

MADOQUA

Vol. 18 No. 1 1991

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JOURNAL OF ARID ZONE BIOLOGY AND NATURE CONSERVATION RESEARCH

MADOQUA

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Madoqua is currently published twice yearly (March and September), with a pre-issue subscription of R25 per year. A price list of individual numbers and back issues is available from the Director. All correspondence dealing with purchase, amounts, distribution and other administrative matters should be addressed to:

The Director
Ministry of Wildlife, Conservation and Tourism
Private Bag 13306
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Published by the Ministry of Wildlife, Conservation and Tourism,
Namibia: 1991

Printed by MultiServices, P.O. Box 363, Windhoek, Namibia

SHORT NOTE

Leopard predation on giraffe calves in the Etosha National Park

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Received December 1989; accepted July 1990.

INTRODUCTION

Published information on the diet of the leopard *Panthera pardus* reveals that they are opportunistic feeders that prey mainly on small to medium sized animals, but are able to kill herbivores of more than twice their body mass (Smithers 1983; Bothma & Le Riche 1984; Norton *et al.* 1984). Records of leopard kills for the Etosha National Park, held by the Ministry of Wildlife, Conservation and Tourism, Namibia, include black-backed jackal *Canis mesomelas*, kudu calves *Tragelaphus strepsiceros*, springbok *Antidorcas marsupialis*, black-faced impala *Aepyceros melampus petersi*, Burchell's zebra foals *Equus burchelli*, adult ostrich *Struthio camelus*, duiker *Sylvicapra grimmia* and springhare *Pedetes capensis*. Very few instances of leopard predation on giraffe calves *Giraffa camelopardalis* could be found in the literature. We report here on two cases in open savanna in the western part of the Etosha National Park during March 1988.

RESULTS AND DISCUSSION

The remains of two giraffe carcasses were found in *Acacia reficiens* trees at heights of 4 m and 5.7 m respectively. Claw marks on the trees indicated that leopards had been responsible. It could not be determined whether the giraffes had been disembowelled prior to being carried into the trees because of the advanced states of decomposition. No evidence as to how the prey had been killed, could be found. One calf was younger than six weeks old as the first permanent molar had not yet protruded above the alveolar margin (Hall-Martin 1976). It probably weighed about 90-110 kg based on the weights of other giraffe calves in Etosha of the same age class (unpublished data). The second calf was between six and ten weeks old, as the first permanent molar had erupted and mandibular indices (ramus height, diastema length and mandible mass) corresponded with those of calves known to be in this age class (unpublished data). This calf would have weighed up to 125 kg. These records represent food items for leopards at the large end of their prey size spectrum. If the mean body mass for adult male and female leopard is 59.8 kg and 31.5 kg respectively as suggested by Johnstone (1971) for the Matetsi area in Zimbabwe, the prey could have weighed 1.5-2.0 or 2.9-4.0 times the mass of an adult leopard, depending on the sex of the predator.

Giraffe calves have previously been recorded in the diet of leopards in East Africa (Berry 1973; Dagg & Foster 1976; Hamilton 1976), but no further details are known regarding prey size or age or whether the carcasses were pulled into trees. Giraffe calves are most vulnerable to predation during the post partum period when the female is isolated from the herd. During

this period, lasting up to four weeks, the cow and her calf are deprived of the benefits of group vigilance. Calves are not constantly with their mothers but may be left on their own for up to four days (Foster 1972) increasing the calf's vulnerability to predation.

ACKNOWLEDGEMENTS

We thank Raymond Du Jardin and Louis Geldenhuys for additional records of leopard predation in Etosha National Park and Drs. Malan Lindeque and Peter Nortorn for their useful comments on an earlier draft of this document.

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