

REPRODUCTION OF *CORALLUS CANINUS* LINNAEUS, 1758
IN CAPTIVITY.

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Contents: Introduction - *Corallus caninus* in the
terrarium - Copulation - The young - Con-
clusions - References.

INTRODUCTION

The genus *Corallus* is distributed in South and Central America from Nicaragua in the north south to the Amazon Basin. This genus contains three species:

1. *Corallus enydris* Linnaeus with two subspecies. Freiberg (1982) considers *Corallus enydris enydris* and *Corallus enydris cookii* as different species.
2. *Corallus annulatus* Cope, with three subspecies.
3. *Corallus caninus* Linnaeus, of which no subspecies are described. This species has a distribution area of Amazonian-Colombia, Venezuela, Brazil, Ecuador, Peru, Bolivia, and the Guyanas.

The habitat of the genus is tropical rainforest often in open areas within the forest, along riverbanks, high savannah-forest, and close to native villages, where they feed on hens and doves.

As a rule *Corallus caninus* lives high in the tops of the trees but may also be found on lower branches, where they may be seen basking in the sun.

The adult snakes, which can attain a length of 150-250 cm, are green with on the anterior part of the body dark grey markings, posteriorly these markings become larger and clear white. The belly and the chin are yellow, sometimes also green. In the animals from Brazil the white markings are

usually connected by a white dorsomedian line. In Ecuador young *Corallus caninus* of 50 cm were found, coloured red-brown with white markings, in the period June to August. These young were for sure not older than a few months. I believe that *Corallus caninus* reproduces in nature throughout the year.

The food consists mainly of birds (among others parrots) and small mammals, probably also lizards (which is sure for *Corallus enydris*)

CORALLUS CANINUS IN THE TERRARIUM

I obtained my first female (I shall call her female 1) in early September 1981. I housed her in a terrarium measuring 100x60x170 (lxwxh). This terrarium is furnished with some thick branches, mounted horizontally, a removable 20 cm deep plastic water dish, which is sunken in the terrarium floor. The terrarium floor is covered with linoleum.

The temperature in the terrarium varies from 28°C in the upper part to 24°C in the lower part. Light consists of one bulb above the terrarium where the temperature is about 35°C. Only when the snake has eaten does she lay in this warm place.

At night the temperature drops to about 24°C. In summer the temperature may be higher.

The photoperiod is the same as that of the Netherlands, as the terrarium is placed close to a window.

On 10 August 1982 I obtained another female and a male. Both snakes were placed in separate terraria. The male was much smaller than the female, the latter (I shall call her female 2) was a little bit smaller than female 1.

All three snakes ate very well from the beginning. As food the two females accepted mice, rats and goldhamsters, the male accepted only chickens for the first six months, after that he also accepted rats.

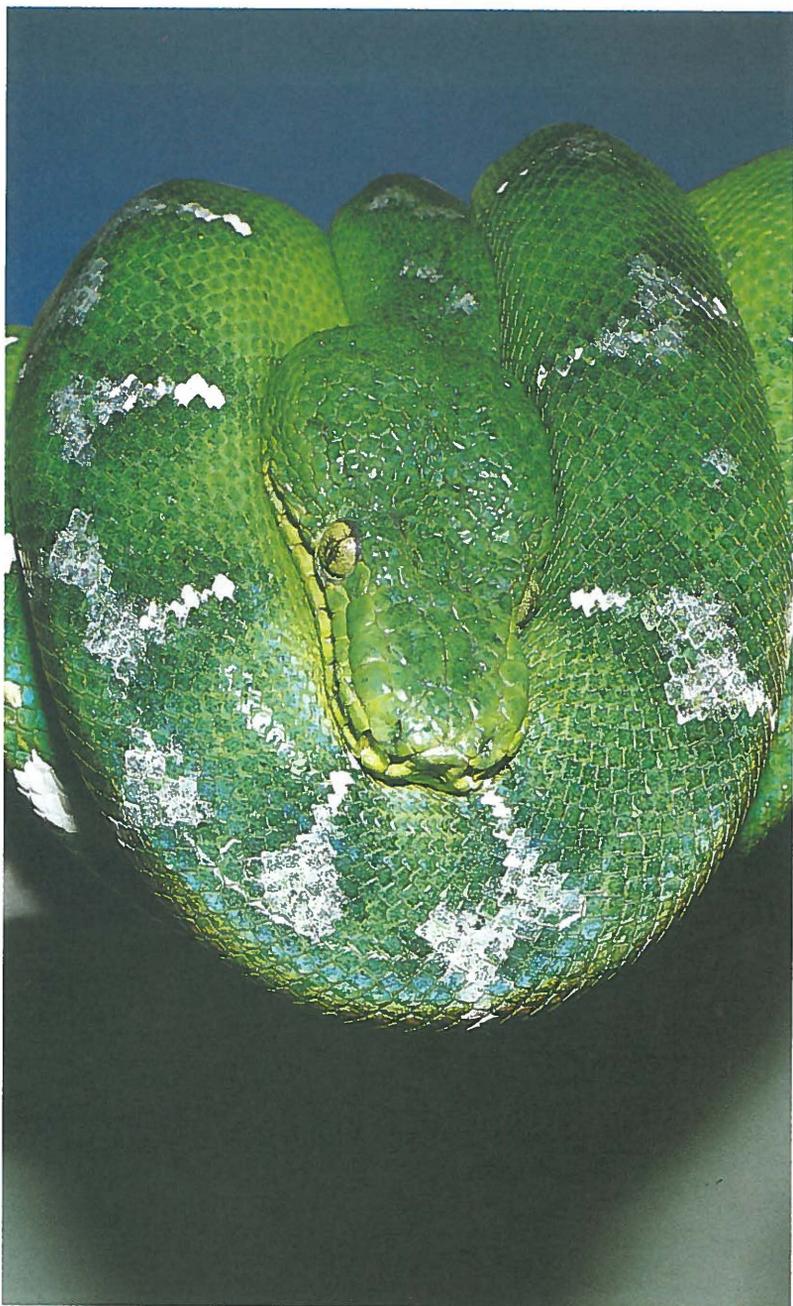


Fig. 1. *Corallus caninus*. Foto: C.A.P. van Riel.

The dead prey was offered to the snakes with a very long pair of tweezers. On the prey I always put vitamins, sometimes a multi-vitamin preparation, sometimes vitamin B-complex or vitamin D₃ (no vitamin D₂ as this has no biological effect on reptiles and amphibians).

Faeces examinations showed that female 1 was free of endoparasites. In the faeces of the other two snakes I found flagellates. Both snakes were treated with Metronidazole (Flagyl) 40 mg/kg bodyweight for five days. When the snakes are "in the blue" (which not often happens) I spray them with water.

COPULATION

The snakes were placed together in December 1982 in the terrarium of female 1.

Daylength was that of outside and the bulb was switched on from 10.00 a.m. to 4.00 p.m. The temperature was only a few degrees below normal. The male, which had refused food for four months, was very interested in the two females, and crawled over the females in the evening, however, I did not see any copulations. From 21 December 1982 regular copulations were observed, always late in the evening or early in the morning (sometimes up to 11.00 a.m.). The copulations always took place on the highest horizontal branches of the terrarium, once with female 1, another time with female 2. The last copulation was observed on 15 January 1983. The male, which still had not eaten was placed in a separate terrarium in the middle of February. He had not eaten now for seven months, however, he was not thin and looked well. From early March he accepted prey again. The two females continued eating normally and on the prey I put extra vitamin D₃. On 23 February female 1 accepted (not very readily) a mouse and I noticed that she had become thicker at midbody. She con-

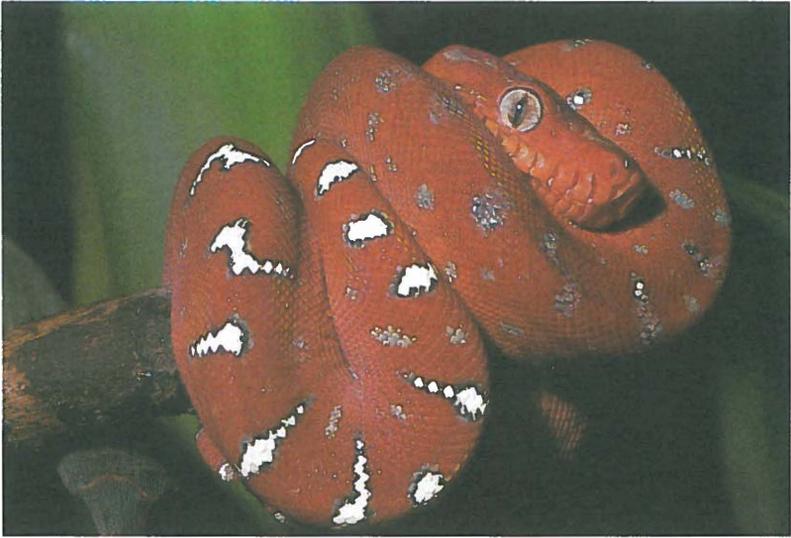


Fig. 2. *Corallus caninus*, juv. Foto: C.A.P. van Riel.



Fig. 3. *Corallus caninus*, juv. Foto: C.A.P. van Riel.

tinued eating until 20 March. On 1 April she accepted a rat but did not eat it. Female 2 ate (not very readily) a mouse on 22 May and then stopped eating. Also she was noticeably thicker now. During the whole month of May both females remained under the bulb. In the next months the snakes drank freely, female 1 (she is very tame) from a little dish that I kept up in front of her. This waterdish contained extra vitamin D₃ and calciumlactate. Both snakes were during these months very restless and sometimes even crawled on the floor of the terrarium.

In the middle of June both females were much thicker over the whole length of the body, to about 10 cm before the cloaca. On the floor of the terrarium I put sphagnum, the large waterdish was cleared out and also filled with sphagnum. A smaller waterdish was put in the terrarium. The sphagnum was for a softer landing of the eventually born young, the smaller dish to prevent them from drowning.

THE YOUNG

On 7 October 1983 at about 8.00 a.m. female 1 was stretched out in the highest branches of the terrarium and was making shaky movements. At about 9.30 a.m. that morning (I frequently went to the terrarium to see the snakes) four young snakes were searching the terrarium. At 10.30 a.m. the last young was born. In total 16 young were born, of which one was dead. The young had at birth fallen down from a height of 130 cm. The female had become very thin after giving birth. She refused to eat but drank a lot. From 18 November she took dead prey again.

The young snakes were very aggressive. They were red-brown with white spots on the back. The weight was 27-33 g, the average length about 43 cm. The



Fig. 4. *Corallus caninus*, juv. Foto: C.A.P. van Riel.



Fig. 5. *Corallus caninus*. Foto: C.A.P. van Riel.

young were all taken out of the big terrarium and placed separately in smaller terraria which were furnished with a small branch and a water dish. Unfortunately one snake died after eight days, on the belly was a hardened cheeselike thickening where the umbilical cord had been connected.

The other fourteen snakes were doing well, only one had to be force-fed several times, the others freely ate half-grown mice from the beginning.

Some of them even ate before the first slough, which took place from 23 October to 14 November.

The snakes were fed from the beginning with dead mice using a pair of tweezers.

Eight snakes went to other snake keepers, I kept six for myself. These six grew well. Early March 1984 they started to become light green, the heads changing colour last.

By probing in July 1984 five of them proved to be males. Four males were sold to other snake-keepers, I kept a male and a female for myself.

It is a pity that everything went wrong with female 2. In the morning of 19 October 1983 (twelve days after birth of the young of female 1) the animal did not look well. She made pumping movements with the body, while keeping the mouth open. She was clearly "egg bound". I immediately gave her an injection of Oxytocin (Piton), which stimulates birth. However, it proved to be too late: the snake died the same day. It is always difficult to determine when is the time of birth. Retrospectively the snake should have been injected days before; if the injection is given too early there is no effect, the contractions of the uterus not starting.

CONCLUSIONS

Coralus caninus is not so difficult to keep as is described in (especially older) literature. The

most important thing is to keep the snakes healthy. Nowadays we know much more about diseases and their treatment. Also a sterile terrarium without substrate (stomatites) without plants, and with a good air circulation are very important.

REFERENCES

- Abuys, A., 1981. De systematiek en kenmerken van de slangen van het genus *Corallus* Litt. Serp. Vol. 1 (6): 222-237.
- Claessen, H., 1982. Vitaminen. Litt. Serp., Vol. 2 (3): 139-147.
- Duellman, W.E., 1978. The Biology of an Equatorial Herpetofauna in Amazonian Ecuador. University of Kansas, Mus. Nat. Hist., Misc. Publ. No. 65: 1-352.
- Freiberg, Marcus, 1982. Snakes of South America. T.F.H. Publications Inc. Ltd., No. PS 758: 1-189.
- Peters, J.A. & B. Orejas-Miranda, 1970. Catalogue of the Neotropical Squamata, Part I: Snakes. Smithsonian Inst. Press. U.S. Nat. Mus. Bull. 297: i-viii, 1-347.