Genetics forged in the Alps help Braunvieh excel in SA

Since its introduction to South Africa 114 years ago, the Braunvieh, with its good walking ability and non-selective grazing habits, has adapted well and can thrive under some of the harshest conditions in the country. **Hans Bester** and his three daughters run the Witbek Braunvieh stud on Sussiesdeel farm in Vrede, Free State, and spoke to **Annelie Coleman** about the advantages of this hardy breed.

FAST FACTS

Braunvieh breeding animals, and bulls in particular, are popular in crossbreeding programmes.

Since the first Braunvieh bulls were imported to South Africa in 1907, the breed has evolved to become well-adapted to local conditions.

The Witbek stud's calves are weaned relatively early at 200 days, and at an average weight of 250kg to 280kg.

The Witbek Braunvieh stud flourishes in the often taxing conditions of the cold Free State Highveld, with its sourveld grazing. One of the reasons this breed can withstand such a harsh environment is that it originated thousands of years ago high in the Swiss Alps, where oxygen levels are relatively low. As a result, these animals evolved to have a higher red blood cell count than any other cattle breed in the world.

"This is why the South African Braunvieh excels in the extreme heat of Limpopo, Northern Cape and Namibia, as well as the bitter cold of the South African Highveld," says stud owner Hans Bester. "Over a period of more than 100 years, the Braunvieh has developed into a truly African breed and become a serious contender in the beef cattle arena."

Bester runs the stud on Sussiesdeel farm, near Vrede, with his three daughters, all of whom are veterinarians: Drs Daleen Roos, Hanri Bester-Cloete and Molly Lubbinge.

Bester and his wife Marina stay on the farm, Roos and Bester-Cloete are based in Vrede, and Lubbinge lives in Nelspruit.

A FAMILY AFFAIR

The Witbek Braunvieh stud comprises 100 animals, which include breeding cows, replacement heifers and bulls. Bester takes care of the day-to-day management of the herd, shows and auctions; Roos, a senior Braunvieh selector, is responsible for lick management and breeding pairings; Bester-Cloete is in charge of finances; and Lubbinge keeps a record of birth registrations, cancellations, and identification of animals. The three sisters run the animal health programme together.

The Braunvieh was at one stage criticised on a number of points, and Bester and his daughters have responded by addressing these problems specifically in their stud and turning perceptions around. For example, the breed was previously slated for calving problems, and Witbek Braunvieh has therefore made calving ease one of its primary selection criteria.

The establishment of the Witbek stud arose from the sisters' earlier participation in youth livestock shows. Bester was determined to find a top-performing beef cattle breed with a calm

and even temperament for easier handling and management, and the Braunvieh fitted the bill. The breed is light brown with a creamy white muzzle (hence the stud's name), a dark nose, and dark-blue eye pigmentation, which protects the animal against sunburn.

The family acquired their first Braunvieh cattle, including six heifers, in 2002 from the Alphine Braunvieh stud in Winburg, Free State. They were so impressed with the breed that they formed the Witbek stud a year later.

"We chose stud breeding to add optimal value to our beef cattle concern. It costs virtually the same to rear a stud animal as it does a commercial animal, but the return on investment is considerably higher," says Roos.

STRONG LEGS, UNDEMANDING GRAZER

The ideal Witbek Braunvieh is long-bodied, well-muscled and good-natured. Balance, strong haunches and top conformation for optimal performance are non-negotiable. The breed's exceptional walking ability, strong legs and deep, dark hooves (a legacy of selection in the Swiss Alps) make it well suited to the hilly environment of the Free State Highveld.

Witbek animals are also well pigmented, with a well-adjusted hide that sheds hair in summer and thickens in winter, keeping the animals' body temperature relatively constant.

Bester-Cloete explains that the Braunvieh was originally brought to South Africa in 1907 as part of a programme to breed animals for the country's high-lying cold areas. The breed adapted well to local conditions and the Braunvieh Breeding Society of South Africa was established in April 1925.

Grazing on Sussiesdeel is dominated by red grass (*Themeda triandra*), which is abundant on the sourveld grasslands of the north-eastern Free State Highveld. Red grass is one of the most important species for farmers in the region due to its high crude protein value. However, while it is highly palatable in summer, it turns red and brittle in winter. It then becomes unpalatable, with a marked loss of dietary value.

The soil on Sussiesdeel has a relatively high clay content, which favours red grass. "This factor, coupled with the exceedingly cold winters here, calls for a strong beef cattle breed. That's where the Braunvieh's genetic development over the ages comes into play; it has developed into a tough, non-selective grazing and highly fertile breed," explains Bester.

FERTILITY

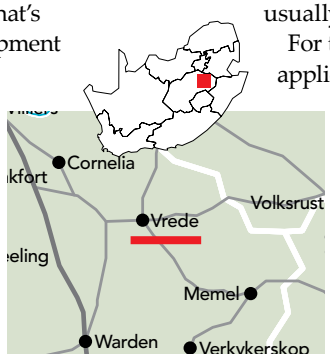
As stud breeders, Bester and his daughters focus on supplying the commercial beef production sector with animals that excel on the veld and add to long-term sustainability. Longevity and fertility are of the essence in this regard. One Witbek cow, for example, dropped and raised 13 calves over a 15-year period after coming into production and maintained an inter-calving period of fewer than 390 days.

Witbek calves are weaned relatively early at 200 days, at weights of between 250kg and 280kg.

"Earlier weaning means a longer rest period before the cow drops her next calf. The breeding programme is designed in such a way that the majority of the animals have calved by October, when the first spring rain usually arrives," says Lubbinge.

For the first 10 years of the stud, Witbek applied artificial insemination (AI) on the female animals themselves, but after Bester's daughters left home, this became impractical, so the stud changed to natural breeding. Nevertheless, AI is still used on outstanding cows from time to time.

"AI really benefitted our stud. It gave us access to exceptional



TOP:
From left: Drs Molly Lubbinge, Daleen Roos and Hanri Bester-Cloete run the Witbek Braunvieh stud in Vrede with their father, Hans Bester (not pictured).

ABOVE:
The Witbek bulls are subjected to veld tests to provide the market with bulls that perform well under all grazing conditions.

OPPOSITE PAGE:
A strong walking ability is one of the most prominent characteristics of the Braunvieh. This is ascribed to the breed's development in the Swiss Alps over thousands of years.
PHOTOS: DR MOLLY LUBBINGE

ABOVE: The Braunvieh breed's exceptionally high red blood cell count makes it highly adaptable to a wide array of farming conditions.

genetic material that we would not otherwise have been able to afford. It also allowed us to establish an average inter-calving period of about 375 days, which we still maintain," says Lubbinge.

Bester and his daughters are careful to use bulls that add optimal genetic value to the stud. They follow a single bull breeding system, and therefore choose bulls that fully adhere to the breeding values of the stud in order to ensure genetic diversity. According to Roos, the ideal Witbek bull is highly masculine, with sufficient length, width and depth. High value is placed on a bull's dam's efficiency, as this will have a long-lasting impact on the ultimate genetic prowess and progress of the herd, including genetic gain in milk yield.

WITBEK SALUTE

The stud's bull breeding objectives culminated in the bull Witbek Salute HB 15 011, which was selected as the *Landbouweekblad*, Breedplan and Zoetis 2017 Southern African Breeding Bull of the Year. According to Bester, Witbek Salute is masculine with a very strong topline and outstanding walking ability, and forms the blueprint for all Witbek bulls.

Bulls are selected for functionality, since form automatically follows, and selection traits include low birth- and high weaning weights, as well as overall balance.

The family extol the value of the Braunvieh in crossbreeding. Braunvieh crossbreeds are characterised by hardiness, superior meat production and significantly higher milk yield. The fact that the modern Braunvieh is medium-framed with fine bone structure makes it ideal for crossbreeding with all types of beef cattle, *Bos indicus* in particular. This trait also reduces calving problems, a crucial advantage in South Africa's mostly extensive farming conditions.

The value of the Braunvieh in crossbreeding concerns is underpinned by the increasing demand for breeding animals, especially bulls, in the commercial farming sector.

The Braunvieh is a hardy, non-selective grazer, making it well suited to SA's harshest conditions

VELD TESTING

As part of their efforts to meet the increased demand for veld-adapted animals, Bester and his daughters have subjected their bulls to veld tests under the auspices of the Veld Bull-Ram Organisation of Southern Africa for the past three years. Only animals that pass this test are kept as potential breeding bulls. Testing usually commences in October and lasts for 150 days.

These growth tests are of great value for ensuring that the market is supplied with bulls that excel under all extensive grazing conditions. Recognising this, the Witbek stud and five other Braunvieh stud breeders recently started the Central Braunvieh Veld Club. Here, bulls from all six breeders are kept together on one farm to be tested under the same production conditions.

The economic realities of beef cattle production in South Africa are such that farmers have to utilise their grazing to the full while providing minimum inputs.

"That's why the identification of the best growers in a herd is so important," says Bester-Cloete. "Veld testing of heifers is another avenue we plan to pursue in the future, because the performance of a heifer on the veld is a reliable indicator of her performance as a mature cow."

Phone Hans Bester on 083 469 1258, or email him at bestershans@gmail.com. **FW**