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Flourishing the Urban Environment: How Urban Gardens Affect Pollinators

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Do urban gardens have a secondary function to the environment through their land use and resource availability with pollinators?

Introduction

The order of Hymenoptera is classified as bees, wasps, and ants and are widely recognized as pollinators. Native plants and crops that are specifically bee-friendly can encourage bees and other pollinators that are decreasing in biodiversity and population to come back. The innovation of urban gardening began in response to food deserts, which make it challenging for people in poverty and low income housing to find fresh vegetables and healthy options within their neighborhood and pricing. These gardens work to provide vegetables and organic produce to its communities and subsequently are also growing pollinator-friendly food. 3 sites with different functions to the community, including an urban garden, were examined.

Methods

• 3 different sites
• Visual and photographic survey
• Use of the Shannon-Weiner and Simpson’s diversity index for alpha diversity
• Sorenson’s similarity index for beta diversity

Results

The Pollinators:

The order of Hymenoptera is classified as bees, wasps, and ants and are widely recognized as pollinators. Native plants and crops that are specifically bee-friendly can encourage bees and other pollinators that are decreasing in biodiversity and population to come back. The innovation of urban gardening began in response to food deserts, which make it challenging for people in poverty and low income housing to find fresh vegetables and healthy options within their neighborhood and pricing. These gardens work to provide vegetables and organic produce to its communities and subsequently are also growing pollinator-friendly food. 3 sites with different functions to the community, including an urban garden, were examined.

Conclusion

• Each site had differences that made their species composition unique
• There was no complete overlap between the sites
• More research for longer periods of time and more specificity is needed for a more concrete answer