

# SUCCESSFUL BREEDING OF THE INDIAN PYTHON *Python molurus molurus* (Linnaeus) AT SUNDARVAN NATURE DISCOVERY CENTRE, AHMEDABAD

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'Sundarvan' is a facility of the Centre for Environment Education, a centre for excellence supported by the Ministry of Environment and Forests, Government of India. This nature discovery centre, recognized as a mini-zoo by the Central Zoo Authority, lays special emphasis on reptilian conservation and education. Some of the activities of the centre include conservation education through animal exhibits, nature camps and animal shows (especially live snake shows), snake rescue and release program, and captive breeding of reptiles. The facility houses about 12 species at venomous and non-venomous snakes.

The Indian Python (*Python molurus molurus*) is a popular animal in Indian zoos and there have been several reports recently about breeding it in captivity (Kalaiarasan and Rathinasabapathy, 1992; Khaire, 1996) and its growth rate (Vyas, 1995), besides other species of the biology. During 1996 we were successful in breeding the Indian Python at Sundarvan. A detailed record was maintained about its breeding which is reported in this paper.

## Housing

A 12 feet long female python and a male approximately 7.5 feet long are housed in a 10' x 5' cage. The cage has a large earthenware pot, into which the snakes retire frequently. The enclosure also has a large tree branch and a tub containing water. Live food, such as rabbits and/or chicken are provided every fortnight (on an average) to each snake. During February - March, both the snakes remained in the earthen pot for several days and it is sometime during this period that mating can be presumed to have taken place.

## Egg-Laying and Incubation

On 23 May 1996, sixteen eggs were discovered lying in the earthenware pot. The egg laying had probably occurred during the night of 22 and 23 May. The female very soon coiled around the eggs and it was not possible to disturb her for making morphometric measurements of the eggs.

Soon after the eggs were noticed, the male was segregated from the female.

A *khus* grass mat was put on the sides of the cage to prevent the visitors from disturbing the incubating python. During the entire incubation period, the female remained in the earthen pot, coiled around the eggs. However, a few drag marks on the sandy floor of the cage lead us to suspect that the female did move around during night. The incubating female almost certainly did not get out of the pot during the final weeks of hatching because a cobweb had formed at the mouth of the pot which remained intact till the end.

The incubating python was observed to coil around the eggs in such a manner that none of the eggs could be seen. On a few occasions the python was also observed to 'shiver'. According to Daniel (1983) this behavior helps to regulate the incubation temperature, in relation to fluctuating levels of ambient temperatures.

## Hatching

On 13 July, 1996 the female python got out of the pot and moved about in its premises. On 14 July the first 3 eggs hatched naturally. On 15th July, the remaining eggs hatched by manually assisting the removal of the egg shells. The average incubation period for *Python molurus* in captivity at the Jersey Wildlife Preservation Trust has been reported as 60.8 days (Khaire, 1996). Daniel (1983) reports 58 days as the incubation period for the python but in this case the incubation period lasted only 54 days. At birth the pythons weighed approximately 160 grams each and had an average length of 58 cm. The length of python hatchlings is reported to vary from 50 cm (Whitaker, 1978) to 73 cm (Daniel, 1983). Compared to the adults, the hatchlings also had a darker coloration. All the 16 eggs taken from the earthen pot had hatched. Since no broken pieces of shells were found in the pot, hatching success could be taken as 100%. The young ones showed aggressive behavior soon after



*Python* hatchlings at Sundarvan

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hatching. When live mice were offered, they didn't feed after killing them.

Once the female python emerged from the incubating pot, she was offered a live rabbit which she consumed on the 16th of July. A couple of days later, the male python was reintroduced into the enclosure. On 20th July, hatchlings were offered live mice in a smaller enclosure. Only 4 hatchlings consumed food. On 21st July, when mice were offered again, 5 hatchlings killed the mice but didn't eat them. On 24th July, excreta containing hair could be observed in the enclosure. On 25th July, the first molting was observed. Two days later, three other hatchlings, shed skins.

As a part of our snake conservation program, we are keen to see the python hatchlings grow to a favourable size conducive for release into the wild or transfer to another zoo. Meanwhile, educational institutions and zoos interested in acquiring python hatchlings on an exchange basis can contact us after having obtained the necessary clearance from the CZA.

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*It is our pleasure and pride to announce that one of the oldest and best Friends of Zoo Outreach Organisation, Dr. T. N. Khoshoo, was awarded the UNEP Sasakawa Environment Prize.*

*A dignified ceremony to mark the Award was held in New Delhi on Saturday, 30th November at 6:00 p.m. at the United Nations, 55 Lodi Estate, New Delhi, hosted by U.N. Under-Secretary General Ms. Elizabeth Dowdeswell, Executive Director, United Nations Environment Programme*

*When Dr. T. N. Khoshoo was Secretary, Department of Environment, Government of India he took great interest in zoos. It was at his initiative and inspiration that Zoo Outreach Organisation was founded, funded at that time by the Environment Department.*

*Our sincere congratulations to Dr. T. N. Khoshoo.*