

## Influence of urbanization on roost selection of Asiatic Lesser Yellow bat, *Scotophilus kuhlii* (Leach, 1821) in Uttar Pradesh, India

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### ABSTRACT

Urbanization in Uttar Pradesh has replaced many pre-existing natural habitats with artificial, human-populous environments. Nevertheless, some bat species have persisted in urban habitats, the overall abundance and diversity of bats within them is low. Therefore, we examined urbanization factors that influence roosting of bats such as house density, abandoned buildings, obstruction, lighting, roost height, water and vegetative resource distance in three different habitats such as urban, suburban and rural areas of Uttar Pradesh. We compared among the factors with colony size of *S. kuhlii* in the urban, suburban and rural. In this study, it was observed that house density, roost height, obstruction and distance of water and vegetative resource negative effect on the colony size or roost selection of *S. kuhlii* in among the habitats. While in number of insect, abandoned building, number of street light pole and age of building shown positive correlation in among habitats except age of building in rural. Showed significantly different between colony size and factors in urban, suburban and rural ( $p < 0.05$ ) except roost height. The present study signifies preference of intermediate level of urbanization by *S. kuhlii*.

**Key words:** Conservation, Microclimate, Obstruction, Roost selection, Urban ecology, Urbanization factors

