

CANDOIA CARINATA CARINATA (SCHNEIDER) IN CAPTIVITY.

By: John van der Pols, Gildstraat 190, 3572 EW
Utrecht, The Netherlands.

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INTRODUCTION

Candoia carinata carinata of New Guinea (the smallest member of the genus *Candoia*) is a pigmy subspecies of *Candoia carinata* (McDowell, 1979), adult specimens reaching a length of 60 cm and a weight of 80 g.

Candoia carinata carinata is rarely imported which is not surprising once its appearance and characteristic behaviour are considered. This form has adapted itself to life in the treetops (especially Sago palm trees) where they are nearly invisible, due to their colour and small size, giving them the appearance of a twig. They are often found in the tops of Sago palm trees when these are chopped down (according to M. v.d. Kerkhof).

As far as I know, *Candoia carinata carinata* of New Guinea has never been bred in captivity. In contrast, the much larger subspecies *Candoia carinata paulsoni* has been bred in captivity a number of times (Fauci, 1981). Yet another subspecies of *Candoia carinata*, one native to the island of Guadalcanal, has also recently been bred in captivity (according to Lehman). This is a rather stoutly built subspecies which morphologically resembles *Candoia aspera*.

As *Candoia carinata* is found on so many islands in the Indo-Australian archipelago, there are many geographical differences. Every island-type seems to have its own distinct characteristics. It would be exaggerating the matter though, if every type

were to be considered a separate subspecies. It is possible however, to divide *Candoia carinata* into two morphologically different types: the "Long Tailed" and the "Short Tailed" form. The Long Tailed has a lighter build than the Short Tailed and has a higher number of subcaudals (43-60), the Short Tailed being of heavier build and with fewer subcaudals (35-52). According to this line of reasoning, the specimen discussed in this article would have to be a representative of the Long Tailed form and *Candoia carinata paulsoni* a representative of the Short Tailed. Both forms are supposed polymorphic due to the existence of heterozygous individuals (McDowell, 1979). It does seem to me a little far-fetched that the Long Tailed form, which is thoroughly arboreal, is able to give birth to the Short Tailed form, which is terrestrially adapted, or vice versa. It is true however, that both forms are often found on the same island, for example in New Guinea. I would much more readily accept though, that each form is an adaptation to a specific habitat. It then becomes easy to imagine the arboreal form of *Candoia carinata* as having acquired (or maintained) a longer tail and a lighter build in the course of evolution. This is of course, much more suited to an arboreal way of life. It is likewise possible that the terrestrial form of *Candoia carinata* adapted itself this way also.

VIVARIUM

On 20 May 1985, I bought a female *Candoia carinata carinata* which had been imported from New Guinea. It weighed 61 g on arrival. I placed the snake in a vivarium measuring 60x30x40 cm (lxwxh). In it were several small branches and two removable platforms upon which the snake could rest. There was also a 5 Watt light bulb above one of the plat-

forms and an upturned flower pot directly underneath the bulb. Finally, the floor of the vivarium was furnished with a water bowl and a piece of cork bark. This way, the snake had two places to hide, each with a different temperature. The temperature on the whole varied from 22-36°C during the day to 19-26°C during the night.

PREGNANCY/OFFSPRING

After I had had the snake one week, I tried offering it a small mouse. This was not accepted. A week after that I offered it a small mouse again which I left in the cage for the night. Still the snake refused to eat. I then assumed that I was offering it the wrong type of food.

Later, I decided that this may not be the case. The snake would lie on top of the flower pot in the morning (directly under the light bulb) and in the flower pot during the afternoon. If the temperature in the flower pot rose above 34°C, it would cool itself in the water bowl. Since it also showed no sign of being hungry, I began to wonder whether or not it was pregnant. A week later, when I examined the snake once more, the evidence pointed clearly in this direction. It appeared that there was an irregular swelling which started halfway down the body. I then decided not to bother the snake with food anymore and to disturb it as little as possible.

On 18 October 1985, four young were born. When I first discovered them that morning, they had already sloughed their skins. I immediately put them into plastic containers. Each had a water bowl, a piece of cork bark to hide under and a moistened paper towel on the bottom to raise the humidity. The weights of the offspring were respectively 3.13 g, 3.15 g, 3.14 g and 3.13 g. When disturbed, the juveniles would not defend

themselves or try to escape as most other young snakes, but would become completely ridged. They would remain this way even when picked up. Their colour, co-ordinated with this behaviour, giving very much the impression that they are imitating a twig. This type of mimicry has also been observed in juvenile *Candoia carinata paulsoni* (Fauci, 1981).

My problem was now to find the right food for these young snakes. In the wild, *Candoia carinata carinata* feeds mostly upon lizards, especially *Hemidactylus frenatus* (according to M. v.d. Kerkhof). When they were two weeks old, I started by offering them pinky mice. These were refused. I then tried crickets, larvae, mealworms and pieces of chicken. All without getting any results. Finally I decided to force-feed them with pieces of pinky meat. This gave unexpectedly good results. Three of the offspring were sold when they were two months old. At that point they had not yet started to feed independently. The one I had decided to keep started to feed on its own when it was nine weeks old.

In contrast to the above results however, I still have not been able to induce the mother to feed on its own. Bertus van der Heijden has told me that *Candoia carinata carinata* often refuses to eat in captivity in the beginning, but that after about half a year of patient force-feeding, they will usually start to feed on their own.

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