



The Herpetofauna of the Great Nicobar Island

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The Great Nicobar Island has been declared as one of the 8 Biosphere Reserves under the Indian Man & Biosphere Programme. This large and remote island is biogeographically a transition between the Indochinese and Indomalayan regions. It shares a number of faunal and floral elements with the Southeast Asian Islands such as Sumatra and Java.

The Great Nicobar Island is rather poorly explored with regards the herpetofauna. Much of the early expeditions were done by the Zoological Survey of India. Recent publications about the amphibians and reptiles of the island are those by Indraneil Das (1994, 1995 & 1996). We have been mapping the distribution of herpetofauna on the island since December 1994. The present study is part of an ongoing 3 year project wherein the patterns of distribution of vertebrates on the island are being mapped.

Since December 1994, several species of amphibians and reptiles have been identified on the island. In what follows we present a brief discussion on these animals. We follow the nomenclature of Das (1994). The specific identity of some reptiles have not yet been confirmed. For such reptiles, only the generic names are provided.

Amphibians:

This island has a fairly permanent and widespread source of fresh water and hence ideal habitats for amphibians. The most common species is a toad. Although there are reports of the Common Indian Toad (*Bufo melanostictus*) from the island, the species that we have come across is



probably the endemic toad *Bufo camortensis*. This is different from *B. melanostictus* in having the parietal ridges extending backwards. This is a character quite distinct from that of *B. melanostictus*. *B. camortensis* is widespread and seen both around homes as well as in remote camps within dense forests. In colour it varies from yellowish-olive brown to dark coffee brown or black.

The other amphibian commonly seen on the island, including on roads at night, is the microhylid frog *Microhyla heymonsi*. The small fresh water creeks with green algae growing are inhabited by *Rana erythraea*. Deeper open wells beside rice fields are ideal habitats for this species and the larger *Rana chalconota*. Both species are widespread in the Southeast Asian Islands.

In early 1996 Das described a new species of large frog viz., *Limnonectes shompenorum*, (Das, 1996). This species has also been observed by us on many occasions. We also have recorded on one instance a smaller frog that is probably *Limnonectes cancrivora*. On the forest floor there is the Nicobar frog *Rana nicobariensis*.

The only treefrog that we have come across during our study is *Polypedates insularis* a new species described as endemic to the island (Das, 1995). The 8 species of amphibians so far recorded on this island are certainly part of a richer community of frogs and toads that we have not yet fully explored.

Lizards:

The most common terrestrial lizard on the island is the water monitor (*Varanus salvator*). This large lizard can frequently be seen on roadsides and in forests. Skinks are very frequent on the forest floor. The one that we have identified and that which is commonly seen is *Mabuya rudis*.

Dasia olivacea, an arboreal skink is very common throughout the island. The juvenile of this species is seen on the forest floor and is strikingly different from the adult in having red tail and a bright zebra-like dorsal colour pattern. Other arboreal lizards include the endemic



gecko *Cyrtodactylus rubida*. This lizard is frequently seen during the day on the trunks of coconut palms and taller mangrove trees. *Hemidactylus frenatus* is common both on trees as well as inside houses.

Garden lizards in the genus *Bronchocela* are fairly widespread. *B. danieli* an endemic species is rather common. Other species in the genus, especially the green forms, are also seen sharing the same habitat.

Crocodiles and Turtles:

Saltwater Crocodiles (*Crocodilus porosus*) are found on the island. Possibly due to pressures of poachers, sighting individuals is rather occasional. During our study only 2 subadults of less than 10 foot length were recorded.

The large Leatherback Turtles (*Dermochelys coriacea*) breed on the Galathea beach and hence are commonly seen. The other species including the Green Turtle (*Chelonia mydas*) and Olive Ridley (*Lepidochelys olivacea*) have been recorded occasionally along the southern coast. One subadult green turtle was found entangled and dead within a fishing net that was washed ashore. Although there are reports of the Malayan Box Turtle (*Cuora amboinensis*) from the island by local people, we have not seen any.

Snakes:

The most frequently seen land snake on the island is a species of bronzeback (*Dendrelaphis* sp.). This slender snake is often seen basking on the road and hence gets crushed by passing vehicles. Other land snakes that we have come across includes the green trinket *Elaphe flavolineata* and the rarer *Sibnyophis bistrigatus*. Small sized individuals of the reticulated python *Python reticulatus* have been occasionally recorded on the forest floor. We have also seen and photographed a species of Krait (*Bungarus* sp.) late in the evening along the beach on the northern side.

Of the two species of sea snakes that we have come across, *Laticauda laticaudatus* has been identified. Another species has not yet been confirmed.



A detailed analysis of the patterns of distribution of the island's herpetofauna is underway and will be completed by the middle of 1997. This study hopes to develop a conservation strategy for these lower vertebrates as part of the overall Biosphere Reserve Management plan.

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