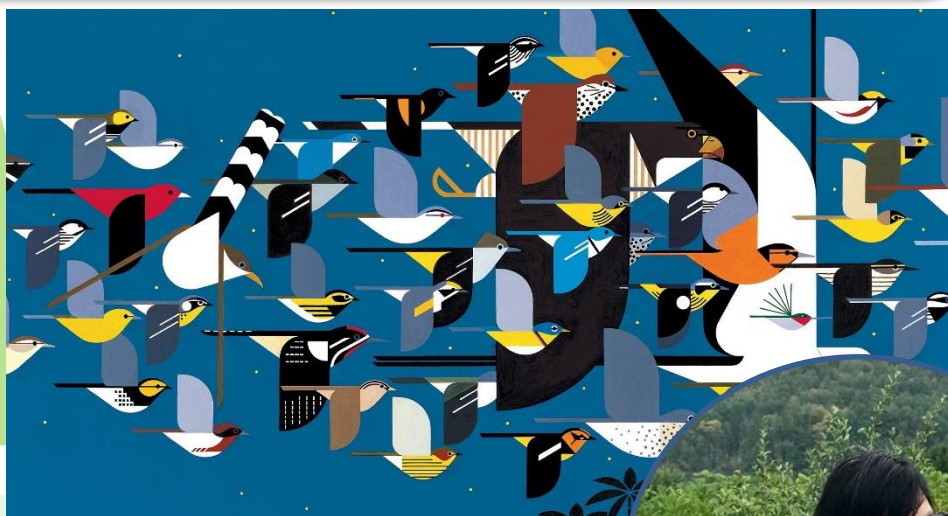# Stopover hotspots and full annual cycle conservation of migratory landbirds in the eastern U.S.

Date: 23rd May 2023

Time: HKT 16:30

Venue: 3N01 & Zoom

About the speaker:

Fengyi Guo (Freda) is a PhD student at Princeton University. She studies the stopover ecology and conservation of migratory landbirds in North America. Combining radar aeroecology and on-the-ground field surveys, she aims to identify stopover hotspots and key habitats for birds during the en-route migration period, the critical missing piece in the full annual cycle conservation of migratory landbirds. She received her BSc and MPhil at HKU, where she made many good memories.

Abstract:

Migratory landbirds are experiencing dramatic population declines globally, but little is known about the important habitats they use as stopover sites during migration. We used data from weather surveillance radar to map seasonal stopover densities of landbirds across the eastern U.S. during spring and autumn migration. We identified stopover hotspots covering 2.35 million hectares that consistently support high densities of migrants. However, only 20% of these sites are hotspots in both seasons. Deciduous forest is the most important habitat type, with high concentrations of birds in forest fragments embedded in broadly deforested regions, especially in spring. While protected areas have higher stopover densities of birds, only 33.7% of hotspots are covered, and many of these protected areas are still subject to extractive uses. A well-distributed network of well-protected stopover areas, complementing conservation efforts on the breeding and wintering grounds, is essential to sustaining healthy populations of migratory landbirds.