

BRAUNVIEH

BREEDING VALUE REPORT

July 2026



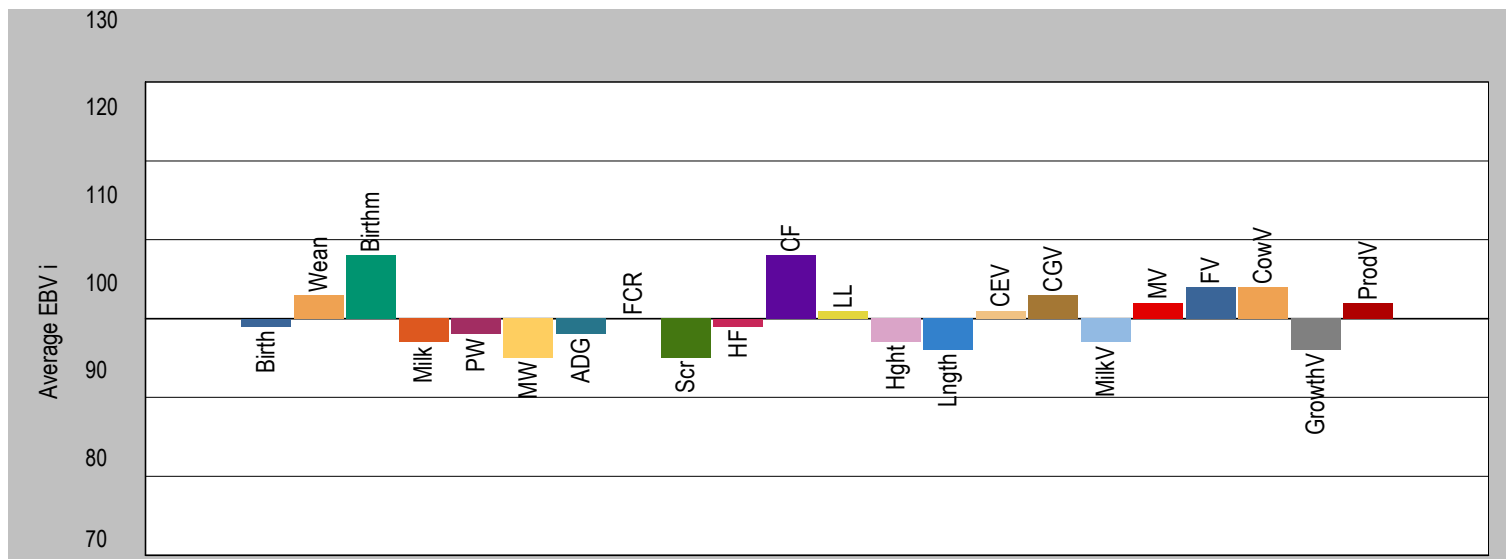
THABA KWENA (PTY) LTD

Herd Number: 728248

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Herd and Breed Averages



Breeding Values:

Birth:	Birth weight	Scr:	Scrotal circumf.
Wean:	Weaning weight	HF:	Heifer Fertility
Birthm:	Birth maternal	CF:	Cow Fertility
Milk:	Milk	LL:	Longevity
PW:	Post-wean weight	Hght:	Height
MW:	Mature weight	Lngth:	Length
ADG:	Average Daily Gain		
FCR:	Feed Conversion Ratio		

Selection Values:

CEV:	Calving Ease Value
CGV:	Calf Growth Value
MilkV:	Milk Value
MV:	Maintenance Value
FV:	Fertility Value
CowV:	Cow Value (CV)
GrowthV:	Growth Value (GV)
ProdV:	Production Value (PV)

	Trait	EBV Herd	EBV Index	EBV Breed
Prewean Growth	Birth Weight	0.50	99	0.44
	Wean Weight	6.3	103	5.0
	Birth Mat.	-0.56	108	-0.24
	Milk (Wn.Mat.)	-0.2	97	0.5
Postwean Growth	Postwean Wt	8.9	98	9.8
	Mature Weight	16	95	20
	ADG	39	98	47
	FCR	-31	100	-31
Fertility	Scrotal Circumf.	-1.0	95	1.3
	Heifer Fertility	-2.6	99	-3.2
	Cow Fertility	-3.9	108	-1.9
	Longevity	11.5	101	11.0
Frame	Height	6	97	7
	Length	8	96	12

Selection Value	Ave. Herd
Calving Ease	101
Calf Growth	103
Milk	97
Maintenance	102
Fertility	104
Cow Value	104
Growth Value	96
Production Value	102

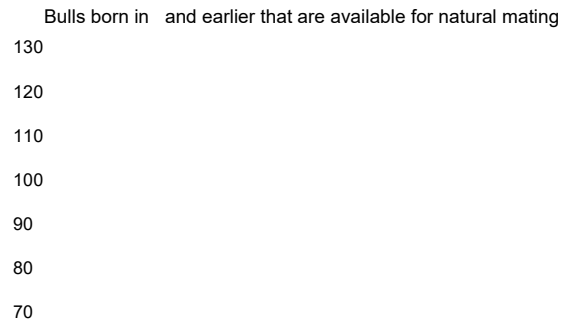
- Average of live animals in the breed: 100
- Above 100: **more favourable**,
- Below 100: **less favourable**

What does a sub-selection value above breed average (100) mean?:

Calving ease:	Smaller calf at birth - easier calving
Calf growth:	Heavier calves at wean due to growth potential of the calf
Milk:	Cows with more milk and better mothering ability
Maintenance:	Animals with low maintenance requirements (lower mature weight).
Fertility:	Cows/daughters that calve

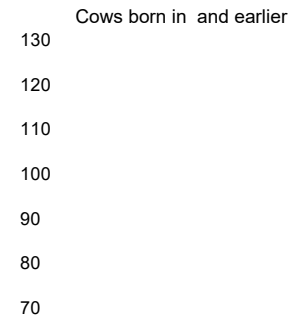
Genetic Windows

Bulls on the farm



Animals available for breeding

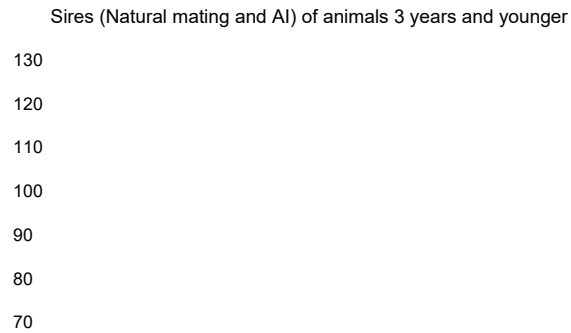
Total:



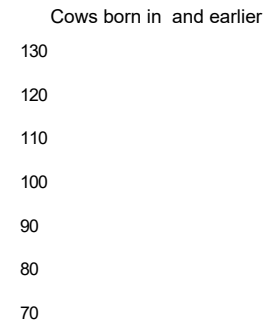
Total:

Results of previous selection decisions

Sires of young animals



Total:

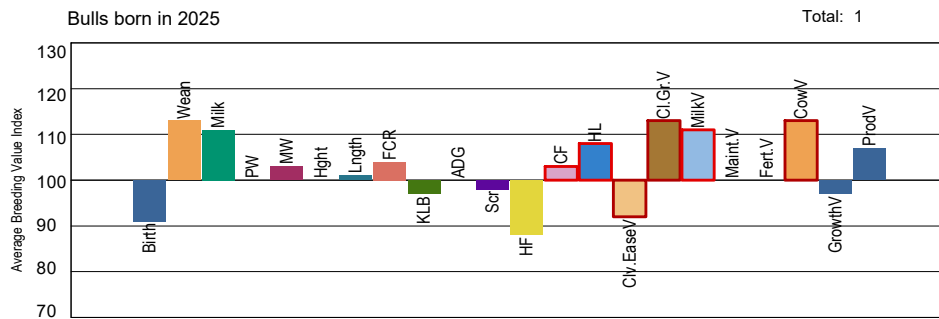


Total:

Cows older than 6 years

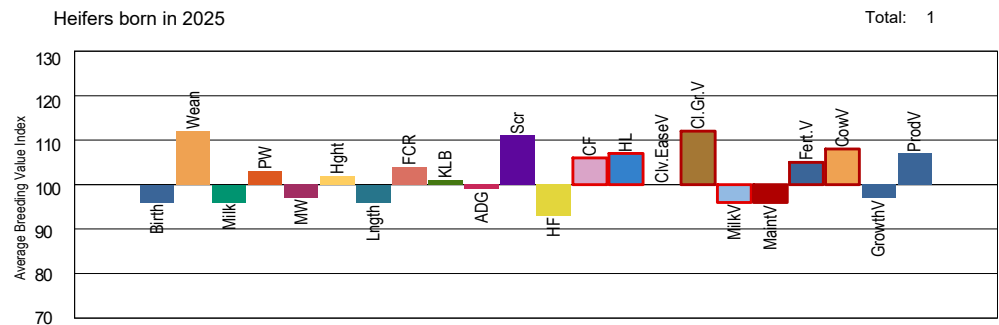
Selection possibilities

Bull calves



Total: 1

Heifer calves



Total: 1

Summary of Cow Herd

			Selection Values (SV)								Calf Weight		Dam		Growth & Efficiency				Fertiity				Frame	
Birth Year	No. Cows	Average Cow Value	Calving Ease	Calf Grwth	Milk	Maint.	Fertility	Cow Value	Growth Value	Prod Value	Birth Weight	Wean Weight	Birth Mat.	Milk (Wn.Mat)	Postwn Weight	Mature Weight	ADG	Kleiber	Scrotal Circumf.	Heifer Fertility	Cow Fertility	Longevity	Height	Length
		Cows in Breed Average:	100	100	100	100	100	100	99	100	100	100	100	100	100	100	100	99	99	99	100	100	99	100
2015	1	★★★★☆	91	125	100	72	134	107	121	113	90	125	104	100	127	117	117	117	108	132	128	116	112	110
2016	2	★★★★★	98	108	115	98	122	119	90	117	99	108	86	115	104	105	104	103	105	117	119	106	96	104
2018	1	★★★★	99	119	60	94	120	92	123	98	96	119	114	60	104	105	121	125	116	110	118	98	102	95
2019	1	★★★★☆	113	103	87	106	91	109	90	106	109	103	135	87	91	70	86	86	75	67	98	109	86	85
2022	1	★★★★☆	114	75	110	126	96	108	73	101	111	75	104	110	75	86	74	73	70	108	94	88	101	103
2023	4	★★★★☆	103	94	94	107	85	88	91	85	100	94	109	94	93	89	91	95	89	90	85	93	93	89
2025	1	★★★★☆	100	112	96	96	105	108	97	107	96	112	118	96	103	97	99	101	111	93	106	107	102	96
Cows in Herd Average:			103	105	95	100	108	104	98	104	100	105	110	95	100	96	99	100	96	102	107	102	99	97

Genetic Trends for On-Farm Traits

The graphs show the genetic gain of the herd relative to the breed. Only data of animals with measurements are included.

Herd

Birth Year	Calving Ease				Calf Growth			Milk			Maintenance						Fertility						Cow Value
	Birth Weight		Dir	Mat	Calv. Ease	Weaning Weight		Calf Growth	Milk (Wn.Mat.)		Milk	Postwean Weight		Mature Weight	Maintenance	Heifer Fert.		Cow Fert.		Longevity		Fertility	
	Number	EBV				Number	EBV		Number	EBV		Number	EBV	Number		EBV	Number	EBV	Number	EBV	Number		

Breed

Birth Year	Calving Ease				Calf Growth			Milk			Maintenance						Fertility								Cow Value
	Birth Weight		Mat EBV	Calv. Ease	Weaning Weight		Calf Growth	Milk (Wn.Mat.)		Postwean Weight		Mature Weight		Maintenance	Heifer Fert.		Cow Fert.		Longevity		Fertility				
	Number	Dir EBV			Number	EBV		Number	EBV	Number	EBV	Number	EBV		Number	EBV	Number	EBV	Number	EBV		Number	EBV		
2016	535	0.26	-0.10	101	192	4.0	97	192	1.13	103	109	10.2	44	16	100	104	-3.1	74	-2.4	586	5.6	100	100		
2017	414	0.29	-0.14	100	179	4.6	99	179	0.56	100	105	10.7	39	18	99	92	-3.0	73	-1.9	427	5.9	100	100		
2018	312	0.47	-0.13	99	155	4.3	98	155	0.08	98	81	9.6	36	16	100	75	-5.3	54	-2.1	320	5.9	103	97		
2019	348	0.54	-0.19	99	161	6.4	103	161	0.51	100	94	12.7	55	22	96	94	-4.1	75	-1.9	373	6.4	100	100		
2020	388	0.64	-0.30	98	167	4.7	99	167	-0.88	95	146	9.8	54	19	98	92	-2.9	74	-2.1	380	7.0	101	95		
2021	392	0.51	-0.24	99	224	5.8	102	224	-0.24	97	173	11.9	41	20	96	90	-3.0	49	-1.9	345	7.4	100	96		
2022	353	0.47	-0.29	100	231	4.1	98	231	0.40	100	137	9.9	30	19	100	75	-1.9	12	-3.3	93	7.4	99	98		
2023	415	0.49	-0.31	99	294	5.0	100	294	-0.03	98	150	10.1	2	30	99	19	-2.4					97	97		
2024	299	0.50	-0.28	99	195	5.1	100	193	0.16	99	115	11.0			98								98		
2025	355	0.45	-0.22	100	141	5.2	100	141	0.03	98	28	12.8			97								100		
2026	81	0.33	-0.22	99																					

Genetic Trends for Growth Test Traits

Herd

Birth Year	Growth									Frame						Selection Values	
	FCR			ADG			Scrotal Circumf.			Height			Length			Growth Value	Prod Value
	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi		

Breed

Birth Year	Growth									Frame						Selection Values	
	FCR			ADG			Scrotal Circumf.			Height			Length			Growth Value	Prod Value
	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi		
2016	11	-34	101	32	72	108	32	3.6	105	32	10	104	32	15	103	106	102
2017	3	-20	96	39	79	110	39	3.8	105	39	12	107	39	15	104	109	100
2018	10	-17	95	30	70	107	30	5.3	108	12	1	89	12	6	94	109	100
2019	4	-14	93	43	70	107	43	3.3	104	35	10	104	35	16	104	107	102
2020	15	-36	102	68	56	103	68	2.9	103	68	8	102	68	13	101	104	94
2021	3	-25	98	52	83	111	53	3.3	104	53	11	105	53	15	104	109	97
2022	17	-40	103	51	62	105	53	1.6	100	53	6	98	53	11	99	104	98
2023	3	-38	103	57	65	105	60	3.1	104	60	10	104	60	16	105	103	97
2024				44	56	103	44	2.6	103	44	12	108	44	19	108	101	98
2025				13	106	118	13	9.2	116	13	19	118	13	25	115	118	103

Sires

Bull			Selection Values							Calf		Dam		Growth				Fertility				Frame		Measured Progeny					
ID	Index EBV Acc	Sire ID Dam ID	Calv.	Calf	Milk	Maint.	Fertility	Cow	Growth	Prod	Birth	Wean	Birth	Wean	Post wn	Mature	ADG	FCR	Scrotal	Heifer	Cow	Long-evi	Height	Length	Birth	Wean	Dgt/Calvs.		Grwth
			Ease	Grwth	Value	Value	Value	Value	Value	Value	Dir	Dir	Mat.	Mat.	wt	weight				Fertility	Fertility	ty							
11-0053LLG		08-0032LLG	88	116	72	94	127	87	122	93	85	116	116	72	104	95	117	107	145	111	125	87	105	98	106	81	32	93	10
AURORA BISTO		PW 020017	92	90	85	71	60	75	46	69	1.85	11.2	-0.92	-6.3	12.3	16	101	-50	23.1	-11.2	-8.2	3.4	11	10					
			92	90	85	71	60	75	46	69	93	90	87	85	78	48	71	16	78	73	46	79	74	72					
170066YV		11 0038YV	88	108	108	94			117		85	108	117	108	106	120	113		102	83		76	90	106	75	59	7	7	23
DIE RANTE ANKER		12 0041YV	84	83	38	64			36		1.81	7.9	-0.94	2.5	13.0	38	90		2.5	8.8		-3.7	1	17					
			84	83	38	64			36		89	83	34	38	70	12	64		73	30		29	74	71					
HB 100003		FJNH010008	115	82	97	123	106	110	69	101	113	82	102	97	78	66	76	79	96	96	106	92	76	80	151	125	36	107	30
WINDHOEK		PW 080816	95	93	88	79	70	81	76	80	-0.79	-1.8	-0.33	-0.2	-2.7	-9	-30	22	-0.8	-0.6	-3.5	6.3	-8	-7					
			95	93	88	79	70	81	76	80	96	93	90	88	84	63	80	68	85	81	58	86	85	84					
HB 180003		HB 150011	121	84	92	128	81	111	71	103	115	84	119	92	72	84	78	86	122	83	83	97	84	75	86	68	7	7	18
OMEGA		HB 050005	90	88	65	73	41	64	48	61	-1.01	-1.2	-1.02	-1.4	-6.4	6	-23	5	12.0	9.2	2.3	9.2	-3	-11					
			90	88	65	73	41	64	48	61	92	88	68	65	77	33	71	21	77	58	24	59	78	76					
N 150063		N 110021	112	96	69	107	81	85	98	84	108	96	137	69	91	86	97	103	63	68	87	100	89	86	157	112	15	26	38
LT ROCKET		N 080026	93	91	77	71	56	72	76	73	-0.32	3.6	-1.79	-7.1	4.8	8	37	-40	-16.6	20.0	1.4	10.9	0	-1					
			93	91	77	71	56	72	76	73	95	91	79	77	79	53	80	66	86	72	40	74	85	84					
N 160063		N 130083	118	97	108	89	94	108	110	111	117	97	87	108	111	109	121	122	100	94	95	90	106	97	50	42	10	10	
NESCAFE SNOOPY		N 070023	84	82	63	56	37	58	48	56	-1.21	3.8	0.29	2.4	15.8	28	113	-88	1.5	1.2	-0.5	5.3	11	9					
			84	82	63	56	37	58	48	56	86	82	71	63	64	15	57	30	68	55	19	56	70	66					
N 190006		N 160012	79	111	119	91	109	99	106	100	81	111	91	119	111	100	103	103	76	115	105	108	108	115	76	48	1	1	4
SAINT'S WAKKER		N 120010	85	78	55	62	36	56	52	55	2.23	9.4	0.12	4.9	15.9	20	57	-38	-10.1	-13.8	-3.1	15.9	13	26					
			85	78	55	62	36	56	52	55	88	78	60	55	68	32	62	33	71	50	22	52	57	55					
N 200015		N 150063	84	116	103	99	104	102	109	105	82	116	114	103	101	118	107	107	98	104	102	108	105	105	25	16			10
ROCKET'S APOLLO		N 130019	81	77	49	54	27	50	49	50	2.12	11.1	-0.83	1.1	10.4	36	70	-49	0.3	-6.3	-2.4	15.8	11	16					
			81	77	49	54	27	50	49	50	84	77	52	49	63	18	62	30	69	42	12	52	70	67					

Breeding Values and Accuracies: Bulls

Inbreeding in red is high

Value <80

Value >120

Breeding values with an accuracy < 5% are not printed

Animal			Selection Values									Birth		Wean				Growth			Fertility				Frame	
Index EBV Acc	% Inbreeding	Sire ID Dam ID	Calv. Ease V	Calf Growth V	Milk V	Maint. V	Fertility V	Cow Value	Growth Value	Prod. Value	Birth wt dir	Birth mat	Mature wt	Wean wt	Wean mat	Cow-Calf Ratio (Wean)	Postwean wt	ADG	FCR	Scrotal Circ.	Heifer Fertility	Cow Fertility	Longevity	Height	Length	
N 250019		N 200015	92	113	111	100	100	113	100	114	103	91	109	103	113	111	118	100	100	104	98	88	103	108	100	101
98561129	2	N 160031	69	53	43	37	22	38	26	36	5	1.33	-0.60	23	10.1	3.1	43	9.9	46	-41	0.4	5.5	-2.5	16.1	8	12
APOLLO'S FAAN																										

Breeding Values and Accuracies: Cows

Inbreeding in red is high

Value <80 Value >120

Breeding values with an acc

Animal				Selection Values								Birth		Wean				Growth			Fertility				Frame		
Index EBV Acc	% Inbreeding	Sire ID Dam ID		Calv. Ease V	Calv Growth V	Milk V	Maint. V	Fertility V	Cow Value	Growth Value	Prod. Value	Birth wt dir	Birth mat	Mature wt	Wean wt	Wean mat	Cow-Calf Ratio (Wean)	Postwean wt	ADG	FCR	Scrotal Circ.	Heifer Fertility	Cow Fertility	Longevity	Height	Length	
ID Number Name																											
N 150005 81256554 WH ROSY	1	HB 100003 N 120022		91 83	125 78	100 80	72 63	134 52	107 66	121 48	113 62	120 40	90 1.36 83	104 -0.41 81	117 35 51	125 14.9 78	100 0.5 80	113 34 70	127 25.5 68	117 102 56	110 -56 35	108 5.1 63	132 -25.8 64	128 -8.9 41	116 20.6 62	112 15 64	110 21 62
N 160039 84193648 WH SHANI	1	HB 100003 N 130073		95 79	113 76	119 75	87 61	110 48	115 63	93 46	113 60	107 34	95 0.88 80	95 -0.03 72	93 15 47	113 10.2 76	119 5.2 75	130 66 66	115 18.5 66	108 71 53	111 -58 34	107 4.9 60	92 2.5 58	112 -4.8 38	99 10.6 59	104 10 61	111 22 59
N 160109 84801315 WH SUGAR	1	HB 100003 N 130019		101 82	102 73	110 79	109 50	134 47	123 60	87 50	120 58	102 33	103 0.16 83	77 0.72 77	116 34 40	102 5.7 73	110 2.8 79	102 14 64	93 5.8 58	100 49 59	103 -39 34	102 2.3 66	142 -33.1 58	125 -8.3 36	112 18.1 60	88 -1 65	96 8 62
N 180012 86888831 BISTO VANETTE	2	11-0053LLG N 130041		99 78	119 74	60 71	94 56	120 44	92 59	123 34	98 54	115 26	96 0.86 79	114 -0.83 72	105 25 40	119 12.2 74	60 -9.2 71	80 -25 62	104 12.2 60	121 113 44	116 -72 18	116 9.3 51	110 -10.3 55	118 -6.6 32	98 9.8 55	102 9 50	95 7 48
N 190040 89228118 ROCKET'S WILDE	3	N 150063 N 160031		113 77	103 74	87 66	106 59	91 39	109 57	90 41	106 54	86 27	109 -0.43 78	135 -1.71 64	70 -6 40	103 6.2 74	87 -2.7 66	106 21 60	91 4.9 64	86 2 46	96 -20 31	75 -10.9 52	67 20.6 54	98 -1.4 24	109 16.2 51	86 -2 52	85 -3 50
R 220020 94227584 BIBI		N 190006 R 170003		114 69	75 66	110 44	126 53	96 20	108 43	73 26	101 40	77 13	111 -0.63 72	104 -0.41 46	86 8 17	75 -4.7 66	110 2.8 44	93 -2 42	75 -4.6 57	74 -34 31	67 54 16	70 -13.5 36	108 -8.7 28	94 -0.3 12	88 3.8 37	101 8 29	103 14 28
N 230032 95986055 APOLLO'S DEDRE	5	N 200015 N 180081		73 70	105 67	107 40	98 52	83 18	76 42	104 22	77 38		74 2.86 73	98 -0.16 41	101 21 8	105 7.0 67	107 2.2 40	109 28 38	103 11.5 56	101 50 31	101 -33 9	85 -5.8 37	89 5.0 29	84 2.1 6	102 12.1 37	99 7 37	98 10 35
N 230035 95986071 OMEGA DANEEL	1	HB 180003 N 200033		106 71	93 70	67 44	118 58	83 22	83 46	79 20	77 41	65 5	102 0.24 74	118 -1.01 44	73 -3 12	93 2.4 70	67 -7.4 44	78 -29 42	82 -0.5 60	77 -25 36		100 1.4 41	99 -2.3 35	82 2.8 9	98 9.6 38	80 -5 41	68 -18 40
N 230082 96249149 ANKER DONSIE		170066YV N 190040		114 69	91 68	101 37	107 56			97 20			109 -0.38 73	120 -1.09 35	86 8 16	91 1.5 68	101 0.7 37	99 10 40	92 5.4 59	91 18 35		81 -8.0 41	78 12.6 29		94 7.6 26	80 -5 42	86 -2 40
R 230009 95103982 CHLOE		N 160063 R 170010		118 67	88 65	101 45	106 50	90 21	105 43	83 26	101 40	94 10	116 -1.03 69	100 -0.25 49	96 17 10	88 0.4 65	101 0.7 45	93 -3 40	93 5.9 54	96 35 32	90 -6 15	90 -3.7 39	95 0.7 31	90 0.6 11	79 -1.5 38	111 14 40	103 14 37
N 250004 98281488 OMEGA FIA	2	HB 180003 N 160079		100 72	112 56	96 49	96 42	105 25	108 42	97 28	107 39	97 8	96 0.79 74	118 -0.98 50	97 18 21	112 9.7 56	96 -0.6 49	107 24 42	103 11.7 46	99 46 38	104 -42 12	111 6.9 44	93 1.7 36	106 -3.4 14	107 15.2 39	102 9 45	96 8 43



Selection List on Cow Value

Cows 2 years and older

ID Sorted on ID	Name	Sire ID	Dam ID	% Inbreeding	Calving Ease Value Acc	Calf Growth Value Acc	Milk Value Acc	Maint. Value Acc	Fertility Value Acc	Cow Value Acc	Growth Value Acc	Prod Value Acc	
					★★★★★								
1 N 160109	WH SUGAR	HB 100003	N 130019	1.0	101 82	102 73	110 79	109 50	134 47	123 60	87 50	120 58	
					★★★★☆								
1 N 160039	WH SHANI	HB 100003	N 130073	1.3	95 79	113 76	119 75	87 61	110 48	115 63	93 46	113 60	
					★★★★								
1 N 150005	WH ROSY	HB 100003	N 120022	1.0	91 83	125 78	100 80	72 63	134 52	107 66	121 48	113 62	
2 N 190040	ROCKET'S WILDE	N 150063	N 160031	2.9	113 77	103 74	87 66	106 59	91 39	109 57	90 41	106 54	
3 R 220020	BIBI	N 190006	R 170003	0.0	114 69	75 66	110 44	126 53	96 20	108 43	73 26	101 40	
4 R 230009	CHLOE	N 160063	R 170010	0.0	118 67	88 65	101 45	106 50	90 21	105 43	83 26	101 40	
					★★★☆☆								
1 N 180012	BISTO VANETTE	11-0053LLG	N 130041	2.1	99 78	119 74	60 71	94 56	120 44	92 59	123 34	98 54	
					★★								
1 N 230035	OMEGA DANEEL	HB 180003	N 200033	1.2	106 71	93 70	67 44	118 58	83 22	83 46	79 20	77 41	
					★★☆								
1 N 230032	APOLLO'S DEDRE	N 200015	N 180081	5.3	73 70	105 67	107 40	98 52	83 18	76 42	104 22	77 38	

Selection List on Cow Value

Bull Calves younger than 2 years

ID		Name	Sire ID	Dam ID	% Inbreeding	Calving Ease Value	Calf Growth Value	Milk Value	Maint. Value	Fertility Value	Cow Value	Growth Value	Prod Value			
Sorted on ID						Acc	Acc	Acc	Acc	Acc	Acc	Acc	Acc			
						★★★★☆										
1	N	250019	APOLLO'S FAAN	N	200015	N	160031	2.3	9269	11353	11143	10037	10022	11338	10026	11436

Selection List on Cow Value
Heifers younger than 2 years

ID		Name	Sire ID	Dam ID	% Inbreeding	Calving Ease Value	Calf Growth Value	Milk Value	Maint. Value	Fertility Value	Cow Value	Growth Value	Prod Value	
Sorted on ID						Acc	Acc	Acc	Acc	Acc	Acc	Acc	Acc	
						★★★★								
1	N	250004	OMEGA FIA	HB 180003	N 160079	1.7	10072	11256	9649	9642	10525	10842	9728	10739

	EBVi	Description / Measurement	Goal	Low Value	High Value
Selection Values	Calving Ease Value	Difficult calving due to high birth weight	Average birth weight	High	Low
	Calf Growth Value	Calf's genetic ability for prewean growth	Heavy weaner	Light	Heavy
	Milk Value	Cow's genetic mothering and milking ability	Enough milk for calf	Less	More
	Maintenance Value	Maintenance requirement of cow (weight and milk)	Low cow maintenance	High	Low
	Fertility Value	Fertility and retention of cows and heifers	Fertile cows	Low	High
	Cow Value	Combination of calving ease, calf growth, milk, maintenance and fertility values (Rand-value per Ha)	Profitable cows	Loss	Profit
	Weaner Calf Value	Heavier weaners and more milk, with lower birth and cow weights	Heavy weaner	Light	Heavy
	Growth Value	Efficient growth on veld and in feedlot (Rand-value per animal)	Profitable growth	Loss	Profit
	Production Value	Combination of Cow- and Growth Values (Rand-value)	Profitable animals	Loss	Profit
	Carcass Value	Meat on carcass (Weight and RTU EBVs)	Meat on carcass	Less	More
Birth	Cow weight - birth	Cow weight at birth of calves	Mature cow weight	Light	Heavy
	Birth weight direct	Birth weight (Calf's genetic ability)	Average birth weight	Heavy	Light
	Cow-Calf birth	EBV Birth dir / EBV Mature cow weight	Average	Low	High
Wean	Cow Weight wean	Cow weight at weaning of calves	Mature cow weight	Light	Heavy
	Weaning weight direct	Weaning weight (Calf's genetic ability)	Heavy weaners	Light	Heavy
	Weaning weight mat	Weaning weight (Dam's genetic ability)	Good mothers	Poor	Good
	Cow-Calf Wean	EBV Wean dir / EBV Mature cow weight	High cow-calf ratio	Low	High
Growth & Adaptation	Post-Wean weight	12- and 18mth weights	Post-wean growth	Low	High
	Ave. Daily Gain	Average daily gain in growth test (Phase C and D)	Good growth	Poor	Good
	Veld Growth	ADG on veld (Phase B)	Good adaptation	Poor	Good
	Feed Conversion Ratio	100g feed intake /g weight gain	Feed Efficiency	Poor	Good
	Final Test Weight	Final weight in growth test (Phase C and D)	Heavy Carcasses	Light	Heavy
	Skin Thickness	Measured in growth tests	Thicker skin	Thin	Thick
Fertility	Scrotal Circumference	Scrotal circumference in growth test	Fertile bulls	Less	More
	Heifer Fertility	Age at first calving	Fertile heifers	Less	More
	Cow Fertility	First 3 inter-calving periods (ICPs)	Fertile cows	Less	More
	Longevity	Retention of progeny	Acceptable progeny	Poor	Good
Frame	Height	Shoulder / Hip height in growth test	Average height	Short	Tall
	Length	Length in growth test	Longer (more meat)	Short	Long
	Length:Height	EBV Length / EBV Height	Longer, not higher	Less desirable	More desirable
Carcass	Eye Muscle Area	RTU Eye muscle area	Muscle in carcass	Small	Big
	Fat	RTU P8 Backfat Thickness	Carcass quality & adaptability	Thin	Thick
	Marbling	RTU % Marbling	Juicy meat	Low	High
	Dressing%	Carcass weight / Live weight	High dressing %	Low	High

Notes on the interpretation of EBVs, EBVi's, sub-values and selection values

EBVi (EBVindex) is the breeding value index and is easier to interpret than the breeding value, especially for commercial farmers buying from stud farmers. The base of a breeding value index is 100, which is the average of all the live animals in the breed, and all values are expressed relative to this value. Values above 100 are always in a more desirable direction: an index of 105 for AFC indicates a genetic potential to calve earlier. Note that a very high index is not always desirable. For certain traits, such as birth weight, average values can be better.

EBV: (Estimated Breeding Value) indicates the genetic potential of the animal for a specific trait. It is presented in the unit of measurement and relative to the average of animals born in the base year (1990 for most breeds and traits). Higher values for certain traits are better while lower values for other traits are better, for example, an EBV of -2 for AFC (age at first calving) indicates that the animal has the genetic potential to calve 2 days earlier than the average heifer in 1990 (the base year). Earlier calving is better and therefore low breeding values (high breeding value indices) are better. For weaning weight, higher values are better.

Sub-values combine similar breeding values in a scientific manner to simplify the selection of animals. For example, AFC (age at first calving) and ICP (inter-calving period) are combined to form the sub-value Fertility by taking the heritability and economic importance in consideration. The sub-value is expressed in an index format, thus an animal with a sub-value of 110 for Fertility will genetically be above average compared to the live animals in the breed.

Selection Values (Cow Value and Growth Value) combine the sub-values into a single value. This gives a quick and easy indication of the combined genetic value of an animal compared to the breed. It is advised to still look at the sub-values to see where the strengths and weaknesses lie.

How to use breeding values to select animals

Selecting animals on breeding values is easy if you know how. There is a common saying that “good nutrition can mask poor breeding”. This is very true. If an animal that is genetically inferior is fed well, it can appear as a great animal. This great performance will not be passed over to future generations. An animal that is genetically superior can appear to be inferior if its environment did not allow it to reach its true potential. It is best to select animals that are most adapted to the environment and can reach their full potential. To continuously adapt the environment to the animal can be expensive.

The reason why the use of breeding values is such a valuable tool is because it “removes” the environmental effect that contributes to the performance.

Scientific methods are used to determine how much of the performance is due to genetics and to identify genetically superior animals. This involves the measurement of animals under controlled environments, complete record keeping and pedigree information. *If performance recording and pedigree information are not done correctly, breeding values of these animals will not be useful.* Keep in mind that breeding is a long-term option: the effect of a bull selected/bought today will only show much later. If it is a good decision, his daughters will become part of the breeding herd and contribute to overall profitability in future.

Even if a bull is not perfect in all aspects, knowing the shortcomings will allow strategic selection with suitable cows. Traits are genetically correlated, meaning that a change in one trait can lead to a change in another. This change can be favourable or unfavourable. An increase in weaning weight can lead to an increase in birth weight, which can lead to calving difficulty. It is therefore advisable to not only select on a single trait. Take other traits in consideration to avoid negative effects.

How to improve the herd genetically

The first and most important aspect is to know what type of animal will improve the herd genetically. This can be determined through the following factors:

What happens to the calves? For example: used as replacement heifers, sold as stud animals or sold to commercial breeders who sell weaner calves.

How much feed is available? The availability of feed (or the hardness of the environment) determines the optimal frame size. If feed is abundant and the environment is less harsh, larger animals would be ideal. If not, medium framed animals would be ideal.

What is the genetics of the cow herd? Are they the wrong frame type, grow too slowly, do not have enough milk, etc.? Always aim to breed a calf that is superior to its dam.

Conclusion

Different types of bulls are suitable for different types of cows, environments and breeding objectives. Inbreeding should be avoided or limited as much as possible. Mating programs are available to aid in the pairing of bulls and cows.

The data used for this evaluation is pedigree information and performance data found on LOGIX as provided by breeders. All attempts are made to present accurate information. SA Stud Book takes no responsibility for the use and interpretation of information presented in this report.

