

PSEUDECHIS COLLETTI

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INTRODUCTION

The colletts black snake while common in Australian collections is rarely seen or written about outside Australia. This is due to its scarcity overseas and its venomous nature. I hope to outline below the known data on this species, and bring it to the attention of all those who may wish to work with *Pseudechis colletti*.

HISTORICALLY

The genus *Pseudechis* was proposed by Wagler in 1830, presently five species are contained: *Pseudechis australis*, *Pseudechis butleri*, *Pseudechis colletti*, *Pseudechis guttatus* and *Pseudechis porphyriacus*. Boulenger described *Pseudechis colletti* in 1902. Originally De Vis considered *Pseudechis guttatus* to be subspecific to *Pseudechis colletti*, but now is considered to be a full species. Much confusion has surrounded *Pseudechis colletti*, and *Pseudechis guttatus*, specimens have been found that were hard to assign to one or the other. *Pseudechis colletti* differs from *Pseudechis guttatus* by a higher ventral scale count, and usually by colour.

DESCRIPTION

Adults are brown to black above with numerous irregular crossbands. These crossbands range from red to cream in colour. The belly is cream to orange. The head is usually darker than the body. Juveniles are more vividly coloured, being black with orange crossbands. The head is distinct from the body.

SCALATION

19 midbodies: 215-235 ventrals; 50-7- subcaudals; anal usually divided; subcaudals usually singular anteriorly and divided posteriorly.

VENOM

The venom contains myolytic fractions, so muscular destruction can be expected from envenomation. Though this is minor when compared to the destruction caused by vipers.

This species averages a yield of 30 mg. The LD 50 is 2.38 (saline), in mg/kg, being 24% as toxic as *Naja naja*. Tigersnake (*Notechis scutatus*) antisera is effective for this species. This species can be quite reluctant to bite.

SIZE

Adults measure on average 1500 mm, with a maximum of 2000 mm total length. They mature at an approximate length of 1000 mm. Neonates average 300 mm, ranging from 290-370 mm.

DISTRIBUTION

Occurs in north central Queensland, Australia. The range of *Pseudechis colletti* is bound approximately by the towns of Cloncurry (west), Hughenden (east), and Charleville (south).

Museum collections strongly follow main roads. I personally have never located any specimens in the wild, despite a few attempts.

HABITAT

This species inhabits the clay plains made by the weathering of shales. These 'black-soil' plains crack deeply in dry conditions, following the wet, which causes the cracks to close. These cracks descend quite deep, to what depth I am unaware. I have dug along cracks that descended at least 1200 mm. The plains are vegetated with mitchell grass (*Astrebla spp*), spinifex (*Triodia spp*), with *Acacia spp* woodlands forming a small percentage of the vegetation. Occasionally sandstone, and basalt outcrops can also be found. This countryside has wide variances of temperature, and rainfall. The annual minimum/maximum temperatures can vary by 31-36°C. The winter is dry, with low night, and high day temperatures. Summer is preceded, usually by a wet, which causes considerable flooding, with high day and slightly lower night temperatures. The habitat is heavily grazed by sheep, and cattle, which leads to a degradation of the environment. Subsequent damage is endangering the lives of many species of animals within this area.

FOOD

Little is known of the wild food consumed. But it is presumed that it consists of frogs, reptiles, and possibly mammals. Captive specimens readily consume mice, or rats. Neonates are being large enough to be started on 'pinkies'.



Foto 1: Pseudechis colletti, vrouw, female, 1.40 m.
Foto G.J. Ure.



Foto 2: Pseudechis colletti, juvenile, 0.35 m.
Foto G.J. Ure.

BEHAVIOUR

Wild specimens are reported to be fairly docile, captives are extremely so. Neonates are often very nervy, jumping at any disturbance. Adults settle down, and can be easily handled with a hook, or by hand. Both juveniles, and adults flatten out a semi-hood when disturbed, and angle this hood towards the perceived threat. This display is very useful when gauging the attitude of an animal. I feel that with care and attention this species easily settles down to free-handling, and I find animals used to such, to be better captives. I am not condoning blasay, exhibitionist handling, but rather promoting a more realistic behaviour towards handling venomous reptiles. Animals used to human movements and handlings are less likely to be stressed by humans. Care must be taken that hands are not thought to be food. I always feed at night with thongs and clean during the day with hands, the animals recognise this routine. In the wild this species appears to be rare at times, and common at other times. When numbers of sightings are reported, a corresponding wet or flooding has also been noticed. Some people feel that more specimens are in captivity, than in the wild. I feel that this is very speculative considering the environmental conditions experienced on the 'black-soil' plains. But with the continued high pressure of grazing and predominance of droughts this may become the case. *Pseudechis colletti* apparently lives within the deep cracks in the soil during the winter. Specimens have been seen fleeing into them. Which might explain their apparent population explosion following floods, as cracks close up, leaving little cover to hide within. Wild specimens with the tips of their tails missing, may have lost it due to predation. They quite often leave their tails exposed on the surface when in cracks. This also occurs in captivity when the animals use hide-boxes.

BREEDING

Collets snakes were first bred in Australia in the early nineteen eighties, as far as I am aware. Very few specimens have been removed from the wild, so the stocks in captivity are very inbred. Stock exported from Australian zoos make up a fair proportion of those specimens outside Australia, the rest probably originated from smuggled stock. Mature adults are at least 1000 mm long, usually two years of age, and can be conditioned to breed by lowering the temperature during winter. With a night time low of 20°C and a day time high of 26°C. Summer temperature should have a night time low of 25°C and a day time high of 30°C. Temperature gradients within the cage still apply. Adults well conditioned, can be introduced to one another from mid to late winter. If no response, try introducing the male to the female, or vice-versa. Males may practice combat, and multiple males can also help in initiating mating. The animals should be continually separated and reintroduced, to encourage repetitive matings. This will ensure that the ova are fertilised when released. The ova may not be released when the initial mating occurs. The female drops a clutch of 6-20 eggs approximately two months past the successful mating. The eggs take from 60-90 days to hatch, little work has been done to accurately ascertain the exact periods of gestation/incubation under controlled conditions, thus the variance. The eggs weigh 35-45 gms, with neonates weighing 15-20 gms. The neonates remain within the egg for 12-24 hours, and slough approximately one week later. Neonates are large enough to be started on one day old mice, and should not be fed skinks. Feeding of lizards can lead to parasite problems, and it also takes longer to get the neonate onto mice.

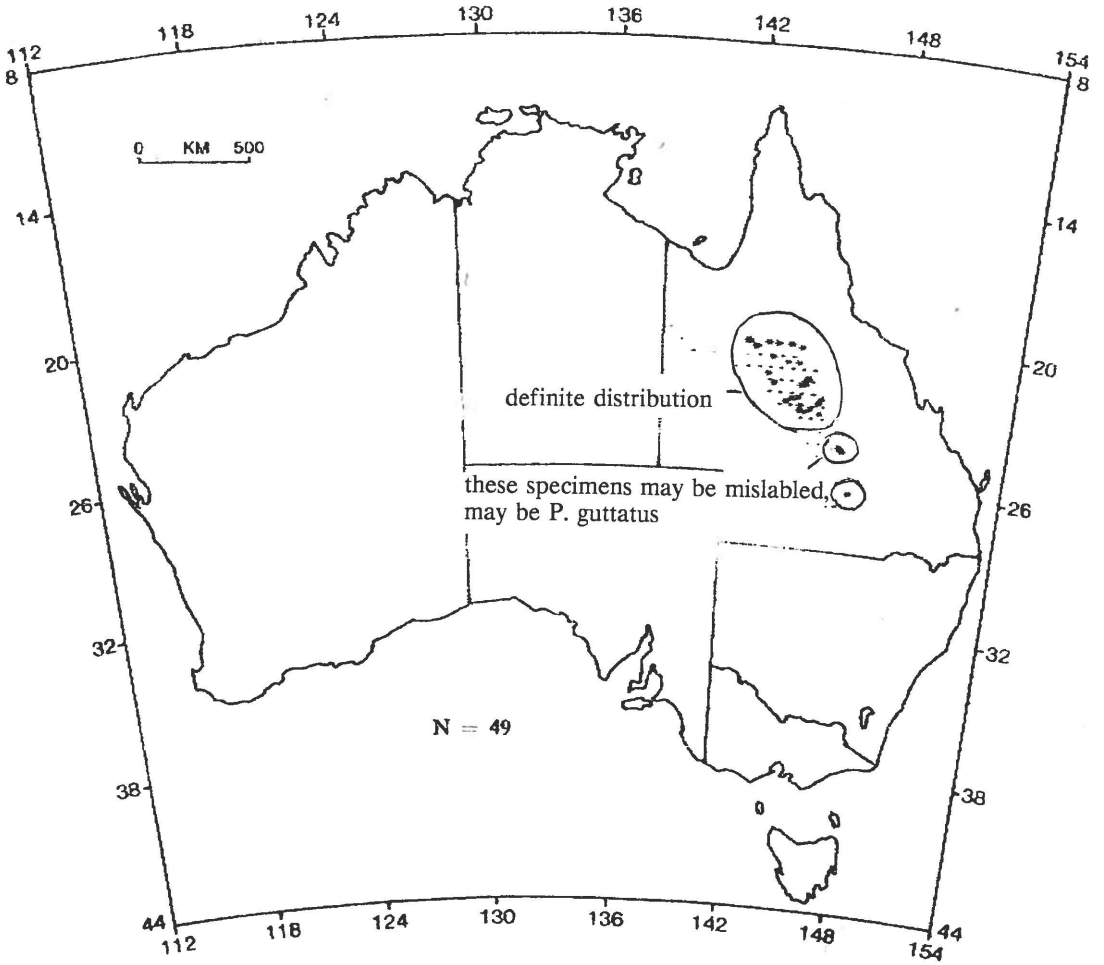




Foto 3: *Pseudechis colletti*, juvenile, 0.35 m.
Foto G.J. Ure.



Foto 4: *Pseudechis colletti*, afgeplatte nek,
flattened neck, Foto G.J. Ure.

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