## FOREST FRAGMENTS IN AGRICULTURAL AREAS ARE KEY TO BAT CONSERVATION: STUDY

Relevant for: Environment | Topic: Biodiversity, Ecology, and Wildlife Related Issues

Megaderma spasma, an insectivorous bat. Credit: Harish Prakash

Along with protected areas and reserves, forests within human-modified landscapes play an important role in the conservation of existing flora and fauna. <u>A recent study</u> has noted that bats preferred forest patches for foraging more often than agricultural habitats, highlighting that remnant forest fragments in human-modified landscapes are key to bat conservation.

Researchers from the Indian Institute of Science, Bangalore, and St. Xavier's College, Kolkata studied the area in and around Kadari village in Udupi district, Karnataka. The area had evergreen forests and plantations of areca, coconut, and rubber. Previous studies have identified numerous roosts of an insectivorous bat, *Megaderma spasma* in this area.

The team tracked 18 bats using radio telemetry to understand their preferred habitats. The bats were glued with radio transmitters weighing about 1gm and the transmitters' signal was tracked using receivers and antennas across nights to pinpoint the location of the bat. The analysis of these bat locations suggested that the bats preferred the forest habitats and the odds of bats using forest habitats was nearly six times higher than open habitats.

To understand why this love towards forests, the team started studying the bat's meal - insects. They quantified the insect resources available in forests and plantations using nets, light traps and sometimes physically catching insects. The team noted that the abundance of one of the bat's favorite prey - a bush cricket belonging to the genus Mecopoda - was higher in forest habitats than in plantations. This suggests that insect prey abundance in forests may be driving the bat's habitat selection.

"Bats as a community has been receiving brickbats in recent times since many zoonotic diseases trace their possible origin to them. But if bat populations are left alone and their habitats are preserved, the chance of a spill-over is highly unlikely. Moreover, bats in the landscape perform important ecosystem services like seed dispersal, pollination and insect pest control that will benefit us humans," explains Harish Prakash, Research Associate at the Centre for Ecological Sciences, Indian Institute of Science (IISc), Bangalore. He is the first author of the paper published recently in paper published in *Forest Ecology and Management*. It is co-authored by Kasturi Saha and Rohini Balakrishnan from IISc and Soham Sahu from the Department of Biotechnology, St. Xavier's College, Kolkata.

## Our code of editorial values

Please enter a valid email address.

## END

Downloaded from crackIAS.com © Zuccess App by crackIAS.com