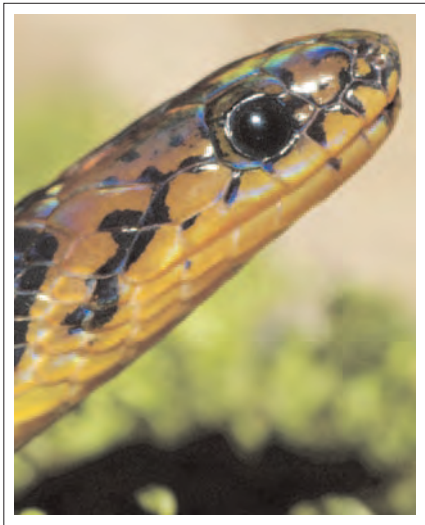


A PHOTOGRAPHIC GUIDE TO

SNAKES

AND OTHER REPTILES
OF

SRI LANKA



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Anslem de Silva*



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Contents

Introduction	4
Map of Sri Lanka	5
A checklist of Sri Lankan reptiles	6
About this book	9
Climate, landscapes and vegetation	10
Conservation of reptiles	11
Protected areas in Sri Lanka	13
Snakebite and its management	15
Organisations in herpetology	17
Species descriptions	18
Further reading	136
Vernacular equivalents for	
geographic terms	137
Glossary	137
Anatomical diagrams	139
Index	140
Photographic acknowledgements	144

Introduction

The island of Sri Lanka ($05^{\circ} 54' - 09^{\circ} 52'N$ and $79^{\circ} 39' - 81^{\circ} 53'E$) lies at the tip of the Indian peninsula, a tear-drop shaped island that was attached at various times to the Indian mainland through sea level lowering. A tropical island of $65,610\text{km}^2$ area, it contains a variety of habitats, from the hot, dry, plains of the north, east and south, to the central mountains that ascend $2,524\text{m}$ above mean sea level (Pidurutalagala). Other high peaks include Kirigalpotta ($2,395\text{m}$), Totapolananda ($2,357\text{m}$) and Adam's Peak ($2,243\text{m}$). Major rivers in the island include Mahaweli Ganga (335km), Aruvi Aru (164km) and Kala Oya (148km). The coast of Sri Lanka is fringed with sandbars and lagoons.

Responding to the highly diverse ecological conditions and as a result of past history, the biota of Sri Lanka includes a fascinating admixture of elements that are Indian, Indo-Malayan, African, Eurasian and also includes a large portion of elements that may be described as indigenous or endemic to the island. Sri Lanka is one of the global hotspots for high biological diversity, most famously for its plant life, representing the westernmost representative of the Indo-Malayan flora, coral reefs and marine life, and also for its great diversity of its amphibian fauna.

This work is a general introduction to the reptile fauna of Sri Lanka. We have tried to illustrate as many species as possible through a short text description and one or more colour photographs, showing a live animal. The first author has worked on the Sri Lankan fauna for the past 12 years; the second author for nearly 50. We have also received data and photographs from many of our colleagues, who we have listed in 'Acknowledgements'.

Although snakes are characterised by loss of limbs and of eyelids, several lizards share one of these characteristics, and the relationships of snakes lie with lizards. Snakes are primarily predators of vertebrate animals, although a number of living species are specialists of invertebrates. As efficient hunters, prey are located by sight, as well as via chemical cues that are collected with the aid of their bifid tongues and carried forward to a special sensory organ located on the roof of the mouth, called the Jacobson's organ. Pit vipers and pythons, in addition to this oral organ, have thermal receptors, also known as loreal pits, on or near their lips, that permit them to detect the body heat of warm-blooded prey in darkness. Specialisation of front (and in some cases, rear) teeth is shown by snakes of several groups, permitting the delivery of venom. The hollow, hypodermic needle-like fangs of the true venomous snakes are the most advanced type, while in some water snakes, the venom trickles down grooves. Snakes inhabit virtually all types of habitats in the region, right up to the highest peaks. Lizards are generally recognisable from their close cousins, the snakes, in showing limbs, although, a few skinks, have lost their limbs. Most lizards feed on insects or other invertebrates, the monitor lizards, when adult, capable of subduing and eating small- to medium-sized vertebrates, including birds and mammals. None of the Sri Lankan lizards are venomous, and reports of food poisoning from lizards in the food are probably attributable to the unhygienic conditions under which the food was prepared. Several groups of lizards, including skinks and geckos, are capable of autotomising their tails; that is, when threatened, they can willingly shed their tails, growing a new one in time. The regenerated tail is

never the same as the one lost, and generally lacks ornamentation, shape and colour of the original tail.

Two species of crocodilians occur in Sri Lanka. They are heavy-build, water-dwelling species, bearing large scales and large heads. Males tend to exceed females in size, and both species feed on animals, ranging from fish to large mammals, depending on the size of the crocodile. The Mugger (*Crocodylus paluster*) is a hole-nester, while the Saltwater Crocodile (*C. porosus*) is a mound-nester, raking in leaves and mud from the bank to create a raised mound, inside which eggs are deposited.

Turtles and tortoises complete the reptile fauna of Sri Lanka. This island is home to three species of non-marine species. In addition, of the world's eight marine turtle species, as many as five visit the Sri Lankan coasts for breeding. The Olive Ridley Sea Turtle (*Lepidochelys olivacea*) may form dense aggregations. The Star Tortoise (*Geochelone elegans*), which is a member of the scrub community, is found in the north, north-central, east and south, in the low country dry climatic zone.

