

Boerboel Genetic Evaluation

SA Stud Book
February 2026

MNR. K. LOTTER

99A CROMWELLWEG
KAMMAPARK
PORT ELIZABETH
6070



Kennel Number: 611110



Estimated Breeding Values (EBVs)

Litter size and conformation traits are influenced by many genes, with every gene making a small contribution to the expression of the trait. These traits are, however, also influenced by physiological and physical environmental factors, for example the age and sex of the animal, the feeding and management the animal received and year x season effects. It is therefore not possible to know what the animal's genetic potential for the trait is by merely using the measurement.

With BLUP (*Best Linear Unbiased Prediction*) methodology an animal's genetic potential is predicted by making use of the genetic parameters (heritabilities and genetic correlations) of the breed, pedigree information, as well as the measurements of the animal as deviation from the average of the animals that were measured with the animal. Adjustments are made for differences in sex, age, classifier, management and year x season effects to ensure that fair comparisons are made amongst the animals. These predictions are called **EBVs (Estimated Breeding Values)** which indicates the animal's genetic potential for the specific trait and predicts the type of progeny that the animal will breed.

Pedigree information determines the genetic level at which the animal enters the genetic evaluation, it links the information of all relatives together and it is used to determine the genetic ranking of the breed. For young animals that were not yet measured, mid-parent EBVs are estimated, which are the average of the EBVs of the sire and dam. These breeding values are still inaccurate and can change a lot when more information (measurements) is included in subsequent genetic evaluations.

Breeding values therefore enables a breeder to compare his/her animals genetically to one another, as well as to all other animals of the breed. This Report gives a summary of the genetic levels of the active males and females of the relevant breeder in comparison to that of the breed for linearly classified traits and litter size. The genetic change that occurred over time can also easily be seen.

Breeding Value Indices (EBVi)

For easy interpretation, EBVs are standardised and expressed relative to the average (100) of the active animals of the breed, using 12 as standard deviation (SD). This means that an EBV of 100 is equal to the active average of the breed, and more or less 50% of the animals will have EBVi's of between 90 and 110, which indicates an average animal. Only 0.5% of the EBVi's will be lower than 64 and 0.5% will be higher than 136. Higher EBVi's indicate better genetic potential for the trait.

Accuracy

EBVs are published with an **accuracy value (%)**, which indicates how much info was available for the estimation of the EBV and with how much trust it can therefore be applied. Factors that influence the accuracy include heritability, completeness and correctness of pedigree information, number of own and measured relatives and the size of the group in which the animal was measured. When an accuracy of 85% and more is reached, the EBV should not change significantly with the inclusion of more information in subsequent genetic evaluations.

Kennel and Breed Averages: The different traits' averages of the breeder's active animals are compared to those of the breed in the Kennel and Breed Average Graphs and Tables. The breeder can therefore easily see for which traits the animals are above or below the average of the breed.

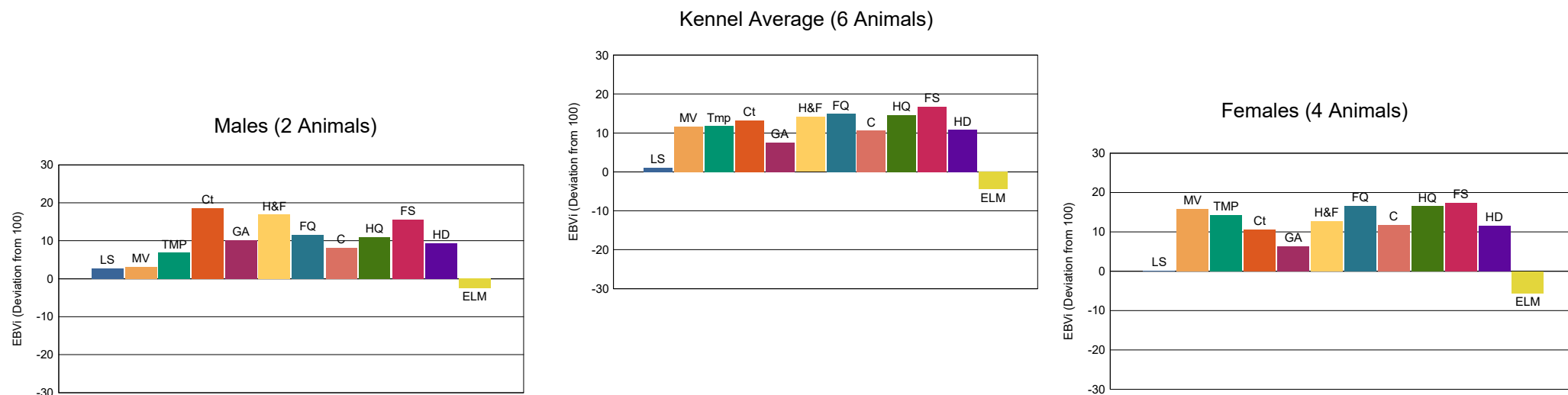
Genetic Trends: The Genetic Trends indicate the genetic change that occurred over time in the animals bred by the breeder compared to that of the breed. These are calculated as the average of the breeding values of all measured animals bred by the breeder, per year of birth.

Inbreeding: Inbreeding is the mating of related animals and is widely viewed as being harmful. The danger of inbreeding lies there in that it can gradually decrease fertility and survivability – a phenomenon known as inbreeding depression. It can cause lower conception rates, more abortions, more stillborn and weak offspring and a higher susceptibility to diseases. Indications in dogs include a low litter size as well as problems relative to fertility, such as invisible heat, behavioural problems when mating and low sperm quality. Overall, reduced litter size most likely reflects inbreeding depression in several traits, both physiological and behavioural, as well as a high frequency of non-viable embryos due to lethal alleles. Generally, the effects of inbreeding can become noticeable at a value of 6.25%, therefore it is generally recommended that individuals should have inbreeding coefficients of less than 6.25%. Breeders should therefore avoid matings causing inbreeding of more than 6.25% in the progeny. The theoretical maximum inbreeding coefficient is 50%. However, it should be noted that not all inbred animals show signs of inbreeding depression.

The data used in this evaluation was obtained from LOGIX from linear classifications that were done by the Breeder Society. All possible attempts have been made to present the information correctly. SA Stud Book does not accept responsibility for the use and interpretation of the information presented on animals in this publication.

Genetic Levels

Kennel Average relative to Breed Average, where Breed Average is indicated as 0



Average Breeding Value Indices (EBVi) where Breed Average = 100

Trait	All Animals	Males	Females
Litter size (LS)	101	103	100
Movement (Mv)	112	103	116
Temperament (Tmp)	112	107	114
Coat (Ct)	113	119	111
General Appearance	108	110	106
Head & Face (H&F)	114	117	113
Front Quarter (FQ)	115	112	117
Centre (C)	111	108	112
Hind Quarter (HQ)	115	111	116
Final Score (FS)	117	116	117
Hip Health (HH)	111	109	111
Elbow Health (ELM)	95	98	94

Inbreeding

Notes

Inbreeding primarily leads to decreased fertility, low survivability of pups and low disease resistance.

Inbreeding coefficients are calculated for all animals of the breed and indicates the probability that two genes of a pair are the same due to a common ancestor in the pedigree of the animal.

The adverse effects of inbreeding can be observed from 6.25% onwards.

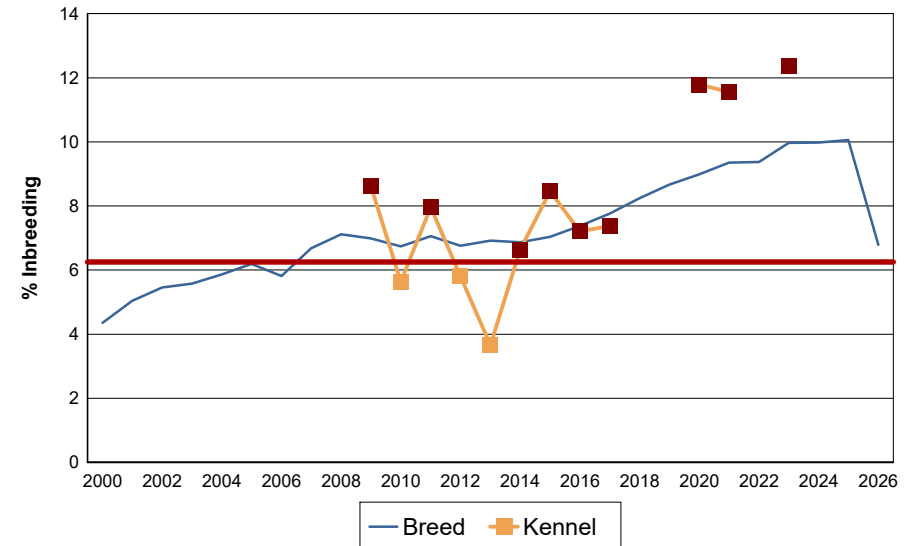
It is therefore highly recommended to record pedigree information as accurately. Inbreeding is dependent on pedigree information. Conventional methods for the calculation of inbreeding coefficients usually assume that unknown parents are unrelated, which is usually far from the truth. Inbreeding coefficients are therefore conservative indicators of the level of inbreeding.

Incomplete or incorrect pedigree information can be reported to SA Stud Book via the Breed Society.

Inbreeding Levels for Specific Matings

Progeny with Parents :	25%
Full Brother x Full Sister :	25%
Half Brother x Half Sister :	12.5%
One Common Grandparent :	6.25%
One Common Great-Grandparent :	3.125%

Rate of Inbreeding

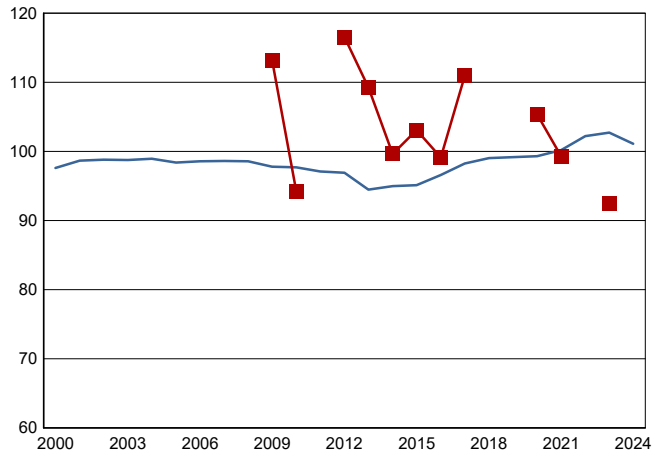


Inbreeding Levels

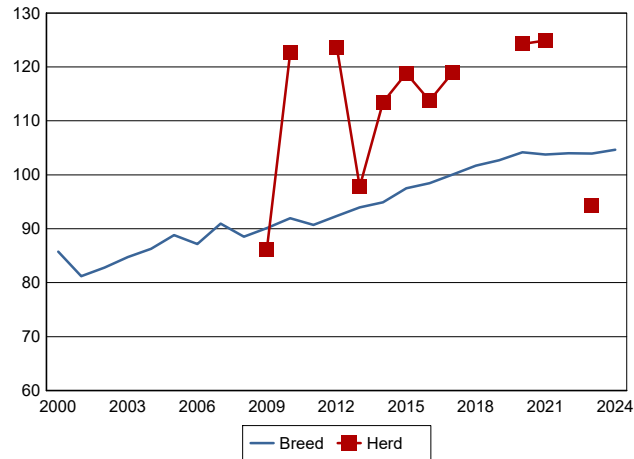
	All Animals		Males		Females		Sires		Dams	
	Kennel	Breed	Kennel	Breed	Kennel	Breed	Kennel	Breed	Kennel	Breed
Number	6	49007	2	25141	4	23857	4	3371	3	6287
Average Inbreeding	11.21	8.49	9.88	8.46	11.88	8.53	10.54	8.01	9.50	8.00
Number inbred	6	48727	2	24990	4	23728	4	24990	3	23728
Number >6.25% Inbr.	6	30600	2	15537	4	15058	4	15537	2	15058

Genetic Trends

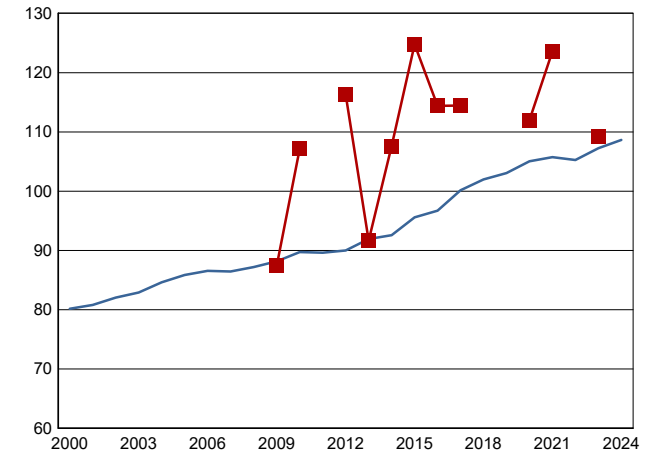
Litter Size



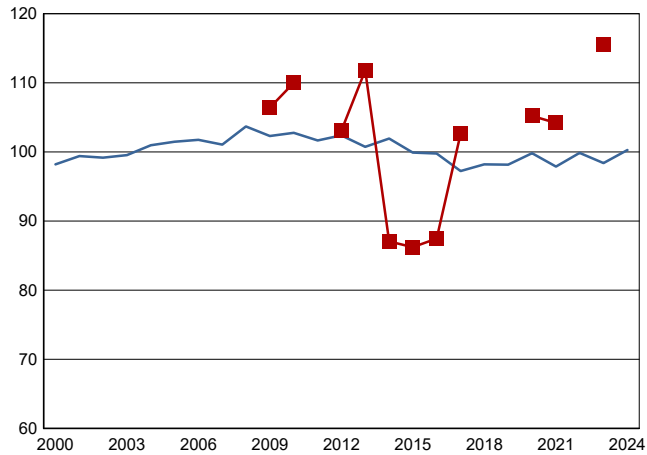
Movement



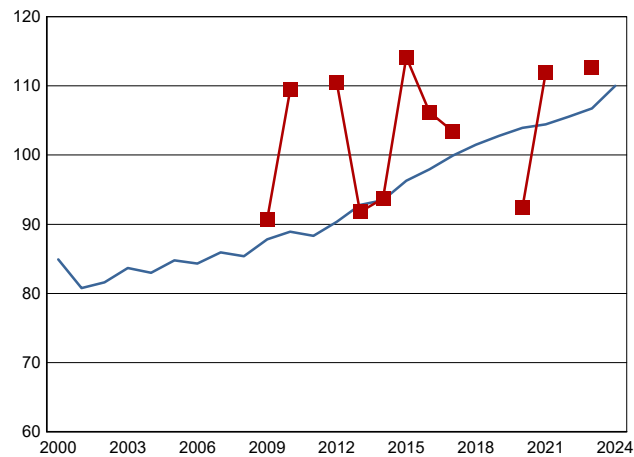
Temperament



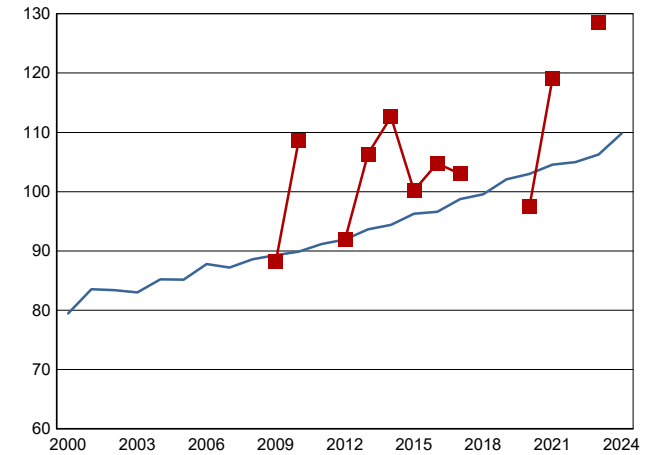
Coat



General Appearance

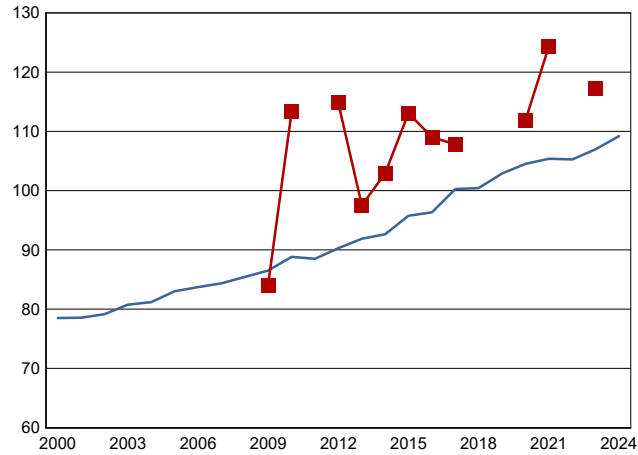


Head & Face

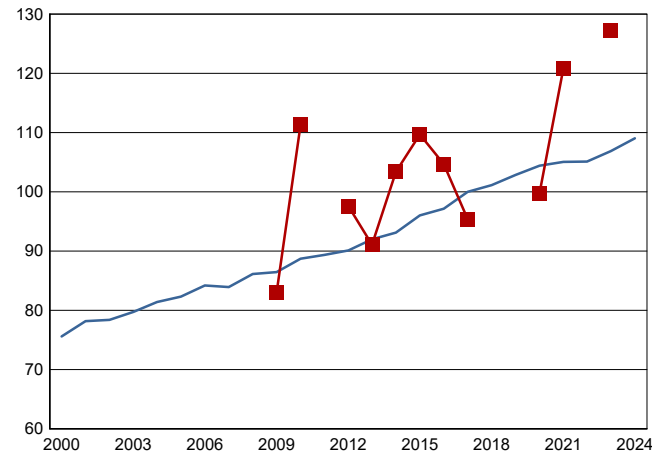


Genetic Trends

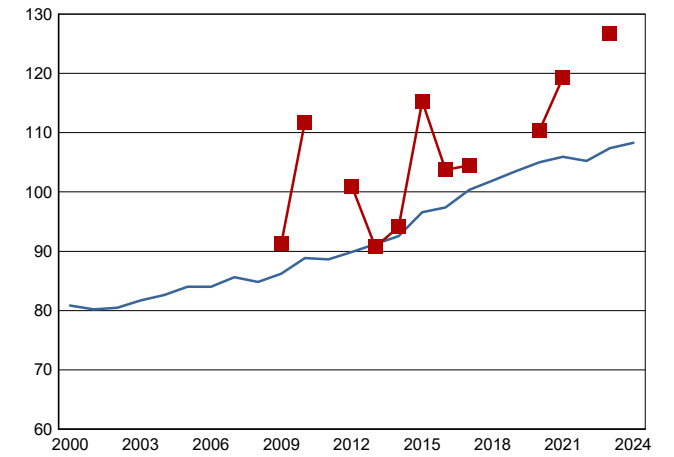
Front Quarter



Centre

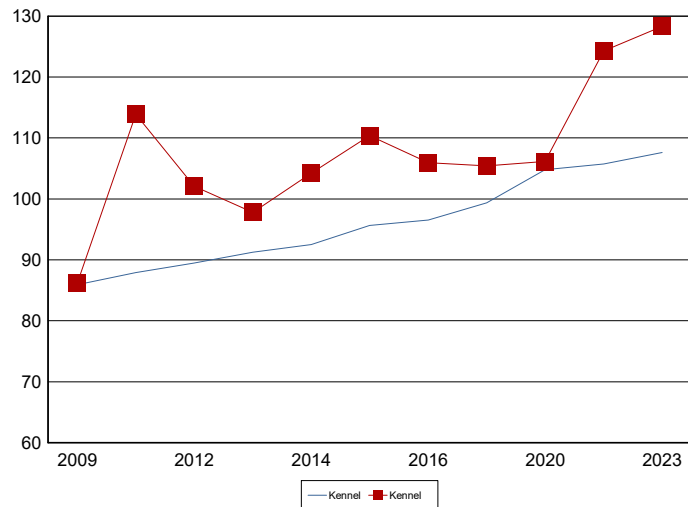


Hind Quarter

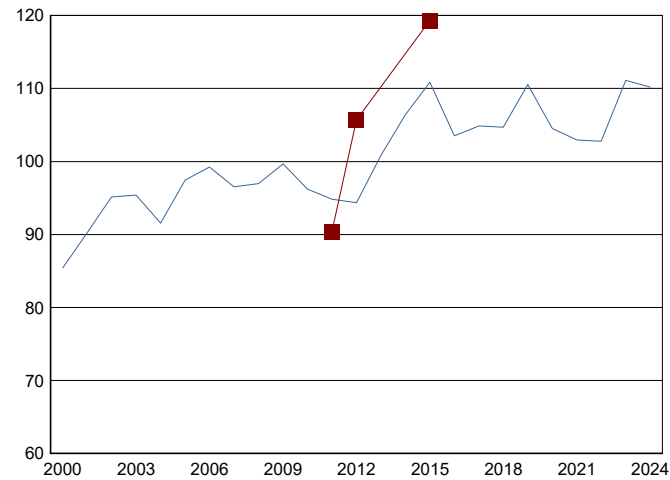


Final Score & Health Traits

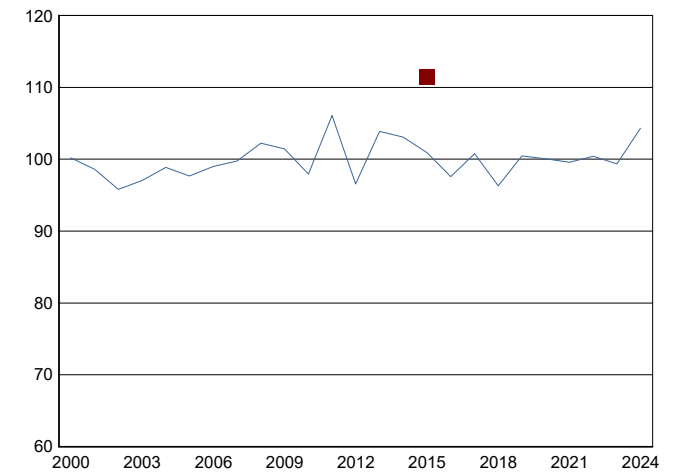
Final Score



Hip Health



Elbow Health



Estimated Breeding Value Indices (EBVi's)

Males

Inbreeding >6.25% is high

< 80

>= 100

>= 120

Animal Information			Inbreed	Health		Fertility	General			Appearance						Progeny :		Appraisal	Health		Progeny with litters
Name	BYr	Sire Dam	%	Hips Acc.	Elbows Acc.	Litter Size Acc.	Move- ment	Tempe- rament	Coat	General Appear.	Head & Face	Front Quarter	Centre	Hind Quarter	Final Score	Progeny	Litters	Progeny Kennels	Hips	Elbows	
LOTTER LEO II		LOTTER SUPER	7.38	102	99	113	119	108	108	95	88	100	85	100	95	10	1	3			2
	2017	LOTTER TESSA		5	5	18	52	25	69	51	68	53	55	58	63			2			1
LOTTER LEGEND		JAMBAL CHAKA	12.37	117	96	92	87	106	129	125	146	123	131	122	136	6	1				
	2023	LOTTER GRACE		5	5	5	43	5	62	42	61	44	46	49	55						

Estimated Breeding Value Indices (EBVi's)

Females

Inbreeding >6.25% is high

< 80

>= 100

>= 120

Animal Information

Inbreed

Health

Fertility

General

Appearance

Progeny :

Appraisal

Health

Progeny with litters

Name	BYr	Sire Dam	%	Hips Acc.	Elbows Acc.	Litter Size Acc.	Move-ment	Tempe-rament	Coat	General Appear.	Head & Face	Front Quarter	Centre	Hind Quarter	Final Score	Progeny Progeny Litters	Progeny Progeny Kennels	Hips Elbows	Progeny with litters
LOTTER DELILA	2020	LOTTER LEO II JAMBAL ELISHA-LOTTER	11.79	108 5	94 5	105 15	120 45	113 14	104 63	101 44	105 61	114 46	99 48	108 51	108 56				
LOTTER JULIA II	2020	LOTTER LEO II JAMBAL ELISHA-LOTTER	11.79	108 5	94 5	105 15	125 45	112 14	115 63	100 44	98 61	111 46	98 48	110 51	107 56				
LOTTER GRACE	2021	MASTERMINDS KING KAIRO JAMBAL ELISHA-LOTTER	11.56	112 5	95 5	99 10	121 43	120 12	114 58	111 42	122 57	124 43	125 46	125 48	128 53	8	1	3 3	1 1
LOTTER HANNAH	2023	JAMBAL CHAKA LOTTER GRACE	12.37	117 5	96 5	92 5	97 32	112 5	109 46	113 32	127 45	118 33	125 35	123 37	126 42				

Estimated Breeding Value Indices (EBVi's)

Sires

Inbreeding >6.25% is high

< 80

>= 100

>= 120

Sire Information			Inbreed	Health		Fertility	General			Appearance						Progeny :	Appraisal	Health	Progeny
Name	BYr	Sire Dam	%	Hips Acc.	Elbows Acc.	Litter Size Acc.	Move-ment	Tempe-rament	Coat	General Appear.	Head & Face	Front Quarter	Centre	Hind Quarter	Final Score	Progeny Litters	Progeny Kennels	Hips Elbows	with litters
LOTTER SUPER		GROENBERG BBD RAMBO	11.72	119	99	112	127	130	88	120	90	117	101	118	107	8 1	5 4		4 1
	2015	LOTTER ATALIA		17	30	43	61	43	73	61	72	62	63	65	69				
LOTTER LEO II		LOTTER SUPER	7.38	102	99	113	119	108	108	95	88	100	85	100	95	10 1	3 2		2 1
	2017	LOTTER TESSA		5	5	18	52	25	69	51	68	53	55	58	63				
MASTERMINDS KING KAIRO		SUID KAAP OSKAR	8.72	110	102	103	124	125	110	120	121	122	120	116	125	40 5	12 11		9 3
	2018	LOTTER TESSA II		5	5	9	58	29	74	57	73	59	61	64	69				
JAMBAL CHAKA		JAMBAL BUKS	14.33	121	97	86	72	103	104	116	132	112	124	121	124	25 4	8 5		2 2
	2021	JAMBAL KITTA		5	5	26	55	27	72	55	71	56	59	61	66				

Estimated Breeding Value Indices (EBVi's)

Dams

Inbreeding >6.25% is high

< 80

>= 100

>= 120

Animal Information			Inbreed	Health		Fertility	General			Appearance						Progeny :		Appraisal	Health		Progeny with litters
Name	BYr	Sire Dam	%	Hips Acc.	Elbows Acc.	Litter Size Acc.	Move-ment	Tempe-r ament	Coat	General Appear.	Head & Face	Front Quarter	Centre	Hind Quarter	Final Score	Progeny	Litters	Progeny Kennels	Hips	Elbows	
LOTTER TESSA	2013	LOTTER LEO	4.62	85	100	108	102	95	115	90	113	98	90	91	101	10	2	5			4
		EGOLI BBD TESSA		5	5	34	54	27	69	53	68	54	57	59	64			4			1
JAMBAL ELISHA-LOTTER	2018	ELEVATION COOPER	12.31		88	96	126	122	98	104	117	127	122	123	124	19	2	4			3
		MIDDELPOS BBD EMILY			25	45	59	37	73	59	72	60	62	64	68			3			1
LOTTER GRACE	2021	MASTERMINDS KING KAIRO	11.56	112	95	99	121	120	114	111	122	124	125	125	128	8	1	3			1
		JAMBAL ELISHA-LOTTER		5	5	10	43	12	58	42	57	43	46	48	53			3			1

