

## DIET STUDY OF THE LITTLE BROWN BAT, *MYOTIS LUCIFUGUS*

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### ABSTRACT

Along with Bristol County Mosquito Control and Dr. Thomas H. Kunz of Boston University, the Central Massachusetts Mosquito Control Project assisted in a diet composition study of *Myotis lucifugus*, the Little Brown Bat. Mosquito surveillance was conducted around the area of a bat colony and guano from these bats is currently being analyzed for possible genetic markers of specific mosquito species. Once analyzed, those results can be compared to the surveillance data CMMCP collected as well as other factors to determine the extent of mosquito feeding by this species of bat, and possible impact levels. Identification of the mosquito collections indicated a high level of *Coquillettidia perturbans* for the majority of the season, as well as a consistent, although much lower level of *Anopheles punctipennis*. Low levels of *Aedes vexans* were also present consistently towards the end of the season. Once the guano is analyzed, it will be determined if these mosquito species are present there and if the rates are reflective of those seen in the trap collections. If other species are more prevalent in the guano than our highest collection species, it will lead to further questions as to why *Myotis lucifugus* would seem to prefer certain species despite their lesser numbers. Mosquito and/or bat surveillance may continue in the upcoming season if parties deem it useful to furthering this study.