

# A RECORD OF OPHIOPHAGY BY THE SPOTTED PYTHON *ANTARESIA MACULOSA* (SERPENTES: PYTHONIDAE) FROM MURRAY FALLS NATIONAL PARK, NORTH QUEENSLAND, AUSTRALIA

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## INTRODUCTION

Many snakes are known to include other snakes in their diet (Greene, 1997) but only one Australian snake, the Bandy Bandy (*Vermicella annulata*), an elapid, can be regarded as a specialist predator on other snakes, feeding primarily on blindsnakes (Shine, 1980). Other Australian elapids, mainly *Austrelaps* (Shine, 1987a; Fearn, 1994, 1995), *Pseudechis* (Shine, 1977, 1987b) and *Pseudonaja* (Shine, 1989; Neindorf, 1994) also prey on snakes as part of their diet (see also Greer, 1997). By comparison, pythons do not appear to regularly prey upon snakes. Within the Australo-Papuan python radiation, observations of ophiophagy have been reported from *Antaresia childreni* (Kend, 1997), *Apodora papuana* (O'Shea, 1988; Mavromichalis & Bloem, 1994), *Aspidites melanocephalus* (Fleay, 1941; Kend, 1997), *A. ramsayi* (Shine & Slip, 1990), *Bothrochilus boa* (Bell, pers. obs.), *Liasis fuscus* (Shine, 1991; Anon, 2007; Huddleston, pers. obs.), *Liasis olivaceus* (Shine & Slip, 1990; Kend, 1997; O'Shea, 2007) and *Morelia viridis* (Jago, 1994). Here I report an observation of ophiophagy by the Spotted Python *Antaresia maculosa*.

## OBSERVATION

On 23 April 2005 at around 1400 hours I observed an adult male *Antaresia maculosa* (1154 mm snout-vent length, total length 1259 mm, weight 530 g; Figure 1) near a barbecue area at Murray Falls National Park, south of Tully, North Queensland (18°09'08"S 145°48'53"E). As the barbecue area was occupied by several people I decided to catch

the snake and relocate it away from this area for its safety. Upon capture the snake disgorged a recently-ingested adult female keel-back snake, *Tropidonophis mairii* (761 mm snout vent length, total length 891 mm, weight 170 g). The snake was released immediately after and the *Tropidonophis* was dissected to determine its sex and reproductive status and found to contain two recently ingested *Bufo marinus* (approx. 30 mm SVL).

## DISCUSSION

Although a specimen of *Antaresia childreni* was observed "to pursue, subdue, and eat a non-venomous *T. mairii*" (Kend, 1997) there appear to be no other published records of ophiophagy in this genus. Comprehensive dietary studies on museum specimens of *Antaresia* species by Slip and Shine (1990) showed a diet of frogs, mammals, and lizards with no snakes noted. Similarly, my examination of numerous *A. maculosa* from around the Townsville, North Queensland area has not recorded snakes in the diet.

Pythons are known to consume large heavy prey but, with the possible exception of *Aspidites melanocephalus*, are not often associated with elongate prey, despite other families of snakes preying on such items (Greene, 1983). Recent research into ophiophagy by the California Kingsnake *Lampropeltis getula californica* found that in order for snakes to consume other snakes the predator's stomach had to be stretched longitudinally to accommodate the prey (Jackson *et al.*, 2004). They conducted five trials in which a live Corn Snake *Elaphe guttata* was fed to *L. getula californica* with only one trial ending with full

**Figure 1. Spotted python (*Antaresia maculosa*) from Murray Falls National Park, Queensland, that had swallowed a Keelback (*Tropidonophis mairii*).**



digestion of the prey. These results give the impression that even snakes known to practice ophiophagy may not be morphologically adapted to eat snakes and that these snakes can have difficulty in fully digesting their prey.

*Antaresia* species have a catholic diet (Shine, 1990) and are also known to consume road-killed skinks (Switak, 1989) and agamids (Trembath *et al.*, 2007). This broad scale diet along with an acceptance to prey on dead items may allow them to take advantage of the relative abundances of prey including high densities of snakes they come in contact with.

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