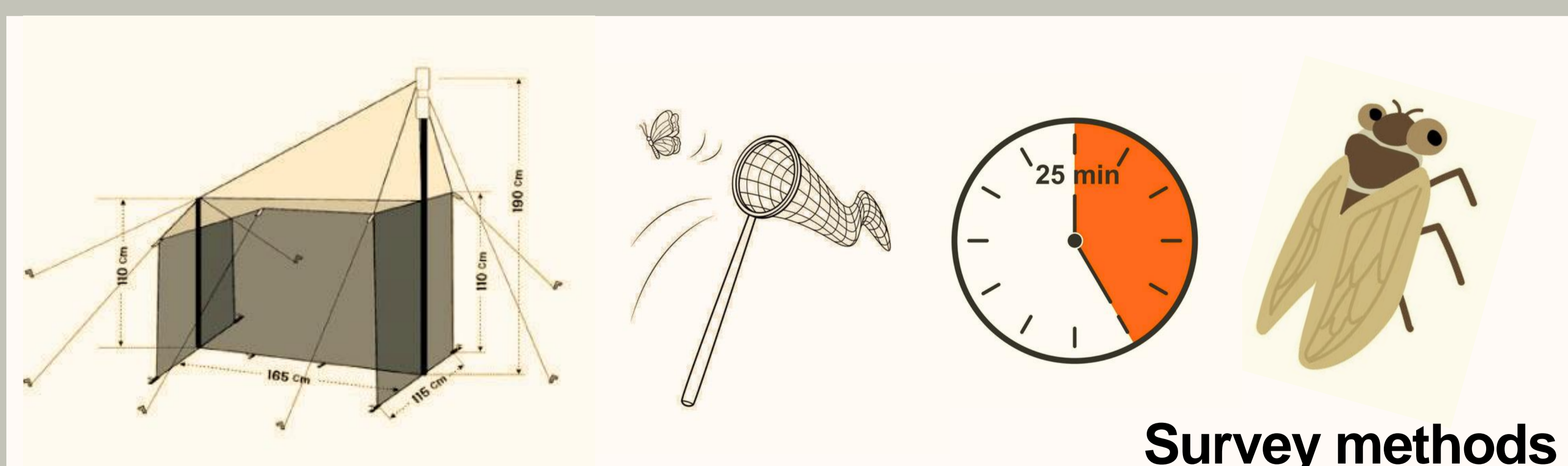
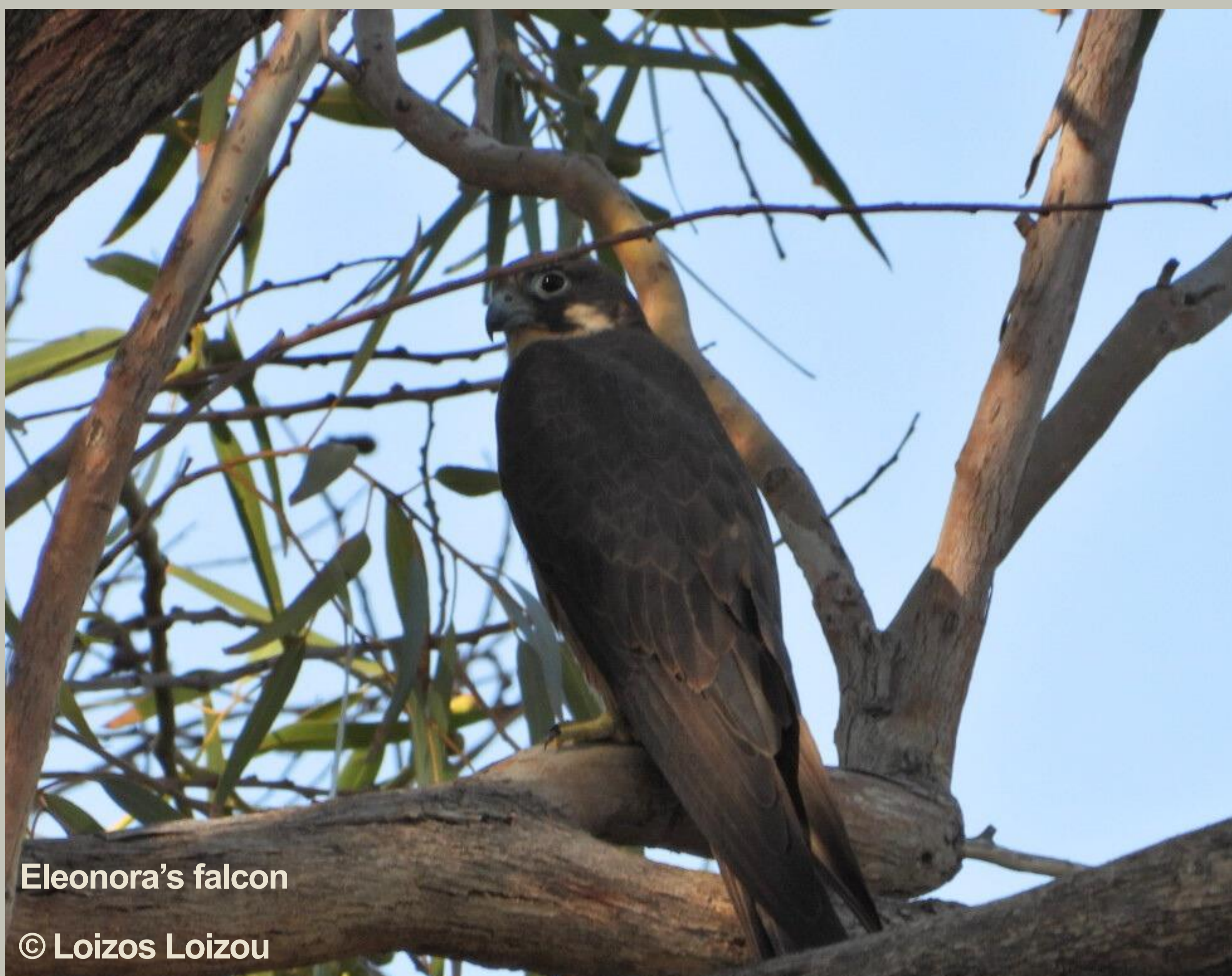


UNDERSTANDING THE ECOLOGY AND TROPHIC INTERACTIONS OF ELEONORA'S FALCON (*FALCO ELEONORAE*) WITH FLYING INSECTS AT THE AKROTIRI PENINSULA IN CYPRUS.

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Background: Insects provide essential ecosystem services such as biological control and pollination while the biomass of insect prey consumed by birds is estimated around 400-500 million metric tons per year. The Eleonora's falcon (Annex I species of the European Directive 2009/147/EC) depends on large flying insects during its pre-breeding period and shifts to small passerine birds during breeding. The Akrotiri peninsula constitutes the main foraging and breeding site for Eleonora's falcon in Cyprus which nowadays is under tremendous anthropogenic pressures such as urbanization, agricultural intensification, pollution and invasive alien species that are expected to affect its insect prey.

Aim: To evaluate the impacts of different land uses on Eleonora's falcon insect prey at the Akrotiri peninsula and identify how human-induced pressures affect the spatial distribution of the falcon.

Methods: Spatiotemporal activity of the falcon was recorded for 2 consecutive years during the pre-breeding season (April-August 2023 and 2024). Data on insect biodiversity were collected at 5 different habitats of different land use (3 plots per habitat) using:
(i) malaise traps, (ii) transect counts, (iii) area-time counts, (iv) Cicadas' surveys.

Preliminary Results: Insect specimens were identified at family or species level using morphological identification keys; 44 families of insects have been identified so far, from the malaise traps specimens.

Moreover, according to the bird observations, the species is active in 14 of the 15 plots.

A systematic review of the trophic interactions of Eleonora's falcon during pre-breeding and breeding is currently in preparation.

Discussion: Previous studies show that the diet of Eleonora's falcon is diverse, based on its breeding status. Our preliminary results show that at the habitats where Eleonora's falcon forages Diptera, Hymenoptera, Lepidoptera, Hemiptera and Odonata are abundant, with Diptera being most abundant and Odonata the least abundant.

