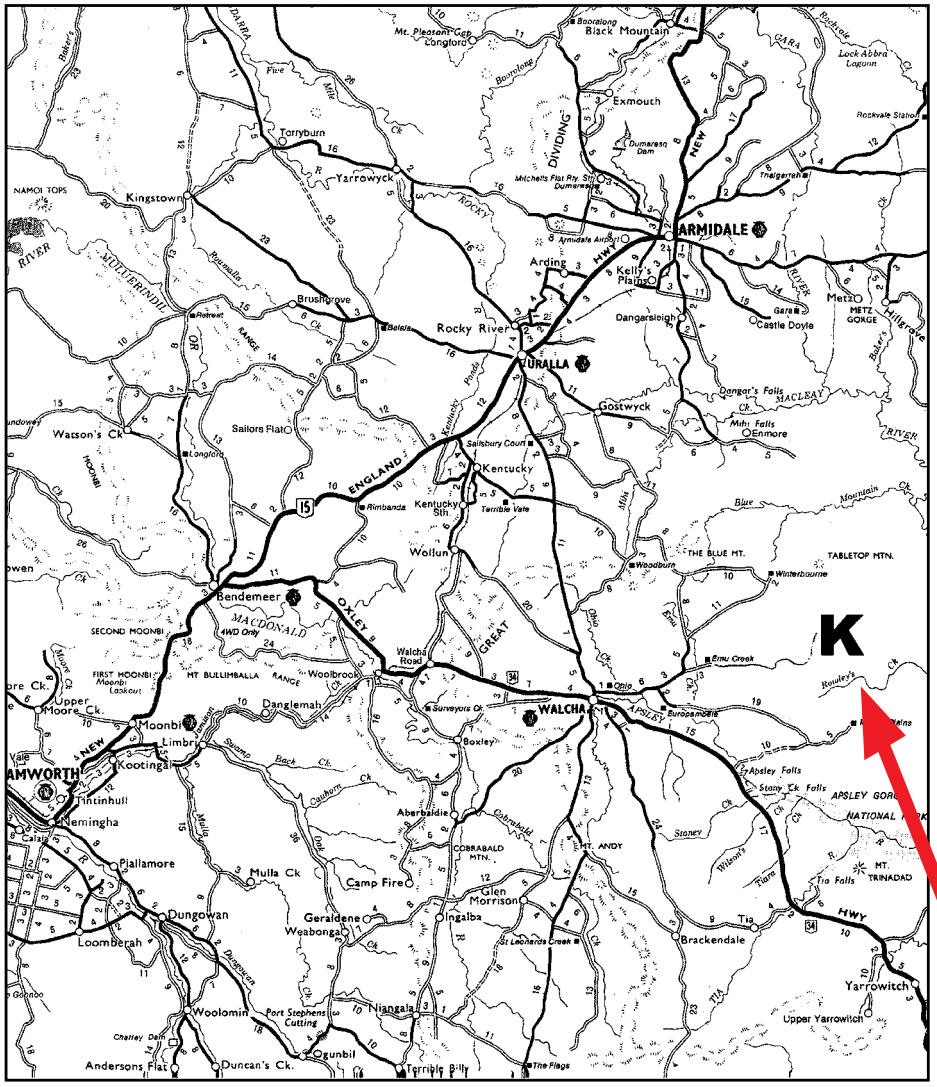
Carriers will be present at the sale. Andy Burwell will be co-ordinating deliveries from Straban.

REFRESHMENTS

Light refreshments and a barbecue will be available at the sale.

DIRECTIONS TO STRABAN

The Kilburnie Sale at Straban is located at the K on the map below. Travel north out of Walcha on the Uralla/Armidale road (or south from Uralla on the same road) and turn right (left) at the signpost just north of the Showground. This is Jamison Street which becomes the Winterbourne Road. Go out on this road, past the old Timber mill, for about seven and a half kilometres to the Moona Plains Road junction. At that Y junction keep left (stay on the Winterbourne Road). One and a half kilometres from there turn right into the Old Brookmount Road (which has a gravel surface). Go past Brookmount and Emu Creek sheds and houses and keep travelling for about twelve kilometres to Straban. After passing the new set of cattle yards on Straban, on your right, follow the road to the right and proceed to the shearing shed on the hill beyond the blue painted house.



The map on our website www.kilburnieangus.com.au is an interactive Google map. It may help you to locate us.

KILBURNIE ANGUS

NEXT SALE DATES

May/June 2020
Selling 10 Stud Cows and Heifers by Private Treaty
Selling 60 Embryos by Private Treaty
Selling surplus registered Cows on AuctionsPlus

Friday, 21st August, 2020
Selling 60 Bulls

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High Indexing Angus - Measured to perform