

## Electrocution of reptiles

Electric strands set at a height of 150 mm above ground level on a farm in southern Namibia (28°34'S; 19°11'E - Warmbad area) to deny predators such as Black-backed Jackal (*Canis mesomelas*) access to camps and killing domestic stock, have resulted in the death of various reptiles. Since the instalment of this electronic strand, three Rock Monitor [*Varanus albigularis* (DAUDIN, 1802)] and one Bushmanland Tent Tortoise [*Psammobates tentorius verroxii* (A. SMITH, 1839)] individuals have been electrocuted. The three adult Rock Monitor individuals were electrocuted whilst passing through diamond mesh and then coming into contact with the electric strand transmitting about 9000 volts in 1 second pulses. It would seem that they could not pass through the diamond mesh fast enough before succumbing to the electric shocks. Female Bushmanland Tent Tortoises have an approximate size of between 400-500 g compared to males with an approximate size of 150 g, making them more prone to electrocution due to their relatively larger size. The electrocuted Bushmanland Tent Tortoise individual came into contact with the electric strand and then supposedly retracted after the initial shock and eventually succumbed after repeated shocks. An unverified report of a Cape Cobra *Naja nivea* LINNAEUS, 1758 being electrocuted was also received from a neighbouring farmer.

According to BOYCOTT & BOURQUIN (2000), Leopard Tortoises [*Geochelone pardalis* (BELL, 1828)] individuals have previously been documented as being electrocuted by electric strands less than 200 mm above ground level. Flap-neck Chameleon [*Chamaeleo dilepis* LEACH, 1819] have also been known to be electrocuted in residential gardens in Windhoek, Namibia, whilst attempting to negotiate electric security fences (ADANK pers. comm., ROTH pers. comm.). These urban security fences usually transmit up to 6000-8000 volts although the amperage is low (< 1 ampere).

Farmers in Namibia have a constant battle with predators, resulting in this extreme electronic measure to deny access to predators, but unfortunately with the added consequences of electrocuting small-

er wildlife. Most animals that come into contact with the electric strands retreat abruptly only resulting in a painful shock. Reptiles, on the other hand, may be more prone to electrocution. BOYCOTT & BOURQUIN (2000) suggest increasing the height of such electronic strands to 250 mm and operational surges every 30 minutes – i.e. 30 minutes on and 30 minutes off, to protect reptiles. Thus far reptile mortalities have only been observed within one kilometer from the transformer – i.e. where the electrical current is strongest (9000 volts) – and it is thus suggested that this area be checked more regularly or the electric strand be lifted slightly to accommodate potential victims. The effect that such electric predator control measures may have on the reptile fauna is disturbing and should be monitored closely.

REFERENCES: BOYCOTT, R. C. & BOURQUIN, O. (2000): The southern African tortoise book. Hilton (O. Bourquin), pp. 228.

KEY WORDS: Reptilia: Testudinidae: *Psammobates tentorius verroxii*, Squamata: Sauria: *Varanus albigularis*, electrocution, conservation, threat, Namibia

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