

SUCCESSFUL BREEDING OF D'ALBERTS PYTHON (*LIASIS ALBERTISII*).

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BRIEF DESCRIPTION

Liiasis albertisii can easily be distinguished by the conspicuous white labials on its otherwise black head. The rather long and slender body is dorsally yellowish brown to black, ventrally white. The sex is hard to determine by means of the spurs, as females tend to have large spurs which strongly resemble those of males. The difference in length and girth as mentioned by Trutnau (1984) is hard to use, as is shown by my animals, in which both males are longer and heavier than the female. *Liiasis albertisii* is found on New Guinea and some islands around it (McDowell, 1975; Cogger, 1983). Its habitat consists of forest areas from the coast inland, but not above 1700 meters. For a detailed taxonomic description I refer to McDowell (1975) and Brongersma (1956).

THE TERRARIUM

The animals are housed in a glass terrarium of 120x60x120 cm (1xwxh) with sash-windows, which is placed on a wooden box with two drawers and a sunk-en water basin. One of the drawers is heated by means of a heat-mat, so that temperature can be raised up to 35°C in the middle of the mat. In the drawers peat moss is used, partly because of its insulating qualities, and partly because it ab-

sorbs excrement so that the animals do not have to lie in their own dirt. Furthermore, the drawers are easy to clean this way. The moss is kept slightly moist.

A disadvantage of these drawers is that the animals are seldom seen.

The terrarium is lit by an 8 Watt TL lamp. Temperature in the cage ranges basically from about 24 to 28°C, with the unheated drawer as the coldest spot, often being no warmer than 22°C.

CARE

As these animals are rather nervous and shy, they should be given a large terrarium or ample opportunity to hide away. After having been given such opportunity (through the drawers), my animals partially lost their nervousness and somewhat aggressive behaviour, and became quite manageable. Generally, *Iasis albertisii* eagerly accepts all kinds of rodents and birds. My animals made use of the various possible temperature gradients, especially the unheated drawer. As a matter of fact they only used the heated drawer while digesting food, often lying on the heat-mat for two or three days. They seldom bathe, but they do drink regularly.

To induce mating, both males were separated from the female and kept apart. Temperature was kept constantly at 24°C. In the female's terrarium, the heating in the drawer was put off to get a maximum temperature of about 24°C. Both males and the female kept eating during this 'cooling period', though maybe a little less often than before.

In the middle of October both males were introduced to the female's terrarium, and the temperature was brought back to normal again. Until mid-December, no obvious matings or mating efforts were observed, and to be honest, I was at the point of separating the animals to try again after

a month, when the largest male started to behave restlessly and was often found lying in the neighbourhood of the female. From that moment on, the other male remained in the unheated drawer and stopped eating, while the active male continued feeding. At the end of December I noticed for the first time something that looked like copulation, but as this took place in a drawer and as I was afraid to disturb the animals, I have not been able to determine whether there actually was copulation. In view of the events that followed, it was probably just a very shy overture, for when I observed a real copulation later on, the animals would not even be disturbed by pushing open the drawer. They were lying quietly next to each other, the hemipenis being clearly visible in the cloaca of the female.

As the animals remained absolutely quiet, I took the risk of inspecting them regularly, which enabled me to conclude that this copulation lasted uninterrupted for 24 hours. It was noticeable that the female had an apparent thickening in the middle of her body, which was not caused by food as she had stopped feeding before.

After this copulation another two, shorter, copulations followed, whereafter the female withdrew to the heated drawer where she was almost continuously found on the warmest spot. During the period of gestation she only made a few excursions to the cold drawer, lasting not more than an hour or so. At this point I separated the males from the female and put them together in another terrarium. The inactive male kept refusing to feed until I gave him his own terrarium, after which he started to accept food the next day and has kept feeding since without any problem. In view of this behaviour I suppose there is a form of competition or at least of intimidation between males.

INCUBATION

Because I wanted to allow the animals to incubate their own eggs, I had to think of a way to accomplish this, as I knew only of failures in the literature (Trutnau, 1984; Ross, 1977).

In doing so I had to consider the nervous character of the animals as well as the need for regular inspection without disturbing the animal. Incubation in a drawer had to be precluded. To prevent the possibility that the eggs would be damaged if the female proved to be a poor incubator, I wanted to reach a constant basic temperature of 29°C. I used a heat-mat again, putting insulating layers between the mat and the incubating cage until the substrate in the cage reached the desired temperature. During the day the temperature in the terrarium could go as high as 32.5°C.

The substrate consisted of moist, boiled, peat-dust in a 8 cm high plastic tray, just as I am used to providing for *Chondropython viridis*. The peat was covered with filter-wadding so that the snake and the eggs would not be allowed to lie directly on the peat-dust. Above these filters was placed a flower pot with a hole cut in it. In order to allow the female to get used to her new incubating tray, the drawers were shut off, so that she had to enter the tray in order to hide or get warm. The flower pot was placed in such a way that one could only look in it by means of a little mirror and a torch. Thus the snake would not be disturbed by movements outside the cage, while I had sufficient opportunity for inspection. From the first day of the incubation-tray's introduction the snake began using it, lying in it almost permanently.

On 1 April at 7.00 a.m. I noticed that she was depositing her eggs and was able to actually see one almost round egg the size of a ping-pong ball.

Around 11.00 a.m. she finished laying. I estimated

the total number of eggs at eleven. At 12.15 she started to curl around the eggs. By this time the eggs, which had been rather wrinkled when layed, had become smooth.

After eight days of incubating, the female became dull coloured, as if about to start shedding, which indeed took place on 12 April during the night. During the preceding day, she was lying rather loosely curled around the eggs, which were then partially visible. Immediately after sloughing she was curled tightly again round her eggs. On 22 April I found a small, already shrivelled-up and unfertilized egg outside the coils. Because the female changed position, I was able to see on 3 May that two eggs were spoiled, but they did not affect the other eggs that were stuck to them. On 18 May the snake loosened her curls again and seemed to start shedding for the second time. This happened after some days.

With regard to the incubation behaviour, I can remark that the snake often re-arranged the eggs, inspecting them repeatedly with tongue-flicking. The incubating temperature, measured at the exterior of the egg-mass varied from about 30°C to 33°C.

HATCHLINGS

Fifty-six days after the eggs had been laid, the first little head came peeping out of its shell about 9 o'clock in the morning, and within three days seven little snakes had hatched. The female was still lying circled around an egg that looked well enough, but still without any sign of hatching. On the fourth day I decided to open it, and found a living but unfortunately deformed youngster.

The first hatchling shed after two weeks, the last only after four weeks, After shedding, one young,

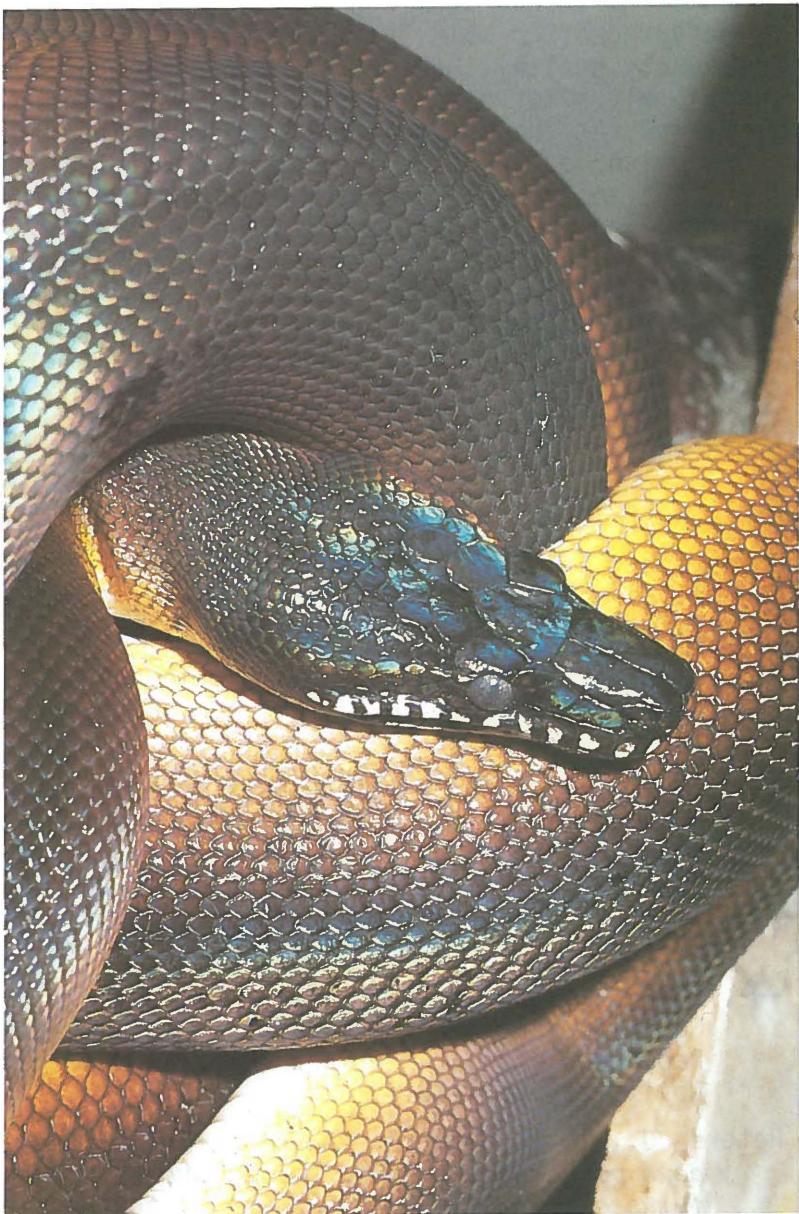


Foto 1. *Liassis albertisii*, volwassen vrouw/adult female. Foto: C.A.P. van Riel.

which at first had seemed to be well, appeared to be deformed after all. The other snakes were apparently healthy. One of them ate a dead pinky immediately after shedding, the others had to be force-fed. At the second feeding effort, the young which had accepted food before, refused to feed, but another one accepted food instead. After some feeding experiences there appeared to be a pattern: if the snakes had taken the dead pinky by the head immediately, they ate it on their own. However, if they had taken it in some other way, or had missed their hold, there was no sense in trying again with that animal that day. Another try the next day would prove more productive.

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