

A NOTE ON MOUNTAIN REEDBUCK *REDUNCA FULVORUFULA FULVORUFULA* AFZELIUS
IN THE KRUGER NATIONAL PARK

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Abstract – This survey was conducted to obtain information on the mountain reed buck population in the Kruger National Park for comparison with the population in the Loskop Dam Nature Reserve, Transvaal. During 93 hours of search effort, 36 mountain reed buck sightings were recorded. All of the sightings were in the Malelane Hills on slopes above the Kwa Machiyaliwane drainage.

Introduction

Mountain reed buck in the Kruger National Park (KNP) are found only in the Malelane Hills and along the Lebombo Mountain. The population is estimated to number 240 (Pienaar 1969). The status of this species in the Park is considered precarious by many people, but too little is known of its population structure and distribution to determine whether the population is declining or merely occupying a limited area of suitable habitat (Smuts, *pers. comm.*).

During February and September 1970, 19 days were spent in the Park surveying the mountain reed buck population in the Malelane Hills. The object of the survey was to obtain information for comparison with the mountain reed buck population in the Loskop Dam Nature Reserve located near Groblersdal, Transvaal. This paper is a condensation of observations made during the survey.

Methods

Mountain reed buck were located in four ways:

1. Scanning hillsides with 7×35 binoculars and a 60× spotting scope;
2. Waiting by watering sites at dawn and sunset;
3. Walking ridgelines accompanied by a game scout;
4. Driving firebreak roads.

Results

Only six individual mountain reed buck were sighted during 52,5

hours of observation in February (Table 1). All sightings were in the hills along the Kwa Machiyaliwane drainage even though a comparable amount of time was spent in the vicinity of Khandizwe Hill and along the eMcwebeni drainage.

Table 1

Relative intensity of sampling and success using four techniques for sighting mountain reedbuck in the Kruger National Park

Technique	February		September	
	Observation Time (h)	Animals Sighted	Observation Time (h)	Animals Sighted
Spotting scope and binoculars	18,6	0	2,1	3
Driving firebreaks	15,0	4	3,9	0
Waterhole counts	3,0	0	4,3	0
Foot transects	15,9	3	30,0	27

Efforts in September were more successful (Table 1). Of 30 animals sighted, at least 25 were not resightings. Group size ranged from one to six. Table 2 gives group size, composition, and general habitat information for the September sightings. All of the animals were located on hills above the Kwa Machiyaliwane drainage in *Combretum* woodland. Most of the groups were seen on west-facing slopes on a burned area east of the Kwa Machiyaliwane streambed. None were more than 5 km from the Matjulwana windpump.

Discussion

The low number of sightings recorded in February was probably due to visibility restrictions imposed by the fully-leaved vegetation. Several of the sightings in September would not have been made if the trees were not bare.

The presence of juveniles in September (Table 2) indicates that mountain reedbuck are reproducing in the Park and that lambs are surviving until the end of the dry season. Although the small sample size precludes any conclusions on the population trends of this antelope in the Park, the lamb to ewe ratio in the KNP is greater than the lamb to ewe ratio of the relatively stable Loskop population for the same period (Table 3).

Table 2

Group size, composition, and site characteristics of mountain reedbuck sighted in the Kruger National Park during September 1970

TIME	GROUP SIZE	GROUP COMPOSITION				HABITAT CHARACTERISTICS		
		Male (>1 a)	Female (>1 a)	Imm. (<1 a)	Un-aged	Slope Face	Ht. on Slope	Recent Burn
1515	1	—	1	—	—	W	3/4	yes
0840	3	—	2	1	—	SW	3/4	yes
1012	2	—	2	—	—	S	3/4	yes
1655	6	1	—	1	4	W	1/4	yes
0705	1	—	—	—	1	W	3/4	yes
0810	(whistle only)	—	—	—	1	?	1/4	yes
0830	3	—	2	—	1	SW	2/3	yes
0855	5	1	2	2	—	NW	4/5	yes
0710	4	1	1	1	1	E	3/4	no

Table 3

*Comparison of mountain reedbuck sightings in the Loskop Dam Nature Reserve during August–September 1970 with sightings in the Kruger National Park during September 1970**

	N	Males (>1 a)	Females (>1 a)	Lambs (<1 a)	Unaged	Lamb : ewe Ratio (lambs per 100 females)
LOSKOP	50	14	25	6	5	24
KRUGER	26	3	10	5	8	50

* Groups sighted in intensive study areas at Loskop have been excluded.

The 24 km² section of the Kwa Machiyaliwane drainage surveyed yielded a minimum count of 25 mountain reedbuck. Exclusion of 3 km² of flats associated with the main streamcourse gave a minimum density of 1,2 mountain reedbuck per km² of slope habitat. A similar treatment of sightings at Loskop during June–August 1973 (Irby 1973), gave a minimum count of 205 individuals on 49 km² for a minimum density of 4,2 per km² of slope habitat. While the two counts are not directly

comparable, since the search intensity was greater at Loskop, the data indicate that the Kwa Machiyaliwane sub-population is less dense than that of Loskop.

The absence of sightings around Khandizwe Hill and along the eMcwebeni drainage may indicate a decline in the population, and a subsequent decrease in the range occupied, or only insufficient effort expended to locate individuals in a very sparse population. New growth on burned grass clumps in the Kwa Machiyaliwane area could have concentrated mountain reedbeek in that region. A mass migration from the eMcwebeni drainage to this burn seems unlikely since comparable burns, with no mountain reedbeek, were observed in the eMcwebeni drainage, and mountain reedbeek are territorial.

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