

Boerboel Genetic Evaluation

SA Stud Book
February 2026

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POSBUS 1458

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OUDTSHOORN

6620



Kennel Number: 698845



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.

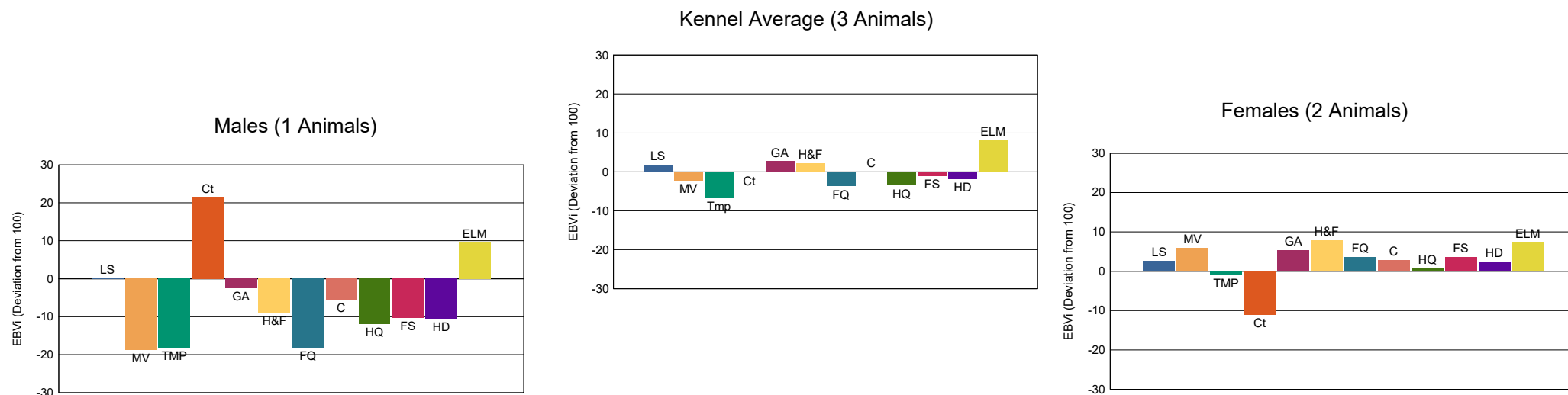
Genetic Trends: The Genetic Trends indicate the genetic change that occurred over time in the animals bred by the breeder compared to that of the breed. These are calculated as the average of the breeding values of all measured animals bred by the breeder, per year of birth.

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)	102	100	103
Movement (Mv)	98	81	106
Temperament (Tmp)	93	82	99
Coat (Ct)	100	122	89
General Appearance	103	98	105
Head & Face (H&F)	102	91	108
Front Quarter (FQ)	96	82	104
Centre (C)	100	95	103
Hind Quarter (HQ)	97	88	101
Final Score (FS)	99	90	104
Hip Health (HH)	98	89	103
Elbow Health (ELM)	108	110	107

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.

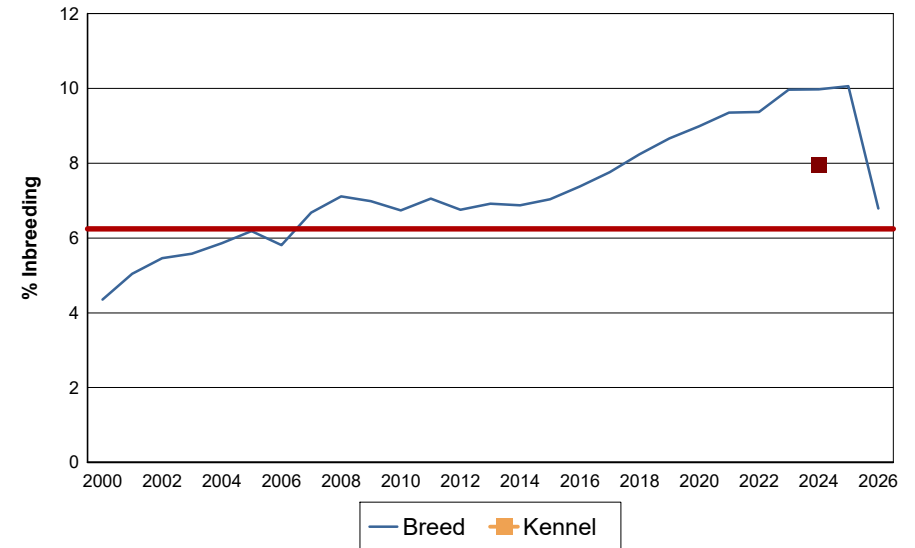
It is therefore highly recommended to record pedigree information as accurately. Inbreeding is dependent on pedigree information. Conventional methods for the calculation of inbreeding coefficients usually assume that unknown parents are unrelated, which is usually far from the truth. Inbreeding coefficients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

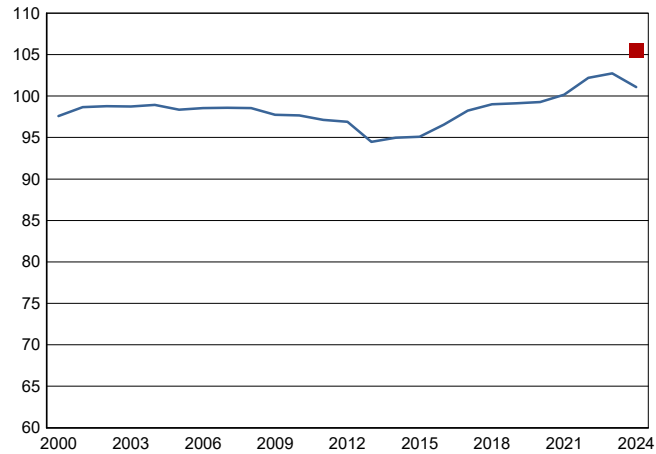


Inbreeding Levels

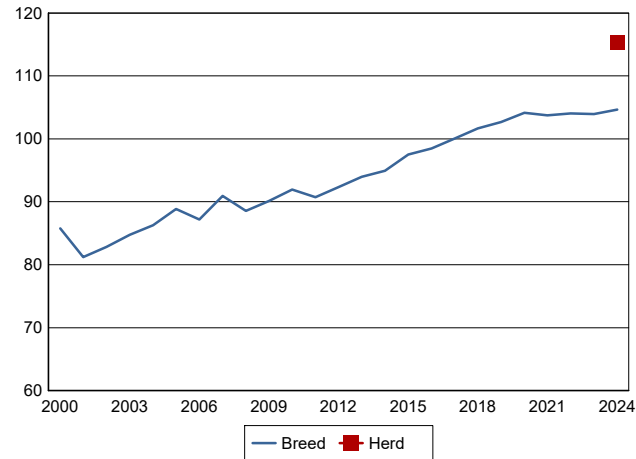
	All Animals		Males		Females		Sires		Dams	
	Kennel	Breed	Kennel	Breed	Kennel	Breed	Kennel	Breed	Kennel	Breed
Number	3	49007	1	25141	2	23857	3	3371	3	6287
Average Inbreeding	6.16	8.49	3.77	8.46	7.35	8.53	9.98	8.01	7.61	8.00
Number inbred	3	48727	1	24990	2	23728	3	24990	3	23728
Number >6.25% Inbr.	2	30600		15537	2	15058	2	15537	2	15058

Genetic Trends

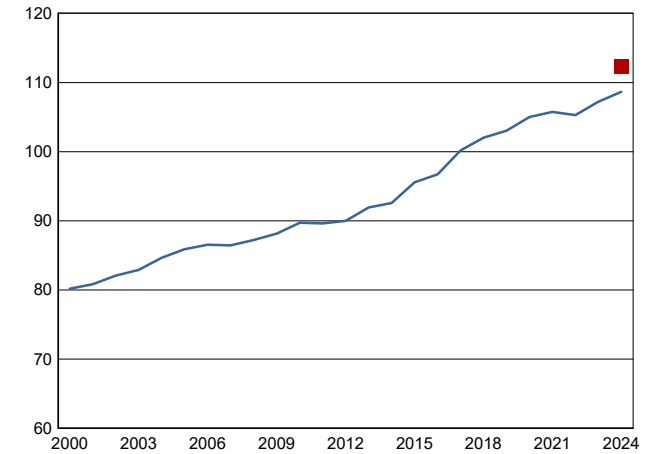
Litter Size



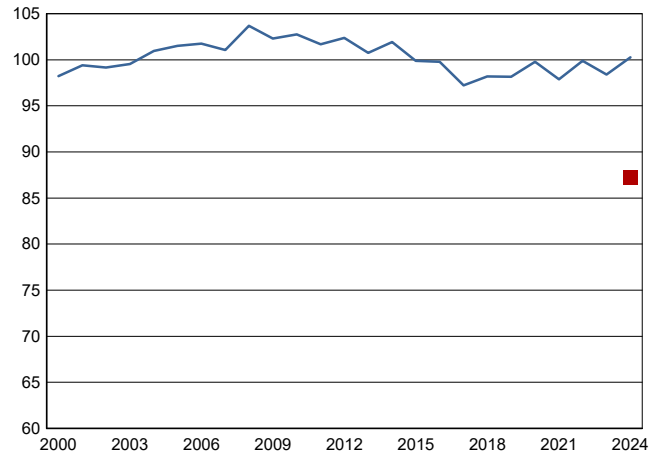
Movement



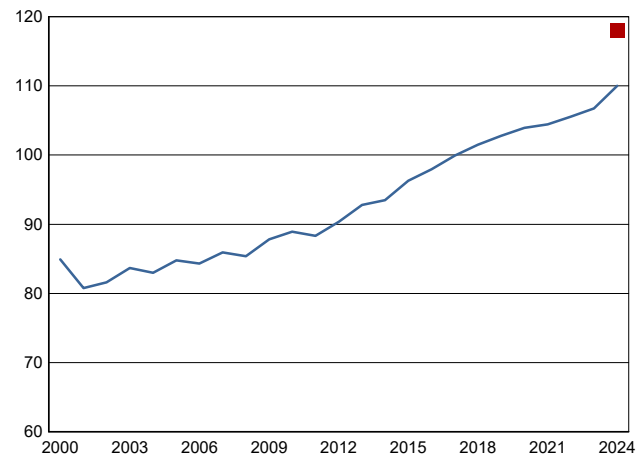
Temperament



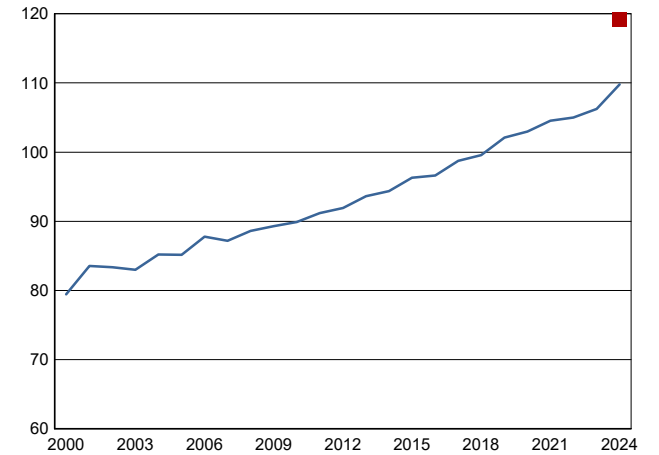
Coat



General Appearance

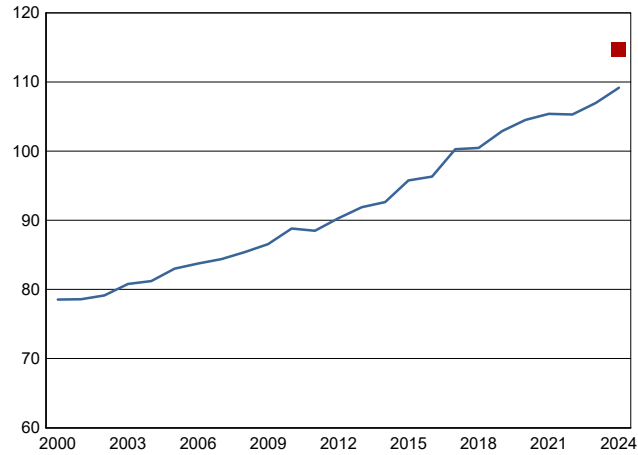


Head & Face

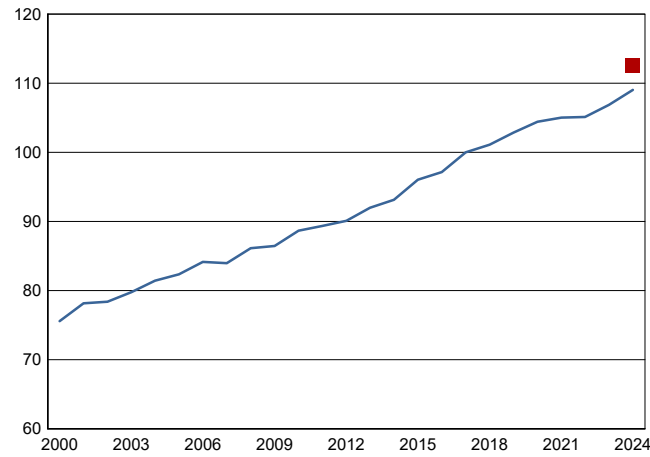


Genetic Trends

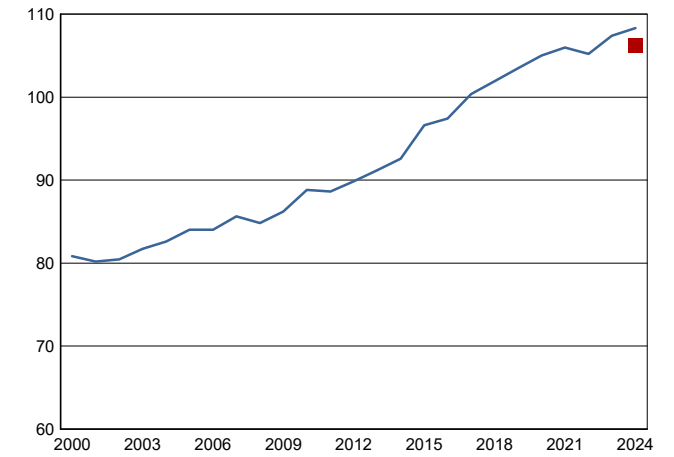
Front Quarter



Centre



Hind Quarter

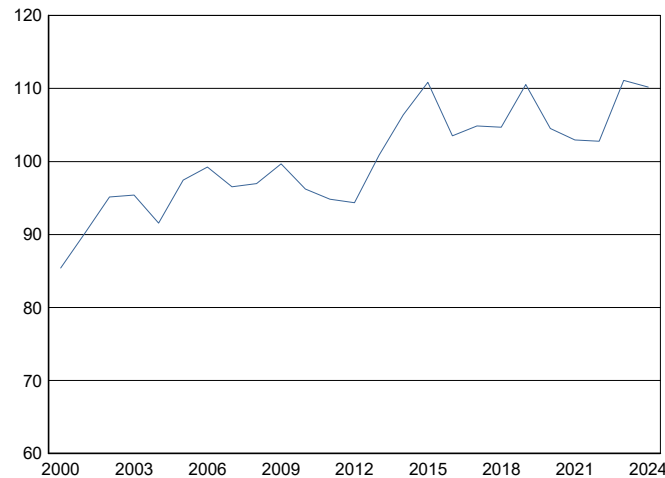


Final Score & Health Traits

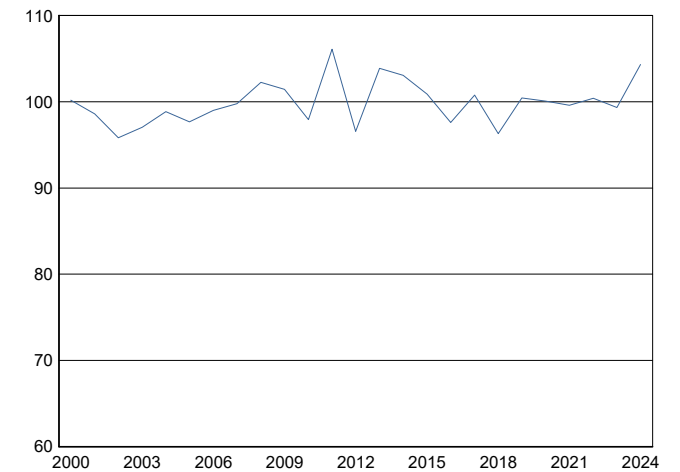
Final Score



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	Sire		%	Hips	Elbows	Litter Size	Move-	Tempe-	Coat	General	Head &	Front	Centre	Hind	Final	Progeny	Progeny	Hips	Elbows	
	BYr	Dam		Acc.	Acc.	Acc.	ment	rament		Appear.	Face	Quarter		Quarter	Score	Litters	Kennels			
KINGSTON SIMSON		LOU-ANDRE BREKER		3.77	89	110	100	81	82	122	98	91	82	95	88	90				
		2020	JAMBAL LIELA		5	5	28	48	21	62	48	61	49	51	53	58				

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	Litters	Progeny Kennels	Hips	Elbows	
REYDALL LEA		BOUWER KOEVOET	6.77	108	104	100	97	86	91	93	97	92	93	95	92	3	1	1			
	2020	HEINEMAN ROXY		5	5	31	39	8	53	38	52	40	42	44	49			1			
KELLER DINA		ELEVATION TOLBOS	7.94	97	111	106	115	112	87	118	119	115	113	106	115						
	2024	REYDALL LEA		5	5	15	39	7	55	39	54	40	42	44	49						

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
LOU-ANDRE BREKER		SUMSARE BLACK LORENZO	11.04	68	120	113	90	79	107	95	94	82	96	80	87	79 10	18 15		11 2
	2014	EGOLI BBD DEBRA		5	5	27	64	34	79	63	78	64	67	69	74				
BOUWER KOEVOET		MIDDELPOS BBD HANNES	5.33	115	95	89	98	106	97	96	98	102	91	100	98	112 17	14 13		10 3
	2017	VOLSPOED FIONA		5	5	36	59	33	75	58	74	60	63	65	70				
ELEVATION TOLBOS		ELEVATION DAX	13.57	87	118	111	126	128	111	139	127	123	121	106	126	54 11	14 11		6 1
	2021	ELEVATION MICA		30	49	40	62	39	76	63	75	63	65	67	72				

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	
JAMBAL LIELA		MIDDELPOS BBD KAISER	10.48	111	99	87	81	96	108	104	103	96	104	107	103	49	6	11			6
	2016	QUREDU SASHA		5	5	54	60	33	76	60	75	61	63	66	70			10			2
HEINEMAN ROXY		AFRIKA MOJO	5.58	101	112	119	92	61	98	87	88	76	90	85	82	41	5	6			6
	2017	HEINEMAN ZHARA		5	5	48	52	25	69	51	68	53	56	58	64			6			1
REYDALL LEA		BOUWER KOEVOET	6.77	108	104	100	97	86	91	93	97	92	93	95	92	3	1	1			
	2020	HEINEMAN ROXY		5	5	31	39	8	53	38	52	40	42	44	49			1			

