

# THE DEMOGRAPHICS OF THE REGISTERED NGUNI FEMALE POPULATION

*Charl Hunlun, SA Stud Book Association*

The Nguni breed is renowned for its sustained fertility and longevity under conditions of minimal managerial intervention. The smaller size, easy calving, highly fertile females are touted to be the ideal examples of a dam line – being able to continuously yield relatively high liveweights of weaners per hectare with little or no supplementation when mated to males of suitable sire lines.

A demographic analysis of the female Nguni population yields some interesting statistics that may contribute to a better understanding of the structure of this segment of the population.

During March of 2008 there were 29 700 recorded Nguni females of which 16 425 (55.3%) were heifers of various ages and 13 275 (44.7%) were cows, i.e. females that have already calved. Of these cows, 5 715 (43%) are so-called first acceptance / first recording cows, i.e. cows that were not “born on the system” but were formerly unrecorded cows that have since been taken up onto the system, after an inspection and approval by the breeders’ society. The remaining 7 560 (57%) Nguni cows were “born on the system” from parents that are recorded on the system, and are essentially Appendix B and SP Nguni cows.

On average first-acceptance Nguni cows yield a recorded calf for the first time at 51.5 months of age and, during their recorded lifetimes, will calve on average 3.5 times. Nguni cows that were born on the system, on the other hand, have an average Age at First Calving of 30.4 months and, on average, give birth to 4.3 calves over their lifetimes. It may be interesting to ponder these statistics a bit and, maybe, make a

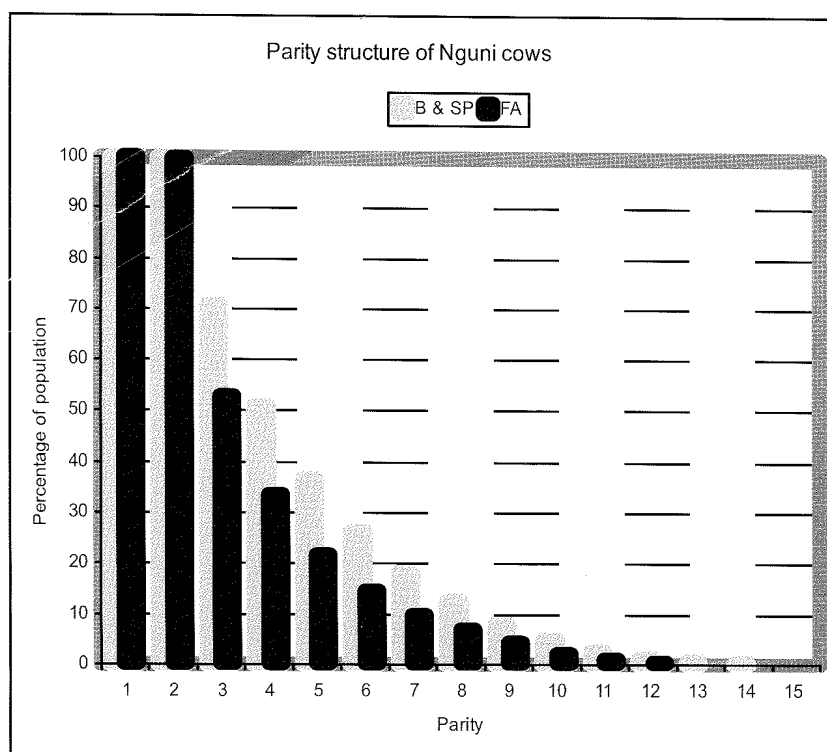
few observations

from them. On average the first-acceptance cows “come into production” 21 months older than Nguni cows that were born on the system but they produce only 0.8 calves less in their (shorter) recorded lifetimes. One would perhaps expect the Appendix B and SP cows that were born

on the system to be somewhat more prolific, but this phenomenon may be an indication that there is a higher selection pressure against, or less tolerance for, first acceptance Nguni cows and that they are thus culled earlier than other cows. This is not necessarily a bad thing – it is always a good policy to strictly scrutinize animals that emanate from an “unknown” genetic background, and strict selection against any poor reproduction (or any other unwanted trait) is the only way to improve the breed in terms of the most important traits.

The culling- or erosion rate of Nguni cows can be seen in the accompanying table and graph. After the second calving there is still very little difference between the patterns of the first-acceptance- and Appendix B/SP cows in terms of the proportion of cows per parity group.

A substantial percentage of the first-acceptance cows are however culled before their third calving. The higher culling rate amongst first-acceptance cows persists as parity increases and consequently only 7.8% of the first-acceptance cows produce more than 8 calves in their recorded lifetimes. More than 1 300 (17.2%) Nguni Appendix B/SP cows have however recorded more than 8 calvings in their recorded lifetimes.



Parity	Appendix B/SP cows		First Acceptance cows	
	Number	Age (m)	Number	Age (m)
1	7558	30.4	5715	51.5
2	7548	44.5	5704	65.0
3	5334	57.5	3011	76.3
4	3838	70.0	1907	87.4
5	2756	82.1	1228	98.0
6	1974	94.2	827	108.7
7	1379	106.2	552	119.9
8	937	118.4	381	131.8
9	599	130.6	235	143.5
10	355	142.4	118	155.7
11	194	154.5	54	163.9
12	96	166.3	24	172.5
13	59	180.6	14	191.4