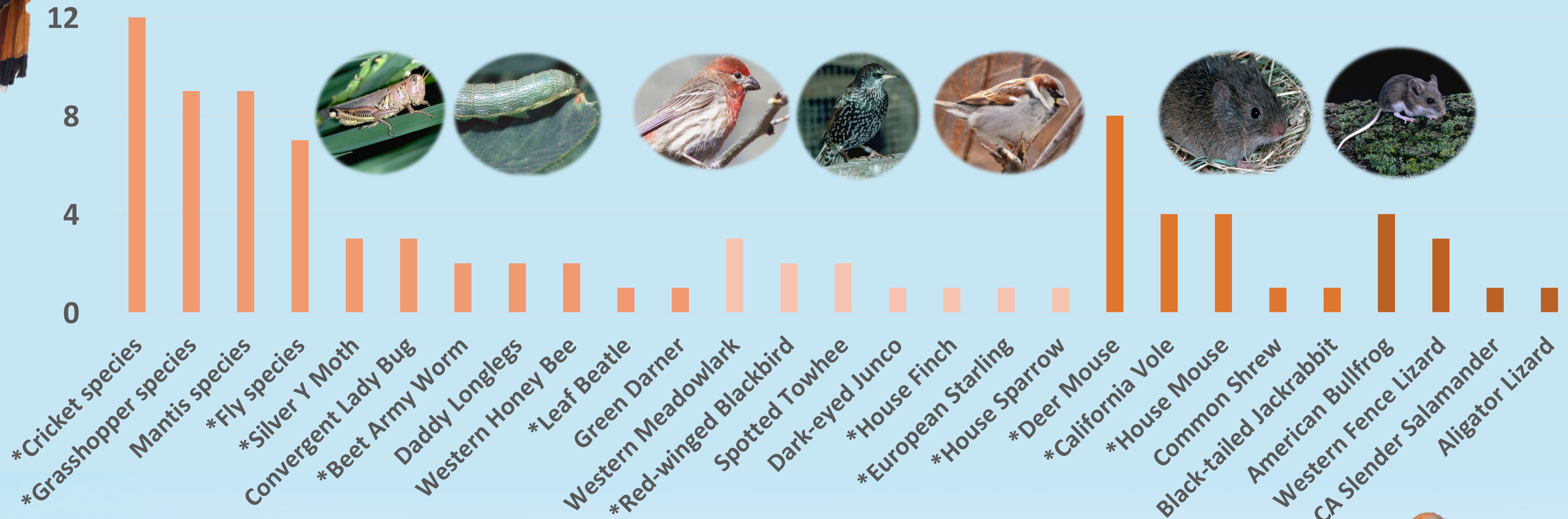


American Kestrels in Agroecosystems: Wintering Diet Revealed Through eDNA Metabarcoding

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Prey species consumed by American Kestrels – * indicates pest species



Sampling: We collected 100 environmental DNA (eDNA) samples from American Kestrels wintering in Yolo County, CA from 2022-2023. Samples were collected via beak swabs to detect trace amounts of a kestrel's previous meal.

DNA Extraction & Sequencing: We ran a small pilot study using 10 samples. We used lab methods that could detect a combination of bird, insect, and mammal prey items from each sample.

Preliminary results: Our pilot study revealed key vertebrate and invertebrate agricultural pests in the diet of 10 wintering American Kestrels. This shows the potential utility of promoting American Kestrels for biological control of agricultural pests within an Integrated Pest Management framework.

Prey detections by taxonomic classification

