

An observation on parental care of young in the steenbok in South West Africa

by

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The steenbok (*Raphicerus campestris*) is a common antelope in southern Africa, but little information has been published on its behaviour. Recently Lent (1974) reviewed the mother-infant relationships in some species of African antelopes, but not the steenbok. The following observations, made on the eastern edge of the Namib Desert at Gobabeb, South West Africa (15°03'E, 23°34'S), are the first to describe parental care of newborn young and its possible adaptative significance.

At 19h00 on 9 August 1976, I observed a newly born steenbok kid with its mother near some large rocks on the gravel plain bordering the Kuiseb River. Birth appeared to have been quite recent as the kid was unsteady on its feet and used the mother's legs for support. The following day the female was seen at 16h00 in the same area, but the kid was not with her. In March 1974 M.K. Seely observed another female at Gobabeb, who kept her kid hidden in one spot among the rocks for five days (pers. comm.).

At 09h00 on 13 August the female walked cautiously from the river vegetation to some rocks on the gravel plain where the young was lying hidden (Plate 1). She suckled the kid while lying on her side concealed between the rocks. When finished, she returned directly to the river, leaving the kid who remained prone in the same spot throughout the day, standing only twice to stretch and turn around. The female did not return to the kid until after sunset (19h00) when she was accompanied for the first time by an adult ram. When they were within three metres of the kid it responded to a snort from the mother by standing up and running to her side. The two then returned to the hiding spot where she suckled it for approximately five minutes from both standing and recumbent positions. During feeding the male stood several metres away observing the river. After several minutes he returned approaching the standing female from the front and tapping her on the shoulder several times with his foreleg before moving around to her hindquarters where he began licking her genital region. She in turn started to lick the same area of the kid as it fed. The ram then attempted to mount the female but was promptly kicked off by the female's rear leg. The three steenbok then moved away slowly, the adults foraging on *Zygophyllum simplex* and *Stipagrostis ciliata* and the young intermittently running ahead several metres but returning quickly to its mother's side. They stopped again while the kid suckled whereupon the ram again tried unsuccessfully to mount the female. Observations had to be terminated at this point (19h45) from poor visibility. That night the kid was not returned to the former spot.

On 9 September 1977 at 11hr15 I observed a female, who had been disturbed, leading a newborn lamb from exactly the previous year's "laying out" spot (Fig. 1) to the river. As I approached to within 20 m of the river vegetation, the female charged directly at me with her head lowered and ears lying flat, but when within 5 m of me she veered away suddenly and disappeared into the vegetation. She repeated this "mock charge" four times, whereupon I moved away.

Antipredator behavioural adaptations found in some herd species of southern African bovids (e.g. group defence, synchronous birth, and aggregation at lambing time) are lacking in steenbok, which live singly, or in pairs during reproductive periods (Estes, 1974; Jarman, 1974). Although limited to two single instances, these observations imply that behavioural mechanisms to protect the vulnerable newborn young from predators have also evolved in the steenbok and other non-

herding antelope species, of which some possibly are leaving the young concealed and alone except for brief periods of suckling, and placement of the kid away from the greatest concentration of predators (e.g. Black-backed Jackal, Caracal Cat, and Spotted Haeyna), which at this locality is in the riparian vegetation, and aggressively threatening potential predators.

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