Selection Values

Breeders usually want to select more than one trait at a time. However, it is difficult to identify the 'best' animal when there are many traits and consequently many breeding values involved. A selection value combines different weighted breeding values into a single value. Breeding values are weighed according to their economic importance and genetic heritability and thus include the advantages and disadvantages of different traits in a balanced way. For example, Fertility counts much more than Calving Ease. The sub-indices and Cow value are also individually expressed as indices, where 100 indicates the average of all live animals.

Table 1: The traits and breeding values used to compile the Cow Value

Sub-value	Weight (%)	Breeding Value	Breeding value weight (%)
Calving Ease	9%	Birth Direct	6 (-)
		Birth Maternal	3 (-)
Calf Growth	25%	Wean Direct	25 (+)
Milk	18%	Wean Maternal	18 (+)
Maintenance	12%	Mature Weight	12 (-)
Fertility	36%	Heifer Fertility	10 (-)
		Cow Fertility	13 (-)
		Longevity	13 (+)

What does the 'ideal' animal look like?

The animal with the highest selection values is theoretically the ideal animal.

Calving ease: An animal with negative breeding values for Birth direct and Birth maternal will have a positive Calving Ease value.

Calf Growth: Animals with a higher Weaning weight breeding value (Wean direct) will have a higher Calf Growth value.

Milk: Animals with a positive milk breeding value (Wean maternal) will get a higher Milk value.

Maintenance: Mature weight is weighed negatively because larger cows require more energy for maintenance.

Fertility: Negative breeding values indicate more fertile animals, and therefore fertility is weighed negatively. This will result in positive selection values.

Cow value: The sub- values are combined as in the table to obtain the cow value.

Growth value: This combination of traits places more emphasize on growth. Weighing is as follows: Calving Ease 7%; Calf Growth 53%; Milk 20% and Maintenance 20%.

Production value: The Cow value and Growth value are weighed in a 70:30 ratio.

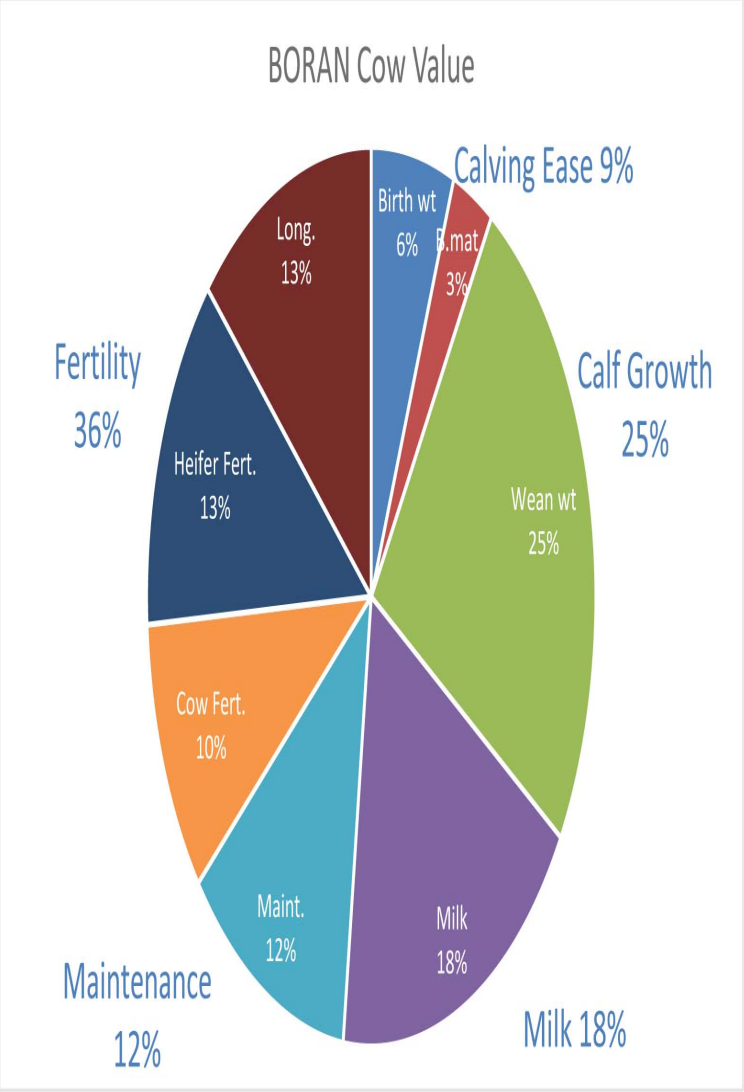
Breeding Objectives

A breeding objective is still essential, as two animals with different strengths and weaknesses may receive the same Selection Value. The bull with the highest Cow Value should therefore not be selected blindly, sub-values should also be inspected. Select bulls carefully, for example:

Bull to use on heifers: High Calving Ease and average Calf Growth and Maintenance. These traits are antagonistic to each other since low birth weight is associated with low growth and low mature weight, resulting in a small cow which will not calve easily in future.

Bull to breed replacement heifers: High Fertility, good Milk and Calf Growth; average Maintenance.

Bull for (terminal) crossbreeding (ONLY on mature crossbred cows that are easy-calving and in a good environment): Maximum Calf Growth. Fertility and Milk are not important if all offspring are slaughtered.



Veilingsdatum:
Data soos op 28/02/2023

BORAN BEESTELERSGENOOTSKAP VAN SA

Saamgestel deur die Suid-Afrikaanse Stamboek- en Veeverbeteringsvereniging
Stamboom- en Prestasiedata korrek gesertifiseer

SA STAMBOEK STUD BOOK

EXPLANATION OF ABBREVIATIONS IN CATALOGUE
VERDUIDELIKING VAN AFKORTINGS IN KATALOGUS

Lot number	LOT	LOT	Lotnommer
Identification number	Ident. Number	Ident. Nommer	Identifikasienommer
Index	Ind	Ind	Indeks
Accuracy of breeding value	Acc	Akk	Akkuraatheid van teelwaarde
Birth direct (kg)	Birth Dir	Geb Dir	Geboorte direk (kg)
Birth maternal (kg)	Birth Mat	Geb M	Geboorte maternaal (kg)
Wean direct (kg)	Wean Dir	Speen Dir	Speen direk (kg)
Wean maternal (kg)	Wean Mat	Speen Mat	Speen maternaal (kg)
Mature weight (kg)	Matur Wgt	Vol GewIG	Volwasse gewig (kg)
Scrotal circumference (mm)	Scr	Skr	Skrotum omvang (mm)
Age in years and months	Age	Oud	Ouderdom in jare en maande
Average Wean index	Avg WI	Gem SI	Gemiddelde Speenindeks
Reproduction index	R.I.	R.I.	Reproduksie Indeks
Age first calving	AFC	OEK	Ouderdom eerste kalwing
Inter calving period	ICP	TKP	Inter kalwings periode
Weaning weight	WW	SP	Speengewig
Post wean	PW	NS	Naspeen
Wean weight ratio	WWR	SGV	Speengewig verhouding
Birth weight ratio	BWR	GGV	Geboortegewig verhouding
Breeding value	BV	TW	Teelwaarde
Breeding value index	BV Ind	TW Ind	Teelwaarde indeks
Registration number	Reg. number	Reg. nommer	Registrasie nommer
Ouerskap verifikasie	OV	PV	Parentage verified
Vaar geverifieer	S	S	Sire verified
Moeder gerverifieer	D	D	Dam verified
Beide geverifieer	B	B	Both sire and dam verified

Description of traits and breeding objectives

Trait	EBV Index	Description/Measurement	Objective	General guidelines for breeding value indices <80 80 90 100 110 120 >120	
Calving Ease	Birth weight	Birth weight (birth direct)	Easy calving	Heavy	Light
	Birth mat.	Birth weight of cow/daughters' calves (birth maternal)	Easy calving	Heavy	Light
Calf Growth	Weaning weight	Weaning weight (wean direct)	Heavy weaner calves	Light	Heavy
	Milk	Milk production of cow/daughters (wean maternal)	Heavy weaner calves	Low	High
Fertility	Age at first calving (AFC)	Age at first calving and early calving within season (Heifer fertility)	Fertile heifers	Late calving	Early calving
	Inter-Calving Period (ICP)	Combination of 3 intercalving periods of cows (Cow fertility)	Fertile cows	Long ICP	Short ICP
Growth	Post-wean weight	Combination of 12- and 18 month weights of bulls and heifers	Above average post-wean growth	Light	Heavy
	Mature weight	Combination of first 3 mature weights at the wean of the cow's calf	Average weight	Light	Heavy

Additional notes:

Breeding objectives depend on the environment in which the animals must perform, for example: Intensive systems with a lot of food can support larger animals, while it is advised to select for animals of average size in extensive systems with less food.

Darkly shaded areas indicate the generally accepted favourable range in which to select. Note that objectives sometimes fall outside this range.

Animals with an index above 100 perform better than the average live animal in the breed. A high index for birth weight therefore indicates a smaller (more favourable) calf.

Most animals in the breed (70%) are average and have an index between 90 and 110.

Traits are genetically correlated to each other. Selection for heavy weaner calves will lead to heavy mature animals (high maintenance requirements) and heavy birth weights (possible difficult calving).

Milk breeding values must be in proportion to weaning weight: the cow must have enough milk to raise her calf, and too low milk production is unfavourable.

LOT 45

0569265000, - NTABA NYONI ESTATES CC, C/O LARA ROSSOUW P.O. BOX 155 BADPLAAS 0911, 0721074798

Naam	Ident. nommer	Geslag	Afdeling	Status	Reg. nommer	Geboorte Datum
LUD LUD190307	**LUD 190307**	**MANLIK**	**SP**	**REG**	**0089804587**	**29-SEP-19**

DNS - Ouerskap
Verifikasie voltooi: B

LUD LUD190307 - 29/09/19
LUD 190307 0089804587 SP -
U528831

Ouderdom **3j. 5m.**

Lab nr U528831

		VAAR	MOER
Ouerskap	DNS	☑	☑
NIE GETOETS	Myostatin	F94L nt821 Q204X	
	Kleur		
	Horing status		

DELBOR D14139 VIKING - 23/07/14
D 140139 0080626922 SP -
DNS U239904

OEK **32** TKP **409**
RI **105** Gem SI/Kalf:
Oud. / Kalwers **9j. 11m / 7**
KALWINGS
11/15 ,11/16 ,12/17 , 12/18 ,09/19 ,10/20 , 08/22

Embrio Kalwers: 0

LUD LUD13056 - 30/03/13
LUD 130056 0077181881 SP -
DNS U166785

OL PEJETA KPO 1294 - 29/04/05
1831LXIX 0075593632 SP -
DNS U0000093515

OL PEJETA KPO 1299 - 23/07/03
F/17780 0075591529 SP -
DNS U0000087621
OEK * TKP -
RI - Gem SI/Kalf:

MAXIMUS - 23/01/09
KMF 090010 0068661685 SP -
DNS U52893

KMF0803 - 22/11/08
KMF 080003 0068661743 SP -
DNS U52887
OEK * TKP **403**
RI **102** Gem SI/Kalf:
Oud. / Kalwers **14j. 3m / 10**

MOGWOONI 3375 - 01/11/96
PB/12106 0075591701 -
DNS - -

OL PEJETA KPO 1211 - 01/04/02
PB/12711 0075592691 SP
DNS U0000096716 -

NDAKAINI 8N9 - 23/09/98
NDA9 0049787518 SP
DNS P354203 -

OL PEJETA KPO 764 - 23/07/96
KPO0764 0075591503 -
DNS - -

BORGEN B 04001 - 06/01/04
B 040001 0062885686 SP
DNS U20350 -

ELANDSPRUIT CFH060501 - 10/08/06
CFH 060501 0063918569 SP
DNS U21440 -

BORGEN B 04001 - 06/01/04
B 040001 0062885686 SP
DNS U20350 -

HLANZENI OCTAVIA - 11/08/06
Z 060062 0064867468 SP
DNS U23665 -

	Kalf Gemak		Kalf Groei	Melk	Vrugbaarheid		Koeigewig		Koei Waarde	Bul	Verhouding	
	Geb Dir	Geb M	W Dir	W Mat	OEK	TKP	Na Sp	Vol Gewig	Waarde	Skr	GGV	SGV
TW	-.33	-.24	5.2	-3	12.7	5.1	3.2	2.4	-1.15	3.4	-	-
Akk	74	53	50	38	36	12	36	19	35	38		
TW Ind	**109**	**105**	**108**	**88**	**84**	**79**	**105**	**99**	**87**	**103**		
TW Ind	**112**		**108**	**88**	**76**		**100**		**87**			

Inent. -

Semen skenker: Nee

Toetse: -

Teler Opmerking: A Carbon copy of his sire D 14-139 Viking. Thick, hard, masculine and half sister to NBOR 20-011(Lot 4)

Kalf aan voet is onder beskerming van Genootskap,is gescreen, maar moet nog gekeur word.