

NOWHERE ELSE IN THE WORLD !

- The Indigenous Fauna of Sri Lanka -

Parallel Diversity

Sri Lanka's rich heritage of plant diversity is paralleled by the wide range of indigenous fauna. Reasons for the presence of such varied life forms should be sought in factors such as zoogeographic history, topographic and climatic variations.

Geographical Connection

Scientists are of opinion that Sri Lanka was a part of the Gondwanaland that drifted apart into South Africa, Asia, Australia and South America about 75.7 million years ago. India separated completely from the Antarctica by late Cretaceous or early Tertiary age. Sri Lanka was separated from India during the Miocene age and was later reconnected in Lower Pliocene times due to an uplift. There appears to have been a land connection between the two countries as late as 25,000 years ago.

It is also believed that geological, climate and elevation conditions have created ecological "islands" with similar features. The evidence for such an assumption comes from the similarity of relict endemic animal life.

These geographical factors have contributed substantially to the evolution of indigenous plant and animal species. Topographic and climatic factors have helped in the evolution of many sub-species forms.

It is evident that the percentage number of endemic genera and species is higher among the evolutionarily older Phyla, while the subspecies numbers are higher among the member of the older subjected the 'younger' Phyla. The members of the older Phyla subjected to isolation over longer times have evolved into endemic genera and species, while the 'younger' Phyla subject to variation of topography and climate isolation recently are just showing signs of isolation. Thus the number of subspecies among them is comparatively higher.

Where they roam

An interesting feature of our indigenous fauna is that many species are found in restricted locations. There are some species which show unique distributions.

As in the case of flora, a large number of indigenous fauna are found in the wet zone - and for that reason highly vulnerable just like the endemic plants.

Before It is Too Late !

Indigenous fauna of Sri Lanka is very diverse, but sadly not known in detail. Although we are aware that some of them have decreased in their range, new varieties or species are discovered from time to time.

All this is a genetic resource which we should study and conserve - before it is too late.

The following tables provide interesting facts about the fauna of Sri Lanka.

TABLE 1: Inland Vertebrates of Sri Lanka (Cruz 1914)

	No. of genera	No. of endemic genera	No. of species	No. of endemic species	No. of species and subspecies	No. of endemic species and sub species
Pisces (excluding introduced forms)	32	3(9%)	59	16(27%)	62	28(45%)
Amphibia	10	1(10%)	37	19(51%)	37	19(51%)
Reptile	68	12(19%)	139	72(51%)	159	98(62%)
Aves (Resident)	165	0	237	20-21	248	104-105 (42%)
Mammalia	51	2(4%)	85	10(12%)	114	61(54%)
	326	18(6%)	557	137(25%)	620	310(50%)

TABLE 2: List of Species Number and Endemics in the Freshwater Invertebrate Fauna from Fernando - 1984

Group	No. of Species	No of Endemics/Comments
Monogenea	23 (possible 23)	Closely related to Indian fauna
Protozoa	40 +	Species almost completely known
Cladocera	68	Species almost completely known
Rotifera	140	
Ostracoda	31	11 Endemic. Rare and from a few localities
Aniostraca	03	Local in distribution. Includes Artemia spp.
Conchostraca	05	
Amphipoda	02	Poorly known
Decapoda	10 shrimps, 11 freshwater prawns and lobsters. 7 crabs.	5 shrimps 10 endemic 1 lobster 4 crabs
Aquatic Mollusca	31	12 endemics
Ephemeroptera	Total list not known	So far 18 endemic species
Simuliidae (Diptera)	About 13 species	

**TABLE 3: Number of Endemic Genera, Species and Sub-species
Among the Vertebrates**

	Genera	End Gen.	Species	Endgs.	Sub Species
Pisces	32	03	59	19	12
Amphibia	10	01	37	19	0
Reptiles	68	12	139	72	26
Aves	165	04	83	12	49

Table 4: Location of Some Rare Ostracods

Species	No. of locations	Location/s
Ghardaglaia ambigua	03	Locations (3) of Ruhuna National Park
Stenocypris fernandoi	01	Palatupana
Chrissia ceylonica	02	Kalawewa, Parakrama Samudra
Chrissia halyi	03	Polonnaruwa, Mahawila, Colombo
Centrocypris viridis	03	Kalainagar, Kullundai, Ma-Eliya
Darwinula lundii	01	Sabaragamuwa (running water)

TABLE 5: Restricted Distribution of some Vertebrates

<i>Mannophrys quentheri</i>	Low country wet zone	1 peneplain
<i>N. marmorata</i>	Wet Zone	11 peneplain
<i>N. ceyloneasis</i>	Wet Zone	Knuckles Region
<i>Ceratophora aspera</i>	Low Country Wet Zone	Singharaja Region
<i>C. tennanti</i>	Hill country	Central Region
<i>C. stoddardi</i>	Hill Country	Nuckles Region
<i>Calodactyliodes</i>		
<i>Illingworthi</i>	Maha Oya	
<i>Cophotis ceylanica</i>	Central Hills	
<i>Calotes liolepis</i>	11 peniplain	
<i>Myiophoneus blighi</i>	Horton Plains	

TABLE 6: Distribution of Endemic Vertebrates

	LCWZ	HC	LCDZ	ISW
Fishes	15	04	03	02
Amphibia	09	12	03	-
Reptiles	51	30	32	02
Birds	13	14	04	03
Mammals	06	09	03	02