



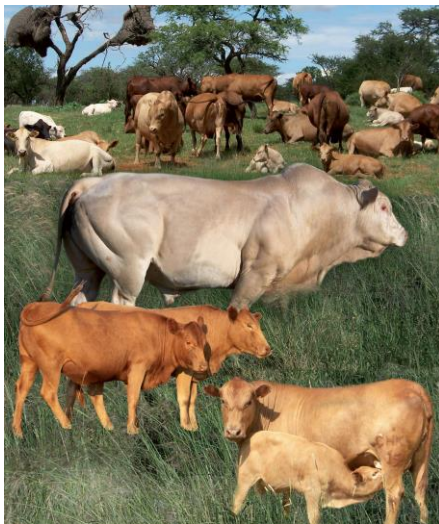
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AMALIA STUDYGROUP IN MAMUSA Breeding and Bull Selection

Event	:	Farmers' Study Group Training Day
Presenter	:	N.P. Bareki
Presentation title	:	Breeding and Bull Selection
Location	:	Ipopeng, Amalia in Mamusa
Date	:	23 November 2021
Requesting Agric advisor	:	Mr A.C. Mallo
Aim	:	Training of selected study group farmers
Purpose	:	To enhance farmers' knowledge on generalised beef cattle breeding and specifically on Bull Selection.
Importance	:	Herd bull selection is a major cost for cattle breeders.



Better bulls have a number of impacts on a herd:

- For the years that they are in the herd, these bulls will sire superior male and female progeny
- Improvements using genetics are permanent and will continue to accumulate as high performing sires are selected.

Breeding in general

- In a single sire herd, the bull is accountable for half of the genetic makeup of the total calf crop.
- The last three sires used in the operation will represent up to 87% of the genetic makeup of a calf crop, especially in a herd where replacement heifers are retained.
- Selecting sires is an important decision and one of the first requirements is to: *Determine your herd's present level of production and decide what traits need improvement!*

Bull-to-cow ratio (1:15 – 1:35)

- Practical bull-to-cow ratios vary depending on the capability of individual bulls and the environment under which they are to perform.
- Always remember that young bulls should be used at a lower bull-to-cow ratio than older bulls.
- Higher bull-to-cow ratios depends on mating ability, semen quality, and libido of individual bulls

Let the cow herd and your previous calf crop tell you what needs to be improved!



Bull Selection Basic Guide

What breed do I need?

There is a wide variety of breeds, and no breed exceeds all other breeds in all traits of economic importance. ***So choose a breed:***

- With a market demand for their calves in your area.
- With performance history for which you can document and predict the expected performance of future progeny
- With the genetic potential to make positive changes in economically important traits.

Which traits to look at?

Adaptability; Adaptability; Adaptability and Adaptability

Birth weight - If you intend to use the same bull on mature cows and first- and second-calf heifers, then you need to consider the bull's birth weight EBV. Dystocia (calving problems) is highly correlated to birth weight. It is important to select a bull that is used on all females in the herd, with a birth weight EBV that is better than the average of his breed.

Milk - If you intend to retain heifers from within your herd, then consider the bull's EBV for milk. A bull that is below his breed's average on EBV for milk will most likely sire daughters that do not have a tendency for high milk production.

Weaning weights? If weaning weights need to be increased, then consider a bull with weaning weight EBV that is higher than his breed average. If your previous bull was of the same breed as the bull that you are considering, then his weaning weight EBV must be greater than the previous bull's EBV.

If you want to change breeds, then select a bull that exceeds his breed's average EBV for weaning weight.

Fertility

The single most economically important trait in beef cattle production is reproduction.

- Herd sires have the largest influence on herd fertility than any other single animal.
- Bulls with larger scrotal circumferences sire daughters that reach puberty at earlier ages than those sired by bulls with smaller scrotal circumferences.
- Select bulls with larger scrotal circumferences and positive scrotal circumference EBV's as an indirect selection criteria for improved reproductive capacity.

This brings us to the importance of Breeding Soundness Examination (BSE); our next lecture will discuss just that.

Conclusion

Prioritise which traits need the most attention. Then sacrifice some trait levels in the first selection phase, and then pay attention to your sacrificed traits in your subsequent bull purchase.