

FAUNAL STUDIES IN THE SINHARAJA RAIN FOREST  
III. COMPOSITION AND DIVERSITY OF SMALL MAMMAL FAUNA

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Quantitative studies on the small mammal fauna in Sinharaja were carried out between June 1981 - December 1984, using the 'mark-recapture' method in seven study sites: four relatively undisturbed, two disturbed by mechanized logging and one, a clear-felled area replanted with Pinus.

A total of 14 species was recorded in the sample of 337 captured animals. These included four endemic species viz: Paradoxurus zeylonensis, Crocidura miya, Coelomys mayori and Srilankamys ohienensis. Of these, the latter two

are known to be endemic genera. Three species (including two sub-species) were recognized as commensals viz: Rattus rattus kandianus, Rattus rattus kelaarti, Bandicota indica and Viverricula indica.

Site comparisons revealed that, compared to disturbed sites, relatively undisturbed sites (with the exception of one) maintained a high diversity index. They were also predominated by individuals of Srilankamys oliensis or Coelomys mayori. The former occurred in 5 sites, was dominant in two out of the 4 undisturbed sites and was totally absent from one logged site and the Pinus plantation. The latter occurred in all sites, dominated the other two undisturbed sites, as well as the logged site. Rattus rattus kandianus also occurred in all sites, was dominant in the Pinus plantation and contributed conspicuously to two of the undisturbed sites. Rattus rattus kelaarti although present in five sites, had low density except in one logged site.

The undisturbed sites were characterised by high diversity and predominance of individuals of endemic species, while disturbed sites in comparison were marked by low diversity and an influx of commensal species. This draws attention to the vulnerability of endemic species and the need to maintain their habitats in order to conserve them.