

Selection on Breeding Value Indices (EBVindex)

Trait	EBV Index	Abbreviation	Objective	Measurement	Extreme Negative	General guidelines for EBVindex					Extreme Positive
						80	90	100	110	120	
Birth	Birth Direct	Brth-Dir	Easy calving	Calf's birth weight	Large						Small
	Birth Maternal	Birth-M		Birth weights of cow's calves	Large						Small
Growth	Wean Direct	Wn-D, Dir	Heavy weaners	Calf's weaning weight	Light						Heavy
	Wean Maternal	Wn-M, Mat		Weaning weights of cow's calves	Low						High
	Yearling weight	12m	Above average post wean growth and average size mature animals	Weight at 12 months	Light						Heavy
	18 mnth weight	18m		Weight at 18 months	Light						Heavy
	Mature weight	Mat.Wght	Cow weight at 4 years or older	Light						Heavy	
	ADG	ADG	Good growth/ adaptation	Average Daily Gain in growth tests	Low						High
Efficiency	Feed Conv. Ratio	FCR	Improved growth efficiency	Kg feed intake per kg weight gained	Inefficient						Efficient
	Kleiber	Klbr		ADG/metabolic weight	Inefficient						Efficient
	Cow Efficiency	CowEff	Heavy weaner, low cow maint.	Calf weaning weight and cow mature weight	Poor						Efficient
Repro-duction	Calf Tempo	CT	Bull to breed daughters	Number of calves per daughter born	Few						Many
	Scrotum	Scr	Fertile bulls	Scrotum circumference of bulls	Small						Large
	Age 1st Calving	AFC	Fertile heifers	How early heifer calves within calf season	Late						Early
	Inter-calving Period	ICP	Fertile cows	Combination of first 3 ICPs	Long						Short
Frame	Height	Hght	Average sized animals	Shoulder/hip height of bulls	Low						High
	Body Length	Lngth	Slightly longer animals	Body length of bulls	Short						Long
Carcass	Dressing%	Dress%	High percentage meat with acceptable marbling	End weight & ultrasonic measurement of eye muscle area and fat thickness	Low						High
	Meat Yield	MeatYld			Low						High
	Marbling	Marb			Low						High
Rand Value	Feedlot Profit	FeedlotPr	Profitable growth in feedlot	EBVs for intake, growth and weight	Loss						Profit
	Cow Profit	CowPr	Profitable cows	EBVs for fertility, growth and maintenance	Loss						Profit

Please Note:

- In general dark is desirable, medium is less desirable and white is undesirable.
- The ideal animal does not exist. Even if an animal has undesirable breeding values for certain traits, it might still have desirable breeding values for other traits. Each herd's circumstances are also unique. It is mainly determined by the environment and production system as well as the genetic level of the herd (especially the females).
- Although the general desirability of breeding values are indicated in the table, each breeder should consider his unique situation and decide which animals will be most suitable. Sometimes animals in the undesirable range should be considered, especially for corrective mating.
- The lowest breeding values are most desirable for the traits Feed Conversion Ratio (FCR), Age at 1st calving and InterCalvingPeriod (ICP) when selecting on BREEDING VALUES (EBVs), but if selecting on EBVindices, the highest values are most desirable.

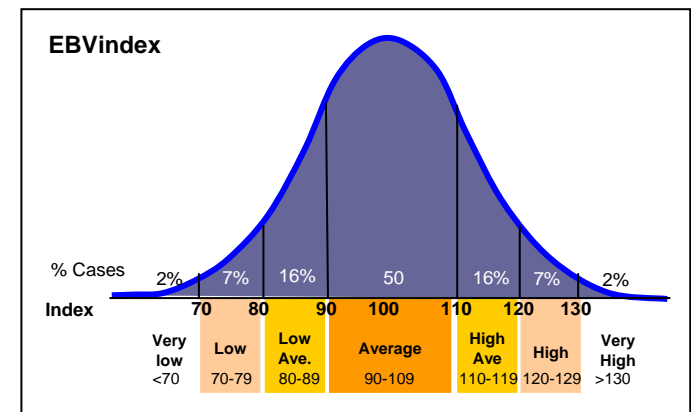


Figure 1: Breeding value indices are easy to interpret. A breeding value index between 90 and 109 is average and approximately 50% of animals fall in this range.