Making Fruitful Habitats: Best Practices for Fruit Gleaning Organizations to Ease the Effects of Climate Change on Pollinators

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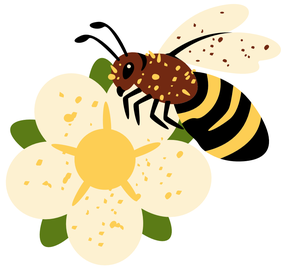

Background

Fruit gleaning (*Def*: act of collecting unwanted or unclaimed fruit and redistributing it to the community) is a valuable method for increasing food accessibility and security

Pollinators that fruit gleaning rely on are declining in health due to climate change effects (drought, habitat loss, extreme heat)

No guidelines exist yet for gleaners to help pollinators through their unique work & context

Thus, fruit gleaning can be an opportunity to investigate pro-pollinator methods

Research Question

What pro-pollinator methods are currently being used, and how can fruit gleaning organizations apply these methods to their specific contexts?

Internship & Methods

Community, Harvest, & Outreach intern
Worked with City Fruit: non-profit fruit gleaning organization in Seattle

Gleaned, processed, & donated fruit (*Fig. 1)*

Conducted online survey
Respondents included: farmers, community gardeners, orchardists, pollinator experts, & environmental volunteers

Conducted literature review
Analyzed academic sources to determine why methods are effective

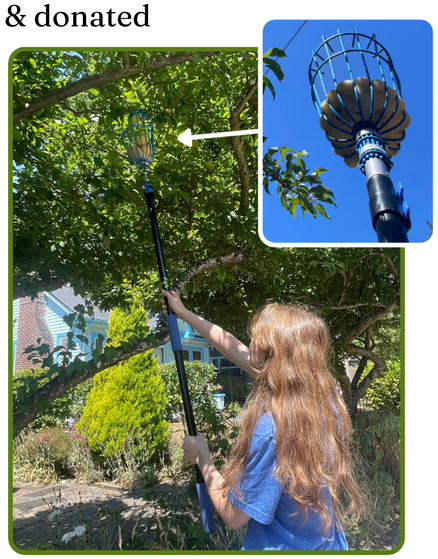

Figure 1. Harvesting golden plums at a resident's tree in south Seattle. Collected fruit was donated to the nearest food bank. Gleaning tool shown in use.

Results

METHODS OF POLLINATOR SUPPORT (*Fig. 2)*

Providing nesting resources
Biodiverse plantings, pollinator hedgerows, urban gardens, and dead wood enhance resources needed for reproduction

Providing foraging resources
Flowering plants are sources of nutrition, pollen, nectar, & energy

Intentional management efforts
Organic methods, diverse plantings, less manicured lawns, low-intensity management

Spreading awareness of pollinator support
Encourage volunteering and education

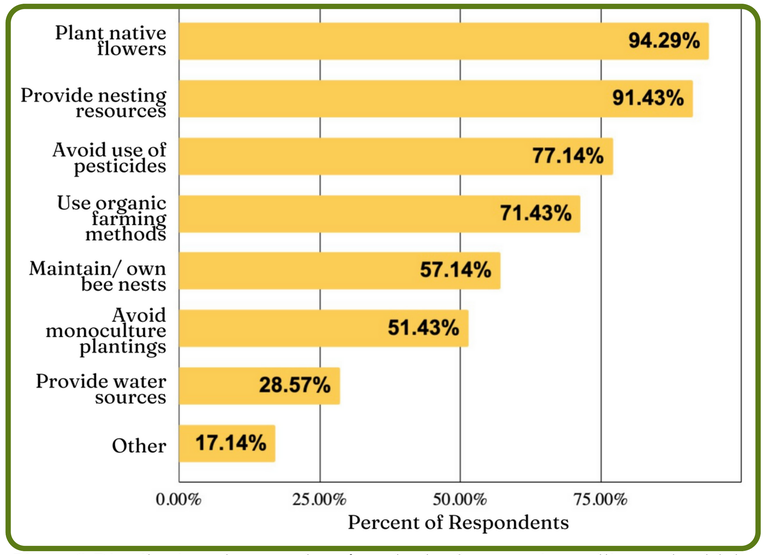

Figure 2. Distribution of respondents' methods of supporting pollinator health by percent. Data collected from online survey. Sample size of 35 respondents.

APPLICATIONS TO FRUIT GLEANING

Connections with tree owners/ stewards
Encourage pro-pollinator methods (*Fig. 2 & 3),* eg: leave dropped fruit & leaves while gleaning

Outreach & Education
Communicate best practices & suggestions with homeowners and others

Accountability
Long-term contact with tree owners to maintain efforts

Takeaways

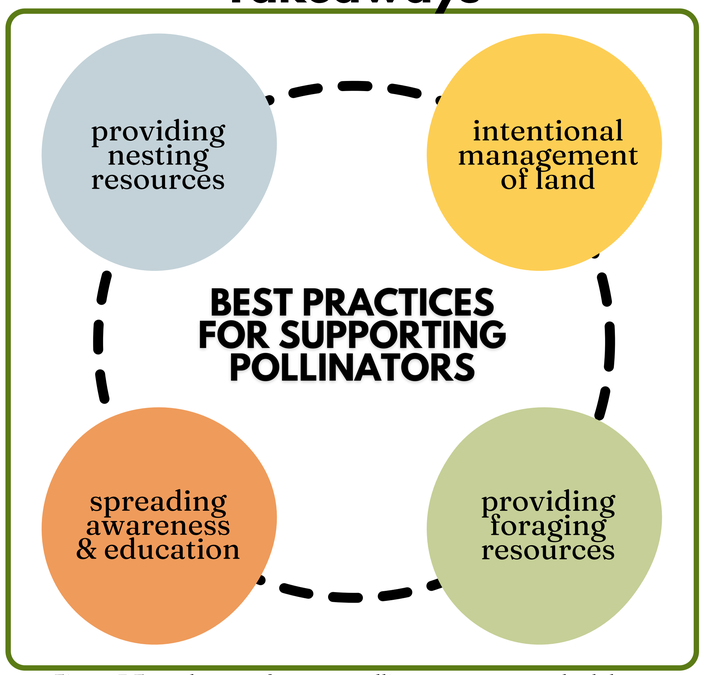

Figure 3. Four themes of current pollinator support methodology. Concluded from survey data, observations during internship, and literature review analysis.

Broader Significance

Basis for establishing universal guidelines
To be used by gleaning organizations everywhere, spreading positive effects

Further research
How to encourage tree owners & stewards to maintain efforts

Whether actions while gleaning are significantly effective over long periods of time

Represents the idea that supporting at-risk species can take place in different settings/ niches
More sectors of environmentalism could integrate actions to help conserve climate-affected species

Acknowledgements

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