

D-51 Breeding patterns of Schneider's leaf-nosed bat, *Hipposideros speoris* (Microchiroptera) in Sri Lanka

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Existing records on the breeding pattern of *Hipposideros speoris* in Sri Lanka, indicate that either this species has more than one breeding cycle per year or the breeding period differs from one locality to another.

A long term, island-wide study was initiated to investigate the exact breeding pattern of *H. speoris*. Investigations commenced in September 1995 and are still in progress. During the study period, investigations were carried out in 16 districts and 94 bat roosts were examined. Of these, 8 sites were selected and were visited at regular intervals for continuous monitoring. Bats were caught by hand nets and sex, maturity, weight, size and reproductive status of bats were determined by external examination. In each location, temperature and relative humidity were measured and rainfall values were obtained from the Meteorology Department.

The results show that *H. speoris* was the commonest micro-chiropteran species resident in the island and was distributed in all districts except Nuwara Eliya. In all the observed sites, it has a mono-estrous breeding cycle which had a close relationship with rainfall. However, the timing of the parturition varied depending on the inhabiting region. Bats in the northern regions timed their breeding period with the first inter-monsoonal rains (between March to May) whereas those in the southern regions timed their breeding with the 2nd inter-monsoonal rains (between September to December). Therefore it appears that colonies in these 2 regions are reproductively isolated from one another. An endogenous mechanism may possibly account for this variation in reproductive timing.

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