

AFRIKANER

BREEDING VALUE REPORT

September 2026



AFRIC AFRIKANERS

Herd Number: 735305

E-mail: marletras2402@gmail.com



LOGIX



EBVs, EBVi's and GEBVs

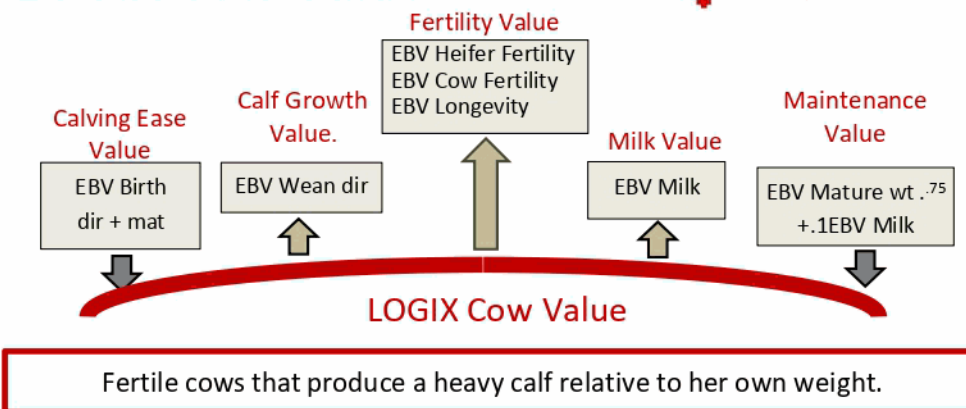
EBVi (Breeding Value Index): Genetic potential relative to the average (100) of the live (active) animals in the breed. Roughly 50% of the animals have values between 90 and 110. Values above 100, depending on the trait, tend to be in the more favourable direction.

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.

LOGIX Cow 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.

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)

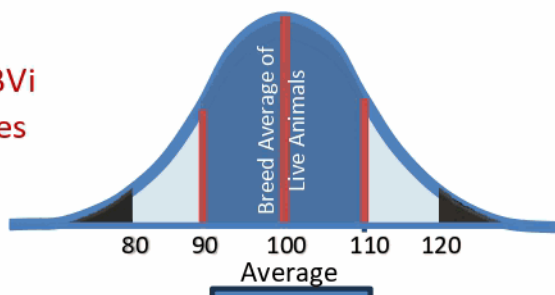
- WeanerCalf / Growth Value > 120
 - Cow Value and Fertility Value average to high
- Growers are usually heavier at birth (lower Calving Ease Value), and maturity (lower Maintenance Value).

LOW- MAINTENANCE ANIMALS

(HARSH ENVIRONMENT)

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

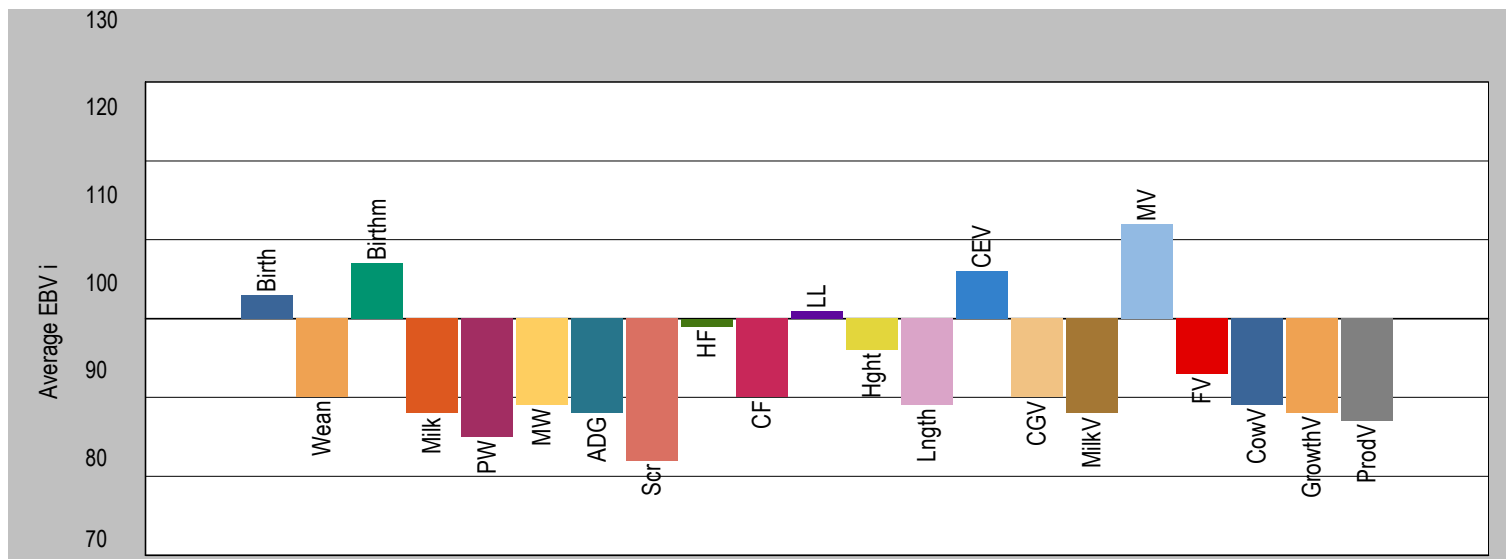
Interpretation of EBVi and Selection Values



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	EBV Index	EBV Breed
Prewean Growth	Birth Weight	1.35	103	1.60
	Wean Weight	12.3	90	16.9
	Birth Mat.	-0.24	107	-0.03
	Milk (Wn.Mat.)	2.3	88	5.7
Postwean Growth	Postwean Wt	17.8	85	28.6
	Mature Weight	17	89	29
	ADG	81	88	126
Fertility	Scrotal Circumf.	8.6	82	18.9
	Heifer Fertility	-2.4	99	-3.6
	Cow Fertility	-3.0	90	-6.1
	Longevity	31.7	101	31.3
Frame	Height	14	96	17
	Length	24	89	37

Selection Value	Ave. Herd
Calving Ease	106
Calf Growth	90
Milk	88
Maintenance	112
Fertility	93
Cow Value	89
Growth Value	88
Production Value	87

- 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

Bulls born in and earlier that are available for natural mating
130
120
110
100
90
80
70

Animals available for breeding

Total:	Cows born in and earlier
	130
	120
	110
	100
	90
	80
	70

Cow Herd

Total:

Sires of young animals

Sires (Natural mating and AI) of animals 3 years and younger
130
120
110
100
90
80
70

Results of previous selection decisions

Total:	Cows born in and earlier
	130
	120
	110
	100
	90
	80
	70

Cows older than 6 years

Total:

Selection possibilities

Bull calves

Bulls born in
130
120
110
100
90
80
70

Total:

Heifers born in
130
120
110
100
90
80
70

Heifer calves

Total:

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:	101	99	100	101	100	99	98	99	101	99	100	100	99	99	98	98	98	100	100	100	99	98
2016	2	★★★☆☆	104	85	84	128	105	89	83	87	104	85	101	84	85	77	83	84	79	116	95	102	91	82
2017	1	★★★★	109	83	104	99	105	92	87	90	106	83	107	104	82	100	87	88	71	114	100	95	91	90
2019	3	★★★☆☆	102	92	89	111	93	88	85	86	99	92	106	89	85	90	86	87	79	89	95	107	93	87
2020	2	★★★☆☆	114	88	79	117	88	85	86	84	109	88	113	79	81	85	82	83	80	98	82	104	95	86
2022	1	★★★★	98	102	87	105	86	92	90	91	94	102	111	87	89	95	93	94	88	90	84	107	107	97
2023	3	★★★☆☆	110	87	88	111	83	83	82	81	105	87	114	88	83	90	83	84	81	92	83	91	93	86
2026	1	★★★★☆	108	96	101	106	94	100	105	101	107	96	103	101	90	93	107	113	94	95	95	103	103	100
Cows in Herd Average:			106	90	90	111	93	90	88	89	103	90	108	90	85	90	89	90	82	99	91	101	96	90

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		Mat EBV	Calv. Ease	Weaning Weight		Calf Growth	Milk (Wn.Mat.)		Milk	Postwean Weight		Mature Weight		Mainte- nance	Heifer Fert.		Cow Fert.		Longevity		Ferti- lity	
	Number	Dir EBV			Number	EBV		Number	EBV		Number	EBV	Number	EBV		Number	EBV	Number	EBV	Number	EBV		

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		Maine-nance	Heifer Fert.		Cow Fert.		Longevity			Ferti-lity	
	Number	Dir EBV			Number	EBV		Number	EBV	Number	EBV	Number	EBV		Number	EBV	Number	EBV	Number	EBV			Number
2016	795	1.08	-0.07	106	427	13.1	92	427	4.13	94	137	26.8	182	23	105	256	-1.3	160	-2.9	2162	22.1	89	94
2017	765	1.10	-0.01	105	1292	13.3	92	1292	4.40	95	677	25.2	286	22	105	402	-2.1	205	-2.9	2471	23.5	89	90
2018	894	1.24	0.01	104	1277	13.7	93	1277	4.39	95	655	25.9	148	25	103	300	-1.7	150	-4.1	2297	23.7	91	93
2019	990	1.28	-0.01	103	1493	13.6	93	1493	4.46	96	732	25.4	132	27	105	254	-1.0	127	-4.5	2413	24.5	91	94
2020	1295	1.29	-0.05	104	1575	14.2	94	1575	4.61	96	807	26.4	129	27	104	203	-1.1	109	-5.3	2650	25.9	93	97
2021	1206	1.28	-0.07	104	1186	13.7	93	1186	4.08	94	498	25.5	143	27	105	209	-1.8	85	-6.4	2286	26.8	95	94
2022	619	1.33	-0.05	103	843	15.3	96	843	4.60	96	448	27.8	116	31	100	124	-2.3	15	-7.4	449	26.3	96	97
2023	533	1.47	-0.04	101	752	15.4	97	752	4.96	97	353	28.6	10	31	101	31	-4.1					105	99
2024	560	1.69	-0.04	99	725	17.3	101	725	5.53	99	334	31.7			97	3	6.5					93	104
2025	514	1.89	0.01	96	639	19.3	105	639	6.15	102	84	36.6			93								106
2026	214	2.11	0.00	93	70	24.7	117	70	7.19	105													111

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		

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														
2017	134	130	101	134	20.5	103	134	14	95	134	37	100	101	100
2018	147	125	100	84	19.2	101	84	15	97	84	35	99	99	99
2019	71	118	98	68	19.3	101	68	12	93	68	34	97	99	101
2020	170	117	98	171	19.6	101	171	13	94	171	34	98	99	101
2021	84	108	95	84	17.0	97	84	16	99	84	30	94	95	96
2022	121	131	101	121	19.8	102	121	20	105	121	39	102	102	101
2023	48	133	102	48	21.1	104	29	20	105	29	47	109	102	111
2024	63	154	107	63	22.4	106	61	22	108	61	45	107	107	110
2025	10	177	113	10	24.8	110	10	26	114	10	56	117	115	108

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		
DC 120249		KC 030676 DC 060645	93	95	91	107	104	92	90	91	92	95	104	91	84	93	86	85	101	104	108	100	94		15	72	33	62	2
UITKLOP			79	93	84	46	70	75	51	70	2.19	14.9	-0.15	3.2	16.8	21	71	10.3	-4.1	-7.3	34.7	17	30						
											81	93	72	84	85	46	48	55	78	44	87	56	54						
KV 120291		KV 070071 KV 090144	114	93	89	105	105	98	100	98	109	93	111	89	92	95	101	95	111	99	100	112	102		3	102	26	54	
OFFER			67	94	83	62	75	75	46	69	0.94	13.8	-0.37	2.6	23.0	23	129	16.0	-13.0	-5.8	31.1	24	39						
											71	94	51	83	82	62	44	48	83	50	92	48	47						
SS 170050		FR 050052 SS 060030	113	98	118	96	101	112	124	115	115	98	90	118	97	101	130	105	110	97	93	110	112		31	74	1	2	
SS 170050			73	92	59	30	41	64	65	64	85	92	30	59	56	30	60	21.6	-11.7	-5.2	28.3	23	50						
																		70	31	17	75	71	68						
WH 070164		WH 020840 JC 980007	85	81	73	108	96	63	64	61	94	81	77	73	85	93	72	60	113	86	93	71	62			23	25	95	
GRANIET			78	89	88	44	77	75	54	71	2.08	8.2	0.64	-2.0	17.2	22	20	-3.6	-14.0	-1.9	28.3	-2	-6						
											79	89	73	88	78	44	53	57	84	56	90	57	56						
WH 120430		DC 060650 WH 070150	105	84	92	119	67	76	94	78	108	84	92	92	77	82	80	74	87	65	82	105	89			65	15	25	
BASTA			55	92	76	35	68	67	70	68	1.04	9.5	0.20	3.5	11.6	9	51	4.3	7.2	4.7	23.4	20	25						
											56	92	52	76	71	35	66	75	79	40	86	76	73						
WH 130513		WH 050052 WH 080250	113	86	93	98	81	82	81	80	107	86	116	93	81	102	87	68	89	84	87	92	87		3	100	19	34	4
DROOGTE			68	94	79	51	69	73	64	71	1.08	10.3	-0.49	3.8	14.9	31	77	0.8	5.3	-1.1	25.3	11	22						
											68	94	66	79	86	51	60	78	79	42	86	68	66						
WH 140568		WH 030957 WH 090315	104	91	91	103	82	83	82	82	101	91	109	91	84	96	85	78	100	74	97	99	95		7	75	12	19	6
VINK			58	92	72	19	66	65	68	66	1.54	12.8	-0.30	3.1	16.5	25	67	6.7	-3.8	2.0	29.9	16	31						
											65	92	33	72	78	19	65	80	79	37	82	72	70						
WH 150661		AA 080812 WH 040996	108	80	89	108	94	79	89	80	101	80	124	89	83	91	83	93	102	93	91	100	91		10	73	8	10	5
SILWER			66	92	70	31	62	67	68	67	1.52	7.6	-0.72	2.5	15.9	20	61	15.0	-5.2	-3.9	27.4	17	26						
											73	92	42	70	68	31	65	71	70	36	80	72	70						
WH 170714		DC 060650 WH 090291	105	96	83	118	77	87	91	87	103	96	104	83	87	83	97	87	91	70	104	112	96			10			
HENCO			46	76	58	25	51	54	47	53	1.36	15.1	-0.13	1.0	18.6	11	116	11.3	3.9	3.0	33.3	24	33						
											47	76	41	58	50	25	45	49	54	32	67	49	48						
WH 180760		AA 080812 AA 060661	112	92	80	102	95	88	100	89	109	92	107	80	93	98	97	98	92	100	92	100	96			20	1	2	
DR JAN			56	83	64	41	56	61	52	59	0.94	13.5	-0.25	0.0	23.7	27	113	17.8	2.7	-6.2	27.6	17	32						
											57	83	51	64	68	41	49	54	61	36	71	54	52						

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	% 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	
WH 240053 97173231 WH 240053	2	WH 170714 WH 190898	101 30	98 62	82 43	106 16	87 36	87 41	96 31	88 39	97 1.85	111 -0.35	94 22	98 16.0	82 0.6	87 58	91 21.9	98 118	92 14.3	98 -1.8	81 -0.4	102 32.4	112 24	100 37	
											32	25	16	62	43	40	32	30	33	39	22	46	33	32	
WH 260003 6020857501 WH 260003		SS 170050 WH 160710	104 45	92 57	94 50	113 23	107 36	97 43	98 40	97 42	107 1.06	89 0.28	87 14	92 13.1	94 4.0	96 77	91 21.7	101 131	85 10.6	111 -12.8	102 -6.8	100 31.5	95 13	91 26	
											50	26	23	57	50	43	40	37	42	36	22	50	43	41	

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																								
ID	% Inbreeding	Sire ID									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
Name		Dam ID																						
JJB 160043	3	KV 120291	113	83	97	118	97	92	93	91	108	112	82	83	97	93	86	92	92	118	82	97	102	94
83893917		JJB 130029	37	62	67	32	46	49	28	45	1.03	-0.39	10	9.0	4.9	71	18.0	94	14.3	-18.5	-0.8	29.9	18	30
JJB 160043											39	29	32	62	67	54	44	27	30	47	28	64	30	30
WH 160710		WH 070164	95	86	70	138	112	86	73	82	99	89	72	86	70	77	84	73	66	113	107	107	80	69
5509075700		AA 060644	50	68	75	35	57	56	46	54	1.66	0.30	-2	10.2	-2.8	34	16.8	20	-0.4	-13.9	-8.3	34.7	4	2
WH 160710											52	43	35	68	75	59	56	43	49	65	40	65	50	48
WH 170785	19	WH 130513	109	83	104	99	105	92	87	90	106	107	100	83	104	90	82	87	71	114	100	95	91	90
5509057203		WH 130560	39	69	66	28	53	52	46	51	1.15	-0.23	28	9.2	6.8	64	15.3	76	2.8	-14.9	-6.0	29.2	11	26
ALIDA											39	38	28	69	66	54	50	44	53	61	35	62	51	49
WH 190865		DC 120249	104	94	84	116	87	89	86	87	98	116	85	94	84	90	83	84	83	79	92	112	96	89
5510055881		WH 140606	44	69	62	27	51	52	34	48	1.73	-0.50	12	14.3	1.1	64	16.1	66	9.6	13.4	-3.7	36.8	14	24
WH 190865											45	40	27	69	62	53	48	31	36	61	32	60	36	35
WH 190884	1	WH 130513	100	93	96	99	73	81	81	79	98	106	101	93	96	91	84	86	70	72	81	95	91	86
5510935660		WH 040976	39	60	60	26	48	47	40	46	1.74	-0.20	30	13.6	4.5	65	17.1	71	2.2	19.3	-0.3	29.1	11	21
ALIDA											39	37	26	60	60	49	48	38	47	53	29	61	43	41
WH 190899	4	WH 180760	101	89	86	118	118	95	88	93	102	96	83	89	86	88	89	88	83	116	112	113	92	86
5511186552		WH 150649	38	67	62	28	48	50	32	46	1.43	0.09	10	11.7	1.6	59	20.7	81	9.4	-16.9	-9.9	37.0	12	21
MONICA											39	34	28	67	62	52	43	31	33	57	30	56	33	33
WH 200950	5	WH 140568	116	87	76	119	85	83	78	81	108	120	83	87	76	79	79	79	76	92	80	109	90	84
5512221226		WH 140606	35	67	59	16	46	47	40	46	1.01	-0.60	10	11.0	-1.2	37	13.1	46	5.6	2.9	0.1	35.2	11	19
ALTA											38	25	16	67	59	47	45	39	46	52	27	58	43	41
WH 200956	1	WH 120430	112	88	82	114	91	86	93	87	110	106	86	88	82	83	83	85	83	104	84	99	99	88
5512223057		WH 120468	36	69	60	24	50	49	42	48	0.88	-0.20	14	11.3	0.6	46	16.2	70	9.1	-6.7	-1.1	30.8	16	23
VERS											37	33	24	69	60	51	50	41	45	61	29	59	45	44
WH 220049	2	WH 170714	98	102	87	105	86	92	90	91	94	111	95	102	87	94	89	93	88	90	84	107	107	97
5514399616		WH 190895	32	61	42	18	35	40	29	38	2.01	-0.34	23	18.0	2.1	74	20.3	101	12.2	4.8	-1.3	34.6	21	33
GRACE											33	29	18	61	42	40	34	27	30	37	21	46	29	28
WH 230064	3	WH 150661	103	89	86	107	87	81	86	81	98	113	93	89	86	83	86	84	89	89	92	87	96	89
5514544039		WH 090257	44	66	53	20	43	47	38	45	1.72	-0.41	22	11.8	1.7	48	18.6	64	12.9	5.0	-3.6	25.7	14	24
BLOMMETJIE											48	29	20	66	53	46	44	36	39	48	25	55	40	38
WH 230076	2	WH 130513	118	79	89	118	85	82	80	80	114	111	83	79	89	82	79	84	72	97	83	88	87	81
96105499		WH 170808	43	66	54	33	45	49	40	47	0.58	-0.34	10	7.1	2.5	45	13.3	63	3.0	-1.3	-0.9	25.7	8	15
SANNIE											44	39	33	66	54	51	50	38	46	51	28	56	42	41
WH 230100	9	WH 140568	110	92	89	107	77	85	80	83	103	118	93	92	89	89	84	81	82	90	73	98	95	89
96427745		WH 140626	35	66	52	15	44	45	40	44	1.38	-0.56	21	13.3	2.6	60	16.4	54	8.7	4.2	2.2	30.4	13	24
SERING											38	25	15	66	52	44	46	39	46	52	26	54	43	41

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	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
	WH 260001		SS 170050	108	96	101	106	94	100	105	101	107	103	93	96	101	101	90	107	94	95	95	103	103	100
	6020857493		WH 190865	43	57	45	20	33	41	36	40	1.09	-0.12	21	15.1	6.0	90	21.4	154	15.6	0.8	-4.5	32.5	18	37
	WH 260001											48	25	20	57	45	41	38	34	39	34	18	48	40	38

Selection List on Cow Value

Bulls 2 years and older

ID Name Sorted on ID			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	WH 240053	WH 240053	WH 170714	WH 190898	1.6	10130	9862	8243	10616	8736	8741	9631	8839	

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	JJB 160043	JJB 160043	KV 120291	JJB 130029	2.5	113 37	83 62	97 67	118 32	97 46	92 49	93 28	91 45
2	WH 170785	ALIDA	WH 130513	WH 130560	19.5	109 39	83 69	104 66	99 28	105 53	92 52	87 46	90 51
3	WH 190899	MONICA	WH 180760	WH 150649	3.9	101 38	89 67	86 62	118 28	118 48	95 50	88 32	93 46
4	WH 220049	GRACE	WH 170714	WH 190895	1.8	98 32	102 61	87 42	105 18	86 35	92 40	90 29	91 38
					★★★★☆								
1	WH 160710	WH 160710	WH 070164	AA 060644	0.3	95 50	86 68	70 75	138 35	112 57	86 56	73 46	82 54
2	WH 190865	WH 190865	DC 120249	WH 140606	0.2	104 44	94 69	84 62	116 27	87 51	89 52	86 34	87 48
3	WH 190884	ALIDA	WH 130513	WH 040976	1.1	100 39	93 60	96 60	99 26	73 48	81 47	81 40	79 46
4	WH 200950	ALTA	WH 140568	WH 140606	4.7	116 35	87 67	76 59	119 16	85 46	83 47	78 40	81 46
5	WH 200956	VERS	WH 120430	WH 120468	1.0	112 36	88 69	82 60	114 24	91 50	86 49	93 42	87 48
6	WH 230064	BLOMMETJIE	WH 150661	WH 090257	3.2	103 44	89 66	86 53	107 20	87 43	81 47	86 38	81 45
7	WH 230076	SANNIE	WH 130513	WH 170808	1.7	118 43	79 66	89 54	118 33	85 45	82 49	80 40	80 47
8	WH 230100	SERING	WH 140568	WH 140626	8.9	110 35	92 66	89 52	107 15	77 44	85 45	80 40	83 44

Selection List on Cow Value

Bull Calves younger than 2 years

ID Name Sorted on ID		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	WH 260003	WH 260003	SS 170050	WH 160710	0.2	10445	9257	9450	11323	10736	9743	9840	9742

Selection List on Cow Value

Heifers younger than 2 years

ID Name Sorted on ID		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	WH 260001	WH 260001	SS 170050	WH 190865	0.3	10843	9657	10145	10620	9433	10041	10536	10140

	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.

