

# AUSTRALIAN PYTHONS (PART I)

## GENERA CHONDROPYTHON AND ASPIDITES

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### INTRODUCTION

Whilst in England (in 1980), I saw a great deal of interest among amateur herpetologists in all aspects of the Boidae. This included Australian species, although most people in the U.K. were not familiar with them. In this series of four articles I intend to give an insight into the Australian Pythons including comments about their care and breeding in captivity.

Australia has four (currently recognised) genera of python, namely Aspidities, Chondropython, Liasis and Morelia, of which Aspidites is the only genus confined to mainland Australia. In this article I shall discuss the genera Chondropython and Aspidites leaving the other two genera for later articles.

### GENUS CHONDROPYTHON

#### Description

Chondropython is a monotypic genus confined to New Guinea and the North East tip of Australia. It is characterised by the absence of teeth on the premaxilla; irregular small scales on the top of the head and the presence of pits in some of the labial scales. Like all pythons Chondropython is an oviparous (egg-laying) genus.

### GREEN PYTHON (CHONDROPYTHON VIRIDIS)

#### Description

The Green Python is in adults usually bright emerald green dorsally with a series of white or yellow scales along the vertebral line and a few scattered white scales on the sides. A series of short, light blue bars extends out from the vertebral line. The belly is cream to light yellow. Live adults which are blue in colour dorsally are known to occur. Juveniles vary from golden red to bright yellow in colour often with a dark purplish brown, white centred streak through the eye and a vertebral stripe of the same colour, with short bars of brown extending out from the vertebral line. The change from juvenile to adult colour varies between several months to a few weeks and is not dependent on sloughing activity by the snake. It occurs at roughly two years of age.

The scalation is smooth with 50-75 mid-body rows, 225-260 ventrals, a single anal and 90-110 (single) subcaudals.

This snake averages 1.2 metres in length but specimens up to 2 metres are known.

### Habits

Green Pythons in Australia are restricted to dense rain-forests, although in New Guinea they occupy a wide range of habitats available including swamplands and savannah woodlands. This species is rare in Australia but common where it occurs in New Guinea.

Green Pythons are nocturnal and arboreal in habit, sheltering by day either in cover or sometimes coiled up in shady places on the ground or on logs. Green Pythons rely on their cryptic colouration to avoid detection during the day in their native habitat. When disturbed, however, Green Pythons are usually aggressive, often biting seemingly without provocation. Due to their large sharp teeth their bites can be painful and usually draw blood, although risk of infection from any python bite is far lower than commonly realised.

Like most pythons, Green Pythons will feed on almost any animal of suitable size although it does display a distinct preference for warm-blooded food.

Adult Green Pythons produce between 13 and 20 eggs annually in the wild.

### In Captivity

Surprising as it may seem to many there are far more Green Pythons in England and the U.S.A. than there are in Australia and New Guinea (their countries of origin). This is due to many reasons including the fact that there are strict laws protecting the species in Australia and New Guinea.

Green Pythons are regarded as a "prestige" snake commanding three-figure sums (Pounds Sterling) when sold commercially.

Green Pythons are hardy in captivity being less susceptible to common diseases such as mouthrot and scale ailments than many other pythons. The "ideal" set up for Green Pythons is a cage well furnished with hollow logs or wooden boxes (for access to the snakes), some green vegetation and a high temperature maintained. Obviously clean water should always be provided. Like many pythons, Green Pythons are successfully kept in small cages with no more than newspaper on the bottom, one or two horizontal logs, a wooden box and a water dish. This is particularly the common case among people with large collections who place a premium on easy maintenance of their snakes.

Green Pythons have rarely bred successfully in captivity. Like other pythons, in order to breed Green Pythons it is advisable to "cool" and separate the sexes for a period of time. This means

lowering the temperature of their cages from the usual, say 25-32°C, to 17-22°C, for a period between a week and two months. Initially the cooling inhibits, but later promotes spermatogenesis in males. The same applies to females for oogenesis and later ovulation.

When laid the eggs should be incubated at 29°C (a lower temperature then for most python eggs), and if moisture conditions are correct (i.e. very high humidity) and if the eggs are fertile, one should expect a very high hatch rate.

## GENUS ASPIDITES

### Description

Aspidites is restricted to mainland Australia. This terrestrial genus of pythons is characterised by the absence of teeth on the premaxilla, enlarged symmetrical shields on top of the head and the absence of pits on the rostral or labial scales. The two species in this genus are the Black-headed Python (Aspidites melanocephalus) and the Woma (Aspidites ramsayi). Like all pythons Aspidites lays eggs.

## BLACK-HEADED PYTHON (ASPIDITES MELANOCEPHALUS)

### Description

This relatively thick-set python has a small head indistinct from the neck. It is light to dark brown dorsally, often lighter on the sides with numerous darker brown, reddish brown, or blackish crossbands which are usually narrower than the lighter interspaces. The head, neck and throat are a shiny jet black. Ventrally the colour is cream to yellow, occasionally with darker blotches.

The scalation is smooth with 50-65 mid body rows, 315-355 ventrals, single anal and 60-75 mainly single subcaudals. The posterior subcaudals tend to be divided, often irregularly. This snake averages 1.5 metres in length although specimens of up to nearly double this length have been recorded.

### Habits

This species is found throughout the northern third of mainland Australia, but is not usually found in arid regions where the Woma (Aspidites ramsayi) occurs instead. Black-headed pythons are fairly common throughout their range.

This snake inhabits all habitats where it occurs, living in rock outcrops, along water courses, in hollow logs, down burrows of various forms or simply in Triodia (spinifex) clumps (grass tussocks).

In warm weather, this species is nocturnal, although during the cooler months (June-August) this species is dominantly diurnal.

The Black-headed Python probably has few natural enemies other than Man and Dingoes (wild dogs), and it seems that the most common direct causes of death in the wild would include starvation in times of famine and the ravages of internal parasites.

Black-headed Pythons' food consists of small mammals, birds and an unusually high proportion of reptiles and frogs. This includes highly venomous species such as the Desert Death Adder (Acanthophis pyrrhus) which occurs throughout much of the Black-headed Python's range. This species is highly prone to cannibalism both in the wild and in captivity.

When detected in the wild, Black-headed Pythons will either move away or, if cornered, hiss loudly, although rarely biting. Black-headed Pythons are an inoffensive species.

This species lays eggs in clutches of about eight.

### In Captivity

Few people anywhere keep this species or its close relative the Woma (Aspidites ramsayi). This is largely due to the remoteness of their habitat and not because either species is rare.

Black-headed Pythons which are kept by people in the areas they originate from are often fed exclusively on snakes due to their apparent preference for them over warm-blooded food. Probably the most commonly used food item is the Desert Death Adder which occurs in large numbers throughout many of these areas. People who live in Australian cities and in other places where Black-headed Pythons don't naturally occur maintain specimens successfully on a diet of mice.

Black-headed Pythons although very docile in captivity and usually good feeders are highly susceptible to a range of infections such as mouth-rot (Canker or Ulcerative stomatosis), eye infections and scale ailments. Also they are very susceptible to the ravages of the internal parasites they commonly carry. Despite this some people have kept individual Black-headed Pythons for a number of years.

Little is known of the breeding biology of this species largely due to the fact that so few of them have been kept in captivity. There appears to be a strong surplus of males in snakes of the genus Aspidites, like in other Australian pythons, which exacerbates the situation of a shortage of "breedable" snakes.

Copulation can be readily obtained by separation of the sexes for a period of at least two weeks, without "cooling" being necessary. Unfortunately only two successful breedings of this species in captivity are recorded, thus meaning that most matings in this species are infertile. It is presumed that Black-headed Pythons have similar breeding biology to other Pythons.

Most people who keep Black-headed Pythons successfully keep them in cages heated between 24-32°C, and with no loose soil or sand as it commonly gets in their mouths. Often they are kept successfully in cages with newspaper as ground covering. Alternatively they have been kept successfully in cages with a clay or rock (hard) bottom, either covered with leaves, rocks, logs, wooden boxes etc. or completely bare.

## WOMA (ASPIDITES RAMSAYI)

### Description

This is a very similar snake to the Black-headed Python. It is thick-bodied and has a head which is indistinct from the neck. Dorsally it is grey, olive brown, or rich reddish brown above, often lighter on the sides, and with numerous darker olive, brown to black crossbands which are normally narrower than the lighter interspaces. Old specimens often lack these bands. The head is the same colour as the body although some juveniles may have black patches on their heads. The throat and belly is yellow to cream with numerous pink or brown blotches.

The scalation is smooth, with 50-65 mid body rows, 280-315 ventrals, single anal and 40-45 mostly single subcaudals. Some posterior subcaudals are irregularly divided. This snake grows to the same size as the Black-headed Pythons, averaging 1.5 metres in length.

### Habits

This snake is virtually a southern and more inland representative of the genus Aspidites. This species is not found in the same localities as the Black-headed Python.

Because this species is an inland form and is commonly found in sandy localities it is often referred to as "Sand Python". Womas have very similar biology to Black-headed Pythons (i.e. feeds on reptiles and mammals, is terrestrial, etc.). Womas are inoffensive and also produce about eight eggs to a clutch. Again womas appear to have few natural predators.

### In Captivity

Like Black-headed Pythons, few are kept in captivity. Its requirements are identical to those of the Black-headed Python, and those people who have kept them successfully have utilized methods similar to those I outlined for Black-headed Pythons. To my knowledge this species has never been bred in captivity.

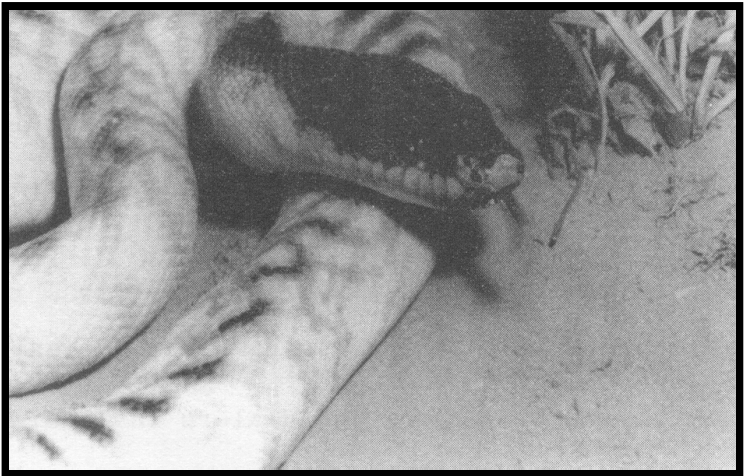
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GOW, G.F. (1976) Snakes of Australia. Angus and Robertson, Sydney.  
ROSS, R. (1978) The Python Breeding Manual. Institute of Herpetological Research, California, U.S.A.



PHOTOGRAPHS BY THE AUTHOR

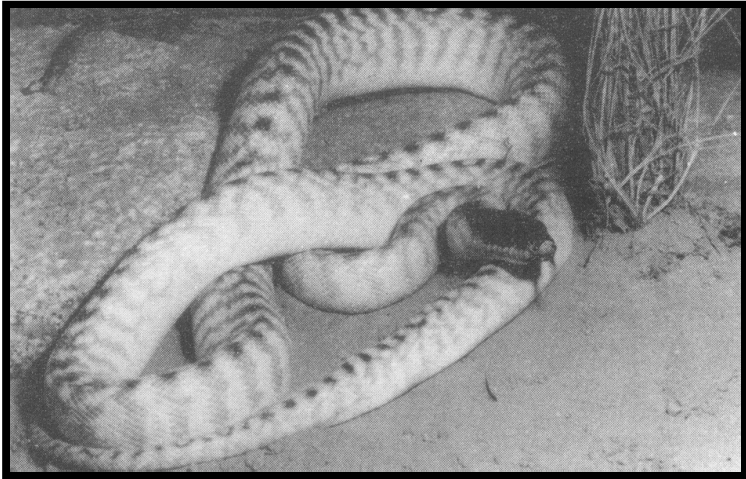
Green Tree Python Chondropython viridis. Unsexed adult.  
New Guinea specimen.



1. Black-headed Python Aspidites melanocephalus.

Specimen from Goldsworthy, W.A. (Lat 20°21' Long 119°30')  
Adult 1.5 meter male.

Note: West Australian specimens are distinctly lighter  
than their Eastern Australian counterparts.



2. Black-headed Python Aspidites melanocephalus  
(Details on previous page)  
Photograph by the Author.