

# An observation of excavating behaviour by a Black-headed Python (*Aspidites melanocephalus*) in the wild

Gerry Swan<sup>1</sup> and Christy Harvey<sup>2</sup>

<sup>1</sup>2 Acron Road, St Ives, NSW 2075, Australia

Email: [gerryswan@axtsystems.com](mailto:gerryswan@axtsystems.com)

<sup>2</sup>16 Fleetwood Cres, Frankston South, VIC 3199, Australia

## Abstract

The Black-headed Python (*Aspidites melanocephalus*) and the Woma (*Aspidites ramsayi*) have both been reported as carrying out burrowing or excavating behaviour. These reports have been based mainly on observations of captive individuals, with the only observations of specimens in the wild being those of Bruton (2013) on Womas. Here we report on a Black-headed Python scooping out sand with its head and fore-body to create a depression in the wild.

---

The pythonid genus *Aspidites* has been reported as exhibiting burrowing behaviour (Ross & Marzec 1990; Ehmann 1993; Barker & Barker 1994), based mainly on the report by Murphy, Lamoreaux & Barker (1981) that four captive Black-headed Pythons (*A. melanocephalus*) excavated gravel by using their head and neck to scoop loose material and create a cavity. O'Brien & Naylor (1987) reported that a young specimen that had been recently removed from the wild and was being held pending release, was observed digging beneath rocks and logs, ultimately creating a cavity in which it concealed itself.

Fyfe & Harvey (1981) recorded similar behaviour by six captive Womas (*Aspidites ramsayi*). The floor of the vivaria in which they were housed was covered with 5–15 cm of sand and the pythons scooped this out in large quantities until they reached the base of the vivarium. Two of these Womas also refused to shelter in the hollow logs or small bushes provided. Instead, they rested on top of the sand with the front 50 cm of the body including the head submerged under the sand. They would remain in this position for up to 20 minutes before surfacing for a few minutes then repeating the movement. The only record of excavation in the wild was made by Bruton (2013), who reported two instances of wild Womas excavating burrows. In both cases, it appeared that they were enlarging existing burrows either for shelter or during hunting.

During survey work on the Northern Gas Pipeline project southwest of the Barkly Tableland in the Northern Territory (19°54.461'S, 135°56.692'E) we observed a Black-headed Python excavating soft sand in the bottom of a pipeline trench. The observation was made on 8 November 2017 during the daily check of the trench for animals that had fallen into it (see also preceding paper in this issue of *Northern Territory Naturalist*). We had

---

seen the track of a python on the floor of the trench, heading in the same direction we were. This continued for almost a kilometre, until we located the animal, approximately 1.3 m in length, scooping into loose sand with its head and neck (Figure 1), thus creating a shallow depression. It had only just begun this activity when we arrived and continued to scoop into the sand while we watched. At the time of day (10.45 hr) the temperature was around 35°C and full sunlight was just beginning to flood the bottom of the trench, thus eliminating any shade. The depth of the trench was approximately 1.8 m with steep unstable edges, preventing the python from scaling the wall. We observed this digging behaviour for several minutes before we removed the animal from the trench and relocated it a suitable distance into adjacent low sparse *Eucalyptus* woodland with hummock grass.



**Figure 1.** Black-headed Python excavating a depression into loose dry sand, southwest of Barkly Tableland, Northern Territory, 8 November 2017. (Gerry Swan)

In the case reported here, the sand was dry and very loose, and quite unsuitable for the creation of a burrow. Given the high temperature and the aspect of the sun in the trench we surmise that the python was attempting to create a depression sufficient to cover itself and escape the direct sunlight.

While some observations appear to be excavations for concealment or to uncover prey items, the purpose of others is not so clear. Unfortunately observations on captive behaviour do not necessarily reflect what happens in the wild. In this particular observation, while the python was not in captivity it was not in its natural environment, and what effect the confinement to a narrow trench would have is uncertain. However, the animal did engage in an excavation behaviour for a purpose that remains unclear.

---

---

## References

- Barker D.G. and Barker T.M. (1994) *Pythons of the World, Volume 1, Australia*. Advanced Vivarium Systems Inc., California.
- Bruton M.J. (2013) Arboreality, excavation, and active foraging: novel observations of radiotracked woma pythons *Aspidites ramsayi*. *Memoirs of the Queensland Museum - Nature*, 56(2): 313-329.
- Ehmann, H. (1993) Family Boidae. Pp. 284–289 in Glasby C.J., Ross G.J.B. and Beesley P.L. (eds) *Fauna of Australia. Vol. 2A Amphibia & Reptilia*. Australian Government Printer, Canberra.
- Fyfe G. and Harvey C. (1981) Some observations on the Woma (*Aspidites ramsayi*) in captivity. *Herpetofauna* 13(1), 23-25.
- Murphy J.B., Lamoreaux W.E. and Barker D.G. (1981) Miscellaneous notes on the reproductive biology of reptiles 4. Eight species of the family Boidae, genera *Acrantophis*, *Aspidites*, *Candoia*, *Liasis* and *Python*. *Transactions of the Kansas Academy of Sciences*, 84(1): 39-49.
- O'Brien M. and Naylor L. (1987) Observational note on a Black-headed Python. *Thylacinus*, 12(2): 9.
- Ross R.A. and Marzec G. (1990) *The Reproductive Husbandry of Pythons and Boas*. Institute for Herpetological Research, California.
-