

Insect Diversity of Urban Green Roof Infrastructure

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Goals

Do urban green roofs improve insect biodiversity?

1. Investigate the difference in insect diversity for green roof infrastructure and traditional ground-level landscaping.
2. Target species was established as pollinators.

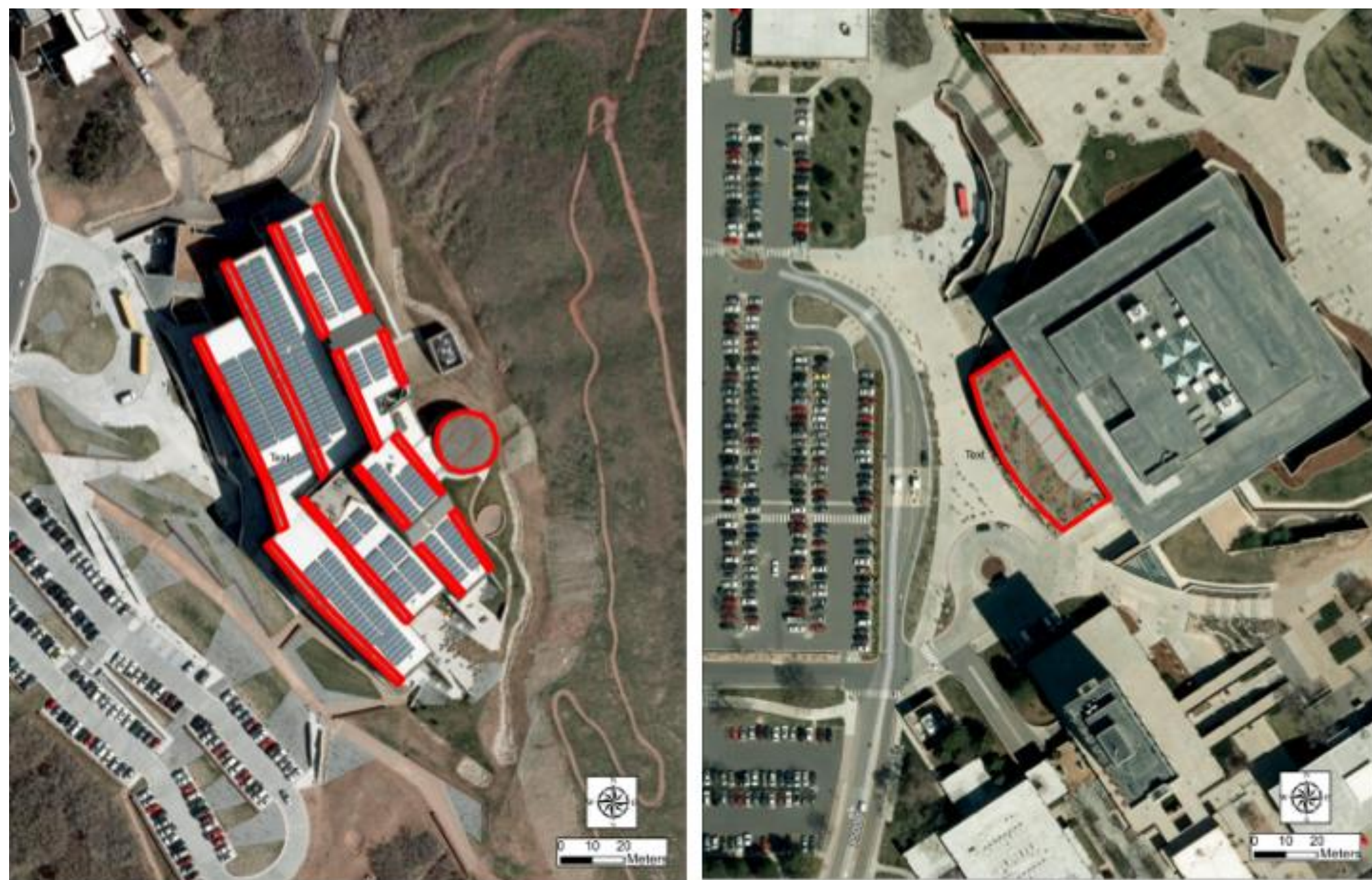


Image 1: Study sites included the Utah Museum of Natural History, UMNH, (left) and the Marriott Library, University of Utah (right). Green roofs delineated with red outlines.

Methods

Site Selection: extensive green roof (NHMU), intensive green roof (Marriott Library), and nearby ground-level landscaped areas for comparison.



Image 2: (Top Left) Combination trap on the roof of the Natural History Museum of Utah. (Top Right) NHMU Ground level Trap. (Bottom Left, Right) Pitfall Trap.

Sample Collection: Weekly basis; duration of June 11 - July 2, 2014. Variable time of collection.

Sample Cataloguing: By Order; Plant species' diversity and abundance were quantified for all sites.

Results

Sample processing is currently incomplete due to limited time and resources.*

Initial Observations: There is a notable difference in the diversity of insects collected on the green roofs and those at ground level.

Pollinators appear to be more prevalent in our NHMU roof sample compared to ground level.



Image 3: (Left) Ground level NHMU combination trap sample. (Right) NHMU green roof combination trap sample.

*This study will be continued by Thomas Walsh

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