CLASSIFICATION OF AUSTRALIAN BOIDAE

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By ERIC WORRELL

I am indebted to Dr. A. B. Walkom and Mr. J. R. Kinghorn, of The Austarlian Museum, who assisted me with this work by allowing me to examine museum records and specimens for comparison with my field notes.

Family BOIDAE. (See Catalogue of Snakes of the British Museum, Boulenger, page 71, Vol. 1.) Solid toothed, rudiments of pelvis and hind limbs indicated externally by a thornlike spur on each side of the vent.

Sub-family PYTHONINAE. Supraorbital bone present; anterior teeth enlarged and recurved; elliptical pupil; all species are oviparous. Genera: Aspidites, Chondropython, Liasis and Python.

Genus ASPIDITES Peters

Premaxilla toothless; head slightly distinct from neck, large symmetrical shields; nostril lateral in single nasal; body cylindrical, capable of depressing under certain conditions; tail short; subcaudals mostly single.

A. melanocephalus Krefft

Black-headed Python. Jet-black head, throat and neck-pointed muzzle overlapping; creamish to brown dorsal surface with darker bars along the entire body. Ventral surface white to creamish. An adult may exceed eight feet.

Scalation: Rostral broader than deep, occupies about one-fourth the distance from tip of snout to front from above; internasals as broad as deep; two pairs of prefrontals, inside pair may or may not contact frontal; frontal almost as broad as deep, almost twice as broad and half as long again as supra-oculars; large nostril, nasal entire, rarely semi-divided; two or three preoculars; three or four postoculars; 11-12 upper labials, about 16 lower. Body scales around 55 rows; Ventrals about 330; Anal entire; Subcaudals about 60.

This python inhabits Northern Australia and appears to be more of an inland form, being more numerous on the borders of the monsoonal belts. I collected several between the Katherine River and Daly Waters area. The python is mild-mannered, but difficult to feed in captivity.

A. ramsayi Macleay

Woma. Similarly shaped to A. melanocephalus, grey-green with narrow olive bars. Ventral surface yellowish with pink blotches. Attains a length of almost eight feet.

Scalation: Rostral broader than deep, occupies about one-eighth the distance from snout to frontal when viewed from above; internasals deeper than broad; two pairs of prefrontals, outside pair may or may not contact frontal; frontal about as broad as deep, nearly twice as broad and one-fourth longer than supraoculars; loreal abnormally broken; nasal entire; 2 or 3 preoculars; about 5 postoculars; up to 15 upper labials and 19 lower labials. Body scales are from fifty to over sixty rows; Ventrals around 300; Anal entire.

The Woma is found in the sandhills of Central Australia, Western Queensland and the northern part of South Australia, where it has on occasions been taken from rabbit burrows. Alice Springs residents know the Woma as the Rocksnake and believe it to be deadly venomous.

Genus CHONDROPYTHON Meyer

Premaxilla toothless; head, covered with small granulated scales, distinct from neck; nasal large, single or divided; internasals separated by smaller scales; oculars not enlarged; anterior upper labials pitted, also some of the lower labials.

C. viridis Schlegel

Green Python. The compressed body of this beautifully coloured python is bright green with scattered white scales and light blue vertebral markings. The ventral surface is bright yellow. Juvenile specimens are brilliant golden yellow or brick red and change to green about three years after birth. Attains a length of about five feet. Scales are in 57-61 rows; Ventrals 227-240; Anal entire; Subcaudals 75-109.

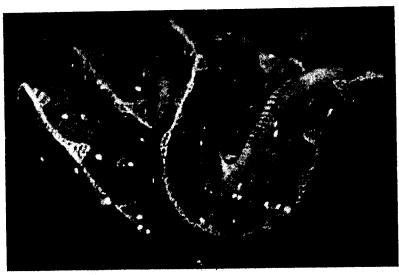


Figure 1. Green Python, Chondropython viridis.

Photo.-E. Worrell.

For some years a specimen of C. viridis in the Queensland Museum, Brisbane, was regarded with suspicion when claimed to have been collected on Cape York Peninsula, as the species was believed to be confined to New Guinea and surrounding islands. Lately, however, its existence has been confirmed, not only from reliable reports, but also from several specimens, one of which is exhibited at Taronga Zoo. In September, 1950, a specimen was collected by the Queensland University's biological collector. I doubt that the range extends beyond Cape York Peninsula.

Genus LIASIS Gray

Premaxilla toothed; head distinct from neck, covered with symmetrical shields; large semi-divided nasal, nostrils supero-lateral; body cylindrical, capable of depressing under certain conditions; tail short to moderate; subcaudals mostly divided.

L. childreni Gray

Children's Python. A somewhat short python, olive brown above liberally covered with broken darker transverse markings or spots with occasional cream splotches. The markings of juvenile specimens are almost black, while some adult specimens may lose their markings entirely. The ventral surface is white. Kinghorn (The Snakes of Australia) states that L. childreni attains a length of about seven feet, but I have never collected a specimen in excess of four feet.

Scalation: Headshields are liable to great variation. Rostral broader than deep, barely visible from above; nasal divided; two pairs of prefrontals, larger pair usually separated from frontal by small azygous scale; largest shield frontal, slightly longer than broad, twice as broad and longer than supraoculars; loreal broken; usually two preoculars, neither contacting frontal; several postoculars; from ten upper and thirteen lower labials—some of the posterior lower labials are pitted. Body scales from 36 to 50 rows; Ventrals from about 250 to almost 300; Anal entire; Subcaudals around 50, of which the first few may be single and the balance divided.

The species is widely distributed in Northern Australia. In Queensland I have collected specimens from Rockhampton, Clermont, Charters Towers and intermediate localities, and in the Northern Territory from Point Charles to Port Essington and south to the Roper River. The python subsists principally on small mammals, birds and lizards.

L. fuscus Peters

Water Python. Long head slightly distinct rfom neck, body stout. Dorsal surface deep chocolate brown, subcaudals dark. The labials are vellowish and ventral surface bright yellow to orange.

Scalation: Rostral broader than deep, barely visible from above; internasals almost twice as deep as broad; two pairs of prefrontals, both pairs contacting frontal; frontal longer than broad, one-third longer and twice as broad as supraoculars; single large loreal; one preocular not contacting frontal or nasal; usually two postoculars; temporals noticeably larger than nuchals; about eleven upper labials, the first pitted; about fifteen lower labials, from about the fourth to the seventh posterior being pitted. Body scales from 42 to about 5 rows; Ventrals 270 to almost 300; Anal entire; Subcaudals 60 to 75 paired.

L. fuscus is the rarest Liasis occurring along the rivers of the far north. I have collected specimens from the Edith, Katherine, Waterhouse and Roper Rivers. It is known as "Wirri", the water-snake by the Diowan tribe of the Katherine-Mataranka area, and speared or food. Reptiles constitute the snake's main diet. Between October and December the water python feeds principally upon juvenile Crocodilus johnsoni, which it hunts in the water by night.

L. olivaceus Gray

Olive Python. The head is large, distinct from neck, snout longish. The body is loose-skinned and olive coloured, the labials are whitish and ventral surface white to cream. The tail is longer comparatively than in any other Liasis. This snake attains twelve feet.

Scalation: Rostral broader than deep, barely visible from above; internasals about twice as long as broad; large single loreal; two pairs prefrontals—anterior pair elongate, usually almost twice as long as internasals and rarely contacting frontal, being separated by a small azygous shield; frontal largest scale—longer than broad, one-third longer and twice as broad as supraoculars; two to four postoculars; temporals not noticeably larger than nuchals; twelve to fourteen upper labials—first pitted. Body scales from about 60 rows; Ventrals from 350; Anal entire; Subcaudals divided, often exceeding 100. Some may be entire.

L. olivaceus is commonest in limestone localities and is the largest snake in the Northern Territory (unless Python amethystinus can be established as exceeding it). I collected specimens rom West Arm to Cape Don and Arnhem Land, south to Birdum and intermediate localities, and also between the Cape River and Blair Athol, Queensland. Natives of the central north (Newcastle Waters to Katherine) believe the Olive Python to be Goorijalpongo, the earthly form taken by Bollong the mythical Rainbow Serpent, creator of all material things. Diet consists principally of mammals, birds and Varanus gouldi.

L. albertisii Peters & Doria

D'Alberti's Python. Head large, distinct from neck, black with creamish to pink labials anteriorly tipped with black. Snout narrow, throat flecked with black. Olive to pinkish brown above, cream to yellow below.

Scalation: Rostral broader than deep to as broad as deep, pitted, visible from above; one pair of prefrontals, twice as deep as broad; internasals slightly deeper than broad, broad anteriorly, over twice as broad anteriorly, over twice as broad anteriorly, over twice as broad anteriorly as supraoculars; one loreal, abnormally two; small variable parietals; twelve to fourteen upper labials, first three or four pitted; about sixteen lower labials, half of which may be pitted. Body scales about 50 rows; Ventrals from about 260; Anal entire; Subcaudals around 70 divided.

Kinghorn states that this rare python occurs in Northern Australia, attains eight feet, and produces about thirty eggs. The diet consists mainly of small memmals and birds.

Figure 2.

D'Albertis' Python,

Liasis albertisii.

Photo.-E. Worrell.



Conus PYTHON Daudih

Premaxilla toothed; head distinct from neck; nasal semi-divided, nostril supero-lateral; body cylindrical to compressed; tail moderate, prehensile; cubcaudals mostly divided.

Queensland Rock Python. The head is large, body elongate and tail tapering. The dorsal surface is olive brown with dark brown markings and the ventral surface white to creamish. Is known to exceed twenty feet.

Scalation: Rostral pitted, broader than deep, visible from abo ve; internasals deeper than broad, two pairs of prefrontals, outside pair may or may not contact frontal or may be separated from frontal by a small az vgous shield; nasal large; loreals broken; usually three preoculars, superior may or may not contact frontal; about four or five postoculars; frontal narrower that deep to as broad, slightly wider and longer than supraoculars; parietals it. mainly two or three pairs, the balance broken; about twelve upper labials, the first four pitted; twenty or more lower labials, the middle six or seven pitted. Body scales from 40 upwards; Ventrals around 300; Anal entire; Subcaudals over 100 paired, the first few may be single.

The Rock Python is essentially a North Queensland species, and although no definite proof exists, it is believed by many to attain a length of thirty feet. I once read an account in "Wide World" of a large Rock Python crushing a Queensland native to death. This particular specimen eluded its pursuers, who later captured a "smaller specimen measuring just on thirty feet and sold it to Melbourne Zoo". In amethystinus feeds principally upon mammals and birds.

Diamond Python. The head is large and relatively short, body stout and tail medium. The body is ivory black and under surface white to yellow, splotched with black. The upper surface may be liberally dotted with yellow or cream spots in patterned groups, or may be sparsely spotted. Some specimens have a light spot on each dark scale. A length of ten feet is

Scalation: Head covered with small scales or broken plates; large nasal superiorly situated; rostral slightly deeper than broad, pitted; eleven to fourteen upper labials, first two or three pitted; about twenty lower labials of which about six or seven of the middle ones are pitted. Body scales from about 40 rows; Ventrals 260, more or less; Anal single, abnormally divided; Subcaudals 80, more or less, divided, some may be entire.

The Diamond Python has the smallest range of the pythons, although its subspecies is distributed all over Australia. This python habitates the central coastal to mountainous areas of New South Wales. Food consists of small mammals and birds. One specimen was brought to Taronga Zoo containing several china eggs, although in captivity I have never been able to induce an Augustian snake it eat eggs.

The many varieties have been con-

veniently grouped under this subspecies, as the variations converge too closely to make accurate definition practical. Known as the Carpet Python. The colouring is various shades of brown with darker patterns in brown or black with greenish tinges. The largest specimens from Queensland sometimes exceed twelve feet, while specimens from Darwin rarely attain seven feet and are brightly banded. One specimen in Taronga Zoo, locality unknown, was adult at three feet. Farmers and produce merchants favour the Carpet Python as a ratter.

Simplified Key to the Genera and Species

(1) Premaxilla toothless.

Genus ASPIDITES: No labial pits. Internasals as broad as deep; about 16 lower labials-melanocephalus. Internasals broader than deep; about 19 lower labials-ramsayi.

"Genus CHONDROPYTHON: Rostral and some labials pitted.

Single species-viridis.

(2) Premaxilla toothed.

- (a) Loreal broken-childreni.
- (b) Loreal normally entire.

Two pairs of prefrontals contacting frontal-fuscus. Small azygous shield between prefrontals-olivaceus. Single pair of prefrontals-albertisii.

Centus PYTHON: Body cylindrical to compressed; rail strongly prehensile.

Headshields symmetrical, at least two distinct pairs of parietals—

amethypenus.

Headshields small, broken and irregular—spilotes.

The General Classification and Key cannot be applied outside Australia.