# AUSTRALIAN PYTHONS (PART 2)

## THE SMALLER LIASIS

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## INTRODUCTION

In this and a following article I intend to discuss the genus Liasis and its Australian representatives. The nomenclature used by myself will be the same as that used by Cogger (1979) except that I shall call Python oenpelliensis, Liasis oenpelliensis in recognition of the affinity this snake shows in relation to others in the same named genus and for reasons of consistency. McDowall's (1975) argument for the reclassification of three Australian python species has both firm grounding and serious flaws simultaneously. I shall review his classification system after my discussion of the genus Morelia. Most Australian herpetologists including Cogger (1978) do not believe that the White Lipped Python (Liasis albertisi) occurs on the Australian mainland, being only found in Australian territory on a few islands immediately off the New Guinea coast. For this reason I shall omit Liasis albertisi from my discussion of Australian pythons.

## GENUS LIASIS

### Description

Liasis is a genus confined to Australia, New Guinea and parts of Indonesia. These pythons have teeth on the premaxilla, head covered by large symmetrical shields and the presence of pits in some of the labial scales. Their bodies are roughly cylindrical. This oviparous genus occupies all available terrestrial habitats except very cold places.

## Children's Python (Liasis childreni)

### Description

The Children's Python is a moderate to heavily built snake of variable colour. Typically it is light brown dorsally, being lighter on the lower sides with an irregular pattern of dark brown blotches along the back and sides, often roughly arranged in transverse series to give the impression of irregular cross-bands, the head, light brown often with small darker flecks or blotches. A dark streak may pass through each eye. The ventral surface is white.

The scalation is smooth with 37-49 mid body rows, 255-300 ventrals, single anal and 30-45 mainly divided subcaudals, with usually a few anterior ones single.

This snake averages .85 metre in adult total length but specimens up to nearly 2 metres are known.

The morphology, particularly that of the head, of this species is highly variable geographically, and these characteristics have led some people to subdivide Liasis childreni into several sub-species although because some morphological differences tend to be clinal it is unlikely that any of these divisions will stand.

Habits

Excluding the genus Morelia the Children's Python is Australia's most widely distributed species of python and throughout most of its range is also the most common python. Children's Pythons are found in many habitats including the most arid deserts, tropical rain forests, and montane forests in South East Queensland and N.S.W., some of which may get snow in winter months (e.g. Bingara, N.S.W.). Usually Children's Pythons are most common in rocky areas although massive population densities of this python are known in areas without rocks, such as along water courses in some arid areas and in ant-hill country. Children's Pythons are often called the rock python.

Children's Pythons are predominantly nocturnal in habit due to the high day-time temperatures throughout most of their range, although in some cooler areas such as parts of South Eastern Queensland, this species may be diurnal. Unlike many pythons the Children's Python almost never rests in the open, always sheltering in or under some form of cover such as a rock crevice, log, etc.

The diet of this species varies according to locality, in reflection of food types available. The Children's Python is an opportunistic feeder, feeding on both warm and cold-blooded food. Cannibalism is unknown in this species and evidence collected in the field shows that this species never normally feeds on other snakes in the wild. Children's Pythons from frog-infested areas tend to carry far more internal parasites than those from other areas.

Adult Children's Pythons produce an average of 10-12 eggs annually around November (in the wild) which usually take under three months to hatch. Young when born measure 30 cm in length and weigh roughly 7 grams (Barnett 1980). Sexual maturity comes at roughly 50 cm in length and two to three years of age in the wild.

In Captivity

Along with pythons of the genus Morelia, Children's Pythons are widely kept in Australia and other parts of the world. Excluding Morelia the Children's Python is the most frequently captive-bred Australian python.

Because Children's Pythons are generally hardy and easy to feed and because nine out of ten are docile in temperament they are an excellent snake to keep in captivity. On account of their size Children's Pythons may be kept in cages of moderate size, and the most important requisite for success in keeping them is maintaining sufficient temperature (above 22°C) for most of the year. The setting of the cage is usually relatively unimportant as Children's Pythons will thrive in almost any cage so long as it is not too moist too much of the time. Successful breeders often keep this species in cages with no more than newspaper on the floor, a single hide box or horizontal log and water, indicating the ease of keeping this species. Children's Pythons are susceptible to ailments such as mites and canker, the latter of which they are statistically more prone to than are most other Australian pythons. Children's Pythons are known to live for well over ten years although no detailed life-span studies on any Australian python has been done.

The Children's Python is an excellent breeder's snake, not only because it breeds regularly and easily but also because it often reaches sexual maturity in captivity in eighteen months. Children's Pythons also have a good 1:1 male:female sex ratio making it relatively easy to obtain both sexes without inspecting or obtaining too many specimens. Most breeders initiate breeding by cooling both sexes (15-18°C Av.), although some breedings of this species occur without any temperature alterations to the snakes. Surprisingly most breeding cases of the Children's Python coming to my notice do not involve separation of the sexes prior to mating, although I would suspect that like most other snakes, separation of sexes prior to an intended mating would enhance the chances of breeding this species. When eggs are laid they should be artificially incubated using standard incubation techniques maintaining a stable temperature of 29°C, and a high humidity. Mould should obviously be kept off the eggs.

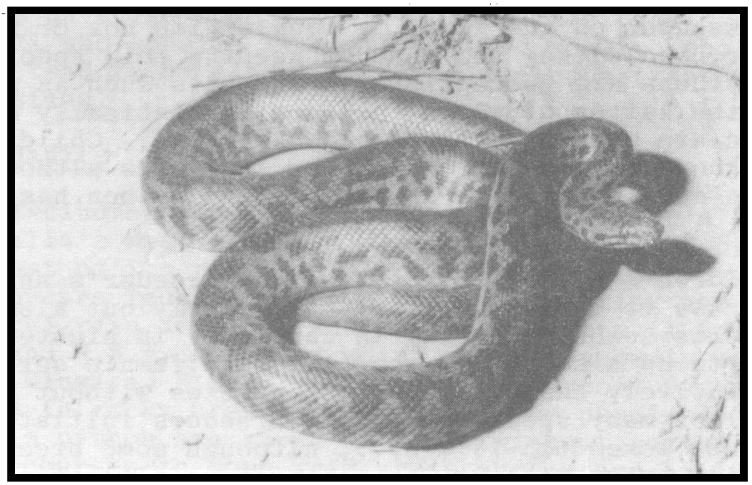
On one occasion an artificially incubated egg split open because of excessive humidity in the incubator (Barnett 1980) and an elaborate 'humidicrib'-like set-up for the egg was devised. The egg's embryo which had been disturbed 31 days into incubation was set up so that full visual observations on the development of the embryo could be made. After 53 days the developing snake left the 'humidicrib' (hatched) and measured 31 cm in length, and 7.1 grams. Because of the relative abundance of Children's Python in their native haunts and the ease of breeding the species it is a relatively cheap Australian Python in the U.S.A. and Europe.

Interestingly, in 1973 the N.S.W. National Parks and Wildlife Service declared the Children's Python a rare and endangered species. An outcry by many herpetologists and conservationists and the risk of public scandal about the unwarranted attention this 'common' species was receiving, led to the move by the N.S.W. National Parks and Wildlife Service being revoked.

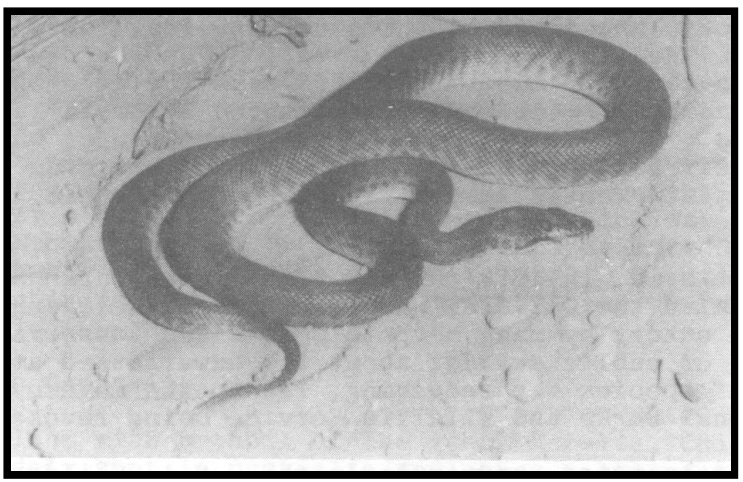
In some countries, particularly the U.S.A. Children's Pythons and other Australian reptiles are becoming much more common due to recent smuggling operations (1981).

PHOTOGRAPHY BY THE AUTHOR

1) Children's Python Liasis childreni, Male.
Charters Towers, Queensland



2) Ant-Hill Python Liasis perthensis, Female.
Katherine Gorge, Northern Territories



Unfortunately nowadays smuggled reptiles are X-rayed significantly to prevent breeding to conserve markets, hence once a reptile is stolen to be smuggled it becomes effectively worthless as a long-term conservation tool.

## The Ant-Hill Python (Liasis perthensis)

The Ant-Hill Python (also known as Western Children's Python, Western Python, Western Dwarf Python), is plain brick red through browns to olive green dorsally with an indistinct blotched pattern. Ventrally the colour is whitish. The head is pointed and wedge-shaped. The Ant-Hill Python is of moderate to heavy build. The basic scalation is smooth with 31-35 mid body rows, 205-255 ventrals, single anal and 30-45 mainly divided subcaudals, but usually a few anterior ones are single. This snake averages 55 cm in adult total length, but specimens up to 70 cm do occur.

Among the many differences between the Ant-Hill Python and the Children's Python are the lower mid-body row and ventral scale counts (Cogger 1979). Some people have postulated that Liasis perthensis be split into two geographical species: the reddish-coloured Western Australian specimens remaining as Liasis perthensis whilst the brownish to olive Northern Territory specimens be named a new species, Liasis inornata. My own research indicates that such a new specific division is not valid.

### Habits

The Ant-Hill Python (Liasis perthensis) is a common species found widely throughout North and Western Australia (Hoser 1981), being found throughout most of Western Australia, the Northern Territory and far north-western Queensland. This wholly nocturnal species is usually found in dry to monsoonal country and probably has a stronger affinity for the termite mound habitat than any other Australian python, although ant-hills are by no means the exclusive domain of this species, with the Children's Python inhabiting termite mounds throughout their range (Hoser 1981).

Ant-Hill Pythons and Children's Pythons are even found in the same termite mounds and it is assumed that throughout much of their range both species compete against one another for food (shelter being no problem). In many respects the biology of Ant-Hill Pythons and Children's Pythons appears identical. Cross-breeding between the two species has never been known to occur.

Ant-Hill Pythons are usually caught outside of ant-hills either moving about at night or residing by day in alternative cover such as spinifex bushes. Ant-Hill Pythons are common in some areas and inexplicably absent in identical areas nearby.

In the wild diet consists of any suitable vertebrates excluding other snakes, in particular Gehyra spp, Eramiascinus spp (lizards) and Antechinus spp (Marsupial mice). Predators include birds, and mammals such as foxes. Both the Ant-Hill Python and the Children's Python appear to be preyed upon by larger

Elapids such as Pseudechis australis (Hoser 1981). The Ant-Hill Python generally has a docile temperament and when disturbed rarely attempts to escape.

Effectively nothing is known about the breeding biology of the Ant-Hill Python although it is assumed to be somewhat similar to that of the Children's Python, although some isolating mechanism between the two species must presumably exist. Although egg-laying, the number of eggs laid is unknown, as is the time of year that they are laid.

In Captivity

To my knowledge only about a dozen specimens of Ant-Hill Pythons have been kept in captivity, all of which have been kept in Australia. Only five of these specimens were or have been kept for any reasonable amount of time (12 months).

I know of no Liasis perthensis ever dying in captivity so must assume that they are susceptible to the usual snake ailments (but to an unknown degree).

All specimens held in captivity have been kept in heated cages with rocks, logs and other natural furnishings. A common complaint about this species by those who have attempted to maintain it in captivity is that it often refuses to feed. My personal experience with Ant-Hill Pythons points to the opposite with all specimens eating all food offered (including dead food) voraciously. This species has not to my knowledge been bred in captivity although because of the closeness of this species to Liasis childreni I would suggest similar techniques for breeding both species. For those not used to the appearance of Ant-Hill Pythons, the risk of misidentification of one for a Children's Python is great. A classic example was seen recently when one Ant-Hill Python passed through the care of three well-known herpetologists, being thought of as a Children's Python until I positively identified it otherwise. In physical appearance Ant-Hill Pythons and Children's Pythons are in reality very different although I wouldn't be surprised if many herpetologists are keeping Ant-Hill Pythons under the impression that the snakes concerned are Children's Pythons.

Stull's original description of Liasis perthensis even made mistakes. The type locality was given as Perth in error, as this species is now known not to occur in the Perth district. The colour description given also fits a typical Liasis childreni from the western part of Australia, but because of the other features of Liasis perthensis mentioned (i.e. scalation and size) it is almost certain that the colour description was also an unintended error.

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