

HEREFORD

GENOMIC BREEDING VALUE REPORT

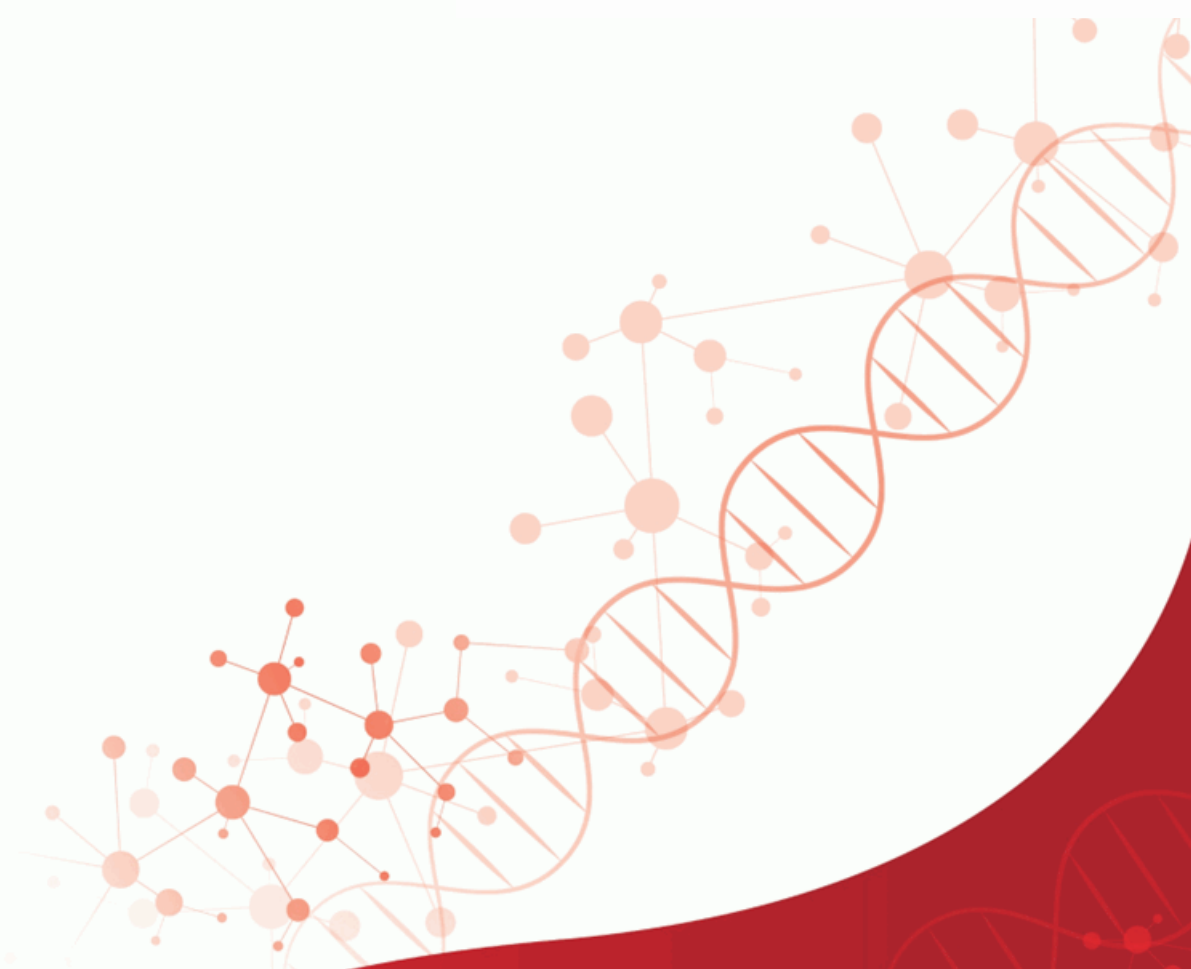
September 2026



MR P.C. EUSTACE

Herd Number: 464324

E-mail: admin@eustace.co.za



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



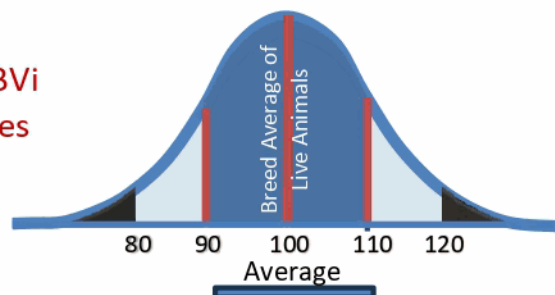
80% LOGIX Cow Value +
20% LOGIX Growth Value

LOGIX Carcass Value

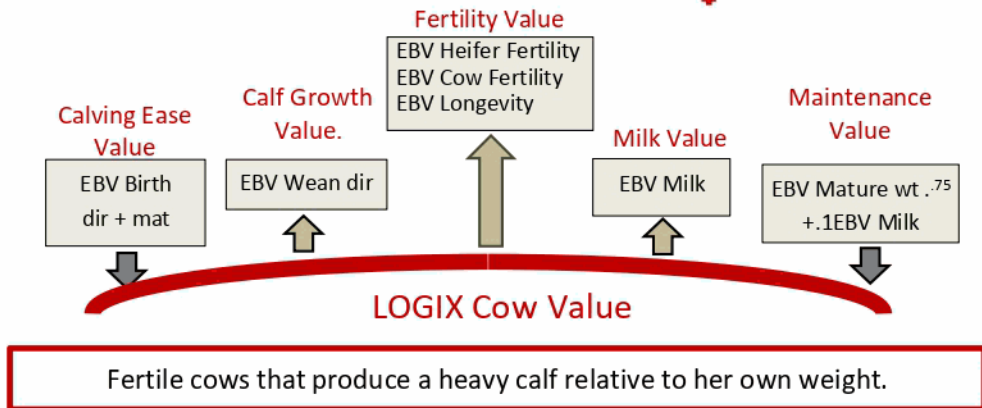


Select for more meat on the carcass as measured from end weight in Phase C and D Growth Tests and RTU scanning.

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)

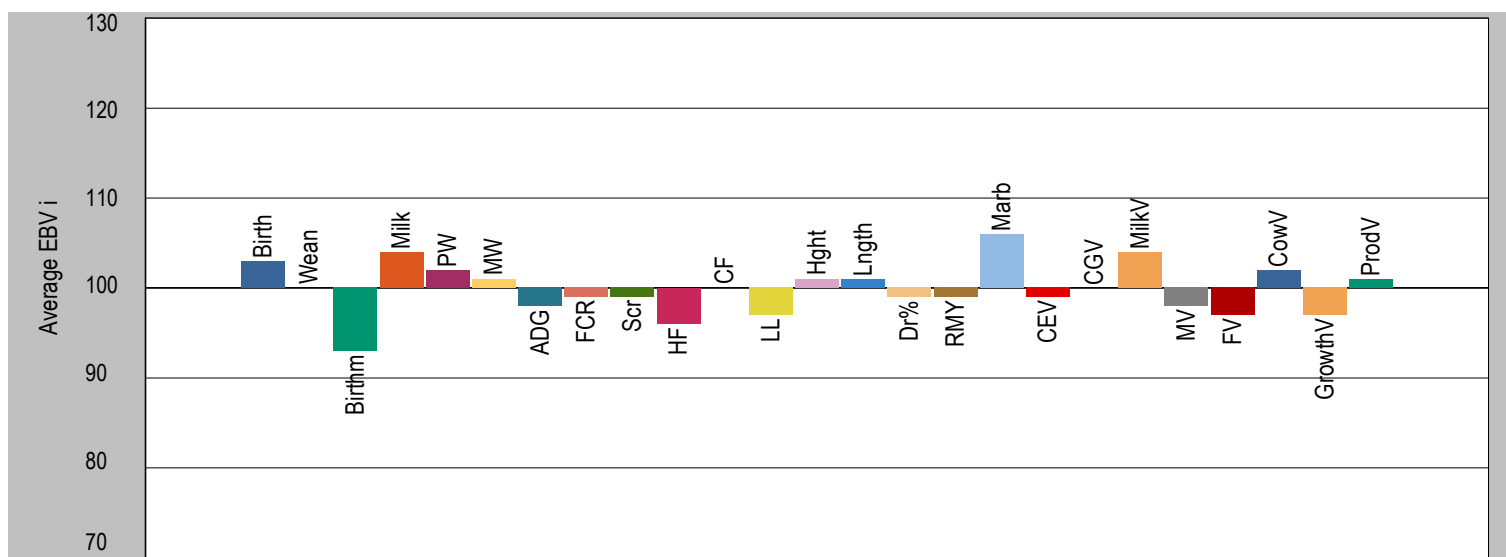
- Maintenance Value >110
 - Cow Value and Fertility Value average to high
- Lighter cows have a lower maintenance.

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

	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

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	0.57	103	0.77
	Wean Weight	18.1	100	18.0
	Birth Mat.	0.84	93	0.57
	Milk (Wn.Mat.)	9.1	104	8.0
Postwean Growth	Postwean Wt	34.1	102	33.0
	Mature Weight	35	101	34
	ADG	127	98	133
	FCR	-74	99	-75
Fertility	Scrotal Circumf.	15.7	99	16.0
	Heifer Fertility	-2.7	96	-5.6
	Cow Fertility	-3.0	100	-2.9
	Longevity	34.8	97	36.2
Frame	Height	23	101	22
	Length	32	101	31
Carcass	Dressing%	0.08	99	0.10
	RedMeatYield	1.0	99	1.3
	Marbling	0.02	106	-0.29

Selection Value	Ave. Herd
Calving Ease	99
Calf Growth	100
Milk	104
Maintenance	98
Fertility	97
Cow Value	102
Growth Value	97
Production Value	101

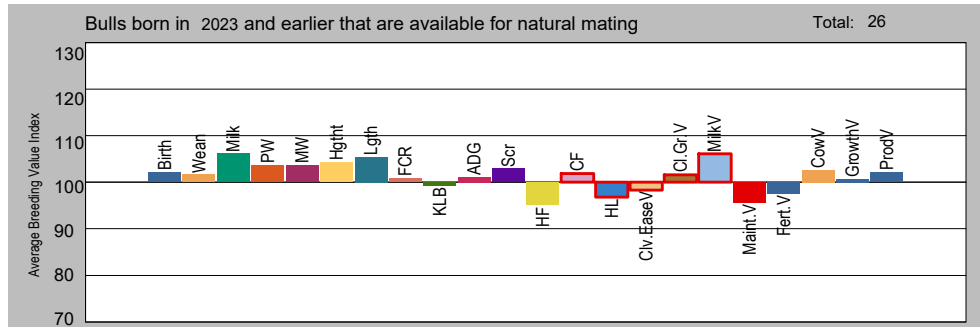
- Average of live animals in the breed: 100
- Above 100: **more favourable**,
- Below 100: **less favourable**

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

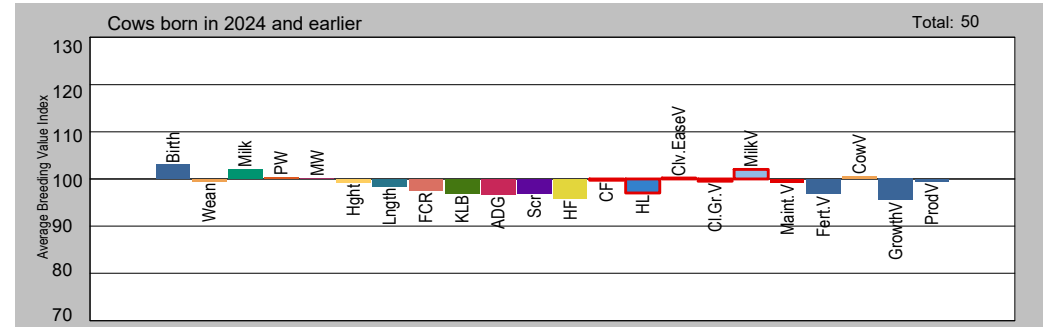
Genetic Windows

Bulls on the farm



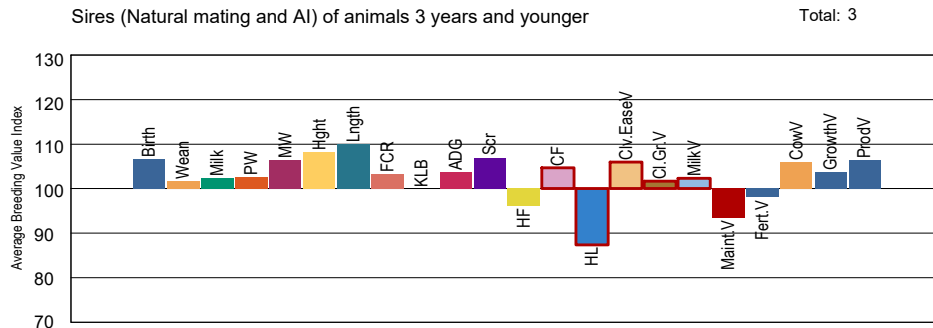
Animals available for breeding

Cow Herd

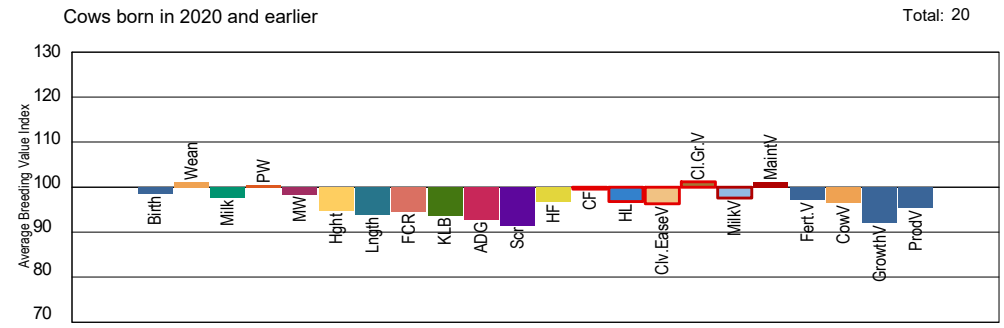


Results of previous selection decisions

Sires of young animals



Cows older than 6 years



Selection possibilities

Bull calves



Heifer calves

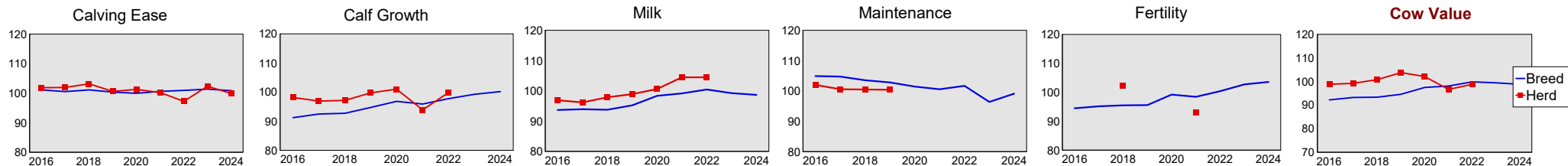


Summary of Cow Herd

			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	99	100	100	100	99	100	98	101	100	100	99	99
2014	1	★★★★	100	87	123	96	89	97	96	96	104	87	92	123	90	102	101	102	102	96	92	82	96	100	
2015	2	★★★★☆	97	94	104	106	100	103	86	100	102	94	85	104	95	94	91	95	87	100	104	90	88	89	
2016	2	★★★★☆	104	101	99	105	96	105	87	102	109	101	89	99	100	95	87	87	91	94	100	99	92	90	
2017	6	★★★★	97	103	96	98	99	97	95	96	97	103	99	96	101	102	95	95	94	96	103	97	100	98	
2018	3	★★★★	98	101	90	104	93	92	87	90	98	101	100	90	98	96	86	86	89	95	94	98	92	90	
2019	5	★★★★	90	104	97	102	97	92	93	91	94	104	90	97	105	97	94	96	89	98	98	97	93	93	
2020	1	★★★★☆	104	103	96	97	104	103	102	104	101	103	108	96	106	103	101	102	95	100	103	112	99	101	
2021	5	★★★★	108	96	98	102	96	99	95	99	107	96	101	98	96	98	98	100	100	100	92	104	100	97	
2022	10	★★★★☆	104	98	107	98	95	105	99	103	108	98	92	107	100	101	99	98	100	91	102	97	102	102	
2023	6	★★★★☆	101	102	103	99	99	104	98	105	104	102	94	103	103	101	99	97	101	96	103	95	102	103	
2024	9	★★★★☆	100	98	109	95	97	103	101	103	104	98	91	109	101	104	101	101	102	97	100	96	105	103	
Cows in Herd Average:			100	99	102	100	97	100	94	99	103	99	95	102	100	99	96	96	95	97	99	97	97	97	97

Genetic Trends for On-Farm Traits

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



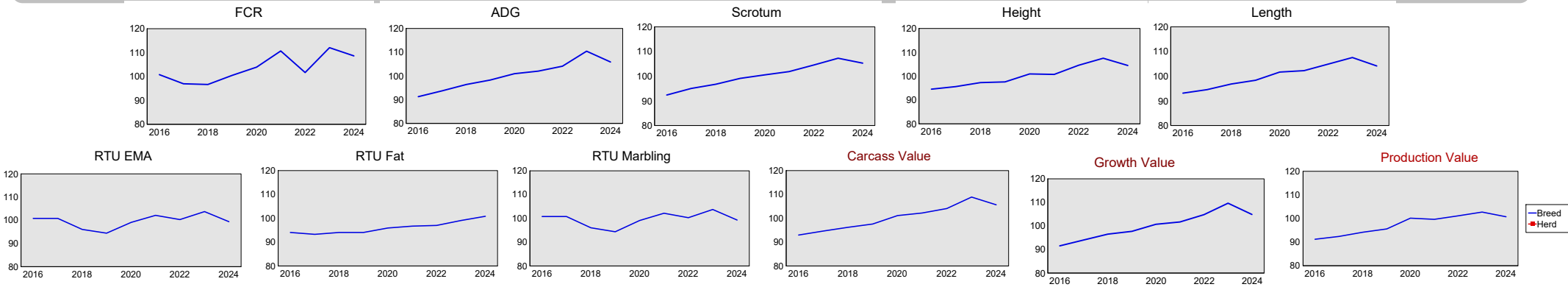
Herd

Birth Year	Calving Ease				Calf Growth			Milk			Maintenance					Fertility						Cow Value	
	Birth Weight		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		
2016	26	0.53	0.69	102	17	17.2	98	17	7.07	97	17	31.3			102					26	29.1		99
2017	28	0.51	0.67	102	18	16.7	97	18	6.85	96	15	31.4		1	43	101				26	29.5		99
2018	28	0.45	0.63	103	19	16.8	97	19	7.32	98				4	33	101	3	-8.3		28	30.8	102	101
2019	26	0.60	0.68	101	16	17.9	100	16	7.63	99	14	33.3				100				26	31.0		104
2020	22	0.56	0.68	101	8	18.4	101	8	8.11	101										21	30.1		102
2021	33	0.54	0.84	100	13	15.3	94	13	9.27	104							3	-4.2		28	30.4	93	97
2022	34	0.74	0.84	97	23	17.9	100	23	9.25	104										15	26.8		99
2023	32	0.34	0.85	102																			
2024	24	0.50	0.88	100																			

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.)		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		
2016	1782	0.81	0.42	101	985	14.3	91	985	6.12	94	448	28.0	250	28	105	395	-6.4	304	-2.1	1860	26.0	94	92
2017	1720	0.80	0.48	101	1155	14.8	93	1155	6.19	94	481	29.8	306	28	105	402	-5.9	313	-2.3	1792	27.4	95	93
2018	1744	0.77	0.45	101	1213	14.9	93	1213	6.14	94	553	29.2	278	29	104	417	-5.9	305	-2.1	1865	28.9	96	93
2019	1757	0.80	0.49	100	1239	15.7	95	1239	6.57	95	553	30.8	300	31	103	430	-5.3	325	-2.5	1826	30.2	96	95
2020	1742	0.79	0.55	100	1243	16.6	97	1243	7.48	98	519	32.3	246	33	101	394	-5.9	302	-3.1	1839	30.8	99	98
2021	1690	0.76	0.52	101	1171	16.2	96	1171	7.70	99	493	32.7	187	32	101	361	-5.2	246	-2.8	1674	31.0	98	98
2022	1795	0.71	0.53	101	1271	17.0	98	1271	8.08	100	520	33.5	198	30	102	356	-6.3	129	-3.0	1136	31.4	100	100
2023	1773	0.71	0.51	101	1235	17.7	99	1235	7.73	99	513	35.8	62	33	96	180	-6.4	37	-3.3			103	100
2024	1801	0.76	0.51	101	1081	18.1	100	1081	7.58	99	560	34.6	8	43	99	44	-5.7					104	99
2025	1633	0.80	0.54	100	854	18.9	102	854	7.90	100	177	38.9			97								100
2026	626	0.82	0.62	99	56	21.7	109	56	10.03	107													100

Genetic Trends for Growth Test Traits



Herd

Birth Year	Growth									Frame			Carcass						Selection Values		
	FCR			ADG			Scrotum			Height			Length			RTU			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			
2017																					
2018																					
2019																					
2020																					
2021																					
2022																					
2023																					
2024																					

Breed

Birth Year	Growth									Frame						Carcass						Selection Values			
	FCR			ADG			Scrotum			Height			Length			RTU Number	EMA		Fat		Marbling		Crass 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	37	-71	97	180	110	94	177	13.5	95	177	20	96	177	25	95	132	0.25	97	-0.71	93	-0.25	101	95	94	92
2018	97	-70	97	261	120	96	261	14.3	97	261	21	97	261	28	97	213	0.34	98	-0.63	94	-0.48	96	96	97	94
2019	59	-76	101	260	127	98	220	15.4	99	260	21	98	260	29	98	242	0.51	100	-0.63	94	-0.55	94	98	98	96
2020	45	-80	104	259	137	101	220	16.2	101	259	23	101	259	32	102	258	0.73	103	-0.44	96	-0.33	99	101	101	100
2021	49	-89	111	219	141	102	224	16.9	102	224	23	101	224	33	102	209	0.89	105	-0.36	97	-0.18	102	102	102	100
2022	56	-77	102	205	149	104	206	18.2	104	206	25	105	206	36	105	177	0.90	105	-0.33	97	-0.27	100	104	105	101
2023	8	-91	112	231	172	110	232	19.6	107	232	27	108	232	38	108	204	1.20	109	-0.14	99	-0.10	104	109	110	103
2024	3	-86	109	132	155	106	135	18.6	105	141	25	104	141	35	104	124	0.91	105	0.04	101	-0.32	99	106	105	101
2025				105	175	111	112	21.7	111	120	27	108	120	40	110	111	1.18	109	0.19	102	-0.29	100	112	111	99
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.	
BH 100032		WDW 060088		110	100	107	95	97	114	108	115	108	100	106	107	105	104	107	105	106	103	95	90	100	101	107	92	91	313	250	
PJB 040010				98	98	96	77	82	88	56	82	0.16	17.8	0.31	10.1	35.9	38	159	-82	19.0	-7.5	-2.2	31.9	22	31	1.07	-0.80	-0.72	78	215	
BENCHMARK 1032												99	98	96	96	92	77	65	43	69	88	63	96	69	68	65	62	61			
BMH 150112		P43214853		144	69	103	123	96	121	104	121	137	69	135	103	65	77	92	89	84	99	103	75	95	100	71	99	117	24	22	
BMH 130077				81	85	64	53	52	66	76	68	-2.00	5.0	-0.86	8.9	10.6	10	105	-62	7.9	-4.9	-3.4	25.3	20	31	-1.69	-0.10	0.51	16	3	9
CAN-DO WONDER 13-77												89	85	65	64	66	53	81	66	82	54	29	72	87	86	83	78	77			
BMH 200063		BMH 150112		118	106	106	99	106	123	99	122	120	106	96	106	103	100	103	101	115	98	114	93	108	120	100	114	131	21	2	
BMH 160023				78	74	54	43	42	58	59	58	-0.75	20.7	0.74	9.8	34.8	34	145	-77	23.6	-4.2	-5.1	33.2	27	50	0.47	1.30	1.20	2		
BM CANDO 16-23												89	74	53	54	61	43	70	41	77	43	25	58	79	76	72	67	65			
GG 170030		BH 100032		95	100	119	88	96	102	110	103	102	100	85	119	107	110	107	106	110	95	100	95	114	110	106	106	106	77	22	
GG 080001				86	87	63	41	53	65	30	58	0.60	18.0	1.19	13.6	37.5	44	160	-83	20.9	-2.1	-3.0	34.1	31	40	0.98	0.52	0.01			
GG170030												96	87	65	63	48	41	35	23	37	52	33	74	37	37	34	32	32			
KRM 160032		KRM 130069		99	101	108	106	86	104	112	106	97	101	104	108	109	92	117	122	68	103	82	76	81	92	86	140	109	36	29	
KRM 120035				86	90	73	59	59	72	52	68	0.97	18.4	0.40	10.4	38.7	26	198	-103	-0.1	-7.4	-0.2	25.6	11	23	-0.54	3.89	0.17	10	2	7
VICTORHEIM 160032												93	90	71	73	72	59	80	19	86	60	39	78	86	85	81	77	76			
KRM 180063		DVB 130019		130	77	99	114	87	106	83	103	130	77	101	99	77	86	88	99	91	110	73	89	90	82	79	90	109	8	4	
KRM 100049				78	78	63	50	53	63	56	62	-1.48	8.3	0.54	7.5	18.1	19	87	-73	11.6	-12.3	1.2	31.3	16	13	-1.03	-1.06	0.15			
KNIEL 180063												85	78	63	63	58	50	67	39	75	57	36	66	76	73	68	63	61			
KRM 180085		KRM 160032		70	111	108	104	85	83	104	84	72	111	82	108	112	95	107	103	100	98	85	73	89	104	91	119	94	18	4	
KRM 140009				88	86	80	78	68	79	80	79	2.81	22.6	1.31	10.2	40.5	28	158	-79	15.8	-4.5	-0.6	24.1	15	35	-0.13	1.84	-0.57			
ZONDO 180085												91	86	80	80	64	78	82	75	85	44	76	84	85	84	83	81	81			
KRM 190014		KRM 140035		103	102	109	95	82	100	111	102	107	102	92	109	103	104	110	100	113	67	101	105	110	119	120	112	133	8	9	
KRM 110092				76	82	61	49	49	63	47	60	0.24	18.6	0.88	10.4	35.0	38	169	-75	22.4	17.1	-3.1	38.3	29	49	1.98	1.17	1.29			
VICTORIOUS 190014												85	82	57	61	58	49	68	19	76	53	33	62	77	74	70	65	64			
PAL 120030		KJA 010103		98	113	101	88	102	102	107	104	101	113	92	101	111	112	104	102	104	97	108	94	115	111	113	88	106	118	73	
PAL 080001				94	95	82	48	67	75	42	68	0.66	23.6	0.89	8.2	40.3	46	148	-78	18.0	-3.6	-4.1	33.5	32	42	1.52	-1.19	0.02	21	25	
12 30												97	95	87	82	70	48	50	33	52	60	52	90	50	49	23	21	20			
WDW 090050		WDW 050009		111	89	113	98	107	116	99	115	112	89	99	113	95	100	108	110	101	109	108	85	99	103	104	107	86	100	51	
WDW 040080				94	93	86	53	59	75	72	74	-0.12	13.5	0.61	11.7	30.0	34	164	-87	16.7	-11.7	-4.1	29.6	22	34	0.79	0.69	-0.95	18	49	
NIBBS												97	93	87	86	70	53	66	72	74	53	34	91	75	72	66	60	58			
WDW 180045		WDW 140081		105	99	82	93	92	93	102	94	98	99	116	82	98	109	101	103	96	95	100	74	103	100	107	91	94	74	48	
WDW 130087				86	92	66	52	54	70	32	62	0.89	17.4	-0.09	2.8	31.5	43	138	-79	14.0	-2.4	-2.9	24.5	24	31	1.05	-0.92	-0.57	4	4	
BULL POWER												96	92	65	66	40	52	35	27	38	50	33	78	38	37	33	31	30			

Growth Tests

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

Animal					Weight		Frame				Growth				Carcass				
Test Code	Sex	Test no	Sire ID	Cow	Wean	End-	Length	Height	Length/	Scrotum	Intake	ADG	FCR	Growth	EMA	Fat	Marbling	Carcass	
Test station		ID	Dam ID	Value	dir	weight			Height					Value				Value	
202116 D11 M				0452488HFD															
PP MONG TRUST				123	106	114	120	108	131	115	96	103	101	99	100	114	131	110	
BMH 200063						44	50	27	1.22	23.6	0.51	145	-77		0.47	1.30	1.20		
90925082				58	74	77	76	79	78	77	41	70	41	59	72	67	65	70	

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																														
GG 170030 85929495 GG170030		BH 100032 GG 080001	95 86	100 87	119 63	88 41	96 53	102 65	110 30	103 58	108 33	102 0.60 96	85 1.19 65	110 44 41	100 18.0 87	119 13.6 63	112 131 64	107 37.5 48	107 160 35	106 -83 23	110 20.9 37	95 -2.1 52	100 -3.0 33	95 34.1 74	114 31 37	110 40 37	106 0.98 34	106 0.52 32	106 0.01 32	
BMH 200063 90925082 BM CANDO 16-23		BMH 150112 BMH 160023	118 78	106 74	106 54	99 43	106 42	123 58	99 59	122 58	110 70	120 -0.75 89	96 0.74 53	100 34 43	106 20.7 74	106 9.8 54	110 128 57	103 34.8 61	103 145 70	101 -77 41	115 23.6 77	98 -4.2 43	114 -5.1 25	93 33.2 58	108 27 79	120 50 76	100 0.47 72	114 1.30 67	131 1.20 65	
FE 220002 94193083 FE 220002	1	KRM 180085 FE 190023	72 64	104 67	102 44	102 26	90 31	80 46	95 25	80 42	100 33	79 2.35 74	86 1.15 43	97 30 26	104 19.7 67	102 8.4 44	106 118 46	103 35.0 37	96 118 35	95 -69 11	94 12.7 40	96 -2.8 28	89 -1.2 20	94 33.7 46	89 16 40	97 27 39	90 -0.24 34	108 0.74 32	100 -0.27 31	
FE 220013 94194578 FE 220013	1	KRM 190014 FE 170012	98 64	98 68	99 45	101 28	89 32	95 47	96 26	94 43	97 34	100 0.74 73	96 0.73 43	98 32 28	98 17.1 68	99 7.6 45	98 101 47	99 32.3 38	96 118 37	93 -66 13	98 15.1 40	80 8.1 31	99 -2.8 21	105 38.3 45	98 21 41	102 33 39	103 0.70 36	105 0.45 33	120 0.66 33	
FE 220014 94194586 FE 220014	1	GG 170030 FE 160028	97 67	108 69	107 48	89 24	102 34	105 48			109 18	102 0.59 76	89 1.04 48	111 45 24	108 21.5 69	107 10.0 48	108 121 47	112 40.9 36	106 157 22	106 -82 15	108 20.1 23	99 -4.9 31	104 -3.5 21	104 38.0 50	114 31 23	112 42 23	110 1.23 18	103 0.28 17	109 0.14 17	
FE 220017 94191384 FE 220017		GG 170030 FE 140007	92 69	101 69	118 50	87 25	94 33	98 49	111 24	100 44	112 23	97 1.00 77	89 1.03 51	112 46 25	101 18.3 69	118 13.2 50	110 128 48	105 36.1 34	112 179 24	110 -88 22	114 22.7 27	93 -0.8 30	98 -2.6 19	93 33.3 51	113 31 27	114 45 26	109 1.15 24	112 1.11 22	107 0.06 22	
FE 220027 95433298 FE 220027	1	KRM 190014 FE 180003	97 54	109 68	99 45	93 28	87 33	92 46	108 26	94 42	109 34	99 0.82 58	96 0.72 46	107 41 28	109 21.6 68	99 7.6 45	103 111 47	106 37.0 36	107 160 37	101 -77 13	109 20.5 40	76 10.7 31	99 -2.8 21	106 38.7 46	111 29 41	116 46 39	114 1.57 36	105 0.48 33	123 0.82 33	
FE 220030 94191350 FE 220030	2	KRM 190014 FE 170009	83 66	103 66	103 45	95 29	96 33	88 48	104 28	89 44	104 35	86 1.80 75	94 0.80 47	105 39 29	103 19.2 66	103 8.8 45	103 111 47	107 37.7 36	105 150 37	101 -77 16	103 17.3 41	87 3.7 31	102 -3.2 22	111 41.2 46	104 25 42	108 38 40	108 1.14 36	106 0.51 34	119 0.64 33	
FE 230001 95941845 FE 230001	1	GG 170030 FE 170008	104 67	96 57	108 46	95 24	96 34	109 45			100 18	107 0.25 76	95 0.76 48	104 38 24	96 16.2 57	108 10.2 46	102 108 42	95 30.1 36	98 127 22	98 -73 15	100 15.7 23	95 -2.2 31	100 -2.9 21	96 34.2 49	105 25 23	102 33 23	99 0.47 18	101 0.09 17	107 0.07 17	
FE 230002 95941852 FE 230002		BMH 200063 FE 180027	117 66	100 52	100 42	99 27	99 29	114 42	94 32	113 40	100 36	120 -0.70 75	94 0.81 45	101 34 27	100 17.9 52	100 8.0 42	100 105 40	97 30.8 38	95 116 37	95 -69 22	103 17.3 41	94 -1.8 27	105 -3.6 19	97 34.8 42	100 23 42	106 37 40	96 0.19 37	105 0.49 34	119 0.65 33	
FE 230005 95943122 FE 230005		GG 170030 FE 150013	95 67	94 54	117 48	96 25	99 33	104 44	97 24	103 40	96 23	104 0.45 76	78 1.48 49	102 35 25	94 15.3 54	117 12.8 48	109 124 42	100 32.8 32	98 124 24	99 -74 22	96 14.0 27	100 -5.6 30	101 -3.1 19	92 32.8 49	99 22 27	98 28 26	96 0.18 24	102 0.20 22	103 -0.14 22	
FE 230006 95941878 FE 230006	1	BMH 200063 FE 200006	114 64	103 47	102 38	98 26	105 30	116 40	101 33	115 39	105 36	114 -0.25 74	101 0.52 42	101 35 26	103 19.4 47	102 8.5 38	104 113 37	103 35.0 37	102 141 38	101 -77 24	105 18.7 42	99 -4.8 28	109 -4.2 19	103 37.4 42	104 25 43	111 41 41	102 0.69 37	104 0.39 35	118 0.56 34	

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	Name	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																															
FE 230007 95941886 FE 230007				GG 170030 FE 130020	94 69	95 58	94 49	105 25	94 33	94 46	89 24	92 42	92 23	96 1.03 77	95 0.78 51	94 28 25	95 16.0 58	94 6.1 49	93 90 44	101 33.4 36	93 107 24	98 -72 22	92 11.7 27	98 -3.9 30	96 -2.3 19	90 31.6 50	92 18 27	91 22 26	91 -0.18 24	104 0.39 22	92 -0.69 22
FE 230011 95941910 FE 230011				BMH 200063 FE 190022	106 65	108 53	97 40	101 27	101 31	106 43	96 32	106 41	101 36	108 0.15 75	96 0.74 44	99 32 27	108 21.4 53	97 7.1 40	104 115 40	106 37.0 42	97 121 38	98 -72 22	103 17.3 41	96 -2.9 30	108 -4.1 20	94 33.7 42	102 23 42	106 37 41	96 0.22 37	104 0.39 34	115 0.42 33
FE 230013 95941936 FE 230013				GG 170030 FE 160009	91 67	106 57	111 45	95 25	95 34	98 45			98 18	99 0.86 76	82 1.29 49	103 37 25	106 20.5 57	111 11.1 45	112 132 42	109 38.9 36	98 126 22	99 -73 15	100 15.9 23	92 0.0 31	101 -3.0 21	97 34.9 49	103 25 23	102 32 23	99 0.44 18	102 0.16 17	108 0.08 17
FE 230014 95941944 FE 230014				GG 170030 FE 120001	98 69	94 57	110 48	92 25	103 34	106 45	101 24	106 41	101 23	100 0.74 77	95 0.78 52	107 40 25	94 15.4 57	110 10.8 48	101 107 43	103 35.1 36	104 149 24	107 -85 22	99 15.2 27	102 -7.1 31	102 -3.2 20	100 36.4 51	101 23 27	100 30 26	97 0.26 24	108 0.74 22	107 0.05 22
FE 230015 95941951 FE 230015				GG 170030 FE 170009	83 68	106 54	108 44	91 25	101 34	94 44	105 20	95 39	104 20	88 1.63 76	87 1.08 50	109 43 25	106 20.6 54	108 10.4 44	108 122 41	112 40.9 33	105 150 23	106 -82 17	102 17.2 25	99 -5.2 31	103 -3.4 21	100 36.4 49	107 27 24	105 35 24	103 0.73 20	102 0.20 19	106 0.03 18
FE 230018 95941985 FE 230018				GG 170030 FE 170012	91 57	102 57	103 45	97 25	95 33	95 43			97 18	95 1.11 62	91 0.92 45	103 36 25	102 18.9 57	103 8.7 45	103 111 42	105 36.3 36	97 122 22	98 -72 15	99 15.4 23	93 -0.5 31	100 -2.9 21	97 34.8 48	102 24 23	100 31 23	98 0.36 18	102 0.15 17	107 0.06 17
FE 230019 95941993 FE 230019				GG 170030 FE 140007	93 68	96 56	120 49	92 25	93 33	99 45	103 24	100 41	104 23	98 0.93 76	90 0.98 51	106 40 25	96 16.2 56	120 13.6 49	111 128 43	101 33.4 34	104 149 24	104 -81 22	106 18.9 27	95 -2.5 30	96 -2.3 19	88 31.1 50	105 25 27	105 36 26	100 0.53 24	111 1.03 22	104 -0.09 22
FE 230020 95942009 FE 230020				GG 170030 FE 170013	105 67	100 52	105 43	94 25	98 34	109 43	105 20	109 38	105 20	106 0.36 76	100 0.59 47	105 39 25	100 18.1 52	105 9.4 43	102 110 40	102 34.3 32	105 151 23	103 -79 17	107 19.4 24	97 -3.3 31	103 -3.3 21	93 33.1 49	110 28 24	106 37 24	102 0.68 20	105 0.41 19	101 -0.23 18
FE 230023 95943007 FE 230023				GG 170030 FE 140004	90 69	99 58	107 51	99 25	96 33	99 46	96 24	98 42	97 23	93 1.25 77	93 0.84 51	100 34 25	99 17.5 58	107 10.0 51	105 116 45	101 33.8 36	97 123 24	99 -73 22	97 14.4 27	99 -4.6 31	99 -2.8 19	88 30.9 50	99 22 27	98 28 26	95 0.12 24	106 0.54 22	102 -0.21 22
FE 230024 95943015 FE 230024				BMH 200063 FE 190028	96 65	112 46	100 36	99 26	103 29	102 40	100 33	102 39	106 36	99 0.85 75	94 0.81 43	100 34 26	112 23.1 46	100 8.1 36	110 127 36	109 38.9 36	103 143 38	100 -75 24	110 20.7 42	98 -4.5 27	109 -4.3 18	90 31.8 42	107 27 43	111 42 41	99 0.43 37	109 0.80 35	113 0.36 34
FE 230030 95943072 FE 230030				GG 170030 FE 160010	97 67	105 57	106 46	94 26	97 35	102 45	102 20	102 40	101 18	102 0.59 76	88 1.07 48	105 39 26	105 20.0 57	106 9.7 46	107 120 43	108 38.0 38	100 132 23	101 -77 15	101 16.5 24	94 -1.7 33	101 -3.1 22	99 35.6 49	106 26 24	102 33 23	101 0.55 19	101 0.01 18	103 -0.16 17
FE 230031 95943080 FE 230031				BMH 200063 FE 190007	109 64	105 51	101 38	99 26	106 29	113 41	94 33	112 39	101 36	111 -0.01 74	98 0.66 43	100 33 26	105 19.9 51	101 8.3 38	105 115 38	102 34.4 39	97 123 38	97 -71 24	104 18.0 42	100 -5.5 27	112 -4.8 18	96 34.6 42	104 25 43	109 39 41	102 0.69 37	107 0.65 35	117 0.55 34

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																														
FE 230034 95943114 FE 230034	1	GG 170030 FE 160028		111 67	93 58	113 47	95 24	102 34	116 45			99 18	117 -0.47 76	88 1.06 48	104 37 24	93 15.2 58	113 11.8 47	105 115 43	99 32.4 36	97 122 22	98 -73 15	99 15.7 23	102 -7.0 31	101 -3.0 21	100 36.3 49	104 25 23	101 31 23	99 0.47 18	102 0.19 17	105 -0.05 17
GG 230062 95726741 GG230062	1	WDW 180045 GG 190055		110 68	99 72	103 52	91 39	95 37	109 53	108 22	110 47	105 24	113 -0.16 77	95 0.77 50	109 43 39	99 17.6 72	103 8.7 52	98 100 54	99 32.5 32	107 160 25	106 -83 18	102 17.1 27	96 -2.6 35	97 -2.4 23	96 34.3 52	109 28 27	109 39 27	110 1.25 24	93 -0.76 23	96 -0.46 22
FE 240001 97823561 FE 240001	1	BMH 200063 FE 200006		112 64	104 47	101 38	98 26	105 30	114 40	101 33	114 39	105 36	112 -0.09 74	102 0.49 42	101 35 26	104 19.8 47	101 8.3 38	104 113 37	104 35.6 37	102 141 38	101 -77 24	105 18.7 42	99 -4.8 28	109 -4.2 19	103 37.4 42	104 25 43	111 41 41	102 0.69 37	104 0.39 35	118 0.56 34
FE 240003 97823587 FE 240003		GG 170030 FE 140004		100 69	94 58	110 51	99 25	96 33	106 46	96 24	106 42	97 23	105 0.42 77	91 0.95 51	100 34 25	94 15.6 58	110 10.9 51	104 114 45	97 31.0 36	97 123 24	99 -73 22	97 14.4 27	99 -4.6 31	99 -2.8 19	88 30.9 50	99 22 27	98 28 26	95 0.12 24	106 0.54 22	102 -0.21 22
FE 240005 97823603 FE 240005	1	BMH 200063 FE 210018		87 63	114 50	108 36	94 25	103 27	99 40	103 32	100 38	109 36	94 1.22 74	85 1.19 38	104 38 25	114 23.8 50	108 10.2 36	115 138 37	114 42.0 34	105 152 37	104 -80 23	110 21.0 41	97 -3.5 26	109 -4.4 16	98 35.2 39	108 28 42	114 45 40	103 0.71 38	109 0.80 35	119 0.63 34
FE 240007 97823629 FE 240007	1	GG 170030 FE 180027		92 67	103 57	103 45	94 26	94 33	95 45			99 18	96 1.08 76	92 0.89 49	106 40 26	103 19.1 57	103 8.7 45	102 109 43	104 35.9 33	97 124 22	98 -73 15	100 15.9 23	93 -0.7 31	98 -2.6 21	98 35.2 48	103 24 23	101 32 23	99 0.45 18	101 0.10 17	107 0.06 17
FE 240008 97823637 FE 240008	1	GG 170030 FE 190027		81 67	107 54	104 44	96 25	98 33	89 44	100 20	89 39	99 20	86 1.77 76	87 1.11 47	103 37 25	107 20.7 54	104 9.1 44	107 120 41	110 39.3 33	99 130 23	100 -75 17	100 16.1 25	97 -3.5 31	99 -2.8 21	99 35.7 48	104 25 24	101 32 24	100 0.49 20	101 0.08 19	103 -0.17 18
FE 240009 97823645 FE 240009	1	BMH 200063 FE 210005		131 62	90 49	103 35	104 27	103 29	128 40	94 33	126 39	100 38	131 -1.53 73	103 0.46 38	95 29 27	90 14.0 49	103 8.7 35	97 98 37	89 25.8 36	97 122 40	99 -74 23	103 17.7 44	104 -8.4 32	102 -3.1 17	99 35.8 38	100 22 45	104 35 43	94 0.03 40	103 0.28 37	117 0.55 36
FE 240013 97823686 FE 240013		GG 170030 FE 170013		106 67	100 52	105 43	94 25	98 34	110 43	105 20	110 38	105 20	107 0.27 76	99 0.60 47	105 39 25	100 17.9 52	105 9.5 43	102 110 40	102 34.0 32	105 151 23	103 -79 17	107 19.4 24	97 -3.3 31	103 -3.3 21	93 33.1 49	110 28 24	106 37 24	102 0.68 20	105 0.41 19	101 -0.23 18
FE 240017 97823710 FE 240017	1	GG 170030 FE 160009		88 67	107 57	110 45	95 25	95 34	96 45			98 18	96 1.06 76	83 1.26 49	103 37 25	107 21.0 57	110 10.9 45	112 132 42	110 39.6 36	98 126 22	99 -73 15	100 15.9 23	92 0.0 31	101 -3.0 21	97 34.9 49	103 25 23	102 32 23	99 0.44 18	102 0.16 17	108 0.08 17
FE 240018 97823728 FE 240018	1	GG 170030 FE 180003		100 67	99 57	108 45	94 25	93 33	104 44			100 18	104 0.51 76	93 0.87 48	105 38 25	99 17.6 57	108 10.2 45	104 113 42	101 33.4 33	99 129 22	99 -74 15	101 16.5 23	92 -0.2 31	97 -2.4 21	98 35.1 48	105 26 23	103 34 23	100 0.51 18	101 0.09 17	107 0.04 17
FE 240019 97823736 FE 240019	1	GG 170030 FE 180006		86 67	105 57	100 45	100 27	97 36	91 45	96 20	90 40	95 19	88 1.64 76	95 0.76 49	100 33 27	105 20.0 57	100 7.9 45	104 113 43	107 37.3 34	94 110 24	96 -71 15	97 14.5 25	100 -5.7 37	96 -2.3 23	95 34.0 48	100 23 25	96 27 24	95 0.15 19	102 0.17 19	103 -0.14 18

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																														
FE 240021 97823751 FE 240021	1	GG 170030 FE 160018	97 67	100 57	104 45	98 27	97 35	101 45	97 20	101 40	96 19	100 0.78 75	94 0.81 49	101 35 27	100 17.9 57	104 9.2 45	103 112 43	103 34.9 37	96 118 24	97 -71 15	100 16.1 25	97 -3.6 34	99 -2.8 23	97 34.9 49	102 24 25	98 29 24	97 0.28 19	99 -0.18 19	100 -0.30 18	
FE 240023 97823777 FE 240023		GG 170030 FE 140007	101 68	92 56	122 49	92 25	93 33	104 45	103 24	104 41	104 23	107 0.27 76	88 1.07 51	106 40 25	92 14.6 56	122 14.3 49	110 127 43	97 31.2 34	104 149 24	104 -81 22	106 18.9 27	95 -2.5 30	96 -2.3 19	88 31.1 50	105 25 27	105 36 26	100 0.53 24	111 1.03 22	104 -0.09 22	

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		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			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	
FE 140007 80135270 GRECIAN		WDW 090050 FE 110002	100 82	87 70	123 76	96 28	89 39		97 57	96 37	96 53	99 32	104 0.46 84	92 0.88 78	102 36 28	87 12.5 70	123 14.5 76	108 123 58	90 26.6 44	101 137 34	102 -77 36	102 16.9 38	96 -2.8 31	92 -1.6 21	82 28.1 65	96 20 39	100 31 37	94 0.08 33	116 1.55 30	102 -0.19 29
FE 150013 90882473 FE 150013		WDW 090050 FE 100003	90 78	90 65	112 72	105 28	102 38		101 54	85 37	98 51	85 32	99 0.83 81	73 1.69 73	93 27 28	90 13.9 65	112 11.5 72	106 118 55	95 30.0 42	88 88 34	91 -63 36	82 7.1 38	105 -9.0 30	102 -3.1 20	89 31.5 64	85 13 39	85 16 37	85 -0.61 33	99 -0.13 30	100 -0.29 29
FE 150016 82169871 HELEN		WDW 090050 FE 100012	104 81	97 75	95 70	106 28	98 39		104 57	86 37	102 53	91 32	105 0.37 83	97 0.68 77	94 27 28	97 16.7 75	95 6.6 70	96 97 58	94 29.0 50	93 107 34	95 -69 36	91 11.6 38	95 -2.2 31	105 -3.6 21	90 31.5 66	90 16 39	93 24 37	94 0.05 33	109 0.88 30	101 -0.23 29
FE 160009 84195395 JESSICA	2	PAL 120030 FE 100012	94 78	109 73	104 65	102 26	94 41		99 55	89 22	97 48	89 12	103 0.53 81	78 1.46 72	97 30 26	109 21.7 73	104 9.2 65	112 131 55	108 38.3 48	89 91 26	90 -63 17	90 10.9 27	89 2.1 34	101 -3.0 26	99 35.7 63	93 18 26	93 24 26	92 -0.10 12	98 -0.20 11	109 0.14 11
FE 160018 84195403 JOSEPHINE	1	PAL 120030 FF 110235	114 79	93 75	94 66	107 35	98 46		110 59	85 27	107 53	83 18	114 -0.30 82	100 0.59 73	92 26 35	93 15.0 75	94 6.2 66	93 88 59	92 27.9 56	85 75 32	87 -58 20	91 11.3 32	99 -5.1 44	98 -2.5 32	99 35.7 63	90 16 32	87 18 31	88 -0.41 19	92 -0.87 18	93 -0.62 18
FE 170001 85750818 KALDORA	2	PAL 120030 FE 110006	90 80	110 76	102 74	91 30	92 41		92 58	100 22	92 51	100 12	95 1.17 82	91 0.94 75	109 43 30	110 22.2 76	102 8.5 74	105 117 60	107 37.5 48	98 126 26	97 -72 17	100 15.9 27	87 3.2 34	99 -2.7 26	103 37.4 64	103 25 26	104 35 26	103 0.72 12	98 -0.23 11	112 0.30 11
FE 170008 85750859 KAREN	1	PAL 120030 FE 070008	102 78	97 74	93 66	101 25	96 42		98 55	91 23	97 49	91 12	99 0.83 81	109 0.20 71	99 32 25	97 16.6 74	93 5.8 66	92 87 55	89 25.7 51	89 94 27	89 -62 18	89 10.5 28	95 -2.4 35	99 -2.8 26	96 34.4 64	96 20 26	94 25 26	93 -0.04 12	97 -0.35 11	109 0.13 11
FE 170009 87206769 KARENA	1	PAL 120030 FE 120001	77 80	109 63	99 63	93 28	107 41		87 53	100 28	87 48	99 19	82 2.11 83	88 1.05 75	107 41 28	109 21.9 63	99 7.7 63	103 112 51	115 42.4 44	102 140 30	105 -81 25	95 13.4 32	104 -8.3 34	105 -3.7 26	106 38.8 63	101 23 32	100 30 31	100 0.48 20	99 -0.13 18	107 0.04 18
FE 170012 85750883 KATE	2	PAL 120030 FE 100012	87 73	105 73	86 65	105 26	94 41		82 54	87 22	81 48	87 12	88 1.63 78	98 0.64 63	95 29 26	105 19.9 73	86 3.9 65	93 90 55	103 35.1 48	87 84 26	89 -61 17	88 9.9 27	90 1.1 34	99 -2.8 26	99 35.5 62	91 17 26	91 22 26	90 -0.26 12	98 -0.22 11	108 0.10 11
FE 170013 90049297 FE 170013		PAL 120030 FE 130023	116 77	100 57	91 58	100 27	100 40		109 50	100 28	109 46	101 19	110 0.00 80	114 0.00 69	100 34 27	100 18.0 57	91 5.3 58	92 88 47	96 30.6 38	102 141 30	99 -74 24	104 17.9 32	98 -4.4 33	105 -3.7 25	91 32.1 62	106 26 31	102 33 31	98 0.39 20	103 0.30 18	96 -0.48 18
FE 170019 85750933 KAY	2	PAL 120030 FF 110237	107 80	98 75	102 65	99 32	105 45		112 58	93 24	111 51	92 15	109 0.09 83	96 0.75 75	100 33 32	98 17.2 75	102 8.5 65	101 106 57	96 30.7 56	93 107 29	98 -72 18	90 11.1 30	101 -6.1 42	111 -4.7 31	88 31.0 63	101 23 30	95 26 29	94 0.04 16	96 -0.46 14	96 -0.49 14
FE 180003 87561239 LASSY	2	PAL 120030 FE 100004	97 78	102 74	94 65	101 26	90 41		91 55	91 22	90 48	92 12	96 1.05 81	103 0.45 71	99 33 26	102 18.6 74	94 6.1 65	96 96 55	98 31.4 42	90 98 26	91 -64 17	92 12.0 27	89 1.6 34	94 -1.9 26	100 36.2 62	97 21 26	96 27 26	94 0.03 12	97 -0.35 11	107 0.07 11

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		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																													
FE 180006 87561247 LAURA	1	PAL 120030 FF 110222	99 79	99 75	87 65	111 34	97 49	96 59	81 26	93 52	82 18	99 0.83 82	100 0.57 73	89 23 34	99 17.7 75	87 4.3 65	93 89 58	97 30.8 50	80 60 32	86 -57 19	84 8.1 33	105 -9.3 53	92 -1.7 32	95 33.9 62	87 14 32	83 14 31	84 -0.68 19	99 -0.19 18	100 -0.28 18
FE 180027 87593877 LILY	2	PAL 120030 FE 110006	97 78	102 74	88 65	99 30	92 40	88 56	89 22	87 49	89 12	98 0.89 81	97 0.68 73	101 35 30	102 18.7 74	88 4.6 65	91 85 56	98 31.9 43	88 87 26	89 -61 17	90 10.9 27	91 0.7 34	95 -2.2 26	100 36.4 61	92 18 26	92 23 26	92 -0.09 12	97 -0.33 11	108 0.10 11
FE 190006 89994784 FE 190006	2	KRM 160032 FE 160003	87 75	104 69	104 51	102 32	99 38	95 52	102 30	96 48	103 41	88 1.67 79	99 0.60 66	97 30 32	104 19.6 69	104 9.0 51	108 121 51	113 41.4 49	106 155 43	111 -89 16	78 4.9 46	104 -8.1 34	93 -1.9 24	103 37.6 56	87 15 46	92 23 45	89 -0.33 42	119 1.84 40	107 0.03 39
FE 190022 89994677 FE 190022	1	PAL 120030 FF 110254	102 78	106 74	91 59	102 32	97 44	98 56	92 24	96 50	91 14	106 0.35 81	94 0.83 71	98 31 32	106 20.5 74	91 5.3 59	98 100 55	106 36.8 56	90 97 28	94 -67 18	90 11.1 30	94 -1.6 41	102 -3.2 30	95 34.1 61	96 20 29	93 23 29	93 -0.04 15	95 -0.52 14	98 -0.37 14
FE 190023 89994693 FE 190023	2	PAL 120030 FE 110006	91 75	93 74	98 65	104 30	92 40	92 55	81 22	89 48	80 12	97 0.97 79	86 1.14 67	95 29 30	93 15.2 74	98 7.5 65	96 95 56	91 27.2 48	80 59 26	82 -53 17	83 7.3 27	94 -1.4 34	93 -1.8 26	99 35.8 60	85 13 26	83 14 26	84 -0.72 12	96 -0.41 11	105 -0.06 11
FE 190027 90083080 FE 190027	1	PAL 120030 FE 140013	80 77	107 63	93 62	103 28	99 40	82 52	90 28	81 47	90 19	86 1.80 80	85 1.18 69	97 30 28	107 20.9 63	93 5.8 62	101 106 51	106 37.1 42	91 100 30	93 -66 25	91 11.2 32	99 -4.9 34	98 -2.6 26	103 37.3 60	94 19 31	93 24 31	93 0.00 20	97 -0.37 18	99 -0.35 18
FE 190028 90049271 FE 190028		PAL 120030 FE 150005	88 76	112 53	99 46	99 27	99 39	94 47	100 28	94 43	101 19	94 1.24 79	88 1.05 68	100 34 27	112 22.8 53	99 7.7 46	108 123 42	109 38.8 38	102 141 30	99 -74 24	104 17.9 32	99 -4.7 33	105 -3.6 25	87 30.4 60	105 26 31	102 33 31	98 0.38 20	103 0.30 18	96 -0.48 18
FE 200006 91271445 FE 200006	2	PAL 120030 FE 150012	104 75	103 57	96 53	97 29	104 40	103 49	102 28	104 45	100 20	101 0.68 79	108 0.24 67	103 37 29	103 19.2 57	96 6.8 53	98 99 46	106 36.7 42	101 138 31	102 -77 25	95 13.7 33	100 -5.3 35	103 -3.3 27	112 41.6 59	99 22 32	101 32 31	105 0.91 20	95 -0.52 19	104 -0.09 18
FE 210001 94194677 FE 210001		KRM 180063 FE 180007	121 68	79 67	87 46	112 31	88 35	92 49	83 30	89 45	82 33	117 -0.46 75	111 0.11 53	89 22 31	79 9.1 67	87 4.3 46	77 54 48	80 20.1 36	85 77 36	90 -63 21	88 10.0 40	103 -7.6 33	76 0.8 23	105 38.5 50	87 15 40	81 12 39	82 -0.82 34	92 -0.85 32	106 0.02 31
FE 210005 94194644 FE 210005	1	KRM 180063 FE 180005	128 68	82 65	94 45	109 32	100 40	110 49	88 32	108 46	90 34	123 -0.92 75	114 -0.01 54	91 24 32	82 10.5 65	94 6.2 45	85 71 47	82 21.6 36	91 99 37	96 -71 23	92 11.7 41	110 -12.5 48	89 -1.2 23	105 38.4 49	92 18 41	88 19 40	88 -0.42 35	93 -0.75 33	104 -0.10 32
FE 210013 94194743 FE 210013	2	KRM 180063 FE 180019	120 68	94 67	88 46	106 33	97 41	109 50	95 32	108 46	99 34	112 -0.13 75	120 -0.23 54	94 28 33	94 15.4 67	88 4.4 46	87 76 49	90 26.6 38	98 126 37	99 -74 22	108 20.0 41	101 -6.0 51	93 -1.8 24	104 37.9 49	100 22 41	97 28 40	100 0.48 35	102 0.13 33	101 -0.25 32
FE 210016 94194719 FE 210016		GG 170030 FE 150021	89 70	110 70	106 49	93 25	95 34	94 49	104 24	95 44	106 23	93 1.29 77	91 0.93 55	106 40 25	110 22.0 70	106 9.6 49	109 125 48	111 40.1 33	107 158 24	107 -84 22	106 19.1 27	92 0.0 30	98 -2.6 19	103 37.6 52	110 29 27	109 39 26	104 0.82 24	104 0.32 22	103 -0.12 22

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		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																													
FE 210018 94195617 FE 210018		GG 170030 FE 150013	80 70	113 68	115 49	90 25	101 34	92 49	107 24	94 44	107 23	89 1.61 77	68 1.87 56	109 43 25	113 23.2 68	115 12.3 49	118 144 47	117 43.8 32	107 159 24	106 -83 22	105 18.4 27	96 -2.8 30	105 -3.6 19	102 37.1 52	109 28 27	108 39 26	106 0.95 24	103 0.29 22	107 0.05 22
FE 220008 94194594 FE 220008	2	KRM 190014 FE 180006	99 65	99 68	98 45	104 30	90 36	96 49	94 28	95 45	95 35	100 0.76 74	98 0.66 47	95 29 30	99 17.7 68	98 7.3 45	100 104 48	99 32.5 38	93 107 38	91 -64 14	97 14.2 41	87 3.7 38	96 -2.3 23	101 36.7 46	96 20 42	98 29 40	100 0.49 36	105 0.47 34	116 0.46 33
FE 220011 94193166 FE 220011	1	GG 170030 FF 110237	109 70	89 72	108 52	101 30	101 39	113 52			92 20	112 -0.11 78	96 0.74 52	97 31 30	89 13.5 72	108 10.2 52	100 104 51	92 27.7 43	93 107 23	99 -73 14	92 11.8 25	100 -5.7 40	107 -4.0 25	84 29.3 52	98 22 25	93 24 24	89 -0.35 20	104 0.39 19	95 -0.52 19
FE 220012 94194502 FE 220012	1	KRM 190014 FE 170008	109 65	100 68	102 46	98 28	89 33	104 48	101 26	105 44	102 34	111 -0.02 74	98 0.67 46	102 35 28	100 18.1 68	102 8.4 46	101 107 47	96 30.7 39	100 132 37	95 -69 13	101 16.5 40	81 7.8 32	101 -3.0 21	101 36.8 46	103 24 41	106 37 39	106 0.99 36	105 0.41 33	121 0.71 33
FE 220016 94191376 FE 220016	1	GG 170030 FE 140019	116 69	90 68	113 49	100 27	96 34	114 49	98 24	113 44	97 23	119 -0.63 77	96 0.75 52	98 32 27	90 13.6 68	113 11.7 49	104 113 48	95 29.7 34	98 127 25	99 -74 22	98 14.8 27	97 -3.6 32	98 -2.6 20	94 33.7 51	97 20 28	98 28 27	96 0.23 24	105 0.47 22	100 -0.27 22
FE 220020 94194560 FE 220020	1	KRM 190014 FE 170013	107 65	104 65	98 43	97 28	91 33	102 47	105 28	103 43	107 35	106 0.30 74	103 0.44 45	103 36 28	104 19.8 65	98 7.5 43	101 107 45	103 34.8 35	106 155 37	100 -75 16	108 20.2 41	82 6.7 31	104 -3.4 21	99 36.0 46	108 27 42	111 41 40	109 1.20 36	108 0.73 34	114 0.41 33
FE 220022 94191392 FE 220022		GG 170030 FE 150013	85 67	97 68	114 49	97 25	100 33	96 48	98 24	96 43	96 23	94 1.22 76	81 1.36 49	102 35 25	97 16.7 68	114 12.1 49	109 125 47	103 34.9 32	98 125 24	99 -74 22	96 14.1 27	100 -5.4 30	101 -3.1 19	95 34.2 50	100 22 27	98 29 26	96 0.18 24	102 0.20 22	103 -0.14 22
FE 220024 94191418 FE 220024		GG 170030 FE 150016	96 68	105 69	105 48	95 25	98 33	102 48	101 24	102 43	103 23	101 0.72 77	90 0.97 50	105 38 25	105 20.1 69	105 9.5 48	106 119 47	106 36.9 36	103 145 24	103 -79 22	103 17.7 27	93 -1.1 30	104 -3.5 19	95 34.1 51	105 26 27	105 36 26	103 0.77 24	108 0.73 22	105 -0.04 22
FE 220026 94195591 FE 220026	1	GG 170030 FE 160018	110 67	89 69	110 46	102 27	98 36	110 49	91 20	108 43	88 19	114 -0.28 76	92 0.88 49	96 30 27	89 13.2 69	110 10.7 46	101 107 47	93 28.4 37	89 93 24	92 -64 15	94 13.0 25	99 -5.0 34	97 -2.5 23	99 35.8 50	95 19 25	91 21 24	90 -0.24 19	98 -0.24 19	97 -0.43 18
FE 220028 94191343 FE 220028	1	KRM 190014 FE 170019	102 66	104 68	104 45	96 30	94 34	103 48	103 26	104 44	104 34	105 0.37 75	94 0.82 47	103 37 30	104 19.6 68	104 9.1 45	105 116 48	103 35.0 40	103 143 37	100 -75 13	103 17.4 41	83 6.2 34	107 -4.0 23	98 35.4 46	107 27 41	109 39 40	108 1.13 36	104 0.37 33	115 0.43 33
FE 220029 94194875 FE 220029	1	GG 170030 FE 160009	107 67	107 69	113 46	92 25	95 34	110 48			103 18	116 -0.44 76	75 1.57 49	106 40 25	107 21.0 69	113 11.9 46	114 136 47	109 38.9 36	102 141 22	102 -77 15	104 17.8 23	90 1.3 31	102 -3.3 21	99 35.9 50	108 27 23	106 37 23	103 0.76 18	102 0.20 17	109 0.16 17
FE 230004 95941860 FE 230004	1	GG 170030 FE 170019	108 68	96 57	113 45	94 26	101 35	114 45	101 20	113 40	100 18	113 -0.23 76	88 1.05 50	105 39 26	96 16.3 57	113 11.7 45	106 117 43	99 32.2 37	100 134 23	102 -78 15	100 16.0 24	98 -4.1 34	106 -3.8 23	92 32.5 49	107 27 24	103 33 24	100 0.51 19	101 0.03 18	101 -0.24 17

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		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																													
FE 230010 95941902 FE 230010	1	GG 170030 FE 160018	95 67	101 57	104 45	98 27	97 35	100 45	97 20	100 40	96 19	98 0.91	95 0.79	101 35	101 18.2	104 9.1	103 112	104 35.3	96 118	97 -71	100 16.1	97 -3.6	99 -2.8	97 34.9	102 24	98 29	97 0.28	99 -0.18	100 -0.30
FE 230016 95941969 FE 230016	1	BMH 200063 FE 190014	112 64	108 52	89 42	104 26	101 29	107 42	95 33	106 40	103 36	112 -0.13	101 0.51	96 30	108 21.1	89 4.8	98 101	106 36.8	101 137	104 -80	101 16.6	95 -2.4	109 -4.2	93 33.3	102 24	109 39	100 0.52	102 0.15	101 -0.22
FE 230017 95941977 FE 230017	1	GG 170030 FE 170012	91 57	102 57	103 45	97 25	95 33	95 43			97 18	95 1.11	91 0.92	103 36	102 18.9	103 8.7	103 111	105 36.3	97 122	98 -72	99 15.4	93 -0.5	100 -2.9	97 34.8	102 24	100 31	98 0.36	102 0.15	107 0.06
FE 230025 95943023 FE 230025	1	GG 170030 FE 140019	109 69	92 54	111 48	97 27	95 34	111 45	101 24	111 41	101 23	111 -0.03	98 0.66	101 35	92 14.8	111 11.1	103 111	98 31.5	102 141	102 -78	101 16.5	96 -3.1	99 -2.7	92 32.6	100 23	102 33	100 0.54	106 0.51	102 -0.20
FE 230026 95943031 FE 230026	1	BMH 200063 FE 190027	92 65	110 49	97 41	101 26	102 29	96 41	95 33	95 39	100 36	95 1.11	92 0.88	98 32	110 22.1	97 7.2	106 118	108 38.0	97 122	97 -71	103 17.4	99 -4.6	106 -3.8	98 35.3	101 23	107 37	96 0.23	105 0.47	115 0.43
FE 240002 97823579 FE 240002	1	GG 170030 FE 140019	117 69	89 54	113 48	97 27	95 34	113 45	101 24	113 41	101 23	120 -0.69	96 0.75	101 35	89 13.3	113 11.8	102 110	94 29.2	102 141	102 -78	101 16.5	96 -3.1	99 -2.7	92 32.6	100 23	102 33	100 0.54	106 0.51	102 -0.20
FE 240006 97823611 FE 240006	1	GG 170030 FE 170008	99 67	98 57	106 46	95 24	96 34	104 45			100 18	101 0.68	97 0.70	104 38	98 17.2	106 9.8	102 109	98 31.5	98 127	98 -73	100 15.7	95 -2.2	100 -2.9	96 34.2	105 25	102 33	99 0.47	101 0.09	107 0.07
FE 240010 97823652 FE 240010	1	BMH 200063 FE 210001	117 85	77 82	110 81	101 80	94 62	100 77	93 80	99 78	93 80	122 -0.85	91 0.93	98 31	77 8.3	110 10.7	92 86	83 21.8	97 121	97 -71	104 18.1	104 -8.5	84 -0.5	104 38.0	98 21	99 30	94 0.03	100 -0.07	119 0.62
FE 240011 97823660 FE 240011	1	GG 170030 FE 170019	96 68	101 57	109 45	94 26	101 35	105 45	101 20	105 40	100 18	100 0.76	92 0.91	105 39	101 18.6	109 10.6	107 120	104 35.5	100 134	102 -78	100 16.0	98 -4.1	106 -3.8	92 32.5	107 27	103 33	100 0.51	101 0.03	101 -0.24
FE 240012 97823678 FE 240012	1	GG 170030 FE 190022	103 67	101 57	106 43	95 26	96 34	107 45	101 20	107 40	100 18	108 0.14	88 1.06	104 38	101 18.5	106 9.8	105 115	105 36.1	99 129	100 -76	100 16.0	95 -1.8	101 -3.1	95 34.1	105 25	101 32	99 0.47	100 0.00	102 -0.18
FE 240014 97823694 FE 240014	1	GG 170030 FE 170009	78 68	108 54	107 44	91 25	101 34	90 44	105 20	91 39	104 20	83 2.05	89 1.03	109 43	108 21.5	107 9.9	108 123	115 42.4	105 150	106 -82	102 17.2	99 -5.2	103 -3.4	100 36.4	107 27	105 35	103 0.73	102 0.20	106 0.03
FE 240020 97823744 FE 240020		GG 170030 FE 150016	104 68	97 57	109 47	97 25	97 33	109 45	98 24	108 41	99 23	108 0.15	90 0.98	102 36	97 16.6	109 10.5	104 114	99 32.1	100 134	101 -76	101 16.3	95 -2.2	103 -3.3	92 32.8	102 24	102 32	100 0.51	108 0.70	104 -0.11

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		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	
FE 240022 97823769 FE 240022	1	GG 170030 FE 170001	94 67	104 58	111 48	90 26	94 34	100 46			104 18	100 0.77 75	87 1.08 49	110 44 26	104 19.8 58	111 11.2 48	108 123 44	106 37.1 36	103 143 22	102 -78 15	105 18.4 23	91 0.6 31	100 -2.8 21	99 35.8 49	108 28 23	107 38 23	105 0.85 18	102 0.15 17	109 0.16 17	
FE 240024 97823785 FE 240024		GG 170030 FE 190028	92 66	106 51	109 39	94 25	98 33	101 42	105 20	101 38	104 20	98 0.89 75	86 1.12 47	105 39 25	106 20.3 51	109 10.7 39	110 127 38	108 38.1 32	105 150 23	103 -79 17	107 19.4 24	97 -3.4 31	103 -3.3 21	91 32.2 48	110 28 24	106 37 24	102 0.68 20	105 0.41 19	101 -0.23 18	

Selection List on Cow Value

Bulls 2 years and older

ID	Name	Sire ID	Dam ID	% Inbreeding	Polled HH:Horned, PcPc:Polled, PcH: Polled horn carrier	Myostatin nt821	Q204X	F94L	Genomic tested	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									
Sorted on ID																										
										★★★★★																
1	BMH 200063	BM CANDO 16-23	BMH 150112	BMH 160023	0.1	PcH	0	0	0		118	78	106	74	106	54	99	43	106	42	123	58	99	59	122	58
2	FE 240009	FE 240009	BMH 200063	FE 210005	1.0						131	62	90	49	103	35	104	27	103	29	128	40	94	33	126	39
										★★★★★																
1	FE 230002	FE 230002	BMH 200063	FE 180027	0.1						117	66	100	52	100	42	99	27	99	29	114	42	94	32	113	40
2	FE 230006	FE 230006	BMH 200063	FE 200006	1.0						114	64	103	47	102	38	98	26	105	30	116	40	101	33	115	39
3	FE 230031	FE 230031	BMH 200063	FE 190007	1.0						109	64	105	51	101	38	99	26	106	29	113	41	94	33	112	39
4	FE 230034	FE 230034	GG 170030	FE 160028	0.6						111	67	93	58	113	47	95	24	102	34	116	45				
5	FE 240001	FE 240001	BMH 200063	FE 200006	1.0						112	64	104	47	101	38	98	26	105	30	114	40	101	33	114	39
6	FE 240013	FE 240013	GG 170030	FE 170013	0.4						106	67	100	52	105	43	94	25	98	34	110	43	105	20	110	38
										★★★★★																
1	FE 220014	FE 220014	GG 170030	FE 160028	0.6						97	67	108	69	107	48	89	24	102	34	105	48				
2	FE 230001	FE 230001	GG 170030	FE 170008	0.6						104	67	96	57	108	46	95	24	96	34	109	45				
3	FE 230005	FE 230005	GG 170030	FE 150013	0.5						95	67	94	54	117	48	96	25	99	33	104	44	97	24	103	40
4	FE 230011	FE 230011	BMH 200063	FE 190022	0.2						106	65	108	53	97	40	101	27	101	31	106	43	96	32	106	41
5	FE 230014	FE 230014	GG 170030	FE 120001	0.4						98	69	94	57	110	48	92	25	103	34	106	45	101	24	106	41
6	FE 230020	FE 230020	GG 170030	FE 170013	0.4						105	67	100	52	105	43	94	25	98	34	109	43	105	20	109	38
7	FE 230024	FE 230024	BMH 200063	FE 190028	0.9						96	65	112	46	100	36	99	26	103	29	102	40	100	33	102	39
8	FE 230030	FE 230030	GG 170030	FE 160010	0.6						97	67	105	57	106	46	94	26	97	35	102	45	102	20	102	40
9	FE 240003	FE 240003	GG 170030	FE 140004	0.4						100	69	94	58	110	51	99	25	96	33	106	46	96	24	106	42
10	FE 240018	FE 240018	GG 170030	FE 180003	0.6						100	67	99	57	108	45	94	25	93	33	104	44				
11	FE 240021	FE 240021	GG 170030	FE 160018	0.9						97	67	100	57	104	45	98	27	97	35	101	45	97	20	101	40
12	FE 240023	FE 240023	GG 170030	FE 140007	0.4						101	68	92	56	122	49	92	25	93	33	104	45	103	24	104	41
13	GG 170030	GG170030	BH 100032	GG 080001	0.2						95	86	100	87	119	63	88	41	96	53	102	65	110	30	103	58
14	GG 230062	GG230062	WDW 180045	GG 190055	1.3						110	68	99	72	103	52	91	39	95	37	109	53	108	22	110	47
										★★★★																
1	FE 220013	FE 220013	KRM 190014	FE 170012	0.5						98	64	98	68	99	45	101	28	89	32	95	47	96	26	94	43

Selection List on Cow Value
Bulls 2 years and older

ID		Name	Sire ID	Dam ID	% Inbreeding	Polled HH: Horned, PcPc: Polled, PcH: Polled horn carrier	Myostatin nt821	Q204X	F94L	Genomic tested	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									
Sorted on ID																											
											★★★★																
2	FE 220017	FE 220017	GG 170030	FE 140007	0.4						92	69	101	69	118	50	87	25	94	33	98	49	111	24	100	44	
3	FE 220027	FE 220027	KRM 190014	FE 180003	0.6						97	54	109	68	99	45	93	28	87	33	92	46	108	26	94	42	
4	FE 230007	FE 230007	GG 170030	FE 130020	0.4						94	69	95	58	94	49	105	25	94	33	94	46	89	24	92	42	
5	FE 230013	FE 230013	GG 170030	FE 160009	0.6						91	67	106	57	111	45	95	25	95	34	98	45					
6	FE 230015	FE 230015	GG 170030	FE 170009	0.5						83	68	106	54	108	44	91	25	101	34	94	44	105	20	95	39	
7	FE 230018	FE 230018	GG 170030	FE 170012	0.6						91	57	102	57	103	45	97	25	95	33	95	43					
8	FE 230019	FE 230019	GG 170030	FE 140007	0.4						93	68	96	56	120	49	92	25	93	33	99	45	103	24	100	41	
9	FE 230023	FE 230023	GG 170030	FE 140004	0.4						90	69	99	58	107	51	99	25	96	33	99	46	96	24	98	42	
10	FE 240005	FE 240005	BMH 200063	FE 210018	1.3						87	63	114	50	108	36	94	25	103	27	99	40	103	32	100	38	
11	FE 240007	FE 240007	GG 170030	FE 180027	0.6						92	67	103	57	103	45	94	26	94	33	95	45					
12	FE 240017	FE 240017	GG 170030	FE 160009	0.6						88	67	107	57	110	45	95	25	95	34	96	45					
13	FE 240019	FE 240019	GG 170030	FE 180006	0.8						86	67	105	57	100	45	100	27	97	36	91	45	96	20	90	40	
											★★★★☆																
1	FE 220002	FE 220002	KRM 180085	FE 190023	0.5						72	64	104	67	102	44	102	26	90	31	80	46	95	25	80	42	
2	FE 220030	FE 220030	KRM 190014	FE 170009	1.6						83	66	103	66	103	45	95	29	96	33	88	48	104	28	89	44	
3	FE 240008	FE 240008	GG 170030	FE 190027	0.5						81	67	107	54	104	44	96	25	98	33	89	44	100	20	89	39	

Selection List on Cow Value

Cows 2 years and older

ID	Name	Sire ID	Dam ID	% Inbreeding	Polled HH:Horned, PcPc:Polled, PcH: Polled horn carrier	Myostatin	Genomic tested	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	FE 160018	JOSEPHINE	PAL 120030	FF 110235	1.4			114	79	93	75	94	66	107	35	98	46	110	59	85	27	107	53	
2	FE 170019	KAY	PAL 120030	FF 110237	1.7			107	80	98	75	102	65	99	32	105	45	112	58	93	24	111	51	
3	FE 210005	FE 210005	KRM 180063	FE 180005	1.0			128	68	82	65	94	45	109	32	100	40	110	49	88	32	108	46	
4	FE 220011	FE 220011	GG 170030	FF 110237	1.0			109	70	89	72	108	52	101	30	101	39	113	52					
5	FE 220016	FE 220016	GG 170030	FE 140019	0.6			116	69	90	68	113	49	100	27	96	34	114	49	98	24	113	44	
6	FE 220026	FE 220026	GG 170030	FE 160018	0.9			110	67	89	69	110	46	102	27	98	36	110	49	91	20	108	43	
7	FE 220029	FE 220029	GG 170030	FE 160009	0.6			107	67	107	69	113	46	92	25	95	34	110	48					
8	FE 230004	FE 230004	GG 170030	FE 170019	0.8			108	68	96	57	113	45	94	26	101	35	114	45	101	20	113	40	
9	FE 230025	FE 230025	GG 170030	FE 140019	0.6			109	69	92	54	111	48	97	27	95	34	111	45	101	24	111	41	
10	FE 240002	FE 240002	GG 170030	FE 140019	0.6			117	69	89	54	113	48	97	27	95	34	113	45	101	24	113	41	
								★★★★☆																
1	FE 150013	FE 150013	WDW 090050	FE 100003	0.3			90	78	90	65	112	72	105	28	102	38	101	54	85	37	98	51	
2	FE 150016	HELEN	WDW 090050	FE 100012	0.1			104	81	97	75	95	70	106	28	98	39	104	57	86	37	102	53	
3	FE 170013	FE 170013	PAL 120030	FE 130023	0.1			116	77	100	57	91	58	100	27	100	40	109	50	100	28	109	46	
4	FE 200006	FE 200006	PAL 120030	FE 150012	1.8			104	75	103	57	96	53	97	29	104	40	103	49	102	28	104	45	
5	FE 210013	FE 210013	KRM 180063	FE 180019	1.9			120	68	94	67	88	46	106	33	97	41	109	50	95	32	108	46	
6	FE 220012	FE 220012	KRM 190014	FE 170008	0.7			109	65	100	68	102	46	98	28	89	33	104	48	101	26	105	44	
7	FE 220020	FE 220020	KRM 190014	FE 170013	1.5			107	65	104	65	98	43	97	28	91	33	102	47	105	28	103	43	
8	FE 220024	FE 220024	GG 170030	FE 150016	0.4			96	68	105	69	105	48	95	25	98	33	102	48	101	24	102	43	
9	FE 220028	FE 220028	KRM 190014	FE 170019	0.6			102	66	104	68	104	45	96	30	94	34	103	48	103	26	104	44	
10	FE 230010	FE 230010	GG 170030	FE 160018	0.9			95	67	101	57	104	45	98	27	97	35	100	45	97	20	100	40	
11	FE 230016	FE 230016	BMH 200063	FE 190014	1.0			112	64	108	52	89	42	104	26	101	29	107	42	95	33	106	40	
12	FE 240006	FE 240006	GG 170030	FE 170008	0.6			99	67	98	57	106	46	95	24	96	34	104	45					
13	FE 240010	FE 240010	BMH 200063	FE 210001	0.6			117	85	77	82	110	81	101	80	94	62	100	77	93	80	99	78	
14	FE 240011	FE 240011	GG 170030	FE 170019	0.8			96	68	101	57	109	45	94	26	101	35	105	45	101	20	105	40	
15	FE 240012	FE 240012	GG 170030	FE 190022	0.6			103	67	101	57	106	43	95	26	96	34	107	45	101	20	107	40	
16	FE 240020	FE 240020	GG 170030	FE 150016	0.4			104	68	97	57	109	47	97	25	97	33	109	45	98	24	108	41	
17	FE 240022	FE 240022	GG 170030	FE 170001	0.6			94	67	104	58	111	48	90	26	94	34	100	46					
18	FE 240024	FE 240024	GG 170030	FE 190028	0.4			92	66	106	51	109	39	94	25	98	33	101	42	105	20	101	38	

Selection List on Cow Value
Cows 2 years and older

ID Sorted on ID			Name	Sire ID	Dam ID	% Inbreeding	Polled HH:Horned, PcPc:Polled, PcH: Polled horn carrier	Myostatin nt821	Q204X	F94L	Genomic tested	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	FE 140007	GRECIAN	WDW 090050	FE 110002	0.1							100	82	87	70	123	76	96	28	89	39	97	57	96	37	96	53	
2	FE 160009	JESSICA	PAL 120030	FE 100012	2.0							94	78	109	73	104	65	102	26	94	41	99	55	89	22	97	48	
3	FE 170001	KALDORA	PAL 120030	FE 110006	1.9							90	80	110	76	102	74	91	30	92	41	92	58	100	22	92	51	
4	FE 170008	KAREN	PAL 120030	FE 070008	0.9							102	78	97	74	93	66	101	25	96	42	98	55	91	23	97	49	
5	FE 180003	LASSY	PAL 120030	FE 100004	1.8							97	78	102	74	94	65	101	26	90	41	91	55	91	22	90	48	
6	FE 180006	LAURA	PAL 120030	FF 110222	1.1							99	79	99	75	87	65	111	34	97	49	96	59	81	26	93	52	
7	FE 190006	FE 190006	KRM 160032	FE 160003	1.8							87	75	104	69	104	51	102	32	99	38	95	52	102	30	96	48	
8	FE 190022	FE 190022	PAL 120030	FF 110254	0.6							102	78	106	74	91	59	102	32	97	44	98	56	92	24	96	50	
9	FE 190023	FE 190023	PAL 120030	FE 110006	1.9							91	75	93	74	98	65	104	30	92	40	92	55	81	22	89	48	
10	FE 190028	FE 190028	PAL 120030	FE 150005	0.1							88	76	112	53	99	46	99	27	99	39	94	47	100	28	94	43	
11	FE 210001	FE 210001	KRM 180063	FE 180007	0.4							121	68	79	67	87	46	112	31	88	35	92	49	83	30	89	45	
12	FE 210016	FE 210016	GG 170030	FE 150021	0.4							89	70	110	70	106	49	93	25	95	34	94	49	104	24	95	44	
13	FE 210018	FE 210018	GG 170030	FE 150013	0.5							80	70	113	68	115	49	90	25	101	34	92	49	107	24	94	44	
14	FE 220008	FE 220008	KRM 190014	FE 180006	1.6							99	65	99	68	98	45	104	30	90	36	96	49	94	28	95	45	
15	FE 220022	FE 220022	GG 170030	FE 150013	0.5							85	67	97	68	114	49	97	25	100	33	96	48	98	24	96	43	
16	FE 230017	FE 230017	GG 170030	FE 170012	0.6							91	57	102	57	103	45	97	25	95	33	95	43					
17	FE 230026	FE 230026	BMH 200063	FE 190027	1.0							92	65	110	49	97	41	101	26	102	29	96	41	95	33	95	39	
18	FE 240014	FE 240014	GG 170030	FE 170009	0.5							78	68	108	54	107	44	91	25	101	34	90	44	105	20	91	39	
												★★★☆☆																
1	FE 170009	KARENA	PAL 120030	FE 120001	0.6							77	80	109	63	99	63	93	28	107	41	87	53	100	28	87	48	
2	FE 170012	KATE	PAL 120030	FE 100012	2.0							87	73	105	73	86	65	105	26	94	41	82	54	87	22	81	48	
3	FE 180027	LILY	PAL 120030	FE 110006	1.9							97	78	102	74	88	65	99	30	92	40	88	56	89	22	87	49	
4	FE 190027	FE 190027	PAL 120030	FE 140013	1.0							80	77	107	63	93	62	103	28	99	40	82	52	90	28	81	47	

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.

