MORELIA SPILOTES VARIEGATA (GRAY, 1842).

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INTRODUCTION

There has been - and there still is - a lot of discussion on the generic and the species name of these snakes. For the genus, *Morelia* or *Python* is used and for the species, *spilotes* or *argus* (Foekema, 1972). In this article the genus name *Morelia* and the species name *spilotes* are used, as in most of the recent literature.
Two, sometimes three subspecies are recognised:
Morelia spilotes spilotes - Diamond python and
Morelia spilotes variegata - Carpet python.
Kinghorn (1969) lists *Morelia spilotes macropsila*, as occurring in the north of Australia. Hoser (1982) lists other subspecies.

DISTRIBUTION

Morelia spilotes variegata occurs in Australia, though absent in southern New South Wales, most of Victoria and Tasmania. This subspecies is also found in southern New Guinea and Yule island. In northern New South Wales cross-breeding between *Morelia spilotes variegata* x *Morelia spilotes spilotes* occurs.
My specimens come from Australia.

HABITAT

The species lives in dry, barren areas, where they often hide in rabbit holes, in rock clefts or under large boulders. In such a habitat these snakes are terrestrial. They are also found in clefts and caves, where they feed on bats caught on the wing. These snakes are seldom found in the real deserts of Central- and West Australia.
This species is also found in moderately and densely afforested damp areas, where they are usually arboreal.
These snakes grow to an average length of 3 metres (specimens have been known to reach 3.5 metres). Food consists of rabbits, rats, mice, birds, lizards, opossums, wallabies and bats.

THE TERRARIUM

The terrarium measures 85x100x180 cm (lxwxh). The back wall is made of glass which is non transparant (fine byzantine) so that the space behind the terrarium is illuminated. The wooden bottom is covered with linoleum. A round, 20 cm deep tank is sunk in the bottom and can be taken out. The terrarium is decorated with a few trunks and a shelf. The top of the terrarium is made of gauze with fine holes to ensure good ventilation.The terrarium is heated and illuminated with a bulb (with reflector) and a True-lite fluorescent lamp and daylight. Under the bulb the temperature is about 35^0C and in the lowest part of the terrarium about 26^0C. The room in which the terrarium stands is centrally heated. At night the temperature is never below 24^0C. The air humidity in the terrarium is maintained by an evaporator.

MY SNAKES

In July 1981 I became the owner of two of these

beautiful snakes. At that time they were very aggressive. The weight of the male was 740 g the female 840 g. Both snakes ate very well from the start. In the first faeces I examined were nematode- and cestode-eggs and several species of flagelates. After treatment the snakes were totally free of endo-parasites in October.

COPULATION AND JUVENILES

Both snakes were weighed a fortnight before the first copulations. The male weighed 1150 g and the female 2325 g So, in a year, the snakes had gained considerable weight especially the female. Copulation was observed on 27 August and 2 September 1981.
At this time it was very warm; the lowest parts of the terrarium often 31°C. At night it cooled to about 20°C. Further copulations were observed in 1982 (1 and 15 January and 4 February) when the room temperature was about 28°C. This was also the temperature in the coolest (lowest) part of the terrarium. At night the temperature dropped to about 22°C.
The male did not eat during these two periods of copulation and only started eating again after he was separated. The female refused to eat from 20 November 1981, but seemed to get fatter. It can be assumed that fertilization took place during one of the first two copulations. As she became fatter, the female lost weight. On 24 January 1982 she weighed 2200 g, 2 May 2015 g, and on 20 May 2010 g. In the beginning of June the snake became restless and crawled around the terrarium all day. During the morning of 7 June she laid 13 eggs in a plastic container, which was filled with moist sphagnum. In the evening I removed the eggs from the cage, believing the humidity and temperature in the terrarium were not ideal. The eggs

Fig. 1. *Morelia spilotes variegata*. Foto: C.A.P. van Riel.

Fig. 2. *Morelia spilotes variegata*. Foto: C.A.P. van Riel.

were placed in a deep plastic dish filled with moist sphagnum, the eggs being covered with moist sphagnum. The dish with the eggs was placed in a plastic container. This container was partly filled with water (about 10 cm), which was heated with an aquarium-heater. In this container I laid a small piece of glass (sloping!) above the eggs, so that the condensed water would drip off. On top of the main container I laid a piece of glass set ajar for ventilation. The temperature between the eggs was 32°C. On 8 june the female weighed 1500 g. I discovered mucus in her mouth and she was refusing food. For seven days she was given the antibiotic Belcomycine (colestine-sulphate) and an injection of vitamin A and B-complex. Three days after the last dose of Belcomycine she started eating again and the mucus had disappeared.

When I checked the eggs on 15 June, I opened one that was bad; it contained a dead embryo. Unfortunately more eggs became bad. On 13 July I opened two eggs, on 15 July another two and on 22 July another one. The egg that was opened on 22 July contained an embryo 23 cm long. All six were fertile, but the embryos had died. I think the reason for the dying was that the eggs were too moist. After 22 July I removed all the sphagnum that laid around and on top of the eggs.

On 31 July and 1 August seven juveniles hatched. They weighed between 10 and 26 g and their lenght varied between 31 and 46.5 cm. Two of these snakes were obviously small and very weak and are now cared for by another snake keeper. I kept the other five young.

The colour and pattern of the juveniles was variable: two specimens were very dark-coloured with a fine pattern; one specimen was very light-coloured with a large diamond-shaped pattern; the other two were coloured and patterned like their parents. The juveniles were very aggressive and bit at

everything that moved in front of them. They sloughed between 16 and 20 August. After this first sloughing, two young snakes freely ate young mice (little jumpers). The other three were force-fed a couple of times. On 6 September a third snake ate independently and the other two on 4 October. I offered them, with a pair of tweezers, dead mice. They grabbed the dead mice as eagerly as living mice.
On 3 March three of the juveniles went to the snake exhibition "Serpo" of Mr. W. Getreuer.
The two snakes I kept turned out to be a male and a female. They are growing very fast. On 24 November 1983 the male weighed 600 g and the female 625 g.

CONCLUSION

I believe that if I had kept the eggs drier from the start, the result would have been better. Next time I shall try to do without moist sphagnum.

REFERENCES

Cogger, Harold G., 1979. Reptiles and Amphibians of Australia. Reed, Sydney. Rev. Ed. Pp. 1-608.

Foekema, G.M.M., 1972. Over de geldigheid van de namen *argus* Linnaeus en *spilotes* Lacépède voor de gewone Australische python (Serpentes, Boidae). Lacerta, Vol. 30 (12): 155-163.

Gow, Greame F., 1976. Snakes of Australia. Angus and Robertson, Sydney. Pp. 1-88, pl. 1-83.

Hoser, R.T., 1982. Australian Pythons (part 4). The Herptile, Vol. 7 (2): 2-17.

Kinghorn, J.R., 1969. The Snakes of Australia. Angus and Robertson, Sydney. Rev. Ed.