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MEDHI YOKUBOL: HABITAT USE AND THE POPULATION TREND OF KITTI'S HOG-NOSED BATS (*CRASEONYCTERIS THONGLONGYAI*) IN DISTURBED HABITATS IN WESTERN THAILAND. THESIS ADVISORS: SOMPOAD SRIKOSAMATARA, Ph.D., WARREN Y. BROCKELMAN, Ph.D., SURAPON DUANGKHAE, M.Sc., 67 p. ISBN 974-664-827-6.

Craseonycteris thonglongyai, also known as Kitti's hog-nosed bats and Bumblebee bats, is the smallest mammal of the world that is distributed only in confined area of western Thailand and was listed as an endangered species by The World Conservation Union (IUCN). There has been no study on the status and population trend of *Craseonycteris* for more than ten years. Also there has been no study on the ecology of these endemic bats in areas where the habitat is being altered to determine whether the bats can adapt themselves to this change in habitat. The purposes of this study were to determine the population trend and to determine if there were any human activities that might affect the survival of *Craseonycteris*.

This study was carried out in three steps: population monitoring and cave survey, studying the flight paths and microhabitat use, and examining habitat preferences of the bats in patchy habitats composed of forest and cassava plantations.

The total population of *Craseonycteris* was found to be higher than the previous study with 2,656 bats compared with 2,000 bats due to the discovery of new caves, while the number in original caves has not changed significantly (1,536 to 1,382 bats). However, disturbance levels tended to decrease the percentage of presence and the numbers per cave of *Craseonycteris*.

Craseonycteris foraged along specific flight paths, which were interconnected with other caves and could be adapted in relation to the change of landscape. The bats could forage in suburban and many kinds of plantation areas preferring edges and small clearings, but avoided foraging in large open areas of cassava plantations eventhough insects were similarly abundant.