SUCCESSFUL BREEDING OF *LAMPROPELTIS GETULUS FLORIDANA* (THE FLORIDA KINGSNAKE).

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INTRODUCTION

The genus *Lampropeltis* is represented by many species and subspecies in the United States and Mexico. They are powerful constrictors, known for their habit of eating other snakes, including venomous ones. In captivity they should not be kept together with smaller snakes, not even of their own species. During feeding, they should be watched closely or be fed separately.
Lampropeltis getulus floridana occurs according to Conant (1975) in Florida from the vicinity of Tampa Bay to the southern tip of the peninsula. It is the palest of all the subspecies of *Lampropeltis getulus*. Each dorsal scale is yellowish or cream coloured at its base and brown at its tip. Indications of light crosslines are usually present, especially in the neck region. The belly is cream to pale yellow with spots of tan or pinkish brown. The scales are smooth.
The young differ in colour looking more like *Lampropeltis getulus getulus* adults. Their back is brown to black, with cream coloured, yellow or reddish yellow crossbands which form a chainlike pattern. In the light areas on the sides there are bright red centers. Directly after hatching the skin is rather dull. They shed skins after about a week and are shiny thereafter.
There is frequent intergradation with *Lampropeltis*

getulus getulus. In these intergrades the chain pattern is much more pronounced than in 'pure' *Lampropeltis getulus floridana*. This is also the case in the specimens here involved, which are quite yellow but with a pronounced pattern.

THE SPECIMENS

The male has been in my possession since December 1983, and is of unknown age. His length is about 1.30 m. In January 1984 he was kept cool for a four week period, during which temperatures were 18°C by day and about 15°C by night. Light duration was reduced to a few hours daily for two weeks.
The female was imported from Florida in the spring of 1984. After two weeks quarantaine during which the male showed signs of excitement when I brought over the odour of the female (intensive tongue flicking, crawling about, trying to escape from the cage), I put them together in the female's cage on April 6th at about 20.00 hours.

MATING

The male reacted immediately. He approached the female, examined her with his tongue and immediately bit her on the tail. She reacted by opening her cloaca. The male then started to crawl over her back in the direction of the head. At the middle of her body he bit her again and held tight. Then he released her, searched for the tail again and bit her about 10 cm above the cloaca, holding tight. Meanwhile he 'wriggled' over her back, extended a hemipenis for a while and finally ejaculated lightly. He then released her again and bit her behind the head.
This continued for about fifteen minutes. For the next half hour the couple were engaged in biting,

searching for the cloaca, trying to penetrate, and especially in excited jerking and wriggling. When the light in the terrarium went out, the mating behaviour continued. At 24.00 hours I witnessed a copulation, which at 1.00 AM was still going on.
The next morning the animals were lying quietly together. In the afternoon I observed another mating, during which the animals were very quiet again during the actual copulation, almost motionless. Two other specimens, imported together with the described ones, and still in the pet shop, were brought together too during that afternoon, and mated as my own had. This mating behaviour consequently seems to be specific and systematic. During the month following the first copulation, I observed more mating behaviour, with one sure case of copulation.

RESULTS

On July 11th I discovered twelve eggs, eleven in a cluster with one separated. They were large and smooth, firmly glued together, so I did not try to separate them. I buried them in wet sand, fully covered (as described in my article on breeding *Psammophis subtaeniatus sudanensis* (Steehouder, 1984)) in an incubator at 29-30°C.
On August 26th eight young hatched, followed by three more the next day, with the last one hatching on August 28th. All hatchlings were healthy and strong, varying in length from 30 to 33 cm. The dorsal colour was black, with thin yellow crossbands joining laterally to form large light areas which had a number of orange-red scales. The young were dull-skinned and all showed signs of an approaching shedding. Sheddings took place from September 2nd to September 4th, after 7-9 days. Thereafter, they were very shining.

A few of the young ate a live pinky mouse after shedding, the others waiting for some days to some weeks.
The adult female shed her skin on June 27th, 12-13 days before oviposition. She then ate a mouse, but refused food thereafter until two days after oviposition.
The incubation period of 46 days is rather short (D'hondt, 1984). I have the impression this was due to the very constant incubation teperature. I recently had an incubation period of 37 days with eggs of *Elaphe schrenkii*, using the same method (though this might be a case of delayed oviposition).

REFERENCES

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