



This Nguni dropped her first calf at 25 months and weaned it at 55% of her bodyweight. Run on veld with a salt/phosphate lick, she averaged an ICP of 363 days over three calvings. MICHIEL VAN NIEKERK

# Excellent income from Nguni calves

The positive expression of fitness traits in an adapted breed can reduce expenses and improve profits in weaner production systems. **Michiel van Niekerk**, Nguni breeder, projects possible profits.

The income potential of a weaner calf production system depends on many factors, including the biological environment, the breed, the genetic merit of the cow herd and the market. The biological environment has a profound influence on income potential. Fitness traits (adaptability, fertility and superior maternal

ability) in a cow herd in the adverse and sub-optimal SA environment also affect productivity. These traits have an impact on input costs. In a cow herd of an adapted breed, fitness traits can significantly reduce expenses on veterinary inputs, licks and drugs for parasite infestations.



**Table 1: Income potential of a Nguni herd in the Boshof district compared with all registered herds from all breeds, using actual 2012 weaning results**

	Nguni herd (Boshof district)	National herd (all breeds)
Number of cows	499	440
Average cow weight at weaning (kg)	385	500
Average calving rate (%)	93	81
Average weaning rate (%)	92	79
Average 205-day weaning weight (kg)	173	218
Average weaning weight ratio (%)	44,7	43,7
Income (R) at R14/kg (weaner calves) and R23/kg (Grade C)	1 221 789	1 193 090
Difference (R)	-	-28 699

## HERD EXAMPLE

The 2012 production data of an Nguni herd in the Boshof district was compared with the 2012 production data of the national beef cattle herd (all registered herds of all breeds).

The income of the Nguni sample herd was calculated so that productivity and profitability were shown. The national herd was used as the second sample herd. The comparison is less than ideal, however, as the production environments of the two herds may differ.

The model considered the following to calculate herd income:

- Farm size (7 000ha)
- Carrying capacity (10ha/LSU)
- Cow replacement rate (12%)
- Cow mortality (1%)
- Percentage bulls used (3%)
- Dressing percentage (50%)

The number of cows in a specific area was determined by considering the scientifically calculated metabolic weight of the cows, using average cow weights (see Table 1). The calving rate was calculated from the average intercalving period of the herd during

the previous year.

The weaning rate was calculated by subtracting a calving mortality of 1% from the Nguni herd's calving rate and 2% from that of the national herd.

Research at the Mara research station in Limpopo and Omatjienne research station at Otjiwarongo in Namibia shows that the Nguni has a calf mortality of about 50% lower than that of other breeds.

The ability of an Nguni cow to limit the growth of the foetus in utero, especially when the sire was a large-framed bull, as well as her characteristic sloping rump, promotes easy calving.

As the Nguni is a small-framed breed, 499 cows can be kept per herd with the same number of LSUs as 440 larger cows per herd in the national herd.

## EFFICIENCY OF NGUNI COWS

The table shows that the income from the Nguni herd was higher than that of the national herd due to its higher calving and weaning rates. It also indicates that Nguni cows are at least as efficient as those in the national herd. The Nguni can thus contribute significantly to a farm's weaner production system.

Taking into consideration Nguni traits that lower production costs, the potential profitability of its cow herd is clear. As the Nguni herd's production area (2012 data) received slightly more than a quarter of the area's average annual rainfall, this potential profitability could be even higher.

• Phone the Nguni Cattle Breeder's Society on 051 448 7303 or visit [www.ngunicattle.info](http://www.ngunicattle.info).