

Sussex

Genetic Evaluation

SA Stud Book
October 2024

Herd Number: 613695

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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.

CV: Cow Value

(Combination of EBVs based on measurements of cows and calves on the farm)

Selection Values	Calving Ease	Calf growth	Milk	Maintenance	Fertility
	Birth Weight: Calf's genetic potential for weight at birth	Wean weight: Calf's genetic potential for growth	Milk (wean maternal): Milk and mothering ability of cow	Mature weight : Heavier cows have higher maintenance requirements	Heifer Fertility: Age at 1 st calving
	Birth Mat: Cow's genetic ability to limit calf 's birth weight			0.1 x Milk: Higher milk increases maintenance requirements	Cow Fertility: ICP (inter-calving period) Longevity: Retention of family
>120 (Green)		Heavier weaner calf	More milk	Lower maintenance (smaller cow)	More fertile and/or good retention
80 - 120 (Grey)	Average birth weight	Average weaner calf	Average milk	Average maintenance (average cow size)	Average
< 80 (Red)	Heavy Birth Weights (More difficult calving)	Lighter weaner calf	Less milk	Higher maintenance (Heavier cow)	Less fertile and/or culled early

Breeding Values (EBVs)	Birth weight	Mat. birth weight	Weaning weight	Milk	Cow weight	Longevity	Heifer Fertility	Cow Fertility
Higher EBV	Heavier weight	Heavier weight	Heavier weight	More milk	Heavier weight	Family remains longer	Later calving	Longer ICP
Lower EBV	Lighter weight	Lower weight	Lighter weight	Less milk	Lighter weight	Family culled earlier	Earlier calving	Shorter ICP
Optimum EBV	Lower intermediate	Lower intermediate	Higher	Higher	Higher intermediate	Higher	Lower	Lower
Optimum EBVindex*	Higher intermediate	Higher intermediate	Higher	Higher	Higher intermediate	Higher	Higher	Higher

*EBV index above 100 is in a more favourable direction and better than breed average (100).

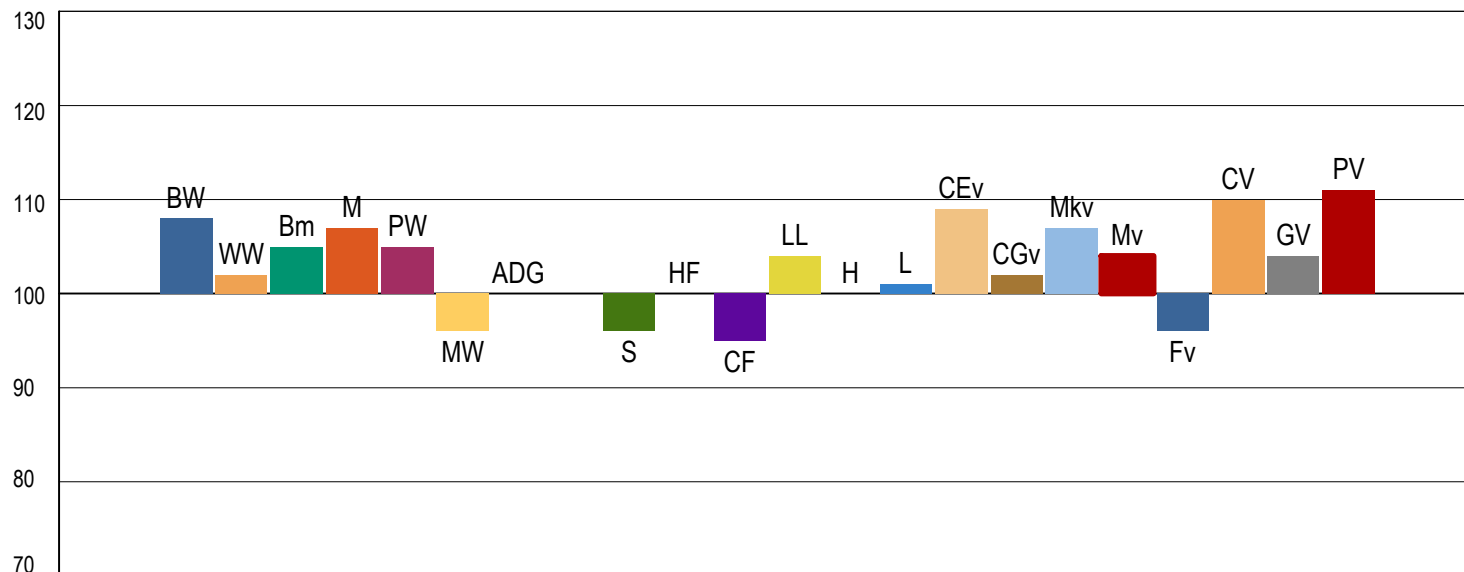
GV: Growth Value

(Combination of EBVs based on bulls measured in growth tests)

Breeding Values (EBVs)	ADG	Kleiber ratio	Feed conversion ratio	Scrotal circumference	Height	Length	Carcass
	Average daily gain	Growth efficiency	Feed conversion ratio	Bull fertility	Shoulder/Hip heigh	Body length	Dressing%, Red Meat Yield and Marbling
Higher EBV	More growth	More efficient on veld	Higher intake per kg gain	Larger scrotum	Taller animal	Longer animal	More
Lower EBV	Less growth	Less efficient on veld	Lower intake per kg gain	Smaller scrotum	Shorter animal	Shorter length	Less
Optimum EBV	Higher	Higher	Lower	Higher	Intermediate	Intermediate/high	Higher
Optimum EBV index	Higher	Higher	High	Higher	Higher intermediate	Higher intermediate	Higher

PV: Production Value is a combination of CV and GV)

Herd and Breed Averages



Breeding Value (EBV) and Breeding Value Index (EBVi):

BW	Birth Weight
WW	Weaning Weight
Bm	Birth maternal
M	Milk
PW	Post-Wean Weight
MW	Mature Weight
ADG	Average Daily Gain
FCR	Feed Conversion Ratio
S	Scrotal Circumference
HF	Heifer Fertility
CF	Cow Fertility
LL	Longevity
H	Height
L	Length

Selection Values

CEv	Calving Ease Value
CGv	Calf Growth Value
Mkv	Milk Value
Mv	Maintenance Value
Fv	Fertility Value
CV	Cow Value
GV	Growth Value
PV	Production Value

	Trait	EBV Herd	EBV Index	EBV Breed
Prewrite Growth	Birth Weight	0.37	108	1.06
	Wean Weight	15.2	102	13.9
	Birth Mat.	0.25	105	0.47
	Milk (Wn.Mat.)	8.1	107	5.7
Postwean Growth	Postwean Wt	31.6	105	27.2
	Mature Weight	20	96	24
	ADG	102	100	101
	FCR			-80
Fertility	Scrotal Circumf.	10.1	96	11.9
	Heifer Fertility	-0.6	100	-0.7
	Cow Fertility	-4.5	95	-5.7
	Longevity	26.2	104	23.0
Frame	Height	18	100	18
	Length	31	101	30
Carcass	Dressing%	-0.19	90	-0.01
	RedMeatYield	-1.1	94	0.5
	Marbling	-1.01	91	-0.39

Selection Value	Ave. Herd
Calving Ease	109
Calf Growth	102
Milk	107
Maintenance	104
Fertility	96
Cow Value	110
Growth Value	104
Production Value	111

- 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?:

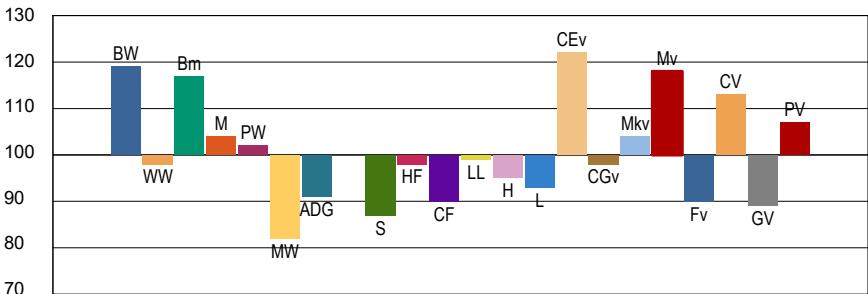
- Calving ease: Smaller calf at birth - easier calving
- Calf growth: Heavier calves at wean due to growth potential of the calf
- Milk: Cows with more milk and better mothering ability
- Maintenance: Animals with low maintenance requirements (lower mature weight).
- Fertility: Cows/daughters that calve

Genetic Window

Bulls on Farm
Bulls born in and earlier



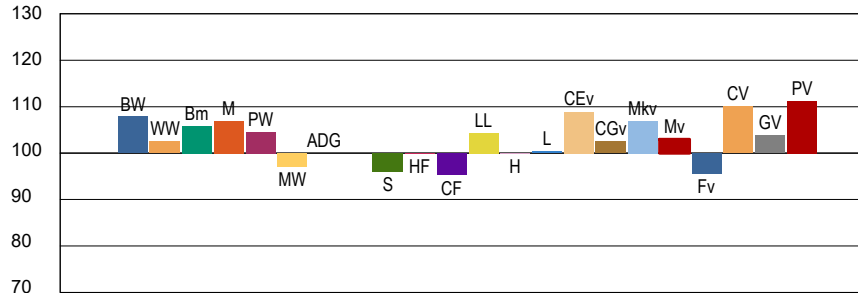
Sires of young animals
Sires of animals 3 years and younger



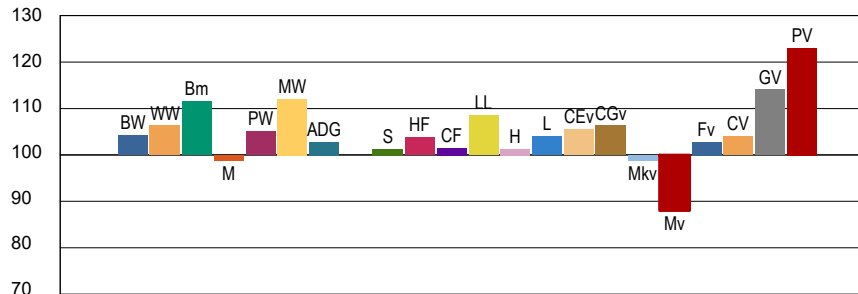
Bull Calves
Bull calves born in



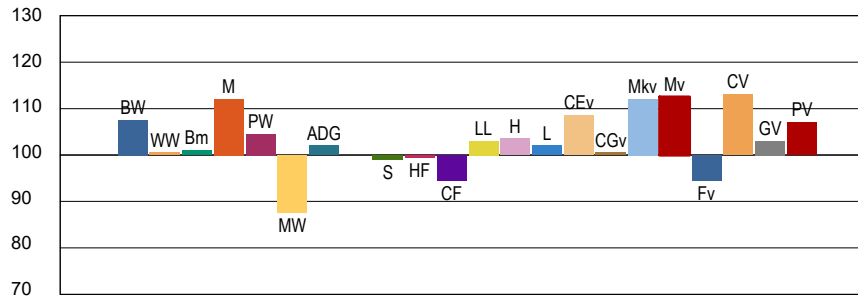
Cow Herd
Cows born in 2022 and earlier



Cows older than 6 years
Cows born in 2018 and earlier



Heifers
Heifers born in 2023



Abbreviations

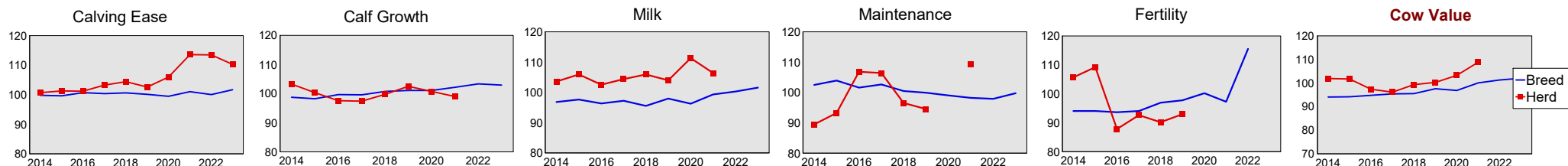
BW	Birth Weight
WW	Weaning Weight
Bm	Birth mat
M	Milk
PW	Post-wean Weight
MW	Mature Weight
ADG	Avg. Daily Gain
FCR	Feed Conv. Ratio
S	Scrotal Circumf.
HF	Heifer Fertility
CF	Cow Fertility
LL	Longevity
H	Height
L	Length
CEv	Calving Ease Value
CGv	Calf Growth Value
Mkv	Milk Value
Mv	Maintenance Value
Fv	Fertility Value
CV	Cow Value
GV	Growth Value
PV	Production Value

Summary of Cow Herd

			Selection Values (SV)								Calf Weight		Dam		Growth & Efficiency				Fertility				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	FCR	Scrotal Circumf.	Heifer Fertility	Cow Fertility	Longevity	Height	Length
Cows in Breed Average:			100	100	100	100	100	100	99	100	100	100	100	100	99	100	99	99	99	100	100	100	99	99
2014	2	★★★★☆	108	113	115	82	120	125	114	123	106	113	112	115	112	119	114		119	105	119	108	113	119
2016	1	★★	104	99	81	82	76	76			103	99	110	81	98	118	91		81	96	76	108	88	87
2018	1	★★★★	103	100	84	107	95	91			102	100	112	84	98	93	93		86	110	92	111	91	91
2019	2	★★★★★	93	112	113	88	93	112	117	112	94	112	93	113	114	113	117		115	83	97	110	119	120
2021	6	★★★★★	114	99	110	113	91	113	94	105	113	99	104	110	103	87	95		88	101	90	102	95	94
2022	6	★★★★★	112	101	107	108	97	111	100	110	110	101	108	107	103	92	98		94	102	95	103	98	98
2023	2	★★★★★	109	101	112	113	95	113	103	107	108	101	101	112	105	88	102		99	100	95	103	104	102
Cows in Herd Average:			106	104	103	99	95	106	106	111	105	104	106	103	105	101	101		97	100	95	106	101	102

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.



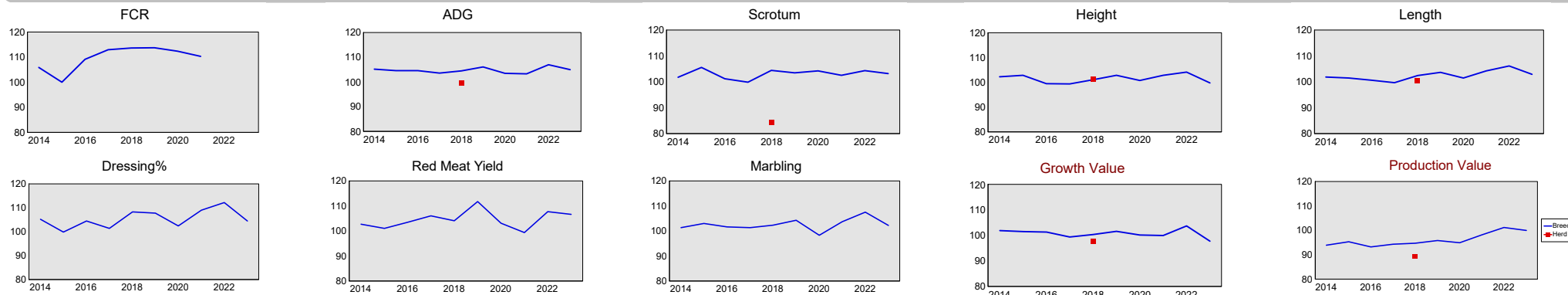
Herd

Birth Year	Calving Ease				Calf Growth			Milk		Maintenance					Fertility							Cow Value	
	Birth Weight		Mat EBV	Calv. Ease	Weaning Weight		Calf Growth	Milk (Wn.Mat.)		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			Number
2015	22	1.01	0.29	101	18	14.1	100	18	7.62	106	12	24.8	1	45	93	4	-8.2	4	-7.5	17	20.0	109	102
2016	29	0.97	0.50	101	23	12.6	98	23	6.51	103	21	25.1	9	18	107	13	-1.5	12	-2.3	22	23.3	88	97
2017	26	0.79	0.55	103	22	12.5	97	22	7.14	104	15	24.2	1	20	106	5	-6.8	4	-2.9	20	23.3	93	96
2018	28	0.71	0.46	104	20	13.8	100	20	7.60	106	17	28.5			97	7	5.4	2	-2.4	17	23.8	90	99
2019	33	0.86	0.48	103	21	15.3	103	21	7.01	104	11	32.6			95	4	12.3	2	-5.6	27	21.9	93	100
2020	30	0.56	0.47	106	16	14.3	101	16	9.39	111										21	24.2		103
2021	15	0.00	0.08	114	11	13.5	99	11	7.76	106	11	28.5			109								109
2022	11	0.02	0.07	113																			
2023	8	0.27	0.19	110																			

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	Number	EBV	Number	EBV		Number	EBV	Number	EBV	Number	EBV			Number
2015	1956	1.08	0.43	100	1385	13.0	98	1385	4.96	98	1091	25.6	104	18	104	438	-1.7	331	-4.2	1874	18.3	94	94
2016	1925	1.02	0.39	101	1392	13.8	100	1392	4.52	96	1016	27.3	142	22	102	422	0.7	350	-4.2	1845	19.0	94	95
2017	2126	1.03	0.44	100	1458	13.7	100	1458	4.81	97	1112	27.1	194	21	103	505	1.2	378	-4.3	2039	19.0	94	95
2018	2084	1.02	0.36	101	1400	14.3	101	1400	4.27	96	1008	28.4	205	23	101	441	1.3	339	-5.4	1891	19.3	97	96
2019	1986	1.07	0.38	100	1302	14.5	101	1302	5.06	98	931	28.9	137	24	100	421	-0.1	260	-5.1	1731	19.7	98	98
2020	2149	1.11	0.43	99	1539	14.5	101	1539	4.49	96	1052	28.4	128	26	99	454	-1.2	132	-5.7	1235	19.7	100	97
2021	2248	0.97	0.43	101	1596	15.1	102	1596	5.49	99	1258	30.0	22	30	98	316	0.7	2	-8.4			97	100
2022	1996	1.07	0.42	100	1468	15.7	103	1468	5.78	100	1071	31.4			98	4	-34.4					116	101
2023	1958	0.89	0.55	102	1113	15.5	103	1113	6.21	102	389	29.9			100								102
2024	866	1.00	0.47	101	52	18.1	108	52	6.86	104													107

Genetic Trends for Growth Test Traits



Herd

Birth Year	Growth						Frame						Carcass Traits						Selection Values					
	FCR			ADG			Scrotal Circumf.			Height			Length			Number	Dressing%		RMeat Yield		Marbling		Growth Value	Prod Value
	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi		EBV	EBVi	EBV	EBVi				
2015																								
2016																								
2017																								
2018				5	100	100	5	4.4	84	5	19	101	5	30	100							98	89	
2019																								
2020																								
2021																								
2022																								
2023																								

Breed

Birth Year	Growth									Frame						Carcass Traits								Selection Values	
	FCR			ADG			Scrotal Circumf.			Height			Length			Number	Dressing%		RMeat Yield		Marbling		Growth Value	Prod Value	
	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi	Number	EBV	EBVi		EBV	EBVi	EBV	EBVi	EBV	EBVi			
2015	3	-80	100	208	128	105	208	14.6	106	208	20	103	208	32	101	93	-0.01	100	0.23	99	-0.185	103	101	95	
2016	8	-110	109	190	127	105	190	12.5	101	190	18	99	190	31	101	89	0.08	105	1.72	105	-0.282	102	101	93	
2017	4	-123	113	264	122	104	263	11.8	100	264	17	99	264	30	100	51	0.03	102	1.21	103	-0.295	101	99	94	
2018	3	-126	114	218	127	104	218	14.1	104	218	19	101	218	33	102	39	0.14	108	2.52	108	-0.234	102	100	95	
2019	10	-126	114	147	136	106	147	13.6	103	147	20	103	147	35	104	28	0.15	109	3.77	113	-0.099	104	102	96	
2020	7	-121	112	182	122	104	182	13.9	104	182	18	101	182	32	101	49	0.04	103	0.68	101	-0.508	98	100	95	
2021	3	-115	110	253	120	103	253	13.1	103	253	20	103	253	35	104	27	0.14	108	2.78	109	-0.143	104	100	98	
2022				221	141	107	221	14.0	104	221	21	104	221	38	106	48	0.22	112	3.34	111	0.122	108	104	101	
2023				10	130	105	10	13.4	103	10	18	100	10	34	103	10	0.08	105	1.30	103	-0.242	102	98	100	

Sires

Sire		Selection Values (SV / Acc)								Calf Weight		Mother		Growth & Efficiency				Fertility				Frame		Carcass			Measured Progeny	
ID Name	Sire ID Dam ID	Calf Ease	Calf Grwth	Milk	Maint.	Fertility	Cow Value	Grwth Value	Prod. Value	Birth Weight	Wean Weight	Birth Mat.	Milk Wn.Mat.	Postwn Weight	Mature Weight	ADG	FCR	Scrotal Circumf.	Heifer Fert.	Cow Fert.	Longe-vity	Height	Length	Dress %	RMeat Yield	Marb-ling	Birth Grwth test	Wean Dght/Calv.
		>125	75 - 125	<75			Breed average:			1.06	13.9	0.47	5.7	27.2	24	101	-80	11.9	-0.7	-5.7	23.0	18	30	-0.01	0.5	-0.39		
JRE 060061 CALLIE 5TH	CC 020042 JRE 000091	99 95	107 93	102 88	79 54	122 64	106 74	106 40	105 67	1.24 95	17.7 93	-0.01 89	6.5 111	27.8 84	45 54	126 74		18.3 80	-17.0 76	-10.1 53	21.1 84	18 81	40 79	0.13 18	2.0 108	-0.12 16	132 16	105 84
JRE 110095 RAPID 6TH	JRE 070010 JRE 060013	103 93	101 91	94 76	101 51	76 54	93 67	101 45	92 63	0.79 94	14.5 91	0.48 77	3.9 100	26.6 86	23 51	139 70	-114 13	6.3 78	29.0 67	-1.9 40	19.7 76	27 79	40 113	40 58	0.8 96	-0.32 54	63 4	52 22
JRE 180088 BRUTUS 10TH PH	LJ 130316 JRE 140152	122 79	98 74	104 53	118 29	90 34	113 47	89 34	107 44	-0.68 81	13.0 74	-0.26 54	6.9 117	29.5 58	5 29	52 59		5.5 69	1.4 45	-3.2 24	22.1 54	14 71	22 67	-0.35 54	-3.0 81	-2.21 49	87 54	28 73
MS 130008 KENT	MS 100028 MS 070001	102 86	97 83	76 67	108 24	51 47	72 56			0.91 87	12.5 83	0.50 69	-2.0 99	26.2 72	16 24	28 25		-0.5 33	7.8 74	6.3 34	27.2 65	10 34	10 90				29 1	21 7
TZ 160058 RENO 6DE	GA 120145 TZ 090141	87 90	108 88	93 67	103 38	85 46	94 59	125 52	99 58	2.12 91	18.3 88	0.64 72	3.4 93	36.0 72	21 38	187 72	-79 26	22.7 79	16.3 62	-3.3 29	27.7 65	32 80	48 120	0.10 14	2.4 106	0.60 9	88 8	79 8

Bulls

Inbreeding in red is high

EBV
Acc Index

Breeding values with an accuracy < 5% are not printed

Bull			Selection Values (SV / Acc)								Calf Weight		Mother		Growth & Efficiency				Fertility				Frame		Carcass		
ID Name	% Inbreeding	Sire ID Dam ID	Calf Ease	Calf Grwth	Milk	Maint.	Fertility	Cow Value	Grwth Value	Prod. Value	Birth Weight	Wean Weight	Birth Mat.	Milk Wn.Mat.	Postwn Weight	Mature Weight	ADG	FCR	Scrotal Circumf.	Heifer Fert.	Cow Fert.	Longe-vity	Height	Length	Dress%	RMeat Yield	Marb-ling
Breed average:																											
Bull average:																											
Shaded EBVi																											
			>125	75 - 125		<75					90-110	>100	>100	>100	>100	90-110	>100	>100	>100	>100	>100	>100	90-110	90-110	>100	>100	>100

Cows

Inbreeding in red is high

EBV
Acc Index

Breeding values with an accuracy < 5% are not printed

Cow			Selection Values (SV / Acc)							Calf Weight		Mother		Growth & Efficiency				Fertility				Frame		Carcass																	
ID Name	% Inbreeding	Sire ID Dam ID	Calf Ease	Calf Grwth	Milk	Maint.	Fertility	Cow Value	Grwth Value	Prod. Value	Birth Weight	Wean Weight	Birth Mat.	Milk Wn.Mat.	Postwn Weight	Mature Weight	ADG	FCR	Scrotal Circumf.	Heifer Fert.	Cow Fert.	Longevity	Height	Length	Dress%	RMeat Yield	Marb-ling														
Breed average:											1.06	13.9	0.47	5.7	27.2	24	101	-80	11.9	-0.7	-5.7	23.0	18	30	-0.01	0.5	-0.39														
Cow average:											1.10	100	13.8	100	0.46	100	5.8	100	26.8	99	24	100	96	99	-76	99	11.5	99	-0.3	100	-5.8	100	17	99	29	99	99	0.2	99	-0.40	100
			>125	75 - 125		<75		Shaded EBVi				90-110	>100	>100	>100	>100	90-110	>100	>100	>100	>100	>100	>100	>100	90-110	90-110	>100	>100	>100												
SWM 140026	2	JRE 060061 SWM 110010	114 80	109 76	102 73	91 26	122 45	118 54	105 22	115 48	0.09 80	18.7 111	-0.55 74	6.2 124	33.9 64	33 26	137 109		39 106	16.5 43	-8.1 110	-10.7 56	29.2 108	21 44	42 104																
SWM 140030	1	JRE 060061 SWM 110001	101 79	117 75	128 75	72 27	118 44	131 54	123 22	131 48	0.95 79	22.8 101	0.48 75	14.8 100	43.6 60	53 117	222 128		40 121	25.2 45	-1.8 128	-10.2 55	28.2 101	34 45	64 122																
SWM 160011	2	MS 130008 SWM 130015	104 77	99 70	81 63	82 28	76 42	76 50			0.82 78	13.5 103	0.07 68	-0.5 110	25.7 54	43 28	47 118		22 91	2.9 27	2.7 81	0.2 53	29.2 108	9 27	14 88																
SWM 180010	1	MS 130008 SWM 160001	103 75	100 70	84 49	107 17	95 39	91 45			0.89 76	14.1 102	-0.03 62	0.4 84	25.3 53	16 17	60 93		22 93	5.2 26	-10.0 86	-3.7 52	31.4 110	12 27	19 91																
SWM 190019	2	JRE 110095 SWM 140030	88 75	122 72	109 53	81 27	94 38	116 48	117 23	116 43	2.06 76	25.9 89	0.55 59	8.5 109	46.9 58	43 121	211 119		41 119	19.6 45	22.8 116	-6.1 53	28.5 74	36 46	62 124																
SWM 190039	5	TZ 160058 SWM 090913	97 75	102 71	117 51	94 16	91 37	107 44	117 21	108 39	1.21 76	15.2 98	0.98 63	11.2 88	32.7 53	30 16	181 106		38 114	18.3 42	6.2 113	-3.8 50	33.0 92	28 43	48 114																
SWM 210008	1	JRE 180088 SWM 130040	117 69	96 66	101 45	112 16	88 26	104 38			-0.23 71	12.0 114	-0.03 47	6.1 112	25.7 48	12 16	28 88		31 87	-0.2 37	-0.5 75	-2.6 18	23.5 108	10 39	13 89																
SWM 210009	2	JRE 180088 SWM 160025	116 68	100 65	110 42	120 19	95 26	118 38			-0.25 70	14.0 115	0.34 44	9.1 103	32.9 46	3 19	71 80		33 95	5.9 39	-6.0 88	-3.9 17	23.5 101	13 40	20 93																
SWM 210010	2	JRE 180088 SWM 110002	124 69	95 66	109 48	108 16	89 26	111 39	93 20	106 35	-0.87 71	11.4 122	-0.06 48	8.5 113	27.7 50	16 100	71 92		34 95	7.7 40	0.7 91	-3.0 18	23.3 41	15 41	24 95																
SWM 210012	2	JRE 180088 SWM 100012	111 68	95 65	117 48	111 17	73 28	107 39	89 20	101 35	0.08 70	11.4 111	0.73 47	11.2 94	27.3 48	12 17	58 89		34 92	2.2 40	8.5 80	0.6 35	24.2 102	10 41	18 89																
SWM 210013	2	JRE 180088 SWM 170009	111 68	99 65	110 41	107 17	102 24	112 37	99 20	108 34	0.18 70	13.6 110	0.19 42	8.9 107	28.0 48	16 17	102 93		33 100	10.9 39	-7.6 98	-5.5 16	26.0 99	18 40	30 100																
SWM 210017	2	JRE 180088 SWM 160029	102 68	107 65	115 44	120 19	99 26	123 38			0.81 70	17.6 103	0.72 44	10.5 94	38.6 47	3 19	100 80		33 100	10.4 39	-4.1 97	-5.1 18	23.8 101	19 40	29 101																
SWM 220003	2	JRE 180088 SWM 130015	114 68	100 50	105 44	103 20	96 28	108 35	94 20	103 32	0.03 70	13.7 112	-0.03 47	7.3 112	27.9 40	21 101	72 97		34 95	7.5 40	1.8 91	-4.8 36	22.6 99	13 41	24 94																
SWM 220005	2	JRE 180088 SWM 190039	109 66	101 51	110 36	106 14	90 24	110 32	103 20	107 30	0.33 68	14.4 108	0.36 41	8.9 103	31.4 38	18 14	117 94		34 103	11.9 40	3.8 100	-3.5 15	27.5 106	21 41	35 105																
SWM 220006	2	JRE 180088 SWM 180010	111 66	100 51	93 36	113 16	93 24	102 32			0.27 68	14.1 109	-0.15 41	3.5 115	28.2 38	11 16	56 87		30 92	5.4 36	-4.3 86	-3.5 16	26.7 105	13 37	20 93																
SWM 220015	2	JRE 180088 SWM 160025	121 68	92 51	109 42	121 19	95 26	111 34			-0.65 70	9.7 119	0.20 44	8.7 107	24.2 38	2 97	66 79		33 94	5.3 39	-6.6 86	-3.8 17	22.3 99	12 40	19 92																
SWM 220018	2	JRE 180088 SWM 140030	110 68	109 52	115 45	95 17	104 26	122 35	106 20	119 32	0.35 70	18.7 108	0.11 46	10.6 109	37.5 40	29 111	137 105		35 106	15.4 40	-0.2 107	-6.7 35	25.2 104	24 41	43 108																
SWM 220021	2	JRE 180088 SWM 170009	107 68	102 52	110 41	111 17	101 24	114 33	96 20	109 30	0.53 70	15.1 106	0.32 42	9.0 104	31.1 40	13 17	82 89		33 97	8.4 39	-9.1 93	-5.2 16	25.1 103	14 40	24 95																
SWM 230002	2	JRE 180088 SWM 160029	107 68	101 52	113 44	119 19	99 26	116 35			0.51 70	14.5 106	0.52 44	9.8 99	31.6 39	5 19	106 81		33 101	11.2 39	-3.9 98	-5.1 18	22.8 100	20 40	31 102																
SWM 230003	2	JRE 180088 SWM 190039	110 68	100 51	111 36	106 14	90 24	110 32	103 20	107 30	0.22 70	13.9 109	0.36 41	9.1 103	30.9 38	18 14	117 94		34 103	11.9 40	3.8 100	-3.5 15	27.5 106	21 41	35 105																

Selection List on Cow Values

Cows 2 years and older

ID	Name	Sire ID	Dam ID	% Inbreeding	Calving Ease Value	Calf Growth Value	Milk Value	Maint. Value	Fertility Value	Cow Value	Growth Value	Prod Value		
Sorted on ID					Acc	Acc	Acc	Acc	Acc	Acc	Acc	Acc		
					★★★★★☆☆									
1	SWM 140030	NETTIE	JRE 060061	SWM 110001	1.0	101 79	117 75	128 75	72 27	118 44	131 54	123 22	131 48	
					★★★★★☆☆									
1	SWM 210017	VALLEY	JRE 180088	SWM 160029	1.8	102 68	107 65	115 44	120 19	99 26	123 38			
2	SWM 220018	WIMPY	JRE 180088	SWM 140030	1.7	110 68	109 52	115 45	95 17	104 26	122 35	106 20	119 32	
					★★★★★☆☆									
1	SWM 140026	NANNY	JRE 060061	SWM 110010	1.8	114 80	109 76	102 73	91 26	122 45	118 54	105 22	115 48	
2	SWM 190019	TESSA	JRE 110095	SWM 140030	1.6	88 75	122 72	109 53	81 27	94 38	116 48	117 23	116 43	
3	SWM 210009	VICKY	JRE 180088	SWM 160025	2.0	116 68	100 65	110 42	120 19	95 26	118 38			
4	SWM 210010	VENICE	JRE 180088	SWM 110002	1.5	124 69	95 66	109 48	108 16	89 26	111 39	93 20	106 35	
5	SWM 210013	VERONA	JRE 180088	SWM 170009	1.9	111 68	99 65	110 41	107 17	102 24	112 37	99 20	108 34	
6	SWM 220005	WINA	JRE 180088	SWM 190039	1.6	109 66	101 51	110 36	106 14	90 24	110 32	103 20	107 30	
7	SWM 220015	WONDER	JRE 180088	SWM 160025	2.0	121 68	92 51	109 42	121 19	95 26	111 34			
8	SWM 220021	SWM 220021	JRE 180088	SWM 170009	1.9	107 68	102 52	110 41	111 17	101 24	114 33	96 20	109 30	
					★★★★★☆☆									
1	SWM 190039	TASMIN	TZ 160058	SWM 090913	5.1	97 75	102 71	117 51	94 16	91 37	107 44	117 21	108 39	
2	SWM 210008	VALENTINE	JRE 180088	SWM 130040	1.2	117 69	96 66	101 45	112 16	88 26	104 38			
3	SWM 210012	VALERA	JRE 180088	SWM 100012	1.7	111 68	95 65	117 48	111 17	73 28	107 39	89 20	101 35	
4	SWM 220003	SWM 220003	JRE 180088	SWM 130015	1.6	114 68	100 50	105 44	103 20	96 28	108 35	94 20	103 32	
5	SWM 220006	WILLOW	JRE 180088	SWM 180010	1.5	111 66	100 51	93 36	113 16	93 24	102 32			
					★★★★★☆☆									
1	SWM 180010	STAR	MS 130008	SWM 160001	1.4	103 75	100 70	84 49	107 17	95 39	91 45			
					★★★★★☆☆									
1	SWM 160011	PARIS	MS 130008	SWM 130015	2.0	104 77	99 70	81 63	82 28	76 42	76 50			

Selection List on Cow Values

Heifers younger than 2 years

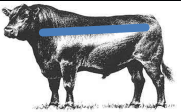
IDName Sorted on ID			Sire ID	Dam ID	% Inbreeding	Calving Ease Value Acc	Calf Growth Value Acc	Milk Value Acc	Maint. Value Acc	Fertility Value Acc	Cow Value Acc	Growth Value Acc	Prod Value Acc	
						★★★★★								
1	SWM 230002	SWM 230002	JRE 180088	SWM 160029	1.8	10768	10152	11344	11919	9926	11635			
2	SWM 230003	SWM 230003	JRE 180088	SWM 190039	1.6	11068	10051	11136	10614	9024	11032	10320	10730	

LCV: Logix Cow Value (Combination of EBVs based on measurements of cows and calves on the farm)

Sub-values	Calving Ease		Calf Growth	Milk	Maintenance	Fertility			
Traits for which breeding values (EBVs) and EBV indices (EBVi) are estimated	Birth weight  Calf's genetic potential for birth weight	Mat. Birth weight  Cow's genetic ability to limit calf weight	Weaning weight  Calf's genetic potential for growth	Milk  Mothering ability of cow	Mature weight  Mature weight + Milk	Longevity  Stayability	Heifer Fertility  Age at 1st calving	Cow Fertility  ICP	
	Interpretation	Calving Ease		Calf growth	Milk	Maintenance	Fertility		
	Sub-value above 100	Easier calving		Heavier weaner calf	More milk	Lower maintenance	More fertile and retained in herds		
	Sub-value below 100	Difficult calving		Lighter weaner calf	Less milk	Higher maintenance	Less fertile and culled early		
	Birth weight	Mat. birth weight	Weaning weight	Milk	Cow weight	Longevity	Heifer Fertility	Cow Fertility	
Higher EBV	Heavier weight	Heavier weight	Heavier weight	More milk	Heavier weight	Family remains longer	Later calving	Longer ICP	
Lower EBV	Lighter weight	Lower weight	Lighter weight	Less milk	Lighter weight	Family culled earlier	Earlier calving	Shorter ICP	
Optimum EBV	Lower intermediate	Lower intermediate	Higher	Higher	Higher intermediate	Higher	Lower	Lower	
Optimum EBV/index*	Higher intermediate	Higher intermediate	Higher	Higher	Higher intermediate	Higher	Higher	Higher	

*EBV index above 100 is in a more favourable direction and better than breed average (100).

LGV: Logix Growth Value (Combination of EBVs based on bulls measured in growth tests)

Traits for which breeding values (EBVs) and EBV indices (EBVi) are estimated	ADG  Average daily gain	Kleiber Ratio  Growth efficiency	FCR  Feed conversion ratio	Scrotal circumference  Bull fertility	Height  Shoulder/Hip height	Length  Body length	Carcass  Dressing%, Red Meat Yield and Marbling from RTU Measurements
Interpretation	ADG	Kleiber ratio	Feed conversion ratio	Scrotal circumference	Height	Length	Carcass
Higher EBV	More growth	More efficient on veld	Higher intake per kg gain	Larger scrotum	Taller animal	Longer animal	More
Lower EBV	Less growth	Less efficient on veld	Lower intake per kg gain	Smaller scrotum	Shorter animal	Shorter length	Less
Optimum EBV	Higher	Higher	Lower	Higher	Intermediate	Intermediate/high	Higher
Optimum EBV index	Higher	Higher	High	Higher	Higher intermediate	Higher intermediate	Higher

LPV: Logix Production Value (Combination of LCV and LGV)

