

**POPULATION STATUS, GENERAL BEHAVIOR AND
THREATS OF FLYING FOX (*Pteropus giganteus*) IN
SALLAGHARI, BHAKTAPUR, NEPAL**

A Dissertation

Submitted to Central Department of Zoology, Tribhuvan University for the
Partial fulfillment of the Requirement for the
Master's Degree in Zoology (Ecology)

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RECOMMENDATION

It is recommended that **Mr. Narayan Prasad Koju** has completed his dissertation work entitled **“POPULATION STATUS, GENERAL BEHAVIOR AND THREATS OF FLYING FOX (*Pteropus giganteus*) IN SALLAGHARI, BHAKTAPUR”, NEPAL**” under my supervision. This is the candidate’s original work, which brings out useful findings in the concerned field of conservation biology. To the best of my knowledge, this dissertation has not been submitted for any other degree in any institution. Hence, I recommend this dissertation to be accepted for the partial fulfillment of requirement for the Master’s degree of Science in Zoology (Ecology).

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APPROVAL

On the recommendation of Supervisor Dr. Mukesh Kumar Chalise, Associate Professor, Central Department of Zoology, Tribhuvan University, the dissertation work entitled “**POPULATION STATUS, GENERAL BEHAVIOR AND THREATS OF FLYING FOX (*Pteropus giganteus*) IN SALLAGHARI, BHAKTAPUR**”, NEPAL”, submitted by **Mr. Narayan Prasad Koju** has been approved for the examination.

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ACCEPTANCE

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ABSTRACT

The present study was done in the population status, general behavior and threats for survival of flying fox (*Pteropus giganteus*) of Sallaghari in Bhaktapur, Nepal. The study was conducted from August 2006 to September 2007 by thorough count and direct observation method.

The highest number of bat was counted 1428 individuals in September 2006. There was not a single bat from December to February. Three different age groups i.e., old and isolated, adult and infant of six each are selected for behavioral study totaling 18 bats under constant observation. Focal bats were observed for 12362 minutes (206 hour) applying 11 hours 26 minutes per bat. Nine general behaviors- grooming, resting, spreading wings, flapping, chattering, crawling, fighting, and mating were recorded. Infant bats rest the most (78.27%) of total study time while old and isolated groom the most (11.26%) than other two groups. Crows attack old and isolated bats frequently which very different in frequency than adult and infant. Crows did not attack adult and infant. Old and isolated bats flapped more (7.75%). Infants crawl, chatter, spread wings and fight each other much more than other two groups. Adult were found active in mating behavior and their system showed both polyandry and polygamy characters.

Human intervention is major disturbances for bat and naked electric wires cause death of bats accidentally. Local people kill bats for medicinal belief. Using pesticide, herbicide and other chemical in the local agricultural field causes threats for their survival. Area around the roosting site is being polluted as drainage and sewages are directly dumped in nearby rivers which is the main source of water for bats. So, management of their habitat for the bat conservation must be initiated.

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