

SUSSEX

BREEDING VALUE REPORT

September 2026



1990 WINE & COUNTRY ESTATE

Herd Number: 728844

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The brand you need

 **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 Carcass Value



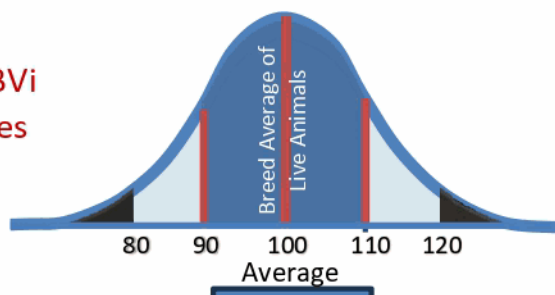
Select for more meat on the carcass as measured from end weight in Phase C and D Growth Tests and RTU scanning.

LOGIX Production Value

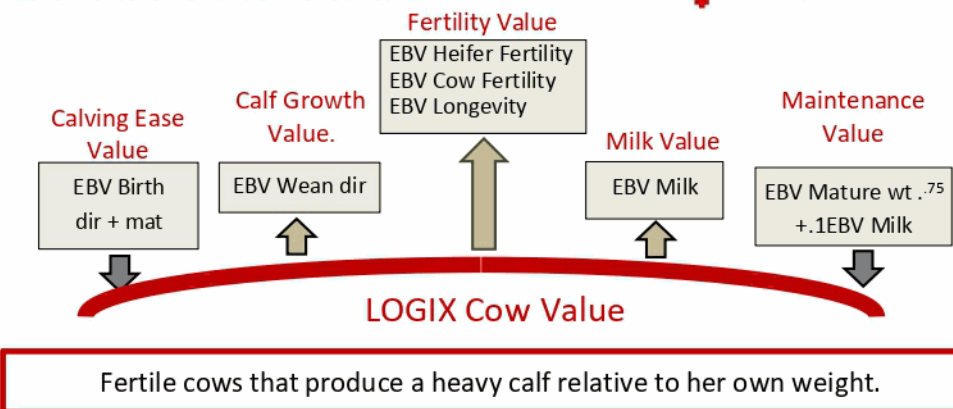


80% LOGIX Cow Value +
20% LOGIX Growth Value

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

Contemporary Groups

The correct composition of contemporary groups is one of the cornerstones of BLUP breeding value estimation. Breeding values are estimated from the differences between animals exposed to the same environment, ***as these differences are caused by genetics***. The following aspects are important:

1. Animals at the same time, place and treatment

A contemporary group is a comparable group of animals measured at the same time in the same environment. It is therefore a comparable group of animals that were together on the same farm or camp in the same year and season. If there are animals in the group that were treated differently, they should be given a separate treatment code because their performance is influenced by other environmental influences than the rest of the group. Examples of possible different treatments are when some animals received supplements or creep feed, sale or show animals, embryo donors, sick or foster calves or even purchased cows and calves. If bull and heifer calves or older cows and young heifers were in the same camp, they should be placed in the same group – corrections for sex, age and first calving of cows are automatically made during breeding value estimation.

2. Progeny of at least two sires, of which one is a link sire

The progeny of different sires needs to be compared in the same group in order to determine the sires' genetic merit relative to each other. At least one sire should be a link sire with progeny in other herds. Genetic links between herds are used to determine the position of sires in the breed. All sires are good link sires. Smaller herds could artificially inseminate some cows or allow some cows to be covered by another herd's bull.

3. Larger groups stabilise Breeding Values

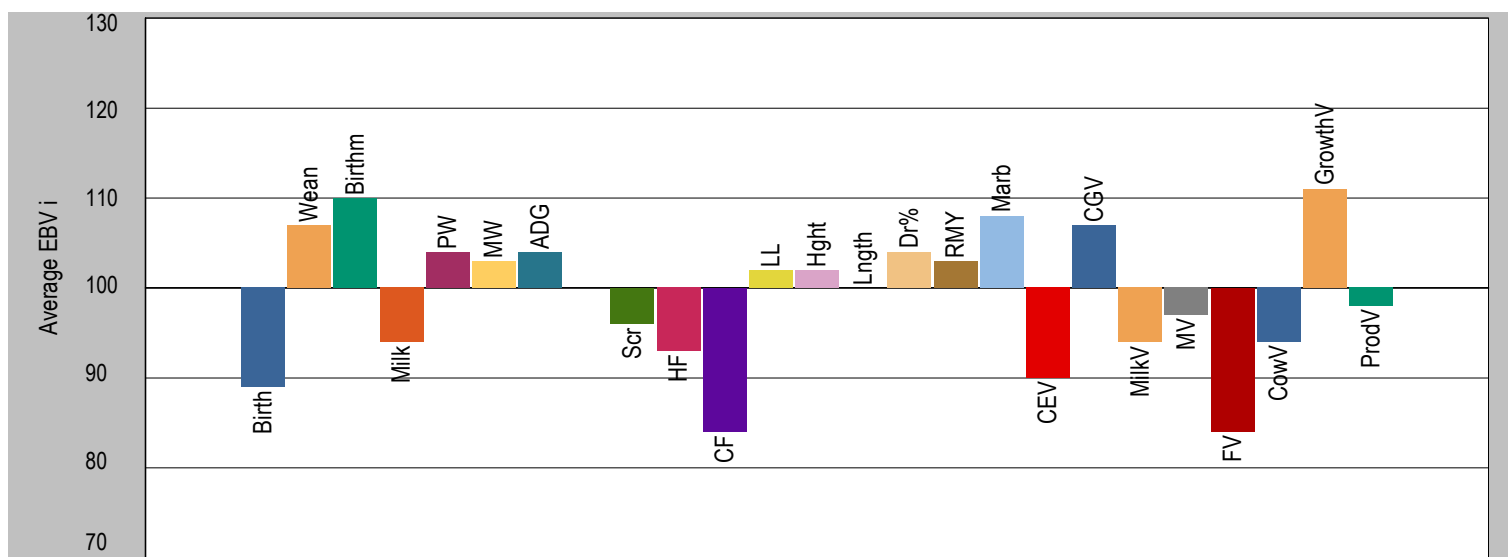
Larger groups result in more accurate and stable breeding values, as the mean and distribution of the group can be more accurately determined and are thus more representative. Groups should preferably have more than 5 animals. Weigh all the animals in the same group on the same day, as corrections for age differences are made during genetic evaluation. The use of breeding seasons rather than through the year calving will also increase contemporary group size. Groups with less than 3 animals are not included in breeding value estimation. An accidental mistake in a small group affects the animal itself, its family, all the other animals in the group and their families. The effect could be much less in large groups.

4. Measure all animals in the contemporary group

Weigh ALL the animals in the contemporary group, the good as well as the poor performers. Weigh animals before they are culled, so their parents can be penalized for their poor breeding.



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	Dr%:	Dressing%
FCR:	Feed Conversion Ratio	RMY:	Red Meat Yield
		Marb:	Marbling

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
Prewrite Growth	Birth Weight	2.07	89	1.09
	Wean Weight	18.9	107	15.4
	Birth Mat.	0.00	110	0.44
	Milk (Wn.Mat.)	4.5	94	6.2
Postwean Growth	Postwean Wt	33.7	104	29.9
	Mature Weight	29	103	26
	ADG	134	104	113
	FCR			-90
Fertility	Scrotal Circumf.	11.7	96	13.7
	Heifer Fertility	4.1	93	-1.5
	Cow Fertility	-2.0	84	-5.8
	Longevity	26.3	102	24.9
Frame	Height	20	102	19
	Length	32	100	32
Carcass	Dressing%	0.04	104	-0.05
	RedMeatYield	1.3	103	0.4
	Marbling	0.06	108	-0.65

Selection Value	Ave. Herd
Calving Ease	90
Calf Growth	107
Milk	94
Maintenance	97
Fertility	84
Cow Value	94
Growth Value	111
Production Value	98

- 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:			100	100	100	100	100	100	99	99	100	100	100	100	100	100	99	99	99	100	100	100	100	99	99
2022	1	★★★★☆	74	115	85	96	70	84			72	115	119	85	107	104	106	107	99	76	75	106	100	98	
2024	14	★★★★	91	106	95	97	85	94	111	98	90	106	110	95	104	103	104	105	96	94	85	102	102	101	
Cows in Herd Average:			83	111	90	97	78	89	111	98	81	111	115	90	106	104	105	106	98	85	80	104	101	100	

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 EBV	Calv. Ease	Weaning Weight		Calf Growth	Milk (Wn.Mat.)		Postwean Weight		Mature Weight		Mainte- nance	Heifer Fert.		Cow Fert.		Longevity		Ferti- lity		
	Number	EBV			Number	EBV		Number	EBV	Milk	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	1955	1.03	0.37	101	1392	13.8	97	1392	4.56	95	1016	27.2	155	24	103	490	1.9	379	-4.2	1999	17.9	92	92
2017	2176	1.04	0.42	101	1503	13.7	97	1503	4.83	95	1143	26.9	231	21	105	589	1.5	426	-4.4	2201	18.1	94	93
2018	2151	1.03	0.34	101	1437	14.3	98	1437	4.35	94	1018	28.3	233	23	103	512	-0.1	390	-5.4	2143	17.4	97	93
2019	2032	1.08	0.35	100	1356	14.5	98	1356	5.11	96	967	28.6	173	26	101	519	0.5	353	-5.2	2109	18.7	96	95
2020	2209	1.13	0.42	100	1596	14.7	99	1596	5.13	96	1107	28.3	226	27	101	587	-0.5	403	-5.6	2251	18.7	98	95
2021	2344	1.00	0.39	101	1733	15.1	99	1733	5.53	98	1384	29.5	220	25	101	696	-0.1	414	-5.4	2145	19.1	98	98
2022	2141	1.10	0.38	100	1549	15.6	100	1549	5.68	98	1124	30.7	148	25	99	479	1.6	92	-5.9	898	19.9	98	98
2023	2136	1.05	0.46	100	1634	15.5	100	1634	6.11	100	1211	29.9	17	26	100	237	0.4	3	-6.6			97	99
2024	2177	1.09	0.46	100	1492	16.2	102	1491	6.17	100	992	31.7			99	22	-3.8					95	101
2025	2001	0.91	0.46	102	1255	14.9	99	1255	5.87	99	218	32.9			100								99
2026	686	0.88	0.57	102	27	18.8	107	27	8.86	108													112

Genetic Trends for Growth Test Traits

Herd

Birth Year	Growth									Frame						Carcass						Selection Values			
	FCR			ADG			Scrotum			Height			Length			EMA		Fat		Marbling		Carcass Value	Growth Value	Prod Value	
	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	RTU Number	EBV	EBVi	EBV	EBVi	EBV	EBVi			

Breed

Birth Year	Growth									Frame						Carcass								Selection Values		
	FCR			ADG			Scrotum			Height			Length			RTU Number	EMA		Fat		Marbling		Cracss Value	Growth Value	Prod Value	
	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi		EBV	EBVi	EBV	EBVi						
2017	4	-123	113	264	120	101	263	11.8	96	264	18	98	264	30	98	51	-0.06	102	1.13	107	-0.29	104	102	96	91	
2018	3	-124	113	218	128	103	218	14.1	101	218	19	100	218	33	101	39	0.53	107	1.02	106	-0.27	104	107	98	92	
2019	10	-124	113	147	137	104	147	13.5	100	147	20	102	147	35	102	28	0.60	108	1.85	113	-0.09	106	111	99	93	
2020	7	-123	113	182	123	102	182	14.3	101	182	18	99	182	32	100	49	-0.11	102	0.85	105	-0.45	102	100	98	93	
2021	3	-120	112	253	127	102	253	14.2	101	253	20	101	253	36	103	27	0.70	108	0.45	101	-0.28	104	111	99	96	
2022				221	146	106	221	13.9	100	221	22	104	221	38	105	48	0.94	111	1.23	108	0.05	108	109	103	98	
2023				241	133	104	241	13.2	99	241	19	100	241	34	102	94	-0.31	100	0.07	98	-0.43	103	99	100	95	
2024				154	148	106	166	13.8	100	132	20	102	132	37	104									103	98	
2025																										
2026																										

Sires

Bull			Selection Values								Calf		Dam		Growth				Fertility				Frame		Carcass			Measured Progeny	
ID	Index EBV Acc	Sire ID Dam ID	Calv. Ease Value	Calf Grwth Value	Milk Value	Maint. Value	Fertility Value	Cow Value	Growth Value	Prod Value	Birth Dir	Wean Dir	Birth Mat.	Wean Mat.	Post wn wt	Mature weight	ADG	FCR	Scrotal	Heifer Fertility	Cow Fertility	Long-evi ty	Height	Length	EMA	Fat	Marbling	Birth Grwth Test	Wean Dgt/Calvs.
	Name																												
AJS 160063	JRE 120030 PSS 099309	PAPARAZZI	98	100	105	102	89	100	99	98	99	100	95	105	100	98	107		118	105	86	108	107	108	109	117	110	26	15
			89	84	62	42	47	59	22	52	1.20	15.2	0.63	7.8	29.7	24	149		22.5	-5.6	-2.5	30.8	24	43	0.69	2.40	0.18		1
AJS 200025	JRE 130156 AJS 080003	LEGACY 20 STE	115	98	109	97	86	106	102	104	113	98	111	109	101	103	105		93	94	86	95	102	100	102	102	108	51	36
			90	88	61	41	44	58	22	51	-0.06	14.3	-0.04	9.0	30.7	29	141		10.5	3.1	-2.5	21.3	21	32	-0.04	0.55	0.07		
AJS 210044	AJS 170069 AJS 140021	GIANT 5 DE	92	109	103	86	103	103			92	109	104	103	111	114	110		101	118	98	92	108	112	113	106	110	12	9
			81	80	49	28	30	46			1.83	19.9	0.26	7.1	39.4	40	167		14.1	-16.2	-5.3	19.4	25	47	1.19	1.08	0.21		
JRE 130156	GA 090125 JRE 090008	KIMBERLEY 12TH	96	112	94	90	71	96	116	99	93	112	125	94	111	110	117	113	100	79	74	99	116	108	110	107	114	79	74
			94	93	86	60	63	74	44	68	1.69	21.5	-0.60	4.2	39.6	36	205	-123	13.8	15.7	0.4	24.4	31	43	0.91	1.16	0.54	1	23
JRE 160162	JRE 130148 JRE 100020	BONAPARTE 3 DE	98	99	112	137	61	108	102	105	99	99	87	112	100	63	104		77	97	58	99	114	112	109	137	102	58	49
			93	91	71	42	48	62	28	55	1.19	14.8	0.98	10.0	29.5	-13	133		2.6	0.8	4.2	24.4	29	47	0.80	4.86	-0.47		7
TZ 170168	DSS 120022 TZ 080122	DALTON 28STE	85	102	76	96	73	72	90	73	84	102	138	76	91	104	97		101	87	74	107	89	87				38	33
			89	88	64	33	47	58	28	52	2.49	16.6	-1.19	-1.3	22.5	30	96		14.1	9.2	0.5	29.8	10	16					2

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		Carcass			
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	Carcass 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	EMA	Fat	Marbling
ID Number Name																													

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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	Carcass 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	EMA	Fat	Marbling
ID Number Name																													
AJS 220013 93259778 KATY 47 STE	2	TZ 170168 AJS 190005	74 74	115 71	85 47	96 27	70 38	84 46				72 3.55 76	119 -0.35 56	104 30 27	115 22.8 71	85 1.4 47	98 71 48	107 36.1 64	106 143 31		99 13.3 34	76 17.9 54	75 0.3 21	106 29.1 47	100 19 34	98 29 33			
AJS 240005 96564992 KATY 60 STE	2	TZ 170168 AJS 210066	87 71	102 69	88 43	99 19	85 28	84 40				86 2.32 73	109 0.04 45	101 27 19	102 16.6 69	88 2.4 43	92 57 44	99 29.1 62	97 98 27		90 9.1 30	102 -3.2 38	83 -1.8 18	107 30.0 44	91 12 30	90 19 29			
AJS 240009 96565031 VERITY 23 STE PP	1	AJS 160063 AJS 210002	84 71	110 69	106 44	116 22	72 29	104 41			108 5	86 2.37 73	94 0.70 47	84 9 22	110 20.2 69	106 8.0 44	119 119 45	108 36.5 62	104 135 23		102 14.5 27	95 2.6 40	71 1.2 18	104 27.7 44	108 25 28	109 44 26	107 0.49 9		
AJS 240010 96565049 UNO 4 DE	1	JRE 130156 CN 200042	107 74	104 71	99 54	94 35	77 36	99 48	110 23	100 43	109 28	105 0.66 76	114 -0.15 54	106 32 35	104 17.4 71	99 5.9 54	100 75 53	105 34.0 62	111 173 42		98 12.5 45	82 13.0 44	80 -1.0 28	101 25.7 50	116 31 46	109 43 45	109 0.72 30	104 0.73 27	107 -0.02 26
AJS 240018 96793740 KATY 62 STE	4	AJS 210044 AJS 190012	87 72	108 71	99 45	85 23	95 26	95 41				86 2.31 74	110 0.04 45	115 42 23	108 19.6 71	99 5.9 45	100 75 46	107 35.8 63	108 156 23		98 12.6 26	102 -3.4 34	94 -4.3 18	101 25.3 42	105 23 27	106 40 25			
AJS 240026 96793799 JEZEBEL 91 STE	5	AJS 210044 AJS 180006	100 72	101 71	98 46	92 22	93 25	96 40				99 1.22 74	113 -0.11 45	108 34 22	101 16.1 71	98 5.6 46	97 68 46	102 32.0 62	105 138 22		90 9.0 25	105 -5.6 34	91 -3.6 16	101 25.6 41	100 19 26	100 33 24			
AJS 240029 97022420 HALOS REVERENCE 26	4	JRE 130156 AJS 150007	93 76	107 74	94 59	90 36	85 38	93 51	111 22	95 45	108 24	91 1.91 77	117 -0.29 59	110 36 36	107 18.8 74	94 4.4 59	97 68 56	105 34.6 67	112 177 40		92 10.0 44	101 -2.4 48	83 -1.8 28	99 24.0 52	108 25 44	105 38 43	109 0.71 27	105 0.92 22	113 0.46 21
AJS 240042 96793898 GLAMOUR 84 STE	2	TZ 170168 AJS 210008	75 73	120 70	84 45	90 21	82 28	90 41				74 3.40 75	121 -0.46 48	110 36 21	120 25.5 70	84 1.1 45	99 73 45	113 41.3 60	108 158 27		110 18.4 29	81 14.3 38	86 -2.5 17	107 29.5 43	103 21 29	103 36 28			
AJS 240048 96946900 UNICE 74 STE	3	AJS 200025 AJS 190008	89 73	116 72	103 48	89 21	96 28	109 42				90 2.01 75	98 0.54 47	111 38 21	116 23.5 72	103 7.3 48	111 99 47	117 44.9 58	107 150 27		102 14.7 30	93 4.0 36	97 -5.1 20	98 23.5 42	107 24 30	108 43 29			
AJS 240056 97177216 SERENE 49 STE	2	TZ 170168 AJS 170031	76 73	114 72	78 51	96 28	88 33	85 46				75 3.35 75	126 -0.68 52	104 30 28	114 22.6 72	78 -0.7 51	93 59 50	105 34.2 58	101 117 32		99 13.2 35	89 7.6 41	90 -3.4 25	103 27.2 46	98 17 35	94 25 34	100 -0.27 7		
AJS 240058 97177232 LEGACY 45 STE	2	AJS 200025 AJS 170032	118 73	88 72	101 49	104 25	93 30	96 44			92 11	116 -0.31 75	110 0.00 50	96 22 25	88 9.7 72	101 6.5 49	93 59 49	90 21.1 53	96 91 27		83 5.7 30	84 11.2 39	96 -4.9 21	95 21.5 45	95 15 30	90 19 29	92 -1.27 13	96 -0.25 9	104 -0.34 8
AJS 240060 97177257 GLAMOUR 85 STE	1	TZ 170168 AJS 200001	84 73	110 72	82 49	88 27	85 32	83 45				82 2.74 75	126 -0.65 50	112 38 27	110 20.3 72	82 0.8 49	90 53 49	101 31.0 58	106 144 27		106 16.7 29	89 7.2 40	86 -2.5 23	101 25.7 44	99 18 30	101 33 29			

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Animal				Selection Values								Birth		Wean				Growth			Fertility				Frame		Carcass			
Index EBV Acc	% Inbreeding	ID Number Name	Sire ID Dam ID	Calv. Ease V	Calf Growth V	Milk V	Maint. V	Fertility V	Cow Value	Growth Value	Prod. Value	Carcass 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	EMA	Fat	Marbling
AJS 240064 97177299 UNICE 75 STE	1	TZ 170168 AJS 130064		98 74	102 73	92 53	97 31	84 34	91 47				95 1.52 76	121 -0.46 54	103 29 31	102 16.6 73	92 3.8 53	95 63 52	99 29.0 60	102 122 31		91 9.6 34	109 -8.4 42	81 -1.1 26	105 28.6 47	96 16 34	94 25 33			
AJS 240067 97177323 JEZEBEL 92 STE	5	AJS 200025 AJS 160024		91 73	106 72	102 49	95 23	81 28	97 42				92 1.79 75	93 0.75 49	105 31 23	106 18.2 72	102 7.0 49	104 85 48	107 35.8 58	98 103 23		90 8.7 27	85 10.8 37	83 -1.8 19	98 23.3 44	96 16 28	96 28 26			
AJS 240068 97348221 PRINCESS 6 DE PP	1	JRE 160162 AJS 170073		86 74	101 72	106 54	126 37	73 34	100 48		103 17		88 2.16 76	84 1.14 56	74 -2 37	101 16.0 72	106 8.3 54	118 116 54	99 29.3 59	99 106 30		88 8.1 34	103 -3.8 46	70 1.5 23	105 28.2 48	102 21 35	102 34 34	103 0.04 19	126 3.48 15	105 -0.26 14

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	AJS 240009	VERITY 23 STE PP	AJS 160063	AJS 210002	1.2	84 71	110 69	106 44	116 22	72 29	104 41		
2	AJS 240048	UNICE 74 STE	AJS 200025	AJS 190008	2.6	89 73	116 72	103 48	89 21	96 28	109 42		
3	AJS 240068	PRINCESS 6 DE PP	JRE 160162	AJS 170073	1.0	86 74	101 72	106 54	126 37	73 34	100 48		
					★★★★☆								
1	AJS 240010	UNO 4 DE	JRE 130156	CN 200042	1.5	107 74	104 71	99 54	94 35	77 36	99 48	110 23	100 43
2	AJS 240018	KATY 62 STE	AJS 210044	AJS 190012	3.6	87 72	108 71	99 45	85 23	95 26	95 41		
3	AJS 240026	JEZEBEL 91 STE	AJS 210044	AJS 180006	4.8	100 72	101 71	98 46	92 22	93 25	96 40		
4	AJS 240029	HALOS REVERENCE 26	JRE 130156	AJS 150007	4.5	93 76	107 74	94 59	90 36	85 38	93 51	111 22	95 45
5	AJS 240042	GLAMOUR 84 STE	TZ 170168	AJS 210008	1.8	75 73	120 70	84 45	90 21	82 28	90 41		
6	AJS 240058	LEGACY 45 STE	AJS 200025	AJS 170032	2.3	118 73	88 72	101 49	104 25	93 30	96 44		
7	AJS 240064	UNICE 75 STE	TZ 170168	AJS 130064	1.2	98 74	102 73	92 53	97 31	84 34	91 47		
8	AJS 240067	JEZEBEL 92 STE	AJS 200025	AJS 160024	4.6	91 73	106 72	102 49	95 23	81 28	97 42		
					★★★								
1	AJS 220013	KATY 47 STE	TZ 170168	AJS 190005	1.8	74 74	115 71	85 47	96 27	70 38	84 46		
2	AJS 240005	KATY 60 STE	TZ 170168	AJS 210066	1.7	87 71	102 69	88 43	99 19	85 28	84 40		
3	AJS 240056	SERENE 49 STE	TZ 170168	AJS 170031	1.7	76 73	114 72	78 51	96 28	88 33	85 46		
4	AJS 240060	GLAMOUR 85 STE	TZ 170168	AJS 200001	1.3	84 73	110 72	82 49	88 27	85 32	83 45		

	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.

