

Diversity of herpetofauna with special reference to endemic and nationally threatened species at Polgolla, an upland area in the mid country wet zone of Sri Lanka

D M Nayana Pradeep, S M M Samarakoon and Shirani Nathanael*

Department of Biology, Faculty of Applied Science, Rajarata University of Sri Lanka, Polgolla

A preliminary survey on the diversity of herpetofauna was conducted at Polgolla, a hitherto unstudied area, situated about 450 m above mean sea level. During the survey special emphasis was placed on the identification of endemic and nationally threatened species. The survey was carried out using quadrat sampling (5 m x 5 m), visual encounter surveys, line transects, night sampling sessions and canopy survey techniques.

From this survey, a total of 35 species including 11 anuran (3 endemic), 16 tetrapod reptile (10 endemic) and 8 serpentoid reptile species (3 endemic) belonging to 12 families were recorded. Of the amphibians, the family Ranidae had the highest number of species (8), followed by the Microhylidae (2) and Bufonidae (1). Among tetrapod reptiles the family Scincidae included the largest number of species (7), followed by the Gekkonidae (3), Agamidae (3), Varanidae (2) and Bataguridae (1). The 8 serpent species recorded belonged to the Colubridae (4), Elapidae (2), Viperidae (1) and Uropeltidae (1). Of the recorded herpetofauna, 16 species viz. *Ramanella obscura*, *Polypedates cruciger*, *Philautus cavirostris*, *Lankascincus taprobanensis*, *L. deignani*, *L. gansi*, *L. fallax*, *Nessia monodactylus*, *Sphenomorphus rufogulus*, *Mabuya carinata lankae*, *Cnemaspis tropidogaster*, *Otocryptis weigmanni*, *Varanus salvator salvator*, *Aspidura brachyorrhos*, *Rhinophis philippinus* and *Bungarus ceylonicus ceylonicus* are endemic.

Except for one vulnerable species *Philautus cavirostris*, the amphibian species identified are lower risk species of least concern. The survey also included 2 endangered (*Lankascincus taprobanensis* and *L. deignani*), 6 vulnerable (*Lankascincus gansi*, *Nessia monodactylus*, *Sphenomorphus rufogulus*, *Cnemaspis kandiana*, *C. tropidogaster* and *Varanus salvator salvator*) and 6 near threatened tetrapod reptile species. Of the snakes recorded in the survey, the 3 endemic species *Aspidura brachyorrhos*, *Bungarus ceylonicus ceylonicus* and *Rhinophis philippinus* are vulnerable.