11. THE HATCHING OF SNAKE EGGS

(With a plate)

Most species of Indian snakes deposit eggs before or during the monsoon, thus meeting the moisture requirements of the eggs. Snakes in the wild choose rotted wood, leaves, empty mammal burrows, vacant ant nests, and so on for their egg-laying sites. The eggs have to remain warm and moist, so no doubt many eggs become spoiled in the wild by fungi as has been observed in 'captive' ones. Sometimes the eggs are infertile, or only some fertile. Digging predators with a preference for eggs such as the lizards *Varanus* and certain mammals take a heavy toll of snake eggs. Only a few species of snakes make any effort to protect and incubate their eggs, including the Indian Python (*Python molurus*), and the King Cobra (*Ophiophagus hannah*). Some species lay only a few eggs whereas *Python molurus* has been observed to lay over a hundred eggs in a single clutch.

Snake eggs may be found in the wild at an unknown time in their developmental period or be laid by a captive specimen and incubated, both clutches can be hatched successfully. The most convenient container is a glass aquarium. If not that, a large tin or wooden box may be used, but in the latter case do not allow the eggs to touch the tin or wooden sides. Through trying many incubating materials, one comes to the conclusion that the simplest and best is a bedding of bits of newspaper. Make a thick layer of crumbled ½″ square pieces of newspaper at the bottom of the container. If the eggs are firmly stuck together place them in that way, if they are separate, or easily separated (do not rip them apart as the leathery shell may tear), place them so they are not touching one another and cover with another thick layer of newspaper scraps. Dampen the entire lot with clean, room-temperature water by sprinkling and maintain this dampness for the duration of the incubatory period. Do not soak the eggs as they absorb water by osmosis, and if too much is absorbed the embryo may die. If the eggs become dented then they are too dry, but this doesn't necessarily mean that the embryo has died. If the eggs remain rounded and full, and appear to be getting larger this is a good indication that the embryo is healthy and growing. Even dented, discoloured eggs may have a live embryo inside, however, eggs should be kept until it is evident that they are infertile or spoiled. The eggs should be observed for the first week or two to see that they are getting the proper amount of

moisture, after that period, and when experience is gained, it is only necessary to check them every few days.

During the monsoon, when the relative humidity is high, the moisture of the incubating material will be retained for three or four days or more. Rather than a cover for the container, it is convenient and protective to insert the container in a muslin bag like a pillow case and tie a knot at the open end. This allows ventilation, reduces chances of fungus, and prevents flies (which will lay their eggs on the snake eggs) from entering. The newspaper scraps should be changed every twenty days, or if any signs of fungus appear which will soon spread to the whole lot. Choose a spot for the container which will receive the natural warmth of the day (a couple of hours of early or late direct sunlight) and coolness of the night. The eggs of one clutch hatch over a period of a week or more, but more usually within one or two days. Below are given average incubation times for some common Indian snakes. It has been observed that hatching time for 'artificially' incubated python eggs (and probably other species, depending mostly on incubating procedure) may be twenty days or more later than the average. It would be useful to compile more information on hatching times for 'captive eggs'.

Naja naja ssp.	(Cobras)	70 days
Bungarus caeruleus	(Common Krait)	65 days
Bungarus fasciatus	(Banded Krait)	60 days
Python molurus	(Indian Python)	70 days plus (variable figures)
Ptyas mucosus	(Rat Snake)	60 days
Ahaetulla tristis	(Bronze-back)	60 days

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12. SEXUAL DIMORPHISM IN COLORATION AMONG BAND FISHES OF THE FAMILY CEPOLIDAE

(With two text-figures)

Two species of band fishes, *Acanthocepola limbata* (Cuv. & Val.) and *Cepola abbreviata* (Cuv. & Val.) were collected from Visakhapatnam coast during April, 1964. Both species occurred together and were present in the catches of boat-seines operated within half a mile