

FRUIT BATS IN AND AROUND GUWAHATI CITY, ASSAM

Md. Azad Ali¹ and Sudip Kanta Basistha²

¹*Animal Ecology and Wildlife Biology Laboratory, Department of Zoology, Gauhati University, Guwahati, Assam 781014, India*

²*Fish and Fishery Biology, Department of Zoology, Bajali College, Pathsala, Barpeta, Assam, India*

A systematic study of bat fauna is yet to be undertaken in Assam. However, some preliminary studies have been carried out by some noted scientists. The present investigation was planned to study the fruit bat roosting sites (specially Indian Flying Fox) and population in and around Guwahati City, since roosting sites are dwindling very rapidly in this area.

Currently, 119 species of bats have been identified from Indian subcontinent (Bates & Harrison-1997), incorporated in eight families and 37 genera. In Assam the most commonly found bat is the Indian Flying Fox (*Pteropus giganteus*).

Guwahati, the capital city of Assam, is located within the longitude of 91°44' E to 91°47' E and latitude of 26° 07' N to 26°11' N. The city is fully urbanized, but still there are hilly regions with thick forests and extensive wetlands in the plains. The urban area is very rich in avian fauna (160 species), and amphibian fauna (15 species). So far as mammalian fauna is concerned Leopard, Pangolin, Large Indian Civet, Small Indian Civet, Porcupine, Capped Langur, Asiatic Elephant, Indian Flying Fox,

As part of the study, whenever a roosting site was sighted, it was recorded. The number of roosting spots present in the roosting site were counted along with the roosting trees. During census each of the roosting trees were divided into four equal parts and the population were counted in each part separately; data from all four parts were added together and the total was considered as the population number for a particular roosting tree. To know the exact population size, census was carried out at three different times in each roosting tree during the day viz. 0600-0800 hrs, 1200-1400 hrs and 1600-1800 hrs.

All together four different roosting sites were identified in and around the city during survey period (June-Nov. 1998). Among them "Kachari" was the major roosting site. This area includes five different roosting spots. Various roosting trees were Rain Tree (*Samanea saman*), Teak (*Tectona grandis*), Sissoo (*Delbergia sissoo*), Radhasura (local name), Krishnasura (Local name) and Eucalyptus (*Eucalyptus globosus*). Population of this area was recorded as between 650-700 bats during census. The second major roosting site was "Koita Siddhi" with a population size of 350. There was only one roosting spot as well as single roosting tree. It was a Ficus tree (*Ficus religiosa*). Third roosting sites was "Singimari" with a population of 207 and bats were found roosting on a Ficus Tree (*Ficus religiosa*). The fourth roosting site "Tatimara" was about 40 km away from the Kachari roosting site. Population was comparatively less in this roosting site (120 only). There were three different roosting trees namely Mango (*Magnifera indica*), Teteli (*Trimarind indica*) and Bamboosa sp. As all these trees were together, it was very difficult to count the population separately in each roosting tree during census time in that roosting spot.

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References

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Table 1. Roosting sites, spots and number of bats recorded during the survey period June-November 1998.

Roosting site	Roosting tree	Number of bats	Comments
Kachari	Rain tree, Teak, Sissoo, Eucalyptus, Radhasura & Krishnasura	650-700	Major roosting site. Population variation is seen during Oct.-Nov. months
Koita Siddhi	<i>Ficus religiosa</i>	350	Second major roosting site with a single roosting spot.
Singimari	<i>Ficus religiosa</i>	207	Population size was moderate. Population variation nil.
Tatimara	Mango, Tateli, Bamboo	120	Smallest colony. All the roosting trees were associated with each other like a single tree.

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