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NECROSPY DATA OF EIGHT REEDBUCK *REDUNCA ARUNDINUM* FROM THE KRUGER NATIONAL PARK

V. DE VOS
Division of Nature Conservation
Private Bag X404
Skukuza
1350

Introduction

During October 1969 a piece of land was fenced out of the Kruger National Park, Republic of South Africa, near Numbi Gate in the south western tip of the Park. Impenetrable diamond mesh fencing material was used. In spite of concentrated and repeated efforts to drive game from this excised bit of land, some game still remained within the area. As this piece of land was designated for concentrated human habitational purposes and lay within the region where movements are restricted by foot-and-mouth control regulations, it was decided to shoot and use the remainder of the antelope population for research purposes. This report documents the findings on eight reedbuck *Redunca arundinum* which were collected in this area. Very little is known of the disease spectrum of this species in the wild state.

Material and Methods

The animals were killed by means of a small bore, high velocity rifle. Body mass and measurement data were then recorded in accordance with standards by Ansell (1965). Standard necropsy procedures were followed and a macroscopic examination was made of all organ systems. Specimens from all organs and tissues were collected in 10% buffered formalin and forwarded to the Department of Pathology, Veterinary Research Institute, Onderstepoort, for light microscopy. Internal parasites were collected in 10% formalin and handed over to the Department of Helminthology, Veterinary Research Institute, Onderstepoort for identification purposes. External parasites were collected in 70% alcohol and subsequently identified by the Department of Entomology, South African Institute for Medical Research.

Results and Discussion

This survey was confined to a very limited, but essentially randomly collected number of apparently healthy individuals living under natural conditions. Consequently the results do not reflect the entire disease

Table 1

Necropsy data of eight reedbuck from the Kruger National Park

Age Category	Sex	Body Mass (kg)	Body* length (cm)	Height at withers	Girth	Pregnancy Status	Macroscopic	Microscopic	Internal Parasites	External Parasites
Young adult	♂	53,0	106,8	92,5	88,3		No specific lesion	No specific lesion.	Setaria bicoronata	Rhipicephalus evertsi
Prime adult	♂	61,5	111,0	94,0	89,0		Four rough areas over liver surface.	Localized chronic hepatitis. One small lymphoid.	Setaria bicoronata	Damalinia reduncae
Prime adult	♂	63,5	110,2	95,0	90,9		Rough whitish areas over liver surface. Few attachments of liver to diaphragm.	Setariasis: Subcapsular area showing a parasitic granuloma. Also localized areas of chronic perihepatitis.	Setaria bicoronata	Damalinia reduncae Rhipicephalus evertsi
Old adult	♂	51,0	101,0	95,3	84,0		Localized rough area over liver surface attached to diaphragm.	Localized chronic hepatitis	Setaria bicoronata Haemonchus veglia	Damalinia reduncae Rhipicephalus evertsi
Young adult	♀	39,0	99,3	83,5	71,0	+	No specific lesions.	No specific lesions.	Haemonchus veglia	Damalinia reduncae
Prime adult	♀	47,5	102,1	88,0	80,5	+	Localized rough areas over liver surface. Cysticercosis (1 cyst) of heart muscle.	Very mild fatty changes in liver.	Setaria bicoronata Cysticercus sp.	Damalinia reduncae Amblyomma hebraeum
Old adult	♀	49,0	105,1	90,3	78,8	+	Heavily parasitized with internal parasites and lice. Cysticercosis (2 cysts) of heart muscle.	Localized vasculitis and few round cell foci in liver.	Setaria bicoronata Haemonchus veglia Cysticercus sp.	Damalinia reduncae Rhipicephalus evertsi
Old adult	♀	43,0	109,0	86,0	76,0	+	No specific lesions.	No specific lesions.	Setaria bicoronata Haemonchus veglia	Damalinia reduncae Amblyomma hebraeum Rhipicephalus evertsi
Average	♂	17,25	107,25	94,2	88,05					
Average	♀	44,63	103,88	86,95	76,58					

Body measurements in accordance with standards by Ansell (1965)
*Body length taken over curves with head included, but tail excluded.

parameter of this species in the Kruger National Park. Nevertheless some interesting information was gained and can be taken as a basis for subsequent observations. The most important results are presented quantitatively and qualitatively in Table 1.

Body masses as recorded are slightly below figures quoted by Meinertzhagen (1938) and Wilson (1968) for reedbuck in northern regions. This could, however, be ascribed to the fact that the animals were killed at the end of the dry season.

All females in the sample were in calf. Foetal stages of development were very similar, indicating a lumping tendency in time of birth. Judging from foetal development it was subjectively assessed that births would have taken place during December or January. This fits in with the theory advanced by Jungius (1971) that a peak in births occur during December to April in the Park.

With the exception of light to fairly heavy parasitism, essentially negative findings were recorded for the macro- and microscopical examination. Although no new species of parasites were found for the reedbuck as reflected by the literature (Theiler 1962; Neitz 1965; Round 1968) all these host-parasite recordings are new for the Park.

Fairly heavy setariasis must be held responsible for the light but consistent pattern of localized hepatitis and perihepatitis in most of the animals.

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