

Snake Necked Turtles

Author: Paul Eversfield

Chelodina spp

Who can fail to be amazed at the sight of a group of this modern day Plesiosaurs, swimming in a hunting pack across an aquarium? The *Chelodina* group of turtles come from Australia, and neighbouring New Guinea.

They are members of the Chelidae family, which are all side neck turtles. That is to say, their necks cannot be retracted into the shell cavity like the typical tortoises and turtles (Cryptodira), instead they tuck their necks and head into the axillary area under the front of the shell in a sought of "s" shaped curve. This provides some degree of protection from predators. Fossil evidence of this group of animals dates back to the Miocene period, which is approximately 20 million years. Other members of this group can be found today in South America.

The New Guinea Snake Neck Turtle (*Chelodina seibenrockii*)

Similar to its near cousin, *Chelodina novaeguineae*, the turtle occurs in the southwestern coastal region of New Guinea and Irian Jaya. Highly aquatic in nature, the turtles are found in slow moving rivers and swamps with lots of vegetation. Carnivorous in its diet, they actively hunt fish, crustaceans, and molluscs. The turtles in captivity certainly spend much of the day foraging for food.

Like most of the group, colour of the Turtles is predominantly brown/beige with a yellowish white underside. In adults, the male can easily be distinguished by large cigar shaped tails, and pronounced barbels under the chin, females have a very short tail and only tiny indistinct barbels. The turtle nests in the dry season, usually September, and produce clutches of up to 20 eggs. Incubation takes approx. 120 days. The nest site is often some considerable distance from the water and presumably accounts for incubation during the rainy season when water levels can fluctuate dramatically. Hatchlings observed in the wild hatch at an average weight of 5.5 grams. In captivity, I have maintained hatchlings bred in captivity. These do not initially show much sexual dimorphism, however, after two/ three years the sexual characteristics develop and courtship and mating behaviour can be observed at four /five years. Adult size is 15/17cm, across the carapace, obviously the length of the neck will take the overall length to 25/26cm. Initially, the hatchlings were kept in relatively shallow water 10cm, and maintained at 26 degrees centigrade. Internal power filters with Charcoal, and Zeolite media filtered water. Weekly water change (30%) was also undertaken.

Initially, the diet was live bloodworm and crickets which were regularly dusted with a calcium + vitamin supplement. Basking area was provided with overhead spot light and UV tube. However, I have since found that given choice, the Turtles prefer less light. In nature, they are very crepuscular and seem to avoid regular basking. The turtles grew well on this initial regime and were moved on to a diet of Cichlid pellet (Hikari- Cichlid Gold), supplemented with shellfish, & fresh fish. As they grew, they were moved to a larger aquarium and shared accommodation with a Fly River Turtle (*Carettochelys insculpta*). They have continued to thrive and now ten years on are now fully adult.

Breeding; the Snake necks are in a group of 2 males, and one female and regularly can be seen courting the female. This activity is extremely graceful. It is usually prompted by a significant water change <50%. I believe the sudden drop in temperature stimulates the males and encourages the courtship. However, it does not follow that mating will always take place. Olfaction is a keen sense and the female must be fully receptive before successful copulation takes place.

In courtship, the Males often compete with themselves and drive the unlucky male off before approaching the female. From the rear he will cover the female and using his barbels stroke the females head and neck. If receptive, the female will allow this procedure which may continue for some hours to follow with actual coupling. After six / seven weeks the female will become ready to lay and separating her to another enclosure with a suitable sand box she will deposit eggs. Eggs are incubated at 30 degree centigrade and hatch after 110/120 days.



As with all of my Turtles, healthy maintenance in captivity is largely down to clean water, and a good understanding of the natural biology of the species. In the references to this article are a number of excellent books which I thoroughly recommend reading. At the same time, membership to a good society here in the UK will put interested hobbyists in touch with others who can share practical experience, and ensure good husbandry practice. For this purpose, I recommend The British Chelonia Group, who can be contacted at: Membership Secretary, BCG, PO BOX 1460, Bedworth, CV12 9ZR.

References; Tortoises Of Australia- John Cann, publisher Angus & Robertson
Australian Fresh water Turtles- John Cann, publisher Beaumont Publishing
Keeping Long- necked turtles- Darren Green, Publisher; Australian Reptile Keeper Pub.