

Man-made maternity roost selection by *Scotophilus kuhlii* (Lesser Asiatic yellow bat) in two anthropogenically altered habitats

ABSTRACT

Scotophilus kuhlii is a highly gregarious bat that thrives in anthropogenically altered habitats readily roosting in man-made structures. Although widespread, information on the ecology of *S. kuhlii* is very scarce in Southeast Asia. We conducted this study to determine if the females used the same day roost as a maternity roost in buildings in an agricultural and suburban habitat from July 2013 to April 2015. The females were found to use the same day roost as a maternity roost as the buildings provided a higher temperature and more stable thermal conditions as compared to the ambient temperature. We found that there was a significant positive relationship between roost microclimate and ambient microclimate. Based on the observation of the external body condition, females were found to be seasonally monoestrous. Our findings are useful for conservation and management of these synanthropic bats where natural roost sites are lacking and in managing human-bat conflicts.

Keyword: Agricultural habitat; Day roost; Maternity roost; Microclimate; Reproduction; Suburban habitat; Synanthropic bats