

SHORT COMMUNICATIONS

OBSERVATIONS ON THE LAMBING INTERVAL OF THE CAPE BUSHBUCK, *TRAGELAPHUS SCRIPTUS SYLVATICUS*

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ABSTRACT

A record of births from three Cape bushbuck ewes at Queens Park Zoo, East London, from November 1971 to December 1974, indicated that the mean lambing interval of *Tragelaphus scriptus sylvaticus* in captivity is 249 days and that ewes reach sexual maturity at approximately one year of age.

INTRODUCTION

Very little information is available on the reproduction of the Cape bushbuck, *Tragelaphus scriptus sylvaticus* (Sparrman), in South Africa. Stevenson-Hamilton (1912) reported, from observations made in Pretoria Zoo, that the gestation period was longer than seven months. Kenneth & Ritchie (1953) found that the gestation period of the bushbuck may vary from 180 to 225 days, while more recently Zaloumis & Cross (1974) have given the gestation period as being 180 days.

In October 1970 the author received a four-month-old bushbuck ram from the Komga district of the Eastern Cape. Having a number of bushbuck ewes present in Queens Park Zoo at this time, it was decided to establish the lambing interval and age of ewe at first lambing of *T. s. sylvaticus* in captivity.

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METHOD

A fenced camp, 0,2 ha in area, was used in this study. The vegetation in the enclosure consisted of a mixture of indigenous and Kikuyu grasses plus a number of shade trees.

Previous experience with the maintenance of bushbuck in captivity had shown that when mature rams and ewes were kept together in a confined space the rams tended to kill the ewes without any apparent reason. To avoid this the young bushbuck ram from the Komga district was dehorned at the age of 11 months. It was introduced into the ewes' enclosure in November 1971. Already in the enclosure at this time were a pregnant ewe (Green Tag) and a young seven-month-old ewe (Blue Tag).

From November 1971 to December 1974 the number, sex and date of birth of all bushbuck in the enclosure were recorded. All new-born rams were removed from the enclosure while all new-born ewes were allowed to remain with their respective mothers and marked with a coloured tag. In this study the animals were exposed to normal seasonal photoperiod (daylength) changes. No artificial lighting was used in the camp.

RESULTS

The birth data recorded from three bushbuck ewes confined with a single ram are shown in Table 1.

The mean lambing interval of *T. s. sylvaticus* ewes in captivity was found to be 249 days. During the course of this investigation, it was noted that all three ewes under observation produced two calves within a single 12-month period.

TABLE 1

The birth data from three bushbuck ewes recorded at Queens Park Zoo, East London between November 1971 and December 1974. The fiducial limits of the lambing interval indicate $\pm 2 \times \text{S.E.}$

Bushbuck ewe	Birth number	Date of birth	Lambing interval (days)	Sex of lamb
Green Tag (Born 1.7.67)	2nd birth	20.11.71	—	Male
	3rd birth	*28.7.72	251	Female
	4th birth	26.3.73	242	Male
	5th birth	6.12.73	256	Male
Blue Tag (Born 3.10.70)	1st birth	23.2.72	—	Female
	2nd birth	19.10.72	239	Female
	3rd birth	17.6.73	242	Male
	4th birth	16.2.74	245	Male
White Tag *(Born 28.7.72)	1st birth	9.2.74	—	Male
	2nd birth	4.11.74	269	Female
			Mean = 249,1	$\pm 8,6$

DISCUSSION

In the case of the Blue Tag and White Tag ewes, the age of the ewes at first parturition was found to be 509 days (3.10.70 to 23.2.72) and 562 days (28.7.72 to 9.2.74) respectively. If it is assumed that the gestation period of 180 days reported by Zaloumis & Cross is correct, then subtraction of the period from the above figures would indicate that bushbuck ewes may reach sexual maturity 329 to 382 days after birth. Further, by subtracting 180

days from the mean lambing interval of 249 days it may be deduced that the female bushbuck is capable of conception on an average of 69 days following the birth of each lamb and that the lambing interval is not regulated by an annual rhythm or seasonal cycle.

It was observed that new-born lambs were able to stand and run as soon as they were dry after birth.

The visible, external sign of horns developing on the heads of young bushbuck rams was noted more than seven months after birth. In one case, the presence of horns on the head of a young ram could be felt with the fingers 293 days after birth.

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REFERENCES

- KENNETH, J. H. & RITCHIE, G. R. 1953. *Gestation periods. A table and bibliography*. Tech. Comm. 5, Commonwealth Bureau of Animal Breeding and Genetics, Edinburgh.
- STEVENSON-HAMILTON, J. 1912. *Animal life in America*. London: Heineman.
- ZALOUMIS, E. A. & CROSS, R. 1974. *A field guide to the antelope of Southern Africa*. Natal Branch of the Wildlife Society of Southern Africa.

SOME REPRODUCTIVE ABNORMALITIES OF THE ZEBRA STALLION (*EQUUS BURCHELLI* *ANTIQUORUM*)

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During a study on reproduction of zebra (*Equus burchelli antiquorum*) from the Kruger National Park (Smuts 1974), three instances of gross male reproductive abnormalities were recorded in a sample of 270 male tracts examined (1,1 per cent). These included two cases of unilateral testicular hypoplasia (Figure 1) and one of bilateral cryptorchidism (Figures 2 and 3). Methods employed