Bat coexistence in a brighter and urbanizing world

Date: 31 October 2022

Time: 10:00

Venue: Room 6N11



About the speaker:

John Allcock is a PhD student supervised by Dr. Tim Bonebrake and Dr. Caroline Dingle. His research looks at the ecology of bats in Hong Kong, especially in response to urbanization.

Abstract:

Bats are a very diverse and widespread group of mammals that play important roles in nocturnal terrestrial ecosystems across the world. Bat species with similar diets coexist in part through temporal niche



partitioning, in which similar species are active at different times of night. Artificial Light at Night (ALAN) attracts some bat species to hunt high densities of insects around the lights, whereas other bat species avoid illuminated areas due to an increased risk of predation. While the impacts of ALAN on bat abundance have been well studied globally, no research has investigated whether ALAN affect the timing of bat activity over the course of the night and temporal niche partitioning between bat species. My research will address this question among insectivorous bats in Hong Kong. During the daytime, bats are limited by the availability of suitable roost sites. Most known roosts in Hong Kong are in man-made mines or water tunnels, but there has been no research into natural roost sites. In other countries, bats are known to roost in burrows created by other mammals, including pangolins and porcupines, presenting a risk of disease transmission between species. My research will investigate cohabitation of mammals in burrows.