

# Adaptability: the winning trait of SA's world-beating Bonsmara



Since its creation, the Bonsmara has been carefully selected for adaptability. According to **Louis Steyl**, breed adviser at the Bonsmara Cattle Breeders' Society of South Africa, it is this trait above any others that has made the Bonsmara the most sought-after beef cattle breed in the country.

**W**ith the many challenges in agriculture these days, no livestock farm can afford to have animals that fail to add value to the operation. This is why breed choice is a decision that needs to be taken only after serious consideration.

Every breed is marketed as having a number of advantages, but not all can back these with proven facts and figures.

The Bonsmara has its origin in an intensive crossbreeding programme that started in the 1930s. The main focus was to develop a breed that

could adapt to South Africa's diverse environment, and be more profitable in areas where natural grazing and veld were often challenging.

After 55 years as a registered breed, the Bonsmara can lay claim to having the crucial characteristics needed to qualify as an adaptable breed that ensures better profits and long-term sustainability.

## EARLY DAYS

In the early 1930s, *Bos taurus* production in the tropics and subtropics suffered from a major problem: tropical degeneration

**ABOVE:** Cows on Namibian veld. Well-bred Bonsmara cattle easily adapt to the semi-arid and arid regions of Southern Africa. PHOTOS: SUPPLIED



syndrome. British beef breeds simply did not thrive under the subtropical conditions of South Africa's ranching areas. In the northern parts of the country, the altitude is 900m above sea level, the average annual temperature is around 20°C, with some parts reaching up to 40°C in summer, and the annual rainfall is 450mm.

The protein content of natural pastures in the Southern Hemisphere is low, dropping to critically low levels during late summer and early winter. Before 1940, it was therefore thought that tropical degeneration of British breeds was caused by malnutrition. Because of this, a large-scale nutritional experiment, which included a heifers from various British beef breeds, was launched at the Messina Livestock Research Station in 1937.

Prof Jan Bonsma, who led the study, recorded body measurements, such as body temperatures and respiratory rates, and took into consideration performance data such as weight gain and linear body measurements. He soon realised that malnutrition was not the cause of degeneration, with some heifers thriving appreciably better than others.

Careful observation proved that those showing the least climatic stress thrived best. Those animals that showed signs of stress on hot days had a very high respiratory rate, panted, stuck out their tongues, and dribbled profusely.

## SELECTING FOR ADAPTABILITY

This discovery pointed to the need for animals that could adapt to these harsh conditions and led



to a crossbreeding programme over several decades to achieve this aim. The Bonsmara Cattle Breeders' Society of South Africa was established in 1964.

Adaptability has remained the main selection criterion for Bonsmara breeders ever since. This is hardly surprising, as commercial breeders need animals that are easily maintained and will be fertile and productive in the harsh conditions of Southern Africa.

Three key factors should be borne in mind:

- **Survival**

If an animal is taken to a new environment, its first instinct is to survive. That means the animal must be able to adapt to the new climate, grazing, and water resources.

- **Production**

Only after the animal is able to survive in the environment will it start gaining weight again and produce reserves in its body.

- **Reproduction**

Only an animal that is in good body condition and feels comfortable in its environment will reproduce.

That is why adaptability is so important for achieving fertility. If an animal is unable to adapt to a new environment, it will remain in survival mode: all its resources will be spent on merely staying alive. Equally, an animal that cannot adapt to its environment will be in poor

**ABOVE:** Bonsmaras thrive even when faced with extreme weather, such as snow.

**ABOVE RIGHT:** Fertility is the most important trait in beef cattle. However, an animal that cannot adapt to its new environment will not be fertile.

**BELOW:** These well-adapted heifers have achieved excellent results on sourveld.

body condition and hence suffer from low fertility. Conversely, if an animal is well adapted, it will rapidly settle down in its new environment and start producing and reproducing.

## VELD

The Bonsmara was bred to be cost-effective off the veld, and was the first breed to have its production records scientifically inspected. This process has continued to the present day: all Bonsmara cattle are inspected at breeding age, and those not showing good veld adaptability are rejected. Well-adapted Bonsmara animals show these characteristics:

- A smooth coat in summer;

- Well-pigmented eyes, udders and hooves;
- A strong constitution;
- Sound feet and legs.

Any animal with structural defects or those that are functionally inefficient are culled.

Today, the Bonsmara breed boasts the highest number of registered animals in SA Studbook. With breeders all over Southern Africa and elsewhere in Africa, breed societies in Namibia, Brazil and Argentina, and animals in the US, Australia and Georgia, it is safe to say the Bonsmara has proved itself as an adaptable breed capable of thriving in the harshest climate.

• Phone the Bonsmara Cattle Breeders' Society of SA on 051 448 6084, or email [info@bonsmara.co.za](mailto:info@bonsmara.co.za).

