

Boer Goat Genetic Analysis

SA Stud Book

03 January 2025

KRANSVLEY BOERDERY

KRANSVLEY GEDEELTE 34

MODIMOLLE

0510



FDM: 2037



CERTIFICATE
OF QUALITY

Valid up to
October 2029

General Information

This **Genetic Report** of your flock enables you to determine the genetic merit and potential of the animals in your herd relative to that of the breed. An animal's performance is determined by two factors, namely the environment and genetics. Good nutrition and management can improve performance, but an animal cannot perform better than its genetic potential. Superior performance due to the environment cannot be carried over to the next generation. It is therefore extremely important not to neglect genetic progress of your flock. Due to the interaction between environment and genetics, it is difficult to identify genetically superior animals on performance data. Estimated Breeding Values (EBVs) are therefore predicted for every animal to determine its genetic potential, as well as its worth as a parent for the next generation. Through the use of EBVs, animals can be compared fairly **within the breed**, therefore across herds, years and production systems. Results presented in this report allow the breeder to identify the underlying genetics of the animals.

Genetic parameters

Genetic parameters (heritability and genetic correlations) are estimated on a breed-basis and are required for the prediction of breeding values. The **heritability** refers to the portion of the variation of a trait in a population that is due to transferrable genetics (the rest of the variation can be attributed to the environment and non-transferrable genetics). Some traits are genetically correlated, which means that a change in one trait will lead to changes in other traits. The strength of this association amongst traits is referred to as a **genetic correlations** and can be desirable or undesirable.

Breeding Values

The prediction of EBVs makes use of performance recordings of the animal as well as those of its relatives, pedigree information and genetic parameters. The deviation of the animal's measurement relative to the average of its contemporary group, forms the basis for identifying the animal's genetic potential for the trait. A **contemporary group** is a group of animals that have been exposed to the same environmental and biological effects, including herd, year, sex and age effects. After adjusting for differences in these effects, animals can fairly be compared and the difference in performance that still persist are then assumed to be due to differences in the genetic merit of the animals.

The EBV predicted for an animal at birth and until it has been measured, is the average EBV of its parents, since the animal received half of its genes from each parent. This mid-parent value makes the assumption that the same half of the parents' genes are carried over to all their offspring. In reality, each offspring receives a random sample of each parent's genes,

therefore mid-parent EBVs are still of low accuracy, but it does indicate the genetic level that can be expected due its parental history. An animal's true genetic merit can be predicted more accurately as more information becomes available, eg. when the animal has been measured or when the number of relatives with measurements increases. Estimated breeding values therefore change over time as more information becomes available. EBVs of animals are published with an **accuracy** (%), which indicates how much information was available for the estimation of breeding values and therefore the confidence with which a breeder can use it. Factors that influence the accuracy of an EBV are the heritability of the trait, the number of measured relatives, the size of the contemporary group, the precision with which the measurements were taken and the completeness of pedigree information. An EBV with an accuracy of 85% or more is less likely to change significantly with subsequent genetic analyses.

Interpretation of breeding values

EBVs are expressed around a **base year** (5 years ago), which means that the average breeding value of the base year is set as zero and all breeding values are expressed relative to this average. An animal with an EBV of +1kg for weaning weight is therefore genetically superior by 1kg compared to an average animal born in the base year. EBVs therefore express genetic merit of animals relative to each other. The true performance of an animal cannot be calculated from the EBV, but it enables the breeder to know which animals will make a better contribution to the next generation. For easier interpretation EBVs are also expressed as breeding value indices. For these indices the average value of the **active population** is set as 100 with a standard deviation of 12. An index of 76 therefore indicates that the animal is 2 standard deviations below the average and an index of 112 indicates that the animal is 1 standard deviation above the average of the active population for the specific trait. Please note that negative EBVs are favourable for Inter-Lambing Period and Age at First Lambing, therefore shorter inter-lambing periods and younger ages at first lambing indicates better fertility. However, breeding value indices are expressed in the same way for all traits, therefore higher indices indicates desirability for the traits and lower indices are undesirable. This makes it easy to identify superior animals for all traits.

The data used in this evaluation has been obtained from LOGIX, as supplied by breeders. Everything possible had been done to present the information correctly. SA Stud Book does not take any responsibility for the use and interpretation of the information from this publication.

Selection Indices

It is easy to select on a single trait, but that is not the best approach to follow. Selecting on only one trait can lead to the deterioration of performance in other traits due to genetic correlations. There are different traits that are important, some being more important than others. A selection index combines multiple traits, each with an economic weight to take the different levels of importance into account. EBVs for different traits cannot simply be added together, since the unit of measurement and range of the values differ and in some cases negative values are favoured. These factors are accounted for in the compilation of a selection index. An overall selection index includes EBVs of all the traits of economic importance, while other selection indices are more focused on specific breeding objectives. Selection indices are expressed around 100, with 100 being the average of the active population, with a standard deviation of 12. A selection index of 124 is therefore 2 standard deviations above the average and an index of 88 is one standard deviation below the average of the active animals of the population.

Two Indices are constructed for the Boer Goat breed, namely the Logix Merit Index and the Reproduction Index. These indices, their purpose and the contribution of the different traits to the indices are summarised as follows :

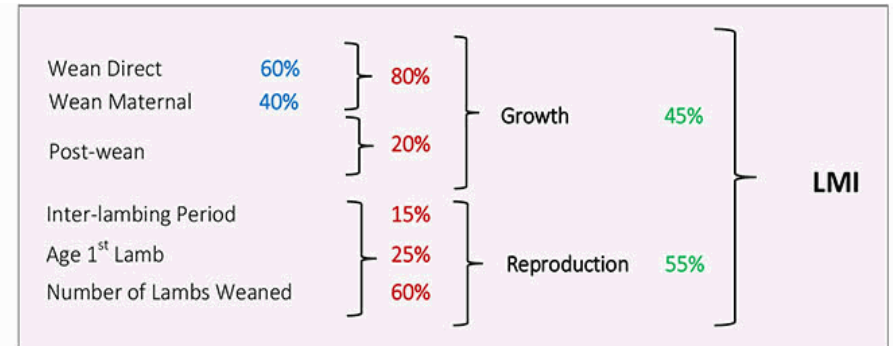
Logix Merit Index (LMI)

This index combines all the traits to select for a balanced, profitable animal that is fertile and delivers a desirable level of production. Selection based on the LMI will lead to breeding of balanced animals that will have the genetic potential to wean at a heavier weight (both due to its own potential and having dams that produce sufficient milk), lambs at an early age, lambs regularly and give multiple lambs. This value is especially important for sustainability, which requires the selection of good, productive replacement animals for the flock.

The LMI is constructed as follows :

$$LMI = (0.1375 * AFL) + (0.0825 * ILP) + (0.216 * Wean Dir) + (0.144 * Wean Mat) + (0.33 * N_Lambs_Weaned) + (0.09 * Post-Wean Dir)$$

Schematically the LMI can be explained as follows :



Reproduction Index (RI)

This index includes Weaning Maternal, Number of Lambs Weaned, Age at First Lambing and Inter-lambing Period. This is especially an important index to consider in the development of a dam line.

The RI is constructed as follows :

$$(0.2 * AFL) + (0.2 * ILP) + (0.3 * Wean Mat) + (0.3 * N_Lambs_Weaned)$$

Schematically it can be explained as follows :



It is always important to consider the traits that contribute to the index individually when selection of animals is based on indices. It sometimes happen that an animal receives a good index due to its exceptional genetic merit of a specific trait, while some of the other traits of the animal in the index might be at undesirable levels for the specific flock's breeding objective, but masked in the index due to the exceptionality of that trait. A sound procedure is to rank animals based on the relevant selection index and then eliminate animals from the list that do not conform towards the flock's breeding objectives when considering the individual traits. Make use of all the available information.

Active Genetic Levels

Genetic Averages : Breeding Values

Trait	Flock			Breed		
	All	Rams	Ewes	All	Rams	Ewes
Weaning Weight Direct	-0.64	-0.67	-0.62	-0.23	-0.17	-0.26
Weaning Weight Maternal	0.04	0.10	-0.01	-0.08	-0.10	-0.08
Weaning Weight Combined	-0.28	-0.24	-0.32	-0.20	-0.19	-0.21
Post-wean Weight	-0.65	-0.70	-0.61	-0.05	0.05	-0.10
Number Lambs Weaned	0.08	0.02	0.13	-0.16	-0.25	-0.12
Total Weight Weaned	-0.56	-0.56	-0.55	-0.41	-0.42	-0.41
Age at First Lambing	0.70	0.33	0.94	0.47	0.56	0.43
Inter-lambing Period	-1.45	-1.50	-1.42	-0.05	-0.02	-0.07
Selection Indices						
Logix Merit Index	99	99	98	99	99	99
Reproduction Index	104	105	103	100	99	100
Inbreeding						
Inbreeding (%)	4.54	2.80	5.36	4.84	5.31	4.64
Number of Animals						
Number of Animals	28	9	19	37236	10879	26263

** Averages of all active animals in the flock.

Breeding Value Indices

Trait	Flock **		
	All	Rams	Ewes
Weaning Weight Direct	93.9	93.6	94.1
Weaning Weight Maternal	103.5	105.2	102.2
Weaning Weight Comb	97.1	97.8	96.5
Post-wean Weight	93.9	93.6	94.2
Number Lambs Weaned	100.8	100.5	101.1
Total Weight Weaned	97.6	97.6	97.7
Age First Lambing	98.6	99.1	98.3
Interlambing Period	105.8	106.0	105.8
Selection Indices			
Logix Merit Index	98.6	98.8	98.4
Ewe Index	104.0	105.0	103.3
Growth Index	94.2	94.1	94.3
Inbreeding			
Inbreeding (%)	4.54	2.80	5.36
Number of Animals			
Number of Animals	28	9	19

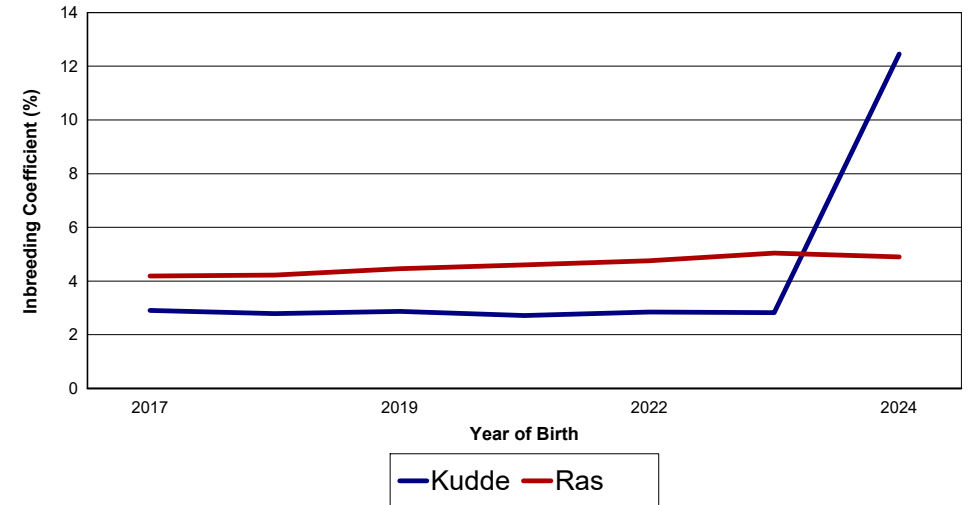
** Averages of all active animals in the flock.

Inbreeding

Inbreeding primarily leads to decreased fertility and low survivability of lambs. The effects of inbreeding can be observed from 6.25% onwards. It is therefore highly recommended to record pedigree information as accurately and completely as possible and to use a selection programme for selection of unrelated rams.

Incomplete or incorrect pedigree information can be reported to SA Stud Book. Inbreeding is dependent on pedigree information. Conventional methods for the Calculation of inbreeding coefficients usually assume that unknown parents are unrelated. However, this is usually far from the truth. An algorithm is used for the calculation of inbreeding, where the average inbreeding coefficient is assigned to unknown parents based on the generation in which they were born. This result is a more accurate reflection of inbreeding of the herd and breed.

Average Inbreeding per Year of Birth



Level and Rate of Inbreeding

Year of Birth	Level* (%)	Rate (% / year)
2017 - 2024	12.45	1.36
Recommended:	< 6.25	< 0.1 - 0.2

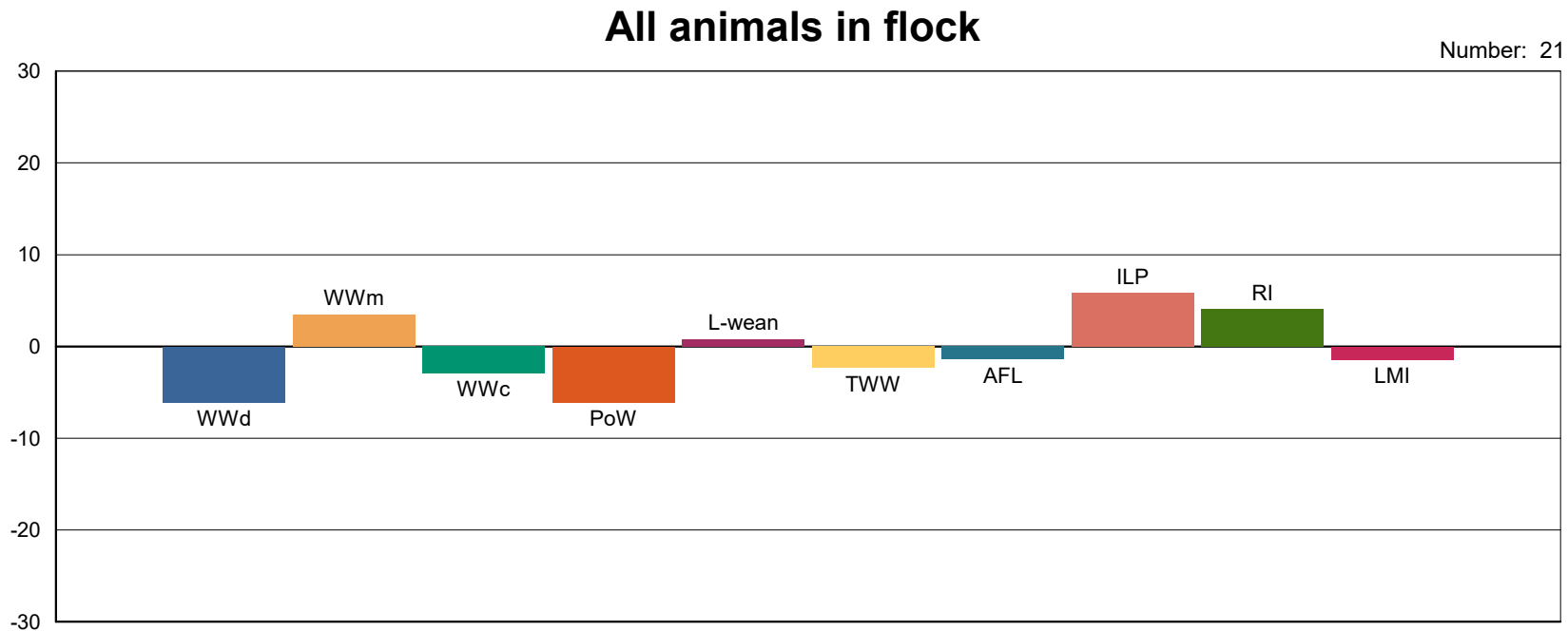
*Of the last year of birth

Pedigree Information

	Number	%
Known Sires	21	75
Known Dams	21	75

Note: Inbreeding can be under-estimated if pedigree information is incomplete or incorrect

Genetic Windows



WWd: Weaning Weight Direct
WWm: Weaning Weight Maternal
WWc: Weaning Weight Combined
PoW: Post-Wean Weight
L-wean: Number of Lambs Weaned
TWW: Total Weight Weaned
AFL: Age at First Lambing
ILP: Inter-lambing Period
RI: Reproduction Index
LMI: Logix Merit Index

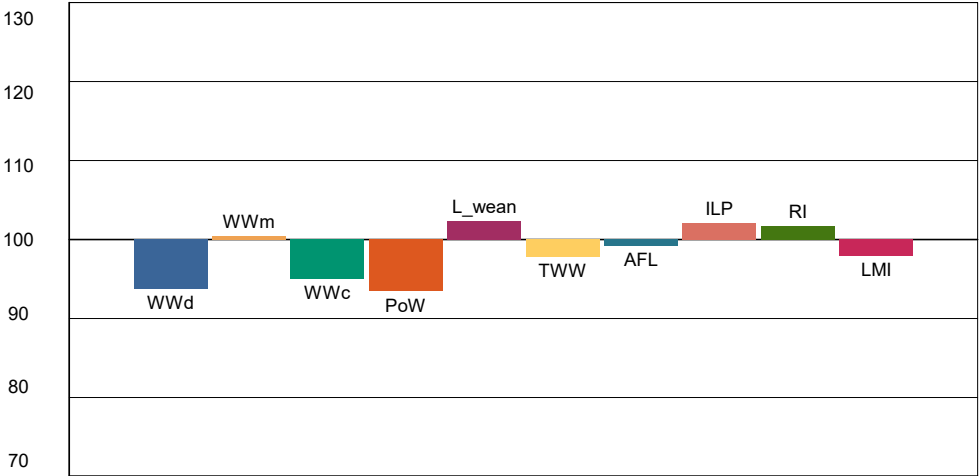
The genetic windows allow a quick overview of the genetic status of the flock compared to the breed. The values presented here are the average EBV indices of all the active animals of the flock, of the dams and sires of the active animals of the flock, as well as of the ewes and rams that are younger than 2-years old. An index of 100 is equal to the average of the active measured population. Due to the higher selection intensity on rams (selection is more strict since a much smaller percentage of young animals are retained in the flock), the expectation is for the average index of the sires to be higher than that of the dams.

Remember that the EBV index for AFL and ILP are presented in such a way that an index above 100 indicates animals that have a lower EBV for these traits.

Genetic Windows

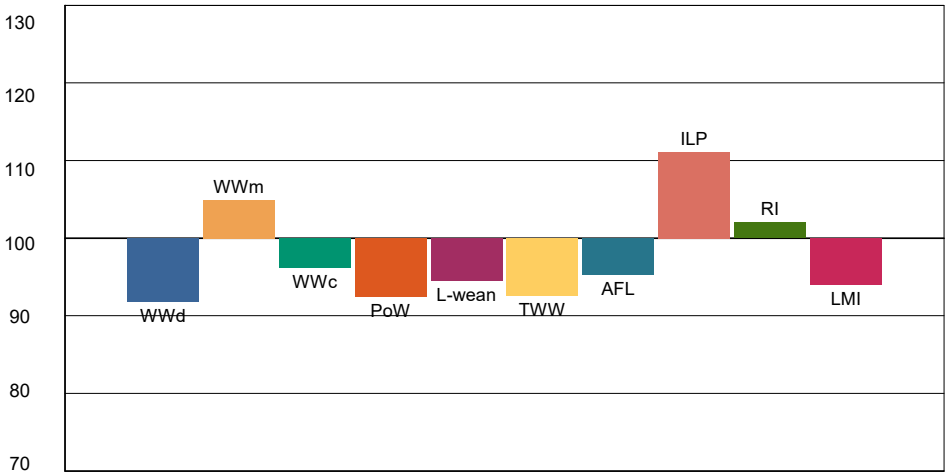
Dams

Number: 4



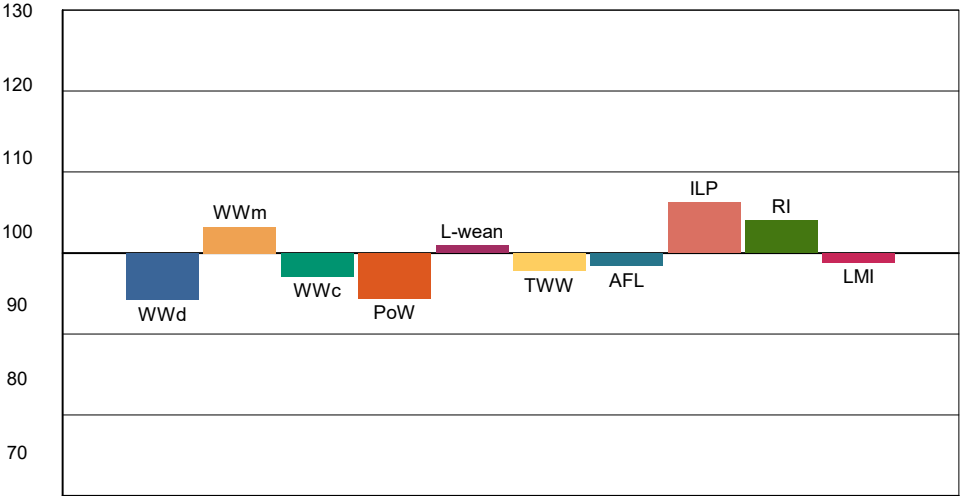
Sires

Number: 4



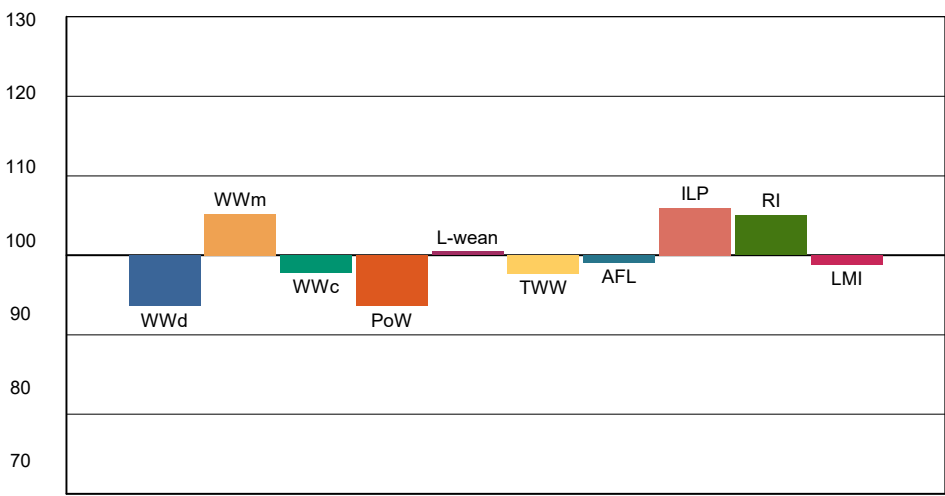
Young Ewes

Number: 9



Young Rams

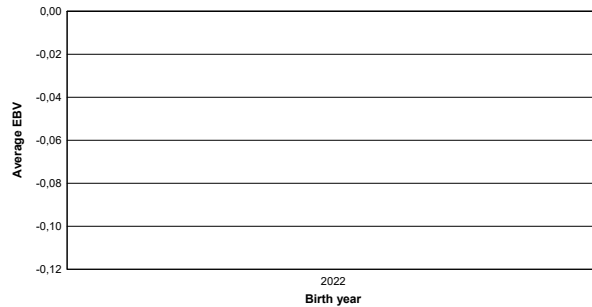
Number: 9



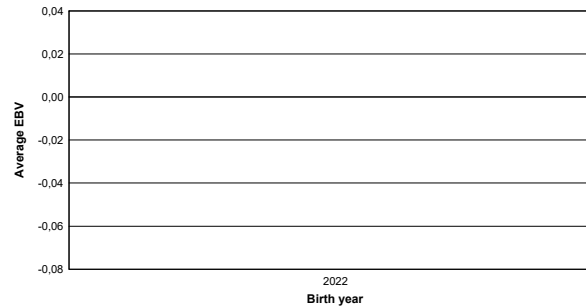
Genetic Trends

Genetic trends are based on measured animals that were bred by the specific breeder.

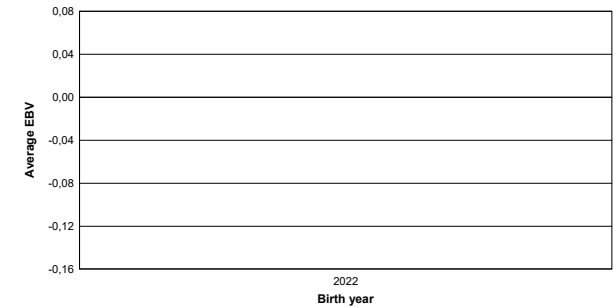
Weaning Weight Direct



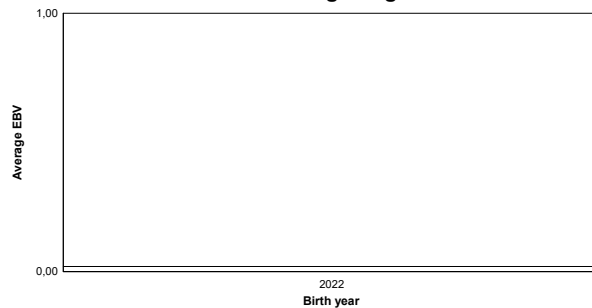
Wean Weight Maternal



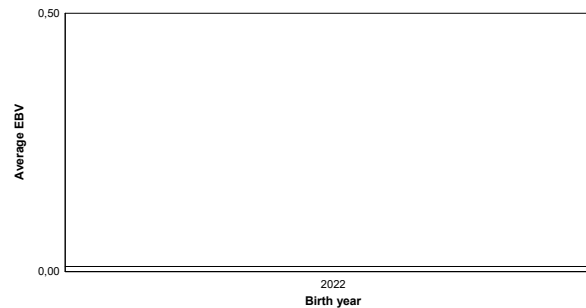
Weaning Weight Combined



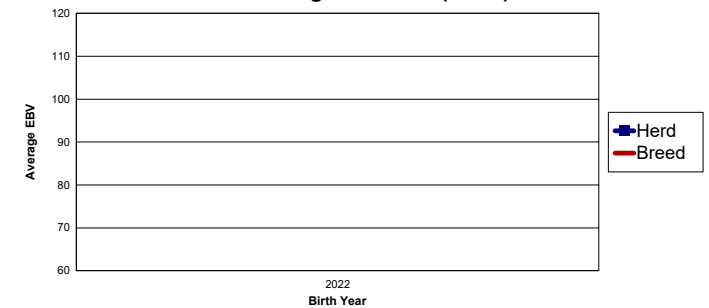
Post-weaning Weight



Number of Lambs Weaned

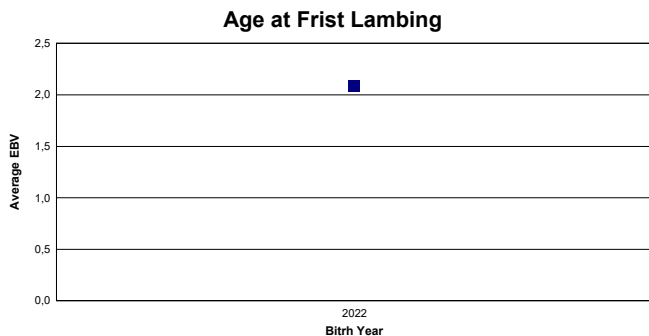


Total Weight Weaned (TWW)

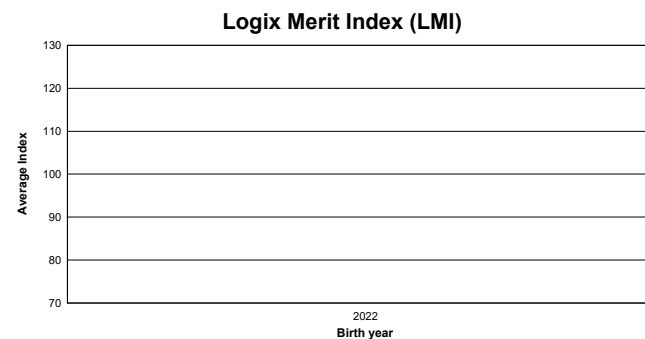
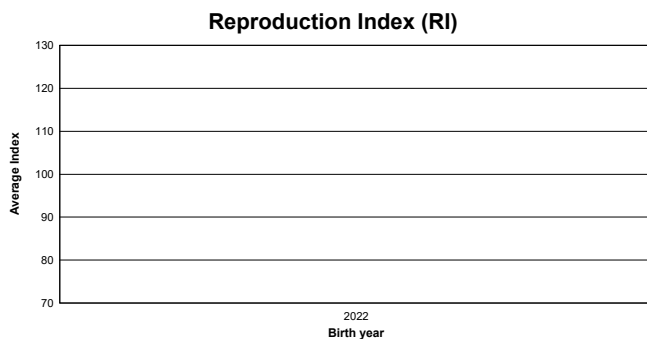
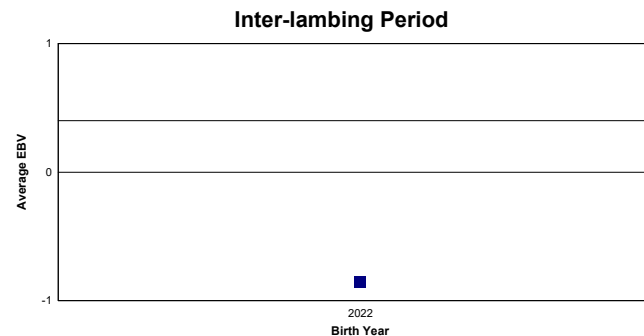


Genetic Trends

Genetic trends are based on measured animals that were bred by the specific breeder.



For AFL and ILP flock genetic trends below breed averages are desirable.



Genetic Trends of Breed

Birth year	Weaning Weight EBV				Post-wean		Lambs Weaned		TWW		AFL		ILP		RI		LMI	
	Number	Dir	Mat	Comb	Number	EBV	Number	EBV	Number	EBV	Number	EBV	Number	EBV	Number	EBV	Number	EBV
2012	1431	-0.32	0.01	-0.15	108	0.19	470	-0.10	1431	99	1140	-1.77	663	0.12	1431	102	1431	99
2013	1336	-0.37	-0.01	-0.20	108	0.31	507	-0.14	1336	97	1072	-1.89	650	0.66	1336	100	1336	97
2014	1007	-0.35	-0.10	-0.28	58	-0.15	676	-0.26	1007	96	1063	-0.74	658	0.63	1007	98	1007	95
2015	1626	-0.18	0.03	-0.06	233	0.87	711	0.27	1626	100	1164	-1.40	706	0.25	1626	103	1626	101
2016	1804	-0.24	0.00	-0.12	239	0.53	795	-0.10	1804	99	1273	-1.00	874	0.02	1804	101	1804	99
2017	2163	-0.30	-0.03	-0.17	313	0.91	824	0.14	2120	98	1371	-0.94	961	0.25	2120	100	2120	98
2018	2547	-0.28	0.05	-0.09	236	0.38	866	0.11	2519	99	1783	0.44	1207	-0.62	2519	102	2519	99
2019	2144	0.00	0.00	0.00	254	0.00	801	-0.01	2138	100	2032	0.00	1275	0.00	2138	101	2138	100
2020	2459	-0.10	-0.01	-0.06	436	-0.77	724	0.32	2459	101	2597	0.50	1414	-0.15	2459	101	2459	100
2021	1738	-0.04	-0.13	-0.15	330	-0.19	605	0.19	1738	101	2579	0.90	1087	-0.16	1738	102	1738	102
2022	2514	-0.11	-0.08	-0.13	427	0.13	371	0.06	2514	101	1882	0.13	331	0.38	2514	102	2514	101
2023	2843	-0.19	-0.08	-0.18	460	0.10	31	-0.26	2839	100	460	1.21			2839	100	2839	99

Genetic Trends of Flock

Birth year	Weaning Weight EBV				Post-Wean		Lambs Weaned		TWW		AFL		ILP		RI		LMI	
	Number	Dir	Mat	Comb	Number	EBV	Number	EBV	Number	EBV	Number	EBV	Number	EBV	Number	EBV	Number	EBV
2022											3	2.09	1	-1.25				

Breeding Value & Selection Index Percentiles

The percentiles indicate the ranking of the animals' EBVs and Selection Indices within the active population.

For example, if an animal's EBV for a specific trait falls between the maximum and 99% percentile of the trait, it means that this animal ranks in the top 1% of the active population, or this animal's genetic merit for the trait is better than 99% of that of the active population.

Should the EBV for a specific trait falls between the 5% and 10% percentile, it means that the animal ranks in the bottom 10% of the active population for the specific trait, or the animal's genetic merit is worse than 90% of the active population.

Note that the percentiles for Age at First Lambing and Inter-lambing Period EBVs work on the reverse scale.

All Active Animals

Trait	AVG	SA*	Min	Percentiles (%)															Max
				1	5	10	20	25	30	40	50	60	70	75	80	90	95	99	
Weaning Weight Direct	-0.23	0.72	-3.81	-1.89	-1.20	-0.93	-0.72	-0.69	-0.63	-0.48	-0.33	-0.19	0.00	0.12	0.26	0.67	1.09	2.03	5.65
Weaning Weight Maternal	-0.08	0.30	-2.14	-0.90	-0.58	-0.45	-0.29	-0.24	-0.19	-0.13	-0.07	-0.01	0.04	0.06	0.10	0.24	0.38	0.76	2.13
Weaning Weight Combined	-0.20	0.43	-2.48	-1.31	-0.84	-0.63	-0.45	-0.40	-0.36	-0.30	-0.25	-0.17	-0.07	-0.02	0.05	0.27	0.54	1.20	3.03
Post-Wean Weight	-0.05	1.13	-6.97	-2.65	-1.46	-1.11	-0.88	-0.80	-0.69	-0.46	-0.21	0.05	0.34	0.51	0.72	1.35	1.98	3.47	7.93
Number of Lambs Weaned	-0.16	1.48	-8.10	-4.10	-2.80	-2.10	-1.30	-1.00	-0.80	-0.30	0.10	0.40	0.70	0.80	0.80	1.10	2.00	3.80	8.70
Total Weight Weaned	-0.41	1.19	-6.40	-3.33	-2.33	-1.80	-1.22	-1.02	-0.84	-0.57	-0.36	-0.17	-0.04	0.06	0.23	0.76	1.50	3.62	7.59
Age at First Lambing	0.47	-6.68	67.29	18.60	10.64	7.66	4.68	3.67	2.74	1.45	0.28	-0.48	-1.62	-2.37	-3.32	-6.21	-9.67	-20.60	-74.92
Interlambing Period	-0.06	-3.64	23.65	9.77	6.00	4.34	2.54	1.93	1.46	0.57	-0.24	-0.82	-1.66	-2.14	-2.62	-4.29	-5.83	-9.32	-22.34
Reproduction Index	100	9	47	74	84	88	93	95	97	99	101	103	105	106	106	109	112	121	149
Logix Merit Index	99	8	63	79	86	89	93	95	96	98	99	100	101	102	103	107	111	124	143

*SD : Standard Deviation. An indicator of how far breeding values/selection indices are distributed around the average.

Breeding Value & Selection Index Percentiles

All Active Rams

Trait	AVG	SA*	Min	Percentiles (%)															Max
				1	5	10	20	25	30	40	50	60	70	75	80	90	95	99	
Weaning Weight Direct	-0.17	0.76	-3.81	-2.00	-1.17	-0.89	-0.69	-0.65	-0.57	-0.41	-0.28	-0.13	0.07	0.19	0.34	0.76	1.17	2.24	5.65
Weaning Weight Maternal	-0.10	0.27	-1.89	-0.83	-0.56	-0.44	-0.30	-0.25	-0.21	-0.14	-0.08	-0.03	0.03	0.04	0.08	0.21	0.33	0.59	1.20
Weaning Weight Combined	-0.19	0.41	-1.79	-1.22	-0.79	-0.61	-0.43	-0.38	-0.35	-0.29	-0.24	-0.16	-0.06	-0.01	0.06	0.27	0.53	1.18	3.03
Post-Wean Weight	0.05	1.14	-6.78	-2.51	-1.38	-1.05	-0.83	-0.71	-0.56	-0.35	-0.11	0.15	0.44	0.64	0.83	1.45	2.08	3.68	7.93
Number of Lambs Weaned	-0.25	1.45	-6.60	-4.00	-2.70	-2.10	-1.40	-1.10	-0.90	-0.40	-0.10	0.30	0.60	0.70	0.80	1.10	2.00	3.70	7.20
Total Weight Weaned	-0.42	1.22	-5.10	-3.20	-2.33	-1.84	-1.28	-1.08	-0.88	-0.60	-0.38	-0.19	-0.05	0.06	0.23	0.76	1.54	3.97	7.47
Age at First Lambing	0.56	-6.19	44.20	16.75	10.07	7.43	4.67	3.72	2.85	1.58	0.41	-0.34	-1.41	-2.09	-3.02	-5.70	-8.96	-19.44	-55.35
Interlambing Period	-0.01	-3.37	20.51	9.05	5.65	4.23	2.51	1.93	1.45	0.62	-0.21	-0.79	-1.60	-2.07	-2.52	-4.09	-5.40	-8.19	-14.12
Reproduction Index	99	9	47	75	84	88	93	94	96	99	101	103	104	105	106	108	111	119	134
Logix Merit Index	99	8	66	80	86	89	93	94	95	97	99	100	101	102	103	106	111	125	142

All Active Ewes

Trait	AVG	SA*	Min	Percentiles (%)															Max
				1	5	10	20	25	30	40	50	60	70	75	80	90	95	99	
Weaning Weight Direct	-0.26	0.71	-3.42	-1.83	-1.21	-0.94	-0.74	-0.69	-0.66	-0.51	-0.36	-0.21	-0.03	0.08	0.22	0.62	1.05	1.91	4.32
Weaning Weight Direct	-0.08	0.31	-2.14	-0.92	-0.59	-0.45	-0.29	-0.23	-0.18	-0.12	-0.06	0.00	0.04	0.07	0.11	0.25	0.41	0.81	2.13
Weaning Weight Combined	-0.21	0.43	-2.48	-1.34	-0.87	-0.64	-0.46	-0.41	-0.36	-0.30	-0.25	-0.18	-0.08	-0.02	0.04	0.27	0.54	1.22	2.45
Post-Wean Weight	-0.10	1.12	-6.97	-2.72	-1.50	-1.15	-0.88	-0.84	-0.72	-0.51	-0.27	0.00	0.28	0.45	0.66	1.30	1.92	3.35	7.45
Number of Lambs Weaned	-0.12	1.49	-8.10	-4.20	-2.80	-2.10	-1.20	-1.00	-0.70	-0.20	0.20	0.50	0.80	0.80	0.80	1.10	2.00	3.80	8.70
Total Weight Weaned	-0.41	1.18	-6.40	-3.38	-2.32	-1.77	-1.21	-1.00	-0.82	-0.55	-0.35	-0.17	-0.04	0.07	0.23	0.76	1.47	3.46	7.59
Age at First Lambing	0.43	-6.90	67.29	19.38	10.94	7.75	4.68	3.65	2.69	1.37	0.20	-0.54	-1.72	-2.49	-3.45	-6.45	-9.92	-20.86	-74.92
Interlambing Period	-0.08	-3.76	23.65	10.06	6.15	4.39	2.56	1.93	1.46	0.55	-0.25	-0.82	-1.69	-2.17	-2.69	-4.44	-6.05	-9.87	-22.34
Reproduction Index	100	9	48	74	84	89	94	95	97	99	102	103	105	106	106	109	113	121	149
Logix Merit Index	99	8	63	79	86	89	93	95	96	98	99	100	101	102	103	107	111	123	143

*SD : Standard Deviation. An indicator of how far breeding values/selection indices are distributed around the average.

Rams

Inbreeding in red is high

EBV - Estimated Breeding Value

Indices >=124
Above breed average
Indices <= 76

Acc: Accuracy of the breeding value
EBVs with an accuracy below 5% are not printed

Index: Expresses the EBV around 100 where 100 is set as the average EBV of active animals

Animal Information						Selection Indices			EBV - Weights					EBV - Fertility						
Animal ID Comp no.			Parents			% In-breeding	Logix Merit Index	Reproducti on	Wean Weight		Post-Wean		Number Weaned	TWW	AFL		ILP		Dam	
									Dir	Mat	Comb				Acc	Index	Acc	Index	Acc	Index
Active Breed Average:						100	100	-0.23	-0.08	-0.20	-0.05	-0.16	-0.41	0.47	-0.05					
1749	20	0040	1484	19	0007	2.59	99	106	-0.54	0.16	-0.10	-0.32	-0.40	-0.61	0.17	-2.48	4			
	90954553		1749	16	0266				25	95	22	107	14	98	21	97	26	99	18	109
2037	23	0003	1749	20	0040	2.79	100	106	-0.61	0.10	-0.20	-0.60	0.20	-0.39	-0.05	-1.51	4			
	97173389		1751	18	0265				12	94	11	105	7	102	10	99	13	100	9	106
2037	23	0004	1749	20	0040	2.91	100	106	-0.61	0.10	-0.20	-0.60	0.20	-0.39	-0.05	-1.51	2			
	97173371		1751	17	0122				12	94	11	105	7	102	10	99	13	100	9	106
2098	23	0007	959	20	0129	2.69	92	101	-1.26	0.10	-0.53	-1.91	-0.50	-1.46	1.91	-0.08	3			
	96977202		920	20	0022				27	87	18	105	8	98	19	92	25	97	15	102
2037	23	0008	1749	20	0040	2.84	100	106	-0.61	0.10	-0.20	-0.60	0.20	-0.39	-0.05	-1.51	1			
	97173421		1751	20	0041				12	94	11	105	7	102	10	99	13	100	9	106
2037	23	0010	1749	20	0040	2.87	100	106	-0.61	0.10	-0.20	-0.60	0.20	-0.39	-0.05	-1.51	2			
	98323645		1797	19	0803				12	94	11	105	7	102	10	99	13	100	9	106
2037	23	0011	1749	20	0040	2.87	100	106	-0.61	0.10	-0.20	-0.60	0.20	-0.39	-0.05	-1.51	2			
	98323652		1797	19	0803				12	94	11	105	7	102	10	99	13	100	9	106
2037	23	0012	1749	20	0040	2.84	98	104	-0.59	0.03	-0.27	-0.50	-0.10	-0.63	1.13	-1.87	2			
	98323660		2037	22	0004				14	94	13	103	8	100	12	97	17	98	11	107
2037	24	0001	1749	20	0040	2.79	100	106	-0.61	0.10	-0.20	-0.60	0.20	-0.39	-0.05	-1.51	2			
	98641301		1751	18	0205				12	94	11	105	7	102	10	99	13	100	9	106
Ram Flock Average:						99	105	-0.67	0.10	-0.24	-0.70	0.02	-0.56	0.33	-1.50					
Number of rams in the flock: 9																				

Ewes

Inbreeding in red is high

EBV - Estimated Breeding Value

Indices >=124
Above breed average
Indices <= 76

Acc: Accuracy of the breeding value
EBVs with an accuracy below 5% are not printed

Index: Expresses the EBV around 100 where 100 is set as the average EBV of active animals

Animal Information					Selection Indices		EBV - Weights				EBV - Fertility								
Animal Comp no.				% In- breeding	Logix Merit Index	Repro- duction Index	Wean Weight		Post-Wean		Number Weaned	TWW		AFL		ILP		Times EPI Lamberd	
							Dir	Mat	Comb										
							EBV Acc	EBV Index	EBV Acc	EBV Index		EBV Index	EBV Acc	EBV Index	EBV Acc	EBV Index	EBV Acc	EBV Index	EBV Acc
Active Breed Average:					100	100	-0.23	-0.08	-0.20	-0.05	-0.16	-0.41	0.47	-0.05					
2037 22 0002 97136089	970 1797	19 19	0088 0803	2.87	97	101	-0.65 15	-0.11 94	-0.44 94	-0.68 7	0.20 6	-0.64 13	2.09 21	-1.25 13	1				
2037 22 0003 97136030	970 1797	19 18	0088 0527	2.79	97	101	-0.65 15	-0.11 94	-0.44 94	-0.68 7	0.20 6	-0.64 13	2.09 21	-1.25 13	1				
2037 22 0004 97136048	970 1797	19 18	0088 0527	2.79	97	101	-0.65 15	-0.11 94	-0.44 94	-0.68 7	0.20 6	-0.64 13	2.09 21	-1.25 13	2				
2037 23 0001 97173363	1749 1751	20 17	0040 0122	2.91	100	106	-0.61 12	0.10 11	-0.20 98	-0.60 10	0.20 7	-0.39 10	-0.05 13	-1.51 9	0				
2037 23 0005 97173397	1749 1797	20 18	0040 0527	2.79	100	106	-0.61 12	0.10 11	-0.20 98	-0.60 10	0.20 7	-0.39 10	-0.05 13	-1.51 9	0				
2037 23 0006 97173405	1749 1751	20 18	0040 0205	2.79	100	106	-0.61 12	0.10 11	-0.20 98	-0.60 10	0.20 7	-0.39 10	-0.05 13	-1.51 9	0				
2037 23 0007 97173413	1749 1751	20 18	0040 0205	2.79	100	106	-0.61 12	0.10 11	-0.20 98	-0.60 10	0.20 7	-0.39 10	-0.05 13	-1.51 9	0				
2037 23 0009 97173439	1749 1751	20 20	0040 0041	2.84	100	106	-0.61 12	0.10 11	-0.20 98	-0.60 10	0.20 7	-0.39 10	-0.05 13	-1.51 9	0				
2037 24 0002 98641319	1749 1751	20 18	0040 0205	2.79	100	106	-0.61 12	0.10 11	-0.20 98	-0.60 10	0.20 7	-0.39 10	-0.05 13	-1.51 9	0				
2037 24 0003 99315806	1749 2037	20 22	0040 0003	2.84	98	104	-0.59 14	0.03 13	-0.27 97	-0.50 11	-0.10 8	-0.63 12	1.13 17	-1.87 11	0				
2037 24 0004 101765592	970 2037	19 22	0088 0004	26.90	96	99	-0.63 17	-0.19 94	-0.50 93	-0.58 8	-0.10 7	-0.88 14	3.26 23	-1.61 15	0				
2037 24 0007 101765600	970 2037	19 22	0088 0002	26.95	96	99	-0.63 17	-0.19 94	-0.50 93	-0.58 8	-0.10 7	-0.88 14	3.26 23	-1.61 15	0				
Ewe flock average: Total ewes in flock: 12					98	103	-0.62	-0.01	-0.32	-0.61	0.13	-0.55	0.94	-1.42					

Sires Used in Flock

*Inbreeding in red is high

EBV - Estimated Breeding Value

Indices >=124
Above breed average
Indices <= 76

Acc: Accuracy of the breeding value
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Index: Expresses the EBV around 100 where 100 is set as the average EBV of active animals

Animal Information		Parents & Progeny				Selection Indices		EBV - Weights				EBV - Fertility				
Animal ID Computer nr	% In-breeding	Sire ID Dam ID	1st Generation		2nd Generation	Logix Merit Index	Reprod Index	Weaning Weight		Comb	Post-Wean	Number Weaned	TWW	AFL	ILP	Dam
			Progeny	Number	Progeny											
			y	Herds	Weaned			Herds		Dir EBV Acc Index	Mat EBV Acc Index	EBV Index	EBV Acc Index	EBV Acc Index	EBV Acc Index	EBV Acc Index
		Active Breed Average:				100	100	-0.23	-0.08	-0.20	-0.05	-0.16	-0.41	0.47	-0.05	
1 1484 19 0007 86545142	2.17	762 14 0056 1484 16 0054				98	107	-0.38 49 97	0.29 45 111	0.10 104	0.24 40 100	-1.60 29 91	-1.05 43 95	1.39 49 98	-5.49 36 117	3
2 970 19 0088 85930402	2.04	HOK 15 0035 970 16 0009				94	97	-0.61 30 94	-0.27 27 95	-0.57 92	-0.48 14 95	-0.40 12 98	-1.11 25 94	4.44 42 94	-1.97 26 107	7
3 1749 20 0040 90954553	2.59	1484 19 0007 1749 16 0266				99	106	-0.54 25 95	0.16 22 107	-0.10 100	-0.32 20 96	-0.40 14 98	-0.61 21 97	0.17 26 99	-2.48 18 109	4
4 959 20 0129 89913933	12.64	959 19 0080 959 18 0063				85	99	-1.84 54 81	0.16 36 107	-0.76 89	-2.95 20 78	-1.70 17 91	-2.70 39 84	6.61 50 91	-3.16 24 111	87 5
		Sire Flock Average: Number of sires used in the flock: 4				94	102	-0.84	0.09	-0.33	-0.88	-1.03	-1.37	3.15	-3.27	

Ram Selection List: LMI

Animals sorted on LMI

Inbreeding in red is high

EBV - Estimated Breeding Value

Indices >=124
Above breed average
Indices <= 76

Acc: Accuracy of the breeding value
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Index: Expresses the EBV around 100 where 100 is set as the average EBV of active animals

Animal Information		Parents & Progeny			Selection Indices		EBV - Weights				EBV - Fertility				
Animal ID Computer nr	% In-breeding	Sire ID Dam ID	1st Generation	2nd Generation	Logix Merit Index	Repro- duction Index	Weaning Weight		Post-Wean	Number Weaned	TWW	AFL	ILP	Dam	
			Progeny Number	Progeny Number			Dir	Mat							Comb
			Weaned Herds	Weaned Herds			EBV Acc Index	EBV Acc Index	EBV Index	EBV Acc Index	EBV Acc Index	EBV Acc Index	EPI	Times Lamb	
			Active Breed Average:		100	100	-0.23	-0.08	-0.20	-0.05	-0.16	-0.41	0.47	-0.05	
1	2037 24 0001 98641301	2.79	749 20 0040 751 18 0205		100	106	-0.61 12 94	0.10 11 105	-0.20 98	-0.60 10 94	0.20 7 102	-0.39 10 99	-0.05 13 100	-1.51 9 106	2
2	2037 23 0008 97173421	2.84	749 20 0040 751 20 0041		100	106	-0.61 12 94	0.10 11 105	-0.20 98	-0.60 10 94	0.20 7 102	-0.39 10 99	-0.05 13 100	-1.51 9 106	1
3	2037 23 0011 98323652	2.87	749 20 0040 797 19 0803		100	106	-0.61 12 94	0.10 11 105	-0.20 98	-0.60 10 94	0.20 7 102	-0.39 10 99	-0.05 13 100	-1.51 9 106	2
4	2037 23 0004 97173371	2.91	749 20 0040 751 17 0122		100	106	-0.61 12 94	0.10 11 105	-0.20 98	-0.60 10 94	0.20 7 102	-0.39 10 99	-0.05 13 100	-1.51 9 106	2
5	2037 23 0010 98323645	2.87	749 20 0040 797 19 0803		100	106	-0.61 12 94	0.10 11 105	-0.20 98	-0.60 10 94	0.20 7 102	-0.39 10 99	-0.05 13 100	-1.51 9 106	2
6	2037 23 0003 97173389	2.79	749 20 0040 751 18 0265		100	106	-0.61 12 94	0.10 11 105	-0.20 98	-0.60 10 94	0.20 7 102	-0.39 10 99	-0.05 13 100	-1.51 9 106	4
7	1749 20 0040 90954553	2.59	484 19 0007 749 16 0266		99	106	-0.54 25 95	0.16 22 107	-0.10 100	-0.32 20 96	-0.40 14 98	-0.61 21 97	0.17 26 99	-2.48 18 109	4
8	2037 23 0012 98323660	2.84	749 20 0040 7037 22 0004		98	104	-0.59 14 94	0.03 13 103	-0.27 97	-0.50 11 95	-0.10 8 100	-0.63 12 97	1.13 17 98	-1.87 11 107	2
9	2098 23 0007 96977202	2.69	959 20 0129 920 20 0022		92	101	-1.26 27 87	0.10 18 105	-0.53 93	-1.91 10 85	-0.50 8 98	-1.46 19 92	1.91 25 97	-0.08 15 102	3

Ewe Selection List: LMI

Animals sorted on LMI

Inbreeding in red is high

EBV - Estimated Breeding Value

Indices >=124
Above breed average
Indices <= 76

Acc: Accuracy of the breeding value
EBVs with an accuracy below 5% are not printed

Index: Expresses the EBV around 100 where 100 is set as the average EBV of active animals

Animal Information		Parents	Selection Indices		EBV - Weights				EBV - Fertility							
Animal ID Computer nr	% In-breeding	Sire ID Dam ID	Logix Merit Index	Reproduction Index	Weaning Weight		Comb	Post-Wean	Number Weaned	TWW	AFL		ILP		EPI	Times Lambled
					Dir EBV Acc Index	Mat EBV Acc Index					EBV Acc Index	EBV Acc Index	EBV Acc Index	EBV Acc Index		
Active Breed Average:			100	100	-0.23	-0.08	-0.20	-0.05	-0.16	-0.41	0.47	-0.05				
1	2037 23 0005 97173397	2.79	1749 20 0040 1797 18 0527	100	106	-0.61 12 94	0.10 11 105	-0.20 98	-0.60 10 94	0.20 7 102	-0.39 10 99	-0.05 13 100	-1.51 9 106	0		
2	2037 24 0002 98641319	2.79	1749 20 0040 1751 18 0205	100	106	-0.61 12 94	0.10 11 105	-0.20 98	-0.60 10 94	0.20 7 102	-0.39 10 99	-0.05 13 100	-1.51 9 106	0		
3	2037 23 0009 97173439	2.84	1749 20 0040 1751 20 0041	100	106	-0.61 12 94	0.10 11 105	-0.20 98	-0.60 10 94	0.20 7 102	-0.39 10 99	-0.05 13 100	-1.51 9 106	0		
4	2037 23 0007 97173413	2.79	1749 20 0040 1751 18 0205	100	106	-0.61 12 94	0.10 11 105	-0.20 98	-0.60 10 94	0.20 7 102	-0.39 10 99	-0.05 13 100	-1.51 9 106	0		
5	2037 23 0001 97173363	2.91	1749 20 0040 1751 17 0122	100	106	-0.61 12 94	0.10 11 105	-0.20 98	-0.60 10 94	0.20 7 102	-0.39 10 99	-0.05 13 100	-1.51 9 106	0		
6	2037 23 0006 97173405	2.79	1749 20 0040 1751 18 0205	100	106	-0.61 12 94	0.10 11 105	-0.20 98	-0.60 10 94	0.20 7 102	-0.39 10 99	-0.05 13 100	-1.51 9 106	0		
7	2037 24 0003 99315806	2.84	1749 20 0040 2037 22 0003	98	104	-0.59 14 94	0.03 13 103	-0.27 97	-0.50 11 95	-0.10 8 100	-0.63 12 97	1.13 17 98	-1.87 11 107	0		
8	2037 22 0003 97136030	2.79	970 19 0088 1797 18 0527	97	101	-0.65 15 94	-0.11 14 99	-0.44 94	-0.68 7 94	0.20 6 102	-0.64 13 97	2.09 21 97	-1.25 13 105	1		
9	2037 22 0002 97136089	2.87	970 19 0088 1797 19 0803	97	101	-0.65 15 94	-0.11 14 99	-0.44 94	-0.68 7 94	0.20 6 102	-0.64 13 97	2.09 21 97	-1.25 13 105	1		
10	2037 22 0004 97136048	2.79	970 19 0088 1797 18 0527	97	101	-0.65 15 94	-0.11 14 99	-0.44 94	-0.68 7 94	0.20 6 102	-0.64 13 97	2.09 21 97	-1.25 13 105	2		
11	2037 24 0007 101765600	26.95	970 19 0088 2037 22 0002	96	99	-0.63 17 94	-0.19 15 97	-0.50 93	-0.58 8 94	-0.10 7 100	-0.88 14 96	3.26 23 95	-1.61 15 106	0		
12	2037 24 0004 101765592	26.90	970 19 0088 2037 22 0004	96	99	-0.63 17 94	-0.19 15 97	-0.50 93	-0.58 8 94	-0.10 7 100	-0.88 14 96	3.26 23 95	-1.61 15 106	0		