'We have a dream,' not Martin Luther King, but a few Karoo farmers wanting to breed hardy sustainable veld adapted Ngunis.

It started many years ago when I knew even less about cattle farming than I do now. As the chairman of the Karoo Nguni Club, I was asked by two prominent farmers to start a veld bull project. Having never been a stud farmer of anything before, I did not know where to start. We discussed it at club level and it was felt we should first look out for grazing. A rather difficult exercise in the Karoo, as it is not

known for being traditional cattle country. We approached a few farmers we thought may be interested and asked them to tender.

We only received three tenders. The club com-

mittee went through them discussing the pro's and con's of each. We eventually decided on Stephan Kirsten in the Camdeboo valley. The area has a relatively high rainfall (± 350mm) for the Karoo, his farm is easily accessible, centrally situated and he is considered a good stockman. We now faced the most difficult part of the project. Convincing farmers to actually part with their beloved Ngunis is easier said than done. Eventually a

few brave men sent their first intake on the 10 March 2005. The initial participants [Johan Blom, Niel Hugo, Stephan Kirsten, Michael Kroon, Trenly Spence and Kevin Watermeyer] didn't really know where we were heading, but knew we had to do something. The first entry consisted of 55 potential bulls out of a combined calf crop of  $\pm 250$ .

Our veld bull project has always been a work in progress and at that stage we fell under the umbrella of the Karoo Nguni Club. As most of us did not have a mating season, we decided to have an intake  $\pm$  every 4 month. The most important objective of the project has always been to accurately compare bulls in the same environment and under the same conditions. It was also decided that all bull calves had to be entered between the age of 7 and 11 month of age. The reason for this was that we did not want the animals from sweeter veld [or unfair management practices] to have an advantage. It was also decided that at each intake we would weigh the bulls and rate them on various aspects. Bulls with faults would be eliminated and the owners would remove them from the project. Due to the fact that we had limited grazing, our selection criteria had to be strict.

One important condition of the project is that all members must enter their best bull calves. We are not allowed to keep our best bulls back, not even for own use. If we want them for our own use, we can buy them back at the sale. In this way we make our best genetics available to the open market.

On the 26 August 2005 we made a bit of history in that our cattle were the first cattle in South Africa to be Falkirk tested. Falkirk is a New Zealand developed measuring system to determine the best meat/bone/fat ratio relative to an animal's weight. After a few tests it is also possible to determine

whether animals are maturing early or late. The measurements are especially important to commercial beef producers. This surely forms part of better selection for profitable

Trenly Spence

NGUNI CATTLE cc

Veld Bull Project



beef production.

At the intake/meeting of 18 August 2006 a very important change was made. The members that contributed the majority of bulls and did all the administration decided to go one step further. We formed the Nguni Cattle CC, consisting of Pat Hobbs, Niel Hugo, Stephan Kirsten, Trenly Spence and Kevin Watermeyer. The motto of the group was to produce NO FRILLS VELD BULLS. No longer being under the umbrella of the Karoo

Nguni Club, we could raise the bar even further, making the selection criteria stricter. As from 2007 our bull entries are every 3 months to accommodate the members that do Performance Measuring.

To be eligible for the first ever Nguni veld bull sale in September 2007, our bulls would have passed many tests. They would have been in the project for a minimum of 24 months on pure veld with no licks or extra feed, passed at least 8 screenings for functional faults and been weighed as many times. They would also have been Falkirk tested 3 times.

To add credibility to our project we decided to join Veld Bull SA. We had our first meeting with them in October 2006 at the Free State University. Our method differs somewhat from the classic veld bull tests, but we do share many common views and goals.

We believe as a group, that what we are doing is right and will allow us to better identify superior bulls. This is not a do or die test, but one 'To preserve the qualities of true to type Nguni cattle for sustainable beef production.'

Before understanding the commercial value of any breed, there should be a common understanding of the particular primary beef production sector. To ensure sustainability of any beef production enterprise, the objective should be to optimize / maximize profit. Profit is driven by price, throughput (units / time) and costs. Price is determined by quality, supply and demand; throughput by growth, reproduction and health; while cost can be divided into variable and fixed costs. This article will evaluate the commercial value of the Nguni in terms of throughput.

Performance information obtained from the National Beef Cattle Improvement Scheme was used to compare the Nguni with other breeds, taking cognizance of the input level required by the different breed types. The production unit was standardized to a farm area that can carry 100 Nguni breeding cows with their progeny. The results are summarized in Table 1.

TABLE 1: Kilogram calf weaned / standardized production unit

Breed	Cow Weight (kg)	Number of cows	Weaning %	205 Day Calf Weight (kg)	Total kg Calf Produced	% Deviation from the Nguni
Low input						
Nguni	353	100	86%	155	13 330	
Zebu breed	491	78	77%	209	12 552	-6%
Medium input						
Composite breed	486	79	84%	214	14 032	+5%
High input						
British breed	484	79	84%	215	14 087	+6%
European breed	560	70	78%	223	12 176	-9%

In Table 1 the throughput (kg / unit) of the Nguni is compared to that of other low, medium and high input breeds. For example, 100 Nguni cows weighing 353 kg will wean a total of 13 330 kg calf. In the case of a large frame European breed of which the cows are weighing 560 kg only 70 cows can be kept on the same farm size. In this case only 12 176 kg calf will be weaned - 9% less than in the case of the Nguni. Furthermore, the medium and high input breeds will require higher inputs that will increase the variable costs per kg produced.

However, it is important that these lighter Nguni calves should still have acceptable growth performance in the feedlot, otherwise there may be a price discrimination against them. Research results have indicated that the Nguni has the potential to perform well in feedlots.

## THROUGHPUT (KG / AREA UNIT) OF THE NGUNI

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In the case of a price discrimination against the Nguni calves, the situation may be as follows:

- Weaner price of R14-00 / kg for calves heavier than 220 kg → Total income from large framed calves from the unit = R170 464.
- Weaner price of R13-00 / kg for the Nguni calves →
  Total income from Nguni calves from the unit =
  R173 290.
  - This gives a difference in income of R2 826 or 2% in favour of the Nguni.

On the other hand, under conditions where there is a price premium on lighter calves, as was recently the case, the lighter Nguni calves may even be more profitable. The following example illustrates such a scenario:

- Weaner price of R13-00 / kg for calves heavier than 220 kg  $\rightarrow$  Total income from large framed calves from the unit = R158 288.
- Weaner price of R14-00 / kg for calves lighter than 180 kg → Total income from Nguni calves from the unit = R186 620.
- This gives a difference in income of R28 332 or 18% in favour of the Nguni.

These results demonstrate that the throughput of the Nguni compares well with that of other breeds and even exceeds that of some well-known breeds. However, it is important to note that these results are only based on that portion of the breeds that are participating in the National Beef Cattle Recording Scheme, and does not necessarily apply to the rest of the breeds. Commercial producers that intend to farm with Ngunis, should ensure that they use breeding material with known performance otherwise they may be disappointed.