

Foraging behavior of the Egyptian Spiny-tailed Lizard *Uromastix aegyptia* (FORSKÅL, 1775)

Uromastix aegyptia (FORSKÅL, 1775) are terrestrial burrowing lizards viewed as generalist herbivores, utilizing a wide variety of plant species throughout their range (MANDAVILLE 1965; FOLEY et al. 1992; DISI et al. 2001; CUNNINGHAM 2000, 2001a, 2001b). Their food plants usually consist of low growing forbs and grasses, but they are even known to be predacious, especially as juveniles, on arthropods, and opportunistically consume items such as date kernels, ungulate droppings and human objects – e.g. plastic (CUNNINGHAM 2000, 2001a, 2001b).

On 6 July 2008 (22°19.672'N; 42°11.943'E, elevation: 980 m), at 10.06 a.m. in the Mahazat as-Sayd Protected Area approximately 700 km west of Riyadh in western central Saudi Arabia, I observed an adult *U. aegyptia* of approximately 40 cm, total length, browsing on the leaves and pods of an *Acacia tortilis* tree (maximum height of the tree was 1.8 m) at a height of 1.2 m off the ground. The general area is undulating sandy and/or gravel plains dominated by *A. tortilis* trees and shrubs and *Salsola spinescens* shrubs. The rainfall is normally low and unpredictable (50–100 mm p.a.), but 2008 has been far below that average with a maximum of only 15 mm recorded in patches throughout the reserve for the “rain season” – March to May.

The individual I observed froze on sighting me – a tactic often used when too far away from the safety of their burrows. The area where I observed this behavior was sandy with gravel islands, sparsely vegetated, the dry vegetation there probably necessitating this foraging strategy. The *Acacia* tree in question, although not fully flushed, had some green growth and more importantly, was fruiting, which probably attracted the lizard.

Although climbing onto *Pennisetum divinum* tufts and *Haloxylon salicornicum* bushes to feed and probably for thermoregulation, as observed in the United Arab Emirates (CUNNINGHAM 2000) and browsing in low shrubs documented for *U. acanthinura* BELL, 1825 in Morocco (HIGHFIELD & SLIMANI 1998), I have not observed them

scaling bigger shrubs/trees to forage. This current observed foraging behavior is probably due to the adverse conditions experienced in the Mahazat as-Sayd Protected Area – the below average rainfall and poor overall vegetative growth – and/or changes in vegetation composition and structure influencing their foraging behavior.

How this selection of *A. tortilis* leaves and pods affects the required energy intake and consequently time spent foraging, coupled with seasonal changes in plant species, plant part selection and availability, requires further investigations. These could lead to answers to the successful foraging strategy of this extreme desert-dwelling species. The overall increase in *A. tortilis* densities inside the protected area after the exclusion of domestic stock, with the opposite being true outside of the protected area, are interesting managerial issues for contemplation regarding the diet and wellbeing of *U. aegyptia* both in and outside Protected Areas in Saudi Arabia.

ACKNOWLEDGEMENTS: My appreciation to Ernest ROBINSON (Director KKWRC, Thumamah) for commenting on a draft of this note.

REFERENCES: CUNNINGHAM, P. L. (2000): Daily activity pattern and diet of a population of the Spiny-tailed Lizard, *Uromastix aegyptius microlepis* (BLANFORD 1874), during summer in the United Arab Emirates. - *Zoology in the Middle East*, Heidelberg; 21: 37–46. CUNNINGHAM, P. L. (2001a): Spiny-tail Lizard *Uromastix aegyptius microlepis* diet – a study in the United Arab Emirates. - *Tribulus*, Abu Dhabi; 11 (2): 28–29. CUNNINGHAM, P. L. (2001b): Notes on the diet, survival rate, and burrow specifics of *Uromastix aegyptius microlepis* from the United Arab Emirates. - *Asiatic Herpetological Research*, Berkeley; 9: 30–33. DISI, A. M. & MODRÝ, D. & NEČAS, P. & RIFAI, L. (2001): Amphibians and reptiles of the Hashemite Kingdom of Jordan. An atlas and field guide. Frankfurt am Main (Chimaira), pp. 408. FOLEY, W. J. & BOUSKILA, A. & SHKOLNIK, A. & CHOSHNIAC, I. (1992): Microbial digestion in the herbivorous lizard *Uromastix aegyptius* (Agamidae). - *Journal of Zoology*, London; 226: 387–398. HIGHFIELD, A. C. & SLIMANI, T. (1998): The Spiny-tailed Lizard at home: *Uromastix acanthinurus* in southern Morocco. - *Reptiles [Magazine]*. Guide to keeping reptiles and amphibians, Irvine; 6 (7): 76–87. MANDAVILLE, J. (1965): Plants eaten by *Uromastix microlepis* (BLANFORD) and other notes on this lizard in eastern Arabia. - *Journal of the Bombay Natural History Society*, Bombay; 62 (1): 161–163.

KEY WORDS: Reptilia: Squamata: Agamidae: *Uromastix aegyptia*, diet, feeding ecology, Saudi Arabia

SUBMITTED: August 14, 2008

AUTHOR: Peter L. CUNNINGHAM, King Khalid Wildlife Research Centre and the Zoological Society of London, Thumamah, P. O. Box 61681, Riyadh, Kingdom of Saudi Arabia <pckwrc@yahoo.co.uk>

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Herpetozoa](#)

Jahr/Year: 2009

Band/Volume: [22_1_2](#)

Autor(en)/Author(s): Cunningham Peter Low

Artikel/Article: [Foraging behavior of the Egyptian Spiny-tailed Lizard *Uromastyx aegyptia* \(FORSKÅL, 1775\). 91](#)