

NGUNI

BREEDING VALUE REPORT

September 2026



ELANDS NURSERY

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NGUNI Cattle Breeders' Society
Beestelersgenootskap



LOGIX



EBVs, EBVi's and GEBVs

EBVi (Breeding Value Index): Genetic potential relative to the average (100) of the live (active) animals in the breed. Roughly 50% of the animals have values between 90 and 110. Values above 100, depending on the trait, tend to be in the more favourable direction.

EBV (Breeding Value): Genetic potential relative to the average of the animals born in the base year (1990), expressed in the unit of measurement.

GEBV (Genomic Breeding Value) Interpreted like the EBVi. (GEBV = EBV + Genomic information)

LOGIX Selection values combine different breeding values in a logical way. For example, Heifer Fertility (how early a heifer starts calving), Cow Fertility (how regular she calves) and Longevity (retention within the family) are combined to form the Fertility Value.

Selection Values

LOGIX Cow Value



Selecting for:

- fertile,
- low maintenance,
- easy calving cows
- with heavy weaners

LOGIX Growth Value



Select for efficient growers on veld and in feedlot, as measured in Phase C and D Growth Tests.

LOGIX Production Value



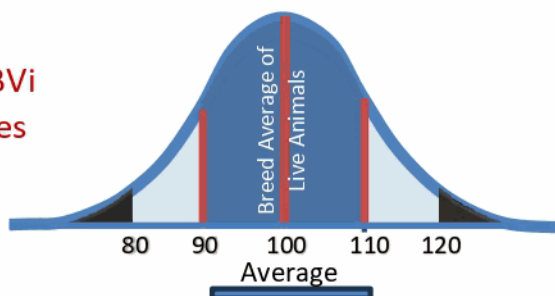
80% LOGIX Cow Value +
20% LOGIX Growth Value

LOGIX Carcass Value

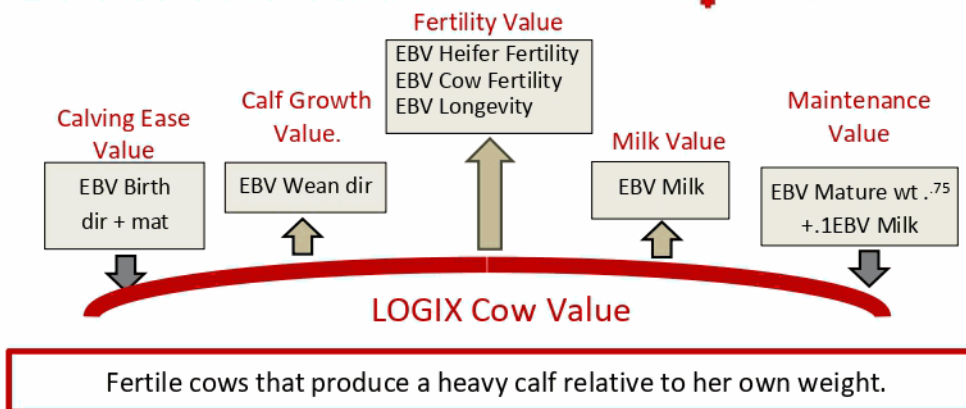


Select for more meat on the carcass as measured from end weight in Phase C and D Growth Tests and RTU scanning.

Interpretation of EBVi and Selection Values



LOGIX Cow Value



How to use the Cow Value

Selection values should be compatible with your selection goal.

AVERAGE ANIMALS

(NO GROWTH EXTREMES)

- Selection Values 90 to 110
 - Cow Value and Fertility Value average to high
- A safe choice, as animals are profitable in most environments.

GROWERS

(GOOD ENVIRONMENT)

- WeanerCalf / Growth Value > 120
 - Cow Value and Fertility Value average to high
- Growers are usually heavier at birth (lower Calving Ease Value), and maturity (lower Maintenance Value).

LOW- MAINTENANCE ANIMALS

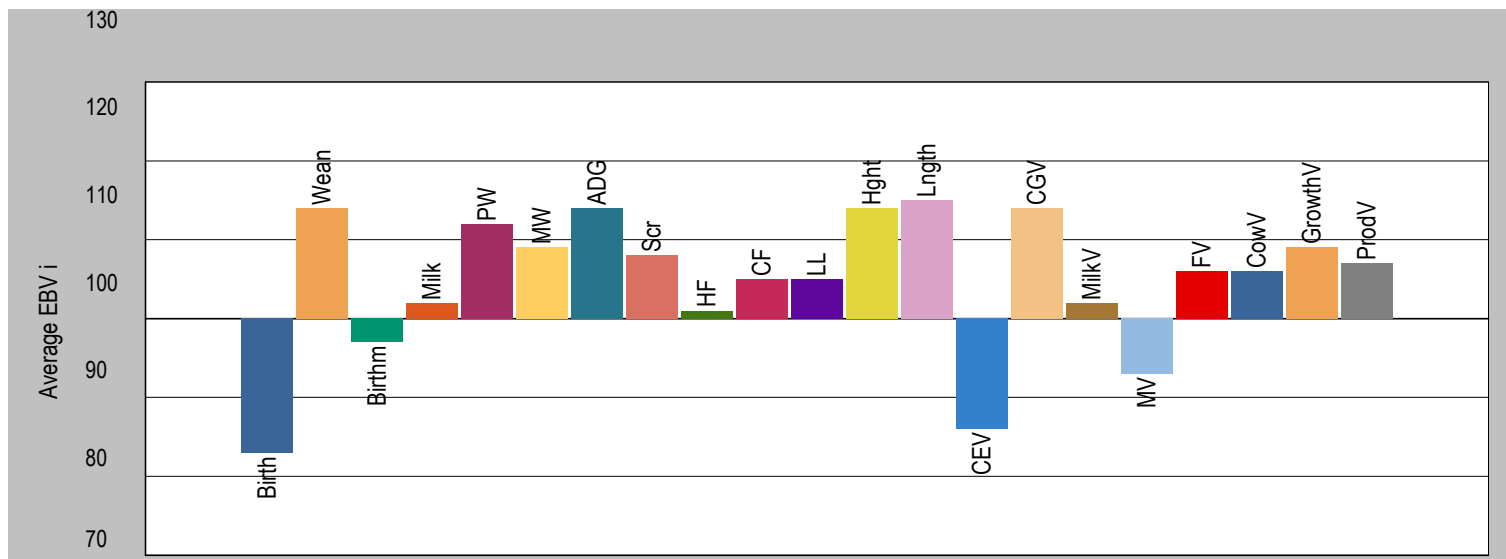
(HARSH ENVIRONMENT)

- Maintenance Value >110
 - Cow Value and Fertility Value average to high
- Lighter cows have a lower maintenance.

Examples

Type of Animal	Cow Value	Calving Ease V	Weaner Calf V	Milk Value	Maint. Value	Fertility Value
Average	Med-High	Avg	Avg	Avg	Avg	Med-High
Grower	Med-High		High			Med-High
Low Maintenance	Med-High				High	Med-High

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		

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	EBVIndex	EBV Breed
Prewean Growth	Birth Weight	0.96	83	0.12
	Wean Weight	7.5	114	2.6
	Birth Mat.	0.13	97	0.05
	Milk (Wn.Mat.)	1.4	102	1.0
Postwean Growth	Postwean Wt	9.8	112	3.7
	Mature Weight	13	109	5
	ADG	42	114	12
Fertility	Scrotal Circumf.	6.7	108	3.8
	Heifer Fertility	-6.7	101	-6.2
	Cow Fertility	-4.2	105	-2.9
	Longevity	25.7	105	23.2
Frame	Height	9	114	2
	Length	16	115	5

Selection Value	Ave. Herd
Calving Ease	86
Calf Growth	114
Milk	102
Maintenance	93
Fertility	106
Cow Value	106
Growth Value	109
Production Value	107

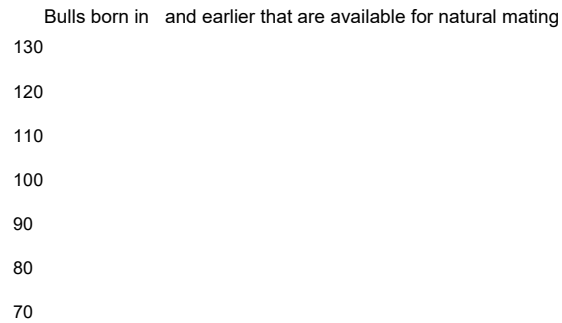
- Average of live animals in the breed: 100
- Above 100: **more favourable**,
- Below 100: **less favourable**

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

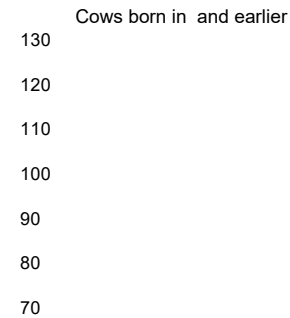
Genetic Windows

Bulls on the farm



Animals available for breeding

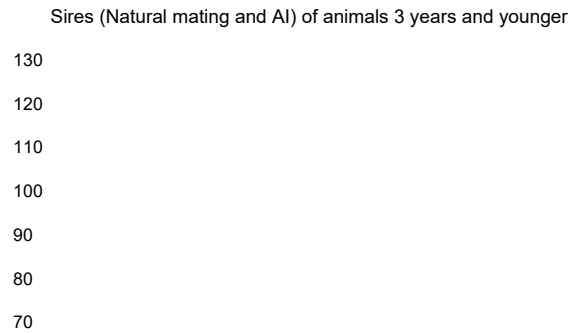
Total:



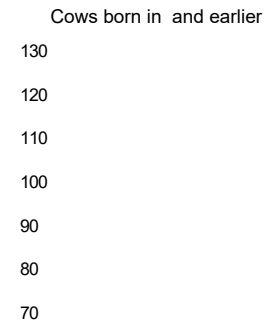
Total:

Results of previous selection decisions

Sires of young animals



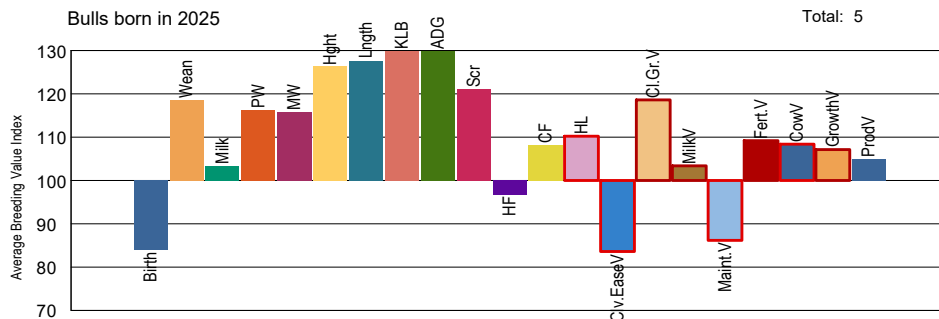
Total:



Total:

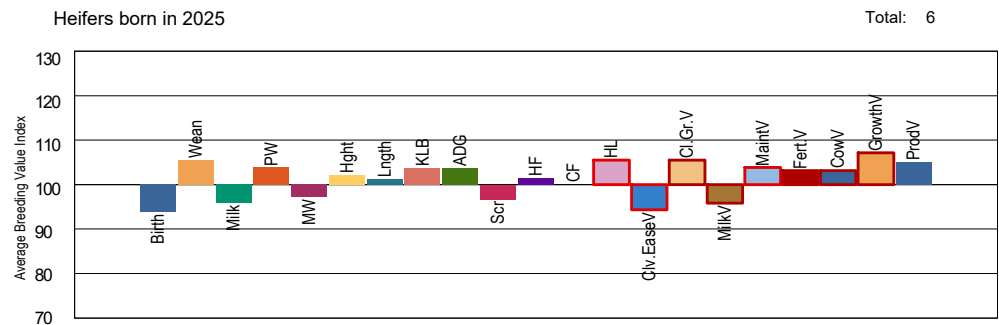
Selection possibilities

Bull calves



Total: 5

Heifer calves



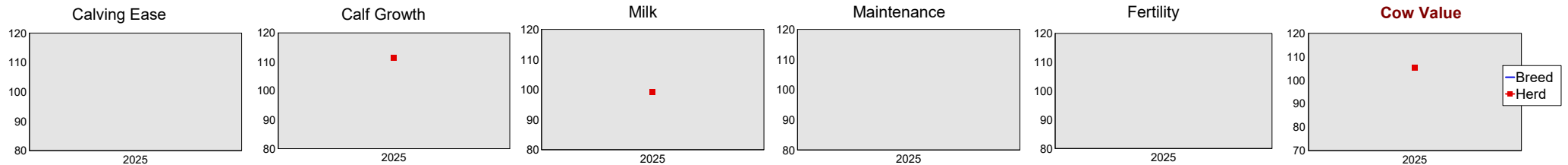
Total: 6

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	101	100	100	100	99	99	99	99	100	100	100
2022	5	★★★★	89	108	93	95	99	95	99	96	87	108	104	93	105	105	101	99	99	94	98	103	102	104
2023	10	★★★★★	85	116	107	94	108	112	114	113	81	116	91	107	116	108	117	112	110	106	108	102	118	118
2024	1	★★★★★	67	117	107	80	120	115	109	112	60	117	103	107	114	121	98	92	97	112	128	99	100	109
2025	6	★★★★☆	94	106	96	104	103	103	107	105	94	106	100	96	104	97	104	104	97	102	100	106	102	101
Cows in Herd Average:			84	112	101	93	108	106	107	107	81	112	100	101	110	108	105	102	101	104	109	103	106	108

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.



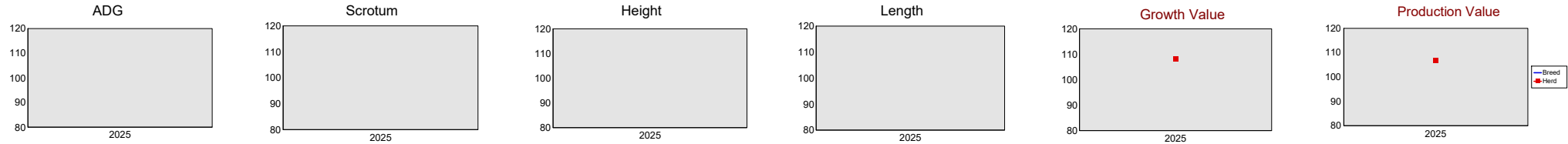
Herd

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			Ferti- lity
	Number	EBV				Number	EBV		Number	EBV		Number	EBV	Number	EBV		Number	EBV	Number	EBV	Number	EBV		
2025						11	6.7	111		11	0.82	99												106

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		Mainte- nance	Heifer Fert.		Cow Fert.		Longevity		Ferti- lity		
	Number	Dir EBV			Number	EBV		Number	EBV	Milk	Number	EBV	Number		EBV	Number	EBV	Number	EBV	Number		EBV	
2016	2062	0.06	-0.03	101	1340	2.9	101	1339	0.64	98	355	6.3	223	5	97	1339	-2.4	868	-1.9	10845	12.2	90	87
2017	1692	0.05	0.03	100	1223	3.5	102	1223	1.02	100	536	7.3	266	7	95	1431	-2.1	859	-1.9	8766	13.2	91	90
2018	1623	0.00	0.02	101	961	4.1	104	961	1.83	104	525	6.9	260	8	95	1317	-2.9	764	-2.0	7360	13.8	93	93
2019	1476	0.03	0.01	100	1204	3.3	102	1202	1.73	103	501	6.3	314	7	96	1273	-3.5	775	-2.6	6887	14.6	94	94
2020	1577	0.05	0.01	101	1147	3.7	103	1147	1.93	104	561	5.4	352	6	98	1269	-4.3	672	-2.5	6779	15.4	96	95
2021	1538	0.08	0.06	99	1397	3.4	102	1397	2.14	105	770	4.9	292	5	99	1218	-5.0	585	-2.9	6379	16.8	98	96
2022	1327	0.25	0.06	97	1681	4.4	105	1681	2.02	104	780	6.7	261	10	95	962	-4.7	240	-4.2	2616	17.4	101	97
2023	1221	0.08	0.12	100	1478	3.2	102	1478	1.87	104	509	6.2	62	12	97	379	-5.9	45	-5.3			106	99
2024	1380	0.08	0.12	99	1392	4.2	105	1392	1.90	104	510	7.3	1	-6	94	128	-6.5					110	102
2025	1033	0.14	0.10	99	1054	4.6	106	1052	1.82	103	173	12.0			84	7	-42.1					133	105
2026	191	0.05	0.02	102	23	7.6	114	23	3.11	109													109

Genetic Trends for Growth Test Traits



Herd

Birth Year	Growth						Frame						Selection Values	
	ADG			Scrotal Circumf.			Height			Length			Growth Value	Prod Value
	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi		
2025													108	107

Breed

Birth Year	Growth						Frame						Selection Values	
	ADG			Scrotal Circumf.			Height			Length			Growth Value	Prod Value
	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi		
2016	61	31	109	66	6.6	107	61	10	115	61	15	114	92	89
2017	53	27	107	52	7.3	109	52	7	110	52	15	113	94	92
2018	78	28	107	78	7.5	110	78	6	108	78	10	107	98	95
2019	66	30	108	66	4.7	103	66	7	111	66	12	109	96	95
2020	78	21	104	77	3.9	100	78	4	105	78	8	103	98	96
2021	84	11	100	83	3.6	99	84	3	101	84	7	102	99	97
2022	171	26	107	95	5.9	106	162	7	109	162	11	108	99	98
2023	65	30	108	64	5.9	106	65	6	109	65	11	108	100	99
2024	64	24	106	63	5.8	105	64	4	105	64	11	107	102	101
2025				21	13.2	125							104	104

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	Scrotal	Heifer	Cow	Long-	Height	Length	Birth	Wean	Dgt/Calvs.	Grwth	
			Ease	Grwth	Value	Value	Value	Value	Value	Value	Dir	Dir	Mat.	Mat.	wt	weight		Circ.	Fertility	Fertility	evity			wt	wt		Test	
CSF 120038		GL 000088 CSF 030136	104	91	107	99	91	87	88	87	103	91	100	107	91	98	102	87	121	79	93	103	103	1	1	7	10	
CSF 120038			57	77	68	50	63	51	67	59	-0.05	-0.6	0.04	2.7	-0.7	3	17	-1.3	-24.1	2.1	19.7	3	7					
											58	77	51	68	42	50	16	18	74	41	75	18	18					
EX 180207		EX 120209 EX 100101	60	142	109	66	138	138	125	132	50	142	74	109	143	144	139	137	129	141	111	149	146	2	37	9	12	2
EX 180207			58	85	73	58	59	53	71	62	2.61	17.4	0.79	3.0	25.2	45	97	17.9	-30.6	-12.4	29.2	27	40					
											60	85	49	73	67	58	62	70	66	41	71	73	69					
EX 210303		AZ 110054 EX 190429	81	124	89	109	123	129	138	135	86	124	75	89	118	93	119	114	113	113	120	112	108		16	2	2	
BOND BERTA			43	83	60	49	49	46	64	55	0.79	11.1	0.77	-1.7	12.8	-2	53	9.2	-16.7	-6.0	34.2	8	11					
											44	83	40	60	62	49	55	65	55	30	62	68	64					
PH 110151		TOL 020072 PH 010018	101	101	73	111	77	71	85	77	100	101	102	73	103	92	90	87	102	73	85	95	93		3	4	5	
MABALA			71	79	67	51	61	51	68	60	0.14	2.9	0.00	-5.3	5.3	-3	-10	-1.2	-7.6	3.3	15.2	-1	0					
											74	79	56	67	66	51	5	6	63	42	77	6	6					
Q 070062		LP 030094 Q 010056	69	121	95	68	108	94	81	86	50	121	131	95	110	142	109	95	100	124	88	115	121		164	23	73	
Q 070062			81	93	88	63	76	63	83	73	2.61	9.9	-0.83	0.0	8.5	43	32	1.7	-6.0	-8.4	16.7	9	21					
											82	93	74	88	86	63	25	29	82	55	91	29	28					
Q 160029		Q 070062 Q 090037	63	132	117	65	117	116	106	111	56	132	86	117	129	144	114	111	100	126	103	108	126	52	141	12	19	
Q 160029			88	93	77	54	65	57	77	67	2.30	13.9	0.44	5.0	18.1	45	44	7.8	-6.3	-9.0	24.8	6	25					
											91	93	73	77	81	54	37	45	73	44	79	43	41					
Q 180028		DH 100041 Q 090004	67	120	82	84	95	84	92	87	69	120	94	82	108	118	99	111	72	98	108	97	102		3	4		
Q 180028			53	75	65	49	48	46	62	54	1.64	9.7	0.22	-3.3	7.6	21	9	7.9	16.9	-2.4	27.6	1	7					
											54	75	48	65	58	49	18	19	51	32	62	19	19					
Q 190012		Q 070062 Q 120110	68	139	97	68	109	105	106	105	50	139	111	97	130	141	123	105	90	110	111	127	132		9			
Q 190012			54	81	60	44	51	46	63	54	2.61	16.5	-0.26	0.4	18.6	42	62	5.5	1.8	-5.1	29.2	16	29					
											56	81	45	60	70	44	19	21	53	34	65	21	21					
RV 200037		Q 100041 RV 110056	95	94	97	97	124	114	100	107	94	94	103	97	93	101	87	92	93	130	117	94	94		2			
RV 200037			53	57	42	30	49	37	48	42	0.40	0.6	-0.03	0.3	0.4	5	-18	0.8	-0.7	-9.8	32.2	-1	1					
											55	57	41	42	44	30	13	15	52	35	61	15	14					
RV 210052		CSF 120038 RV 080043	113	93	93	103	112	105	99	101	112	93	103	93	92	96	96	87	114	98	117	102	101		3			
RV 210052			45	55	38	28	43	33	45	39	-0.46	0.3	-0.02	-0.5	-0.2	1	2	-1.2	-18.0	-2.5	32.3	3	6					
											47	55	37	38	24	28	8	9	48	28	53	9	9					
T 180165		T 090143 T 090281	122	103	114	106	88	98	109	104	125	103	98	114	106	94	109	109	74	98	95	108	105	6	50	3	3	
T 180165			63	85	53	40	57	47	65	56	-1.14	3.8	0.11	4.2	7.0	-1	31	7.1	15.4	-2.5	20.3	6	9					
											69	85	36	53	60	40	20	28	63	37	70	23	22					

Sires

Bull				Selection Values									Calf		Dam		Growth			Fertility				Frame		Measured Progeny						
ID	Index EBV Acc	Sire ID	Name	Dam ID	Calv.	Calf	Milk	Maint.	Fertility	Cow	Growth	Prod	Birth	Wean	Birth	Wean	Post wn	Mature	ADG	Scrotal	Heifer	Cow	Long-	Height	Length	Birth	Wean	Dgt/Calvs.	Grwth			
					Ease	Grwth	Value	Value	Value	Value	Value	Value	Dir	Dir	Mat.	Mat.	wt	weight		Circ.	Fertility	Fertility	evity			wt	wt		Test			
					Value	Value																										
XA 160040		ED 090025			69	111	107	99	106	109	116	113	71	111	92	107	111	98		102	116	93										
		FHU 100001											1.55	6.4	0.28	2.7	9.4	3		-7.6	-6.6	19.2				2	1	1				
XA160040					73	75	57	38	54	45	61	53	76	75	58	57	64	38		65	28	68										

Breeding Values and Accuracies: Bulls

Green: >120 High
White: 80-120 Average
Orange: <80 Low

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	ID Number Name	% 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	Scrotal Circ.	Heifer Fertility	Cow Fertility	Longevity	Height	Length	
Q 190012 88533393 Q 190012	Q 070062 Q 120110			68 54	139 81	97 60	68 44	109 51	105 46	106 63	105 54	50 2.61 56	111 -0.26 45	141 42 44	139 16.5 81	97 0.4 60	109 37 62	130 18.6 70	123 62 19	105 5.5 21	90 1.8 53	110 -5.1 34	111 29.2 65	127 16 21	132 29 21	
ELA 250002 99158818 CHOC-CHIP	1 T 180165 Q 230021			73 39	138 69	115 41	72 30	112 36	118 34	122 49	121 42	77 1.25 42	85 0.48 26	133 35 30	138 16.0 69	115 4.4 41	124 70 47	138 22.8 39	134 87 18	128 14.3 22	95 -2.1 40	118 -7.1 23	106 26.2 44	134 19 21	134 31 20	
ELA 250005 99770026 ROO-IS-MOOI	T 180165 Q 230027			75 37	142 69	113 41	79 31	108 36	119 34	134 49	128 42	79 1.16 39	83 0.54 26	122 25 31	142 17.4 69	113 4.1 41	131 86 47	136 21.8 38	138 95 20	130 15.2 24	90 1.7 40	114 -6.1 23	105 26.1 44	131 17 24	132 29 23	
ELA 250010 99770075 MARBLE	6 RV 200037 RV 230011			100 28	89 61	102 30	107 13	116 27	111 25	99 39	104 32	99 0.20 30	105 -0.10 19	94 -1 13	89 -1.4 61	102 1.5 30	95 7 35	90 -1.4 18			101 -6.9 32	113 -5.8 11	115 31.4 39			
ELA 250013 99770091 PATCH	1 Q 190012 BUL 220035			68 32	122 65	91 39	75 27	108 29	97 30	93 45	94 38	63 1.97 33	108 -0.16 26	130 33 27	122 10.6 65	91 -1.1 39	96 10 44	115 11.3 38		105 5.6 7	91 1.6 30	104 -3.9 18	116 31.7 40	114 9 7	117 18 6	
ELA 250014 99770109 TUXEDO	RV 210052 CLW 230511			102 30	102 59	96 31	98 21	102 29	97 27	100 40	98 34	102 0.02 31	96 0.15 24	100 5 21	102 3.2 59	96 0.0 31	97 12 37	102 4.5 20			107 -11.8 30	92 -1.0 18	109 28.0 38			
ELA 260001 6020633209 JUNIOR	Q 190012 Q 230077			72 36	117 54	112 39	81 28	106 32	105 30	105 41	105 36	74 1.41 38	95 0.18 28	119 23 28	117 8.5 54	112 3.9 39	113 47 40	116 11.7 43	110 33 10	102 4.4 13	87 4.7 34	108 -4.8 21	108 27.7 41	113 8 12	115 16 12	

Breeding Values and Accuracies: Cows

Green: >120 High
White: 80-120 Average
Orange: <80 Low

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	Scrotal Circ.	Heifer Fertility	Cow Fertility	Longevity	Height	Length
ID Number Name																								
BUL 220008 94060910 BUL 220008		Q 180028 LRC 190025	93 38	102 50	89 53	98 36	97 35	89 33	93 44	90 38	90 0.61 38	113 -0.31 35	100 5 36	102 3.2 50	89 -1.6 53	91 -1 46	97 2.3 33	92 -6 13	102 4.4 14	87 4.7 36	94 -1.5 24	108 27.3 46	90 -3 15	95 1 14
BUL 220035 95268454 BUL 220035		Q 180028 BUL 160019	84 32	112 47	83 51	81 35	105 33	89 32	85 42	86 37	84 0.93 33	103 -0.02 27	122 25 35	112 6.8 47	83 -3.0 51	85 -14 44	105 6.5 30			89 2.6 35	100 -2.9 20	114 30.9 44	100 2 5	
Q 220142 95128245 Q 220142		EX 180207 PH 100188	65 38	136 73	86 62	86 40	116 43	114 41	126 57	121 49	59 2.14 39	94 0.21 31	115 18 40	136 15.4 73	86 -2.3 62	109 38 58	131 19.5 48	109 32 31	109 7.2 35	91 1.0 51	126 -8.9 28	106 26.2 51	119 12 36	117 18 35
RV 220077 94369485 RV 220077		CSF 120038 RV 120010	101 40	99 50	102 53	102 37	88 43	88 36	96 46	91 41	99 0.15 41	106 -0.12 34	96 2 37	99 2.2 50	102 1.5 53	102 23 47	100 3.6 27	102 17 14	95 2.0 15	105 -10.6 48	84 0.8 29	93 19.2 53	103 4 15	105 9 14
RV 220085 94580149 RV 220085		CSF 120038 RV 160058	103 37	93 49	107 52	108 35	91 42	93 35	95 45	93 40	101 0.06 38	104 -0.06 31	93 -2 35	93 0.1 49	107 2.6 52	103 25 45	94 0.6 24	99 9 12	89 -0.3 13	100 -6.3 48	88 -0.2 28	96 20.8 51	98 1 13	99 4 13
CLW 230511 95453114 CLW 230511		PH 110151 CLW 150199	100 38	96 48	102 51	104 34	88 36	87 33	93 43	90 38	101 0.07 39	94 0.22 31	95 0 34	96 1.3 48	102 1.6 51	101 20 44	100 3.7 34		90 0.0 5	101 -7.4 36	84 0.9 23	94 19.9 50	99 1 5	98 3 5
CLW 230514 95453148 CLW 230514		XA 160040 CLW 180285	85 42	105 51	98 50	112 31	99 35	103 32	111 43	107 38	86 0.82 44	96 0.17 34	90 -4 31	105 4.4 51	98 0.5 50	106 32 44	105 6.3 38		108 -12.5 39	101 -3.2 21	92 18.7 46			
CLW 230518 95453189 CLW 230518		PH 110151 CLW 140165	104 37	96 47	82 50	109 36	83 33	77 32	84 42	79 37	103 -0.01 38	105 -0.08 31	93 -1 36	96 1.1 47	82 -3.2 50	83 -19 44	96 1.9 33		100 -5.9 31	80 1.7 21	91 18.2 48			
Q 230021 94985371 Q 230021		EX 180207 Q 110065	61 46	142 72	120 62	65 45	131 45	135 43	126 58	131 50	50 2.61 48	76 0.73 38	144 45 45	142 17.4 72	120 5.7 62	125 73 60	143 25.2 52	141 102 31	133 16.2 36	119 -22.0 53	136 -11.3 29	107 27.0 52	145 25 37	146 40 35
Q 230026 94985421 Q 230026		EX 180207 Q 120101	62 45	142 71	111 57	80 44	125 46	134 42	138 57	137 50	54 2.41 47	83 0.53 34	121 24 44	142 17.4 71	111 3.6 57	130 84 57	141 24.3 56	128 73 33	120 11.4 38	120 -23.0 55	123 -8.4 30	110 28.5 52	137 20 39	138 34 37
Q 230027 94985439 Q 230027		EX 180207 MVN 090124	61 39	142 73	122 63	72 48	123 44	132 43	134 59	134 51	52 2.48 40	77 0.70 36	132 34 48	142 17.4 73	122 6.2 63	132 89 61	140 23.8 49	137 93 36	128 14.6 41	112 -16.5 53	125 -8.8 28	107 27.1 52	130 17 42	132 29 40
Q 230032 94985488 Q 230032		EX 180207 Q 080040	66 49	142 72	94 58	76 43	131 45	129 42	130 57	131 50	52 2.53 50	102 0.01 45	129 31 43	142 17.4 72	94 -0.4 58	113 47 58	137 22.5 56	117 50 31	115 9.3 36	127 -28.8 54	133 -10.5 29	106 26.2 52	127 15 37	127 25 35

Breeding Values and Accuracies: Cows

Green: >120 High
White: 80-120 Average
Orange: <80 Low

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	Scrotal Circ.	Heifer Fertility	Cow Fertility	Longevity	Height	Length
ID Number Name																									
Q 230077 95576302 Q 230077		T 180165 Q 120026		107 48	94 71	127 50	99 37	102 42	108 39	105 54	106 46	110 -0.38 51	80 0.62 32	98 3 37	94 0.4 71	127 7.4 50	119 60 53	102 4.9 52	97 4 10	99 3.3 16	83 7.7 45	107 -4.5 28	106 26.3 52	98 1 12	97 3 12
Q 230085 95576385 Q 230085		T 180165 WT 070025		106 45	101 58	111 51	115 32	93 40	104 35	115 48	110 42	106 -0.18 46	97 0.14 38	86 -8 32	101 3.1 58	111 3.6 51	118 58 47	98 3.0 44	99 9 14	102 4.5 18	87 4.8 41	93 -1.3 26	101 23.8 52	102 3 16	98 4 15
RV 230011 95182572 RV 230011		CSF 120038 RV 150044		95 37	97 51	103 53	112 39	104 42	107 36	108 47	107 42	94 0.42 38	104 -0.06 32	90 -5 39	97 1.6 51	103 1.6 53	105 28 48	97 2.4 28	102 15 10	96 2.2 12	106 -11.3 48	97 -2.2 28	107 27.1 51	104 4 12	106 9 12
Q 240014 97118145 Q 240014	3	Q 160029 Q 110034		67 58	117 62	107 56	80 38	120 42	115 39	109 52	112 46	60 2.09 60	103 -0.03 47	121 24 38	117 8.8 62	107 2.7 56	109 38 52	114 10.5 53	98 7 11	97 2.8 16	112 -16.5 47	128 -9.4 27	99 22.4 52	100 2 16	109 12 15
ELA 250003 99770018 TOPDECK		Q 190012 BUL 220008		69 33	121 66	93 40	83 28	102 30	96 31	101 46	98 38	64 1.92 34	112 -0.28 29	118 22 28	121 10.0 66	93 -0.6 40	101 22 45	114 10.6 38	104 21 11	101 4.0 13	89 3.2 31	102 -3.3 20	109 27.9 40	106 5 13	111 13 13
ELA 250004 99770034 WITKOP		T 180165 Q 220142		100 36	108 69	103 40	100 28	102 35	105 33	112 48	108 40	100 0.14 39	100 0.07 24	98 3 28	108 5.4 69	103 1.7 40	110 39 46	109 8.5 38	99 9 18	101 4.0 22	85 6.6 39	111 -5.4 23	101 23.6 44	105 5 21	101 6 20
ELA 250007 99770067 ESPRESSO		EX 210303 RV 220077		92 29	109 65	96 40	108 31	105 33	109 32	117 46	114 39	94 0.41 30	91 0.31 26	93 -2 31	109 5.9 65	96 0.1 40	107 34 45	107 7.4 34	107 28 28	102 4.7 33	109 -13.9 36	98 -2.5 20	107 26.8 42	105 5 34	104 8 32
ELA 250008 99066391 FRECKLE		EX 210303 RV 220085		94 28	105 65	99 39	111 31	107 33	111 32	116 46	114 39	96 0.33 29	90 0.33 25	91 -3 31	105 4.5 65	99 0.7 39	107 34 45	103 5.5 34	105 23 28	99 3.4 33	107 -11.8 36	101 -3.0 20	108 27.4 42	102 3 34	100 5 32
ELA 250009 99770042 B+		RV 210052 CLW 230518		113 29	89 62	89 31	112 22	98 28	93 27	90 41	90 34	111 -0.40 30	105 -0.09 24	90 -4 22	89 -1.2 62	89 -1.5 31	85 -14 38	90 -1.3 20		80 -3.8 5	108 -12.9 29	88 -0.2 17	104 25.2 38	93 -2 5	90 -2 5
ELA 250011 99770083 OREO		RV 210052 CLW 230514		98 31	101 60	95 30	109 20	105 28	105 27	107 40	106 34	98 0.22 32	99 0.09 25	93 -2 20	101 2.8 60	95 -0.1 30	99 16 37	100 3.6 22		111 -15.1 31	100 -2.9 17	104 25.4 36			

Selection List on Cow Value

Bulls 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	Q	190012	Q	190012	Q	070062	Q	120110	0.1	68	54	139	81	97	60	68	44	109	51	105	46	106	63	105	54	

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	Q 230021	Q 230021	EX 180207	Q 110065	0.1	61 46	142 72	120 62	65 45	131 45	135 43	126 58	131 50
2	Q 230026	Q 230026	EX 180207	Q 120101	0.0	62 45	142 71	111 57	80 44	125 46	134 42	138 57	137 50
3	Q 230027	Q 230027	EX 180207	MVN 090124	0.5	61 39	142 73	122 63	72 48	123 44	132 43	134 59	134 51
					★★★★★								
1	Q 230032	Q 230032	EX 180207	Q 080040	0.1	66 49	142 72	94 58	76 43	131 45	129 42	130 57	131 50
					★★★★★								
1	Q 220142	Q 220142	EX 180207	PH 100188	0.0	65 38	136 73	86 62	86 40	116 43	114 41	126 57	121 49
2	Q 240014	Q 240014	Q 160029	Q 110034	3.2	67 58	117 62	107 56	80 38	120 42	115 39	109 52	112 46
					★★★★								
1	CLW 230514	CLW 230514	XA 160040	CLW 180285	0.0	85 42	105 51	98 50	112 31	99 35	103 32	111 43	107 38
2	Q 230077	Q 230077	T 180165	Q 120026	0.3	107 48	94 71	127 50	99 37	102 42	108 39	105 54	106 46
3	Q 230085	Q 230085	T 180165	WT 070025	0.1	106 45	101 58	111 51	115 32	93 40	104 35	115 48	110 42
4	RV 230011	RV 230011	CSF 120038	RV 150044	0.2	95 37	97 51	103 53	112 39	104 42	107 36	108 47	107 42
					★★★★								
1	RV 220085	RV 220085	CSF 120038	RV 160058	0.0	103 37	93 49	107 52	108 35	91 42	93 35	95 45	93 40
					★★★								
1	BUL 220008	BUL 220008	Q 180028	LRC 190025	0.1	93 38	102 50	89 53	98 36	97 35	89 33	93 44	90 38
2	BUL 220035	BUL 220035	Q 180028	BUL 160019	0.5	84 32	112 47	83 51	81 35	105 33	89 32	85 42	86 37
3	CLW 230511	CLW 230511	PH 110151	CLW 150199	0.0	100 38	96 48	102 51	104 34	88 36	87 33	93 43	90 38
4	RV 220077	RV 220077	CSF 120038	RV 120010	0.0	101 40	99 50	102 53	102 37	88 43	88 36	96 46	91 41

Selection List on Cow Value

Cows 2 years and older

IDName Sorted on ID			Sire IDDam 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	CLW 230518	CLW 230518	PH 110151CLW 140165	0.0	10437	9647	8250	10936	8333	7732	8442	7937	

Selection List on Cow Value

Bull Calves younger than 2 years

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	ELA 250002	CHOC-CHIP	T 180165 Q 230021	0.5	73 39	138 69	115 41	72 30	112 36	118 34	122 49	121 42	
2	ELA 250005	ROOI-IS-MOOI	T 180165 Q 230027	0.4	75 37	142 69	113 41	79 31	108 36	119 34	134 49	128 42	
3	ELA 250010	MARBLE	RV 200037 RV 230011	6.4	100 28	89 61	102 30	107 13	116 27	111 25	99 39	104 32	
					★★★★								
1	ELA 260001	JUNIOR	Q 190012 Q 230077	0.2	72 36	117 54	112 39	81 28	106 32	105 30	105 41	105 36	
					★★★★☆								
1	ELA 250013	PATCH	Q 190012 BUL 220035	1.0	68 32	122 65	91 39	75 27	108 29	97 30	93 45	94 38	
2	ELA 250014	TUXEDO	RV 210052 CLW 230511	0.4	102 30	102 59	96 31	98 21	102 29	97 27	100 40	98 34	

Selection List on Cow Value

Heifers younger than 2 years

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	ELA 250008	FRECKLE	EX 210303	RV 220085	0.2	94 28	105 65	99 39	111 31	107 33	111 32	116 46	114 39
					★★★★								
1	ELA 250004	WITKOP	T 180165	Q 220142	0.3	100 36	108 69	103 40	100 28	102 35	105 33	112 48	108 40
2	ELA 250007	ESPRESSO	EX 210303	RV 220077	0.4	92 29	109 65	96 40	108 31	105 33	109 32	117 46	114 39
3	ELA 250011	OREO	RV 210052	CLW 230514	0.0	98 31	101 60	95 30	109 20	105 28	105 27	107 40	106 34
					★★★★☆								
1	ELA 250003	TOPDECK	Q 190012	BUL 220008	0.1	69 33	121 66	93 40	83 28	102 30	96 31	101 46	98 38
2	ELA 250009	B+	RV 210052	CLW 230518	0.0	113 29	89 62	89 31	112 22	98 28	93 27	90 41	90 34

	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 18mnth 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.

