



# Simbra – now the Complete All-Rounder

The main aim in developing the Simbra breed is to meet different market requirements and/or environmental conditions. **Johan Potgieter** discusses the pros of this incredible breed.

It took more than a century of breeding and genetic selection to establish and stabilise the unique breed characteristics of the Simmentaler (fertility, growth potential and milking ability) and of the Brahman (heat tolerance, hardiness, adaptability and tick resistance). The

Simbra, bred out of the Simmentaler and Brahman, combines the characteristics of these two wonderful breeds. The main aim in developing the Simbra breed was to breed a type of cattle that will meet different market requirements and/or environmental conditions. The race

to prove and improve the genetic value of carcass traits is well underway in the beef industry. Simbra breeders have shown their commitment to genetic advancement of meat quality by implementing new technology and research and move into a leadership position

within the beef industry. Carcass information collected routinely by Simbra breeders include carcass weight, ribeye muscle area (EMA), rib fat, rump fat, retail beef yield and intramuscular fat (IMF).

In developing the Simbra breed it was aimed to optimally use the differences between the Simmentaler and Brahman and also to retain hybrid vigour (heterosis) in future generations without continuous cross-breeding. Hybrid vigour can be defined as the increased performance of a composite breed relative to the two pure-bred parents. The challenge of maintaining hybrid vigour and minimising inbreeding in composite breeds (such as the Simbra) can

**Table 1: 2011 South African Simbra GROUP BREEDPLAN EBVS**

	Gest. Len. (days)	Birth Wt. (kg)	200 Day Wt. (kg)	400 Day Wt. (kg)	600 Day Wt. (kg)	Mat. Cow Wt. (kg)	Milk (kg)	Carcass Wt. (kg)	Ribeye Muscle Area (cm <sup>2</sup> )	Rib Fat (mm)	Rump Fat (mm)	Retail Beef Yield (%)
<b>EBV</b>	-1.3	+0.5	+18	+34	+47	+52	+6	+27	+1.2	-0.5	-0.7	+0.6
<b>Acc</b>	44%	60%	53%	49%	51%	48%	36%	42%	26%	35%	35%	29%
<b>Breed Avg. EBVs for 2009 Born Calves</b>												
<b>EBV</b>	-0.3	+1.0	+13	+19	+25	+25	+2	+14	+0.2	0.0	0.0	+0.1

**ABOVE:** Some of the benefits of using Complete All-Rounder Simbra bulls include: Maintaining and retaining hybrid vigour and a high quality product for the market. PHOTOS: DANIE VAN VUUREN





only be met by large populations of cattle.

**Table 2** shows the percentage of hybrid vigour retained in the Simbra breed at stabilisation.

Many stud and commercial Simbra breeders are sometimes concerned that they might not achieve the same genetic gain and rate of progress with SP (Studbook Proper) animals as with F1 crosses. In

of the benefits of using Complete All-Rounder Simbra bulls include:

- Maintaining and retaining hybrid vigour.
- A high quality product for the market.
- The Simbra can easily match a uniform biological type (in terms of size, milk production, growth and body composition) for a specific type of environment in which it can be cost-effective, easy

**ABOVE:** The Complete All-Rounder Simbra is an outstanding breed with maternal and longevity characteristics. The Simbra thrives in a hot and dry environment.

## 'SIMBRAS ADAPT EASILY TO MANY ENVIRONMENTS AND MANAGEMENT SYSTEMS.'

fact, the large gene pool of the Simbra breed and the wide participation of registered Simbra breeders in performance recording enables stud and commercial Simbra breeders to make good genetic progress. (**Figure 1**)

### BENEFITS AND FEATURES OF SIMBRA

The Simbra has been trademarked as the Complete All-Rounder. This means that it is an outstanding breed for maternal and longevity characteristics in a hot and dry environment and produces modern, lean and high quality beef. Some

to manage and profitable.

- Simbras adapt easily to different environments and management systems.

### REGISTRATION CERTIFICATE

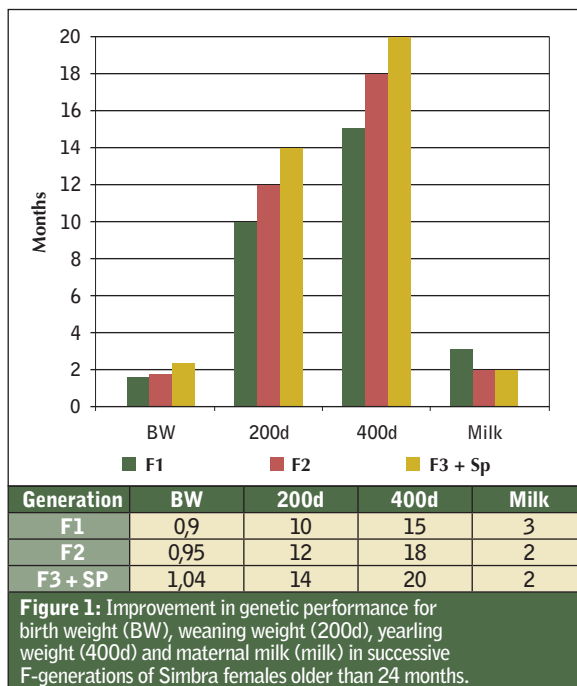
As with any pure-bred animal, make sure it has a registration certificate (meaning that it has been inspected and approved by the society) and performance data (breeding values). You can then confidently use it and there will be no unpleasant surprises!

- Contact the Simmentaler/Simbra Breeders Society on 051 446 0580/2 or email [admin@simbra.org](mailto:admin@simbra.org)

**Table 2:** Expected retention of hybrid vigour (%) and estimated increase in weaning weight performance for various Simbra breed compositions at stabilisation

Breed composition	Heterosis (%)	Estimated increase in weaning weight performance (%)
1/2 Simmentaler x 1/2 Brahman	50,0	11,6
5/8 Simmentaler x 3/8 Brahman	46,9	10,9
3/4 Simmentaler x 1/4 Brahman	37,5	8,7

**Figure 1**



## Praise for the Simbra

Internationally renowned animal scientists and researchers summarise the benefits of Simbra as follows:

“One of the main benefits of composite breeds (such as Simbra) is sustainable hybrid vigour that will improve economic important traits such as fertility, longevity and surviveability, which is normally difficult to improve due to low heritability in pure-breds.” (*Gaden, B & Llewellyn, D*)

“Composite breeds (Simbra) have been developed to maintain hybrid vigour in future generations without the need for further cross-breeding”. (*Ritchie et al*)

“The main benefit of using composite breeds (Simbra) is simplicity and retention of hybrid vigour.” (*Barham, B*)

“The Simbra is a hardy, smooth-coated, well adapted breed, with virile, hard-muscled, growthy bulls and feminine, fertile, highly functional cows. A breed possessing the best of the Simmentaler and the Brahman breeds, a breed that has all the potential to produce beef efficiency, especially in extensive cattle breeding areas.” (*Dave Morley, Senior Judge of Brahman, Simbra and Simmentaler in Namibia and South Africa*).