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# Zulu Goats in KwaZulu-Natal I. B. Stewart

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### Introduction

KwaZulu Natal has a goat population of 1,000,000 goats almost all of which are in the communal areas. However, very little is known about these goats. In consultation with researchers in the Farmers Systems Research Section at Cedara, it was established that the small-scale farmers' problems relating to their goats are the abundance of worms and the poor fecundity of the goats. The people have little or no money for worm remedies and the poor nutrition available in the overcrowded areas no doubt is the major cause of poor productivity. From a broader standpoint, considering the extensive soil erosion of the areas in question, it was hypothesised that if kikuyu could be established in an effort to halt the loss of soil from the farms, then an added incentive would be to raise goats on these kikuyu pastures. It is thus the intention of this goat research to establish the productivity of indigenous Zulu goats on kikuyu, employing the same management principles used by the subsistence farmers.

### **Materials and Method**

At the start of the investigation, there were 15 female Saanen x Zulu goats and kids. The cross-bred rams were replaced by a pure-bred Zulu ram from Impendhle. An area of 2.5 ha of kikuyu was completely fenced with a two metre bonnox fence and then divided into five equal sized camps with four strands of barbed wire. Thus the goats are confined within the 2.5 ha camp but can wander freely through all the camps. The goats are kraaled at night, but go out to graze every day, as is the practice in the rural areas. Similarly, the ram runs with the flock all the time, there being no management system used that would separate any goats into groups. Besides the grass, the goats are given access to a high calcium mineral lick. The goats are weighed once a week and any births or deaths are recorded. During the winter they are combed for cashmere, and a programme of slaughtering for meat has just begun, but both subjects will be topics reported at a future congress. In the two-year period being reported, they have been dewormed three times, the criterion for this being loose dung in a few of the animals. The pastures are top-dressed with 200kg nitrogen/annum and consist of 5 x 0.5 ha camps. During the summer when the grass is actively growing, a herd of 20 yearling cattle graze the pasture on a rotational basis, moving once a week.

## **Results and Discussion**

Maiden ewes kid for the first time at between 10 and 11 months of age. The average masses of the goats at various stages of their production are given in Table 1.

**Table 1** The average weights of the female goats at different stages of their production.

Stage of Weighing	Weight (kg)	s.d	Numbers
Birth	2.3	0.66	22
Conception	22.9	7.60	7
Max. before kidding	32.1	10.25	7
Postpartum	28.1	10.35	10
Second conception	39.0	9.73	12
Max. before kidding	44.6	15.07	11
Multiparous postpartum	40.9	7.43	14

The 2.5 ha of pasture are not as yet grazed to capacity. At present, with the goat numbers at 42 (14 rams have been slaughtered), the stocking rate is nearly 17 goats/ha, plus 10 Nguni yearlings/ha. (The average mass of the yearling cattle at the start of the season was 109.7 kg and 145.9 kg at the end). The cattle are there to help with the worm control and also to help simulate reality as it occurs in the small-scale farming areas. It remains to be seen what the optimum stocking rate will be. A contributing factor to the improvement in reproductive rate as compared with those in the rural areas is the age at first kidding; i.e. less than a year and the reduced inter-kidding interval. This improvement is presumed to be due to the nutritional status of the goats on kikuyu. As yet the problem of worms has been minimal, but that could be because there has not been a build up in the pastures. The

Short paper and poster abstracts: 38<sup>th</sup> Congress of the South African Society of Animal Science investigation needs to continue for a few more years before any real conclusions can be offered. Our objective is to characterize Zulu goats in terms of their importance to the economy, their inherent resistences to diseases, and hence the need for further research.

#### Conclusion

Thus far, goats on kikuyu look like a viable proposition, particularly if the kikuyu can play a major role as a soil erosion deterrent. Furthermore, like the Nguni cattle, if they can be farmed as productive animals and not just status symbols or for cultural reasons, their hardiness can prove to be of economic importance in the field of agriculture. The potential saleable product from Zulu goats is cashmere and meat, both of which are being investigated concurrently with this work.