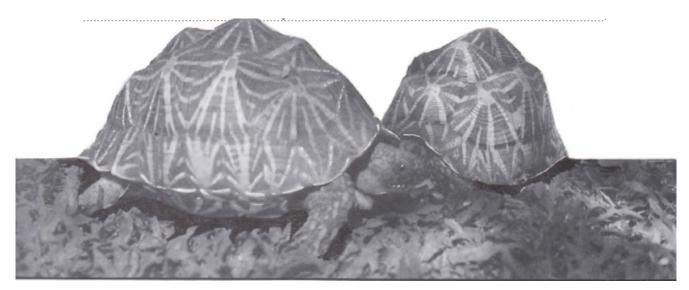
## **Tortoise and Turtles**

by Sharmini Luther



Tortoises, turtles, terrapins -whatever you like to call them -are as old as the dinosaurs. Their fantastic armour-plating is what probably ensured survival to the present day. In British parlance, the tortoise lives on land, the turtle in the sea while terrapins can occupy both land and fresh-water ponds. The Americans simplify matters by referring to all of them as turtles, sea and land varieties.

At the Dehiwela Zoo, you can see specimens of all types. There are species indigenous to Sri Lanka as well as exotics from South America. Well, what's so fascinating about tortoises and turtles? They seem to spend their time doing very little, very slowly. Appearance, for one thing; no other creature looks guite like the tortoise, does it? Biologically, it is classified as a reptile and is more closely related to the crocodile than to lizards or snakes. In fact, the open-air exhibits in the Zoo's Reptile House contain tortoises, turtles and several species of crocodile all living together contentedly. Make sure you take a look at the False or Malaysian gavial exhibit. Perched on the accommodating animal's nose and even across the length of his back, numerous hard-shelled terrapins bask in the sun. Turtles and tortoises are protected by a shell whose upper part is called the 'carapace' and the section below the belly, the 'plastron'. Only the head, legs and tail protrude and even these are retractable when danger approaches. Some species have a type of hinged arrangement where the entire body can be closed in for safety. Others have shells with limited movement so that specific functions, such as laying eggs, can be performed.

In the Snapping turtle species, which you can see at the Zoo, there is enough leeway to withdraw the head but leaving the jaws open to give some unfortunate victim a nasty bite! The shape and thickness of shells vary with the different species. Tortoises and land turtles have shells which are more arched than the aquatic species, probably to protect them from predators. In the pond and marine turtles, the shell is almost flat. This stream-lining helps in movement through the water and is also ideal for hiding from predators in the mud bottoms of ponds and lakes. There is no doubt that the aquatic variety are quicker in the water, reaching upto 20 m.p.h., than the tortoises are on land, hampered as they are by their cumbersome shells. Some terrapins and marine turtles have carpaces which are not as hard as the land varieties being made of bony platelets covered with a leathery skin. They also have webbed toes which are ideal for swimming. Many marine turtles have modified forelimbs which look like flippers and give the creature the appearance of flying through the water. You can identify land turtles or tortoises by their heavy, elephantine feet and short, stubby toes.

The Dehiwela Zoo breeds soft -and hard shelled terrapins in all its ponds. According to Zoo Director, Bradley Fernando, these ponds are not cleaned regularly so as not to interfere with the turtles' habitat and to facilitate breeding. So if you come across a green, algae-covered body of water, chances are that there is a lot of activity going on inside and around it. Both land and aquatic species lay their eggs on but come ashore to build nests. For some reason, the courtship ritual of the sea turtles is more elaborate and gentle. On land, male tortoises show little regard for the females' feelings and bite and butt quite roughly. Once the eggs are laid, incubation can take anywhere from four months to a year in some species. The newly hatched young are left to fend for themselves. The famous journey to the sea from their nest-sites of sea turtle young occurs in certain coastal areas of Sri Lanka. The Dehiwela Zoo assists in hatching sea turtle eggs, a conservation program aimed at enhancing the survival rate of such highly endangered species as the green turtle, leathery turtle and hawksbill among others. In fact, a green turtle, successfully hatched at the Zoo, has proved extremely reluctant to return to the sea. It defies all attempts by divers to reintroduce it to its natural habitat and swims back to shore every time. Unfortunately, due to lack of space, this three-foot homebody is not in the exhibit area. The Zoo's most prolific tortoise breeding program centers on the 'star' of the show, the Starred Tortoise, better known as Star Tortoise. Native to Sri Lanka and south India, it is a beautiful species with yellow star-like patterns on its

carapace. There are thirteen protrusions on the carapace which are placed in three rows along its length. The markings on the Star Tortoise are only rivalled by a rare Madagascan species called the Radiated Tortoise. Each plate on the carapace has a yellow spot with bands radiating from it.

The Star Tortoise is found in the Dry Zone region of Sri Lanka and frequents sandy areas and scrub jungle. it is rarely active during the day, feeding mainly at dusk and early morning. As the tortoise grows older, the bright yellow markings begin to fade. The dinstictive knobs on the carapace also become smoother through contact with rocks and other surfaces. The older the specimen, the smoother and duller its carapace. the Star Tortoise is also equipped with thick, scaly limbs and neck which are well adapted to living in dry, rough country. Star Tortoises breed regularly with a female laying upto half a dozen eggs about twice or thrice a year. She digs a nest-hole in the ground and after the eggs are laid, covers up the hole and stamps down on it to disguise the location. As with other species, young Star Tortoises have to dig their way out of the hole and feed on their own. Adult tortoises are herbivorous, surviving on grass, leaves and flowers. They can also go for long periods without water. The Star Tortoise is land.

Pond and marine turtles mate in the water favoured as a pet in Sri Lanka as it is easy to feed, breeds well in captivity and, according to one owner, even exhibits such endearing qualities as following him around like a pet dog! If the bright markings of the Star Tortoises make it stand out amongst other tortoises, there is another species at the Zoo which is hard to miss because of its size -the Giant Tortoise. There are two main species of this land variety, the Galapagos and Seychelles. It is not certain which species the Zoo's giants belong to, but they are remarkable creatures and could be anywhere from one to two centuries old. Giant tortoises also reach weights of upto one fourth of a tonne and continue to grow for forty years after hatching. On the Galpagos Islands, there once existed about fifteen species and sub-species of Giant Tortoise, one of Darwin's evolutionary delights. Unfortunately, both varieties, like the giant marine turtles, were considered an important source of food for sailors. All these giant species are now on the endangered list and, thus, their survival in zoos around the world becomes vital to prevent extinction. Two other remarkable exotic species on display at the Zoo are the Matamata and the Alligator Snapping Turtle. The Matamata is probably one of the most peculiar-looking species of turtle. Native to South America, it has a carapace that is so bumpy and horny that it hardly looks like a turtle at all. The head is broad, with beady eyes and a snorkel-like nose. Unlike most tortoises and turtles which do not display much action in hunting for prey, the Matamata ambushes its prey of fish and molluscs lying hidden under aquatic plants and rocks. The Alligator Snapping Turtle, found in the swamps of North America, is another unusual hunter. It is distinguished by a large mouth in which pink, worm-like projections attract fish into this gaping trap. This turtle also possesses an unusually long neck with which it makes vicious attacks, hence its name. Like other turtles and tortoises, it does not have teeth but hard, ridge-like gums with which it tears and crushes its food. For visitors who are intrigued by reptiles in general, the Dehiwela Zoo's Reptile House is the place to visit. In addition to the crocs, turtles and tortoises, there is an impressive array of local and exotic snakes and lizards on display with the less harmful species lying only a few inches away from you. The Zoo is open daily from 6 a.m. to 6 p.m. and is located just south of Colombo's city limits at Dehiwela. (11 km. from Fort).