EASTERN RANGE EXTENSION FOR MORETHIA RUFICAUDA COURTESY OF A CAT STOMACH.

Memoirs of the Queensland Museum 45(2): 226, 2000:-Identification of mammalian remains from predator pellets and scats has provided valuable information on the distributions of many species. Smith (1977) identified 14 species of native mammals that had not been previously recorded in the Flinders Ranges of South Australia from owl pellet deposits found in caves. More recently, analysis of carnivore seats led to a number of significant range extensions of species that are rare and/or difficult to detect using conventional fauna cenusing techniques (for example Meek & Triggs, 1997 and references within).

Such techniques have not been as successful for reptiles. which usually lack the hard body parts required for identification following passage through the gut of a predator. Stomach contents of predators, however, offer a better chance of identifying reptile remains to species level. Probably the best known result from this type of sampling was the rediscovery of the Adelaide pygmy blue-tongue (Tiliqua adelaidensis) from the stomach of an eastern brown snake (Pseudonaja textilis) in 1992 (Armstrong & Reid, 1992). This note reports a considerable range extension for Morethia ruficauda following the identification of this species from the stomach of a feral cat from Diamantina Lakes National Park

in far-western Queensland.

The skink remains (hindbody, pelvic region and tail base) were found in the stomach of a male cat shot by the Park Ranger during the day at the Diamantina Gates (23°42'S, 141°08'E) on the 14th June 1994. The remains were identified on the combination of size and colouration, particularly the width, intensity and position of the pale dorsolateral stripes, and the reddish tail base (QM J63647). The seasonally dry shrublands and stony hills of the Hamilton Range that the Diamantina River cuts at the Diamantina Gate is very similar to the preferred habitat of M. ruficanda described by Cogger

Cogger (1992) lists the distribution of M. ruficauda as the northwestern section of the continent, from west of the Northern Territory/Queensland border, extending to the Western Australian coast and north to the Northern Territory coast. More recently, M. ruficanda was recorded in the spinifex dunefields of the northern Simpson Desert (23°46'S, 138°28'E) in western Queensland (Downey & Dickman. 1993), and from Lawn Hill National Park in far northwestern Queensland (18°35'S, 138°35'E) (McKay & Clarke, 1999). No voucher specimens were collected from these sites. A number of M. ruficauda were also previously observed on the limestone ridges at the Riversleigh fossil site (75km southeast of Lawn Hill National Park) in May 1987 (P. Couper, pers. comm.). A voucher specimen of this species from Riversleigh (20km northwest of the homestead) was collected in May 1989, but has only recently been lodged with the Queensland museum (QM 171441).

McFarland (1992) failed to uncover any further records of this species in an extensive review of historical information on the fauna of the Channel Country bioregion of southwestern Queensland. Our record extends the known range of this species by approximately 270km in an easterly direction from the Simpson Desert record and over 600km to the southeast from the Lawn Hill National Park observation.

A review of cat diets by Dickman (1996) found that reptiles were relatively common dietary items during summer especially in drier areas. Cats tend to prey mostly on nocturnal species and dragons, which reflects their nocturnal hunting habits. However, under the dry conditions experienced in the Diamantina region during 1994, cats were commonly seen. hunting on mild winter days. This type of behaviour was not observed in the subsequent years of the study when conditions improved and staple prey species were more abundant (R. Palmer, pers. obs). Thus, it is not surprising that cat stomachs collected during 1994 contained a large number of diurnal reptiles.

Acknowledgments

This work was part of a larger study on feral cats funded by Environment Australia, Thanks goes to 'Chook' Robertson for providing this and other cat stomachs.

Literature Cited

ARMSTRONG, G. & REID, J. 1992. The rediscovery of the Adelaide pygmy blue-longue (*Tiliquu adelaidensis*) (Peters, 1863). Herpetofauna 22(2): 3-6.

COGGER, H.G. 1992. Reptiles and amphibians of Australia. (Reed Books: Sydney).
DICKMAN, C. R. 1996. Overview of the impacts of feral cats on

Australian native fauna. (ANCA: Canberra).

DOWNEY, F.J. & DICKMAN, C.R. 1993, Macro- and microhabitat relationships among lizards of sandridge desert in central Australia, Pp. 133-138. In Lunney, D. & Ayers, D. (eds) Herpetology in Australia: a diverse discipline, (Royal Zoological Society of New South Wales: Mosman). McFARLAND, D. 1992. Fauna of the Channel Country biogeographic

region, south west Queensland. Report to the Queensland

Department of Environment and Heritage.

McKAY, L. & CLARKE, R.H. 1999, Some reptile range extensions at Lawn Hill National Park, Gulf of Carpentaria, Queensland. Herpetofauna 29(1): 21-24.

MEEK, P.D. & TRIGGS, B. 1997. Extension to the range of the eastern chestnut mouse, Pseudomy's gracilicaudatus, to Jervis Bay. New South Wates. Austrălian Mammalogy 20(1): 123-125.

SMITH, M.J. 1977, Remains of mammals, including Notomys longicanulatus (Gould) (Rodentia: Muridae), in owl pellets from Flinders Ranges, S.A. Australian Wildlife Research 4: 159-170.

R.A. Palmer, Department of Zoology and Entomology, University of Queensland, St Lucia, 4072; G.M. Sheu. Department of Veterinary Anatomy and Pathology, University of Sydney, Sydney 2006, Australia; 5 September 1999.



Palmer, R A and Shea, Glenn M. 2000. "Eastern range extension for Morethia ruficauda courtesy of a cat stomach." *Memoirs of the Queensland Museum* 45, 226–226.

View This Item Online: https://www.biodiversitylibrary.org/item/125117

Permalink: https://www.biodiversitylibrary.org/partpdf/303965

Holding InstitutionQueensland Museum

Sponsored by

Atlas of Living Australia

Copyright & Reuse

Copyright Status: Permissions to digitize granted by rights holder.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.