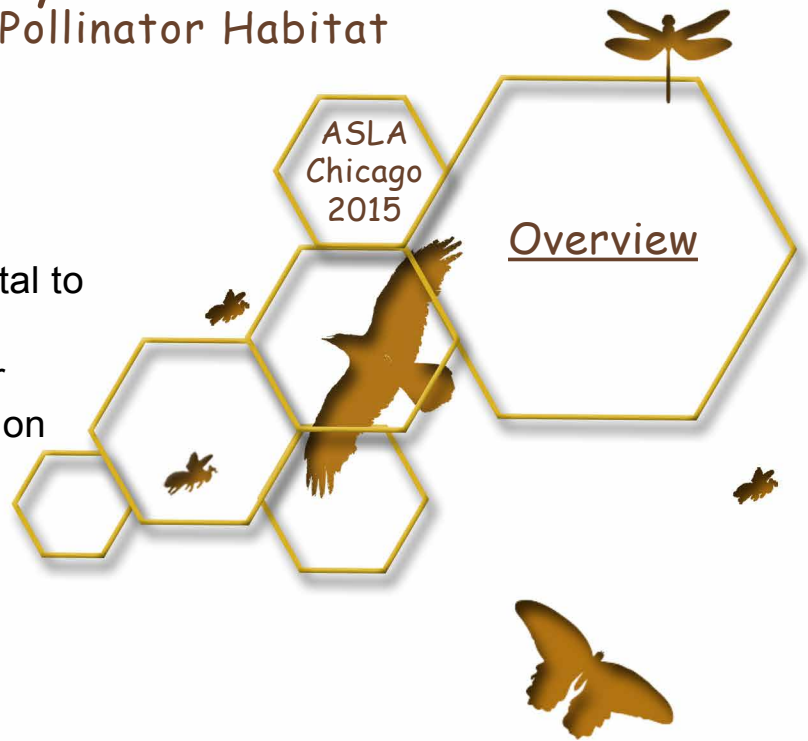


Re-Envisioning Diversity: Integrating Urban and Rural Pollinator Habitat

Summary

Bees, both wild and managed, are vital to sustaining diverse ecosystems and maintaining our food supply, but their populations are dwindling. This session explores local and national plans to integrate pollinator habitat into existing urban and rural frameworks across the US.



Learning Objectives

Highlight pollination issues and propose a treatment to the problem as it relates to planning and landscape architecture

To encourage landscape architects to be involved in local and national policy making

Showcase the importance of forging political partnerships to encourage ecological design

Educate the professional community on advances and partnerships within the landscape architecture community

Speakers

Heather Holm [Author, Holm Design & Consulting LLC, Minnesota]

Danielle Bilot [Associate ASLA, Kudela & Weinheimer, Texas]

Laurie Adams [Executive Director, Pollinator Partnership, California]

Ann Kalayil [Regional Administrator, GSA, Illinois]



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I. Pollinators and Their Purpose

A. Overview of pollination types and associated statistics

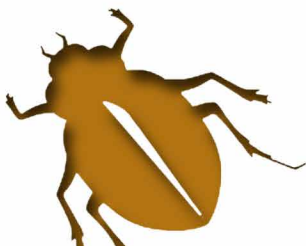
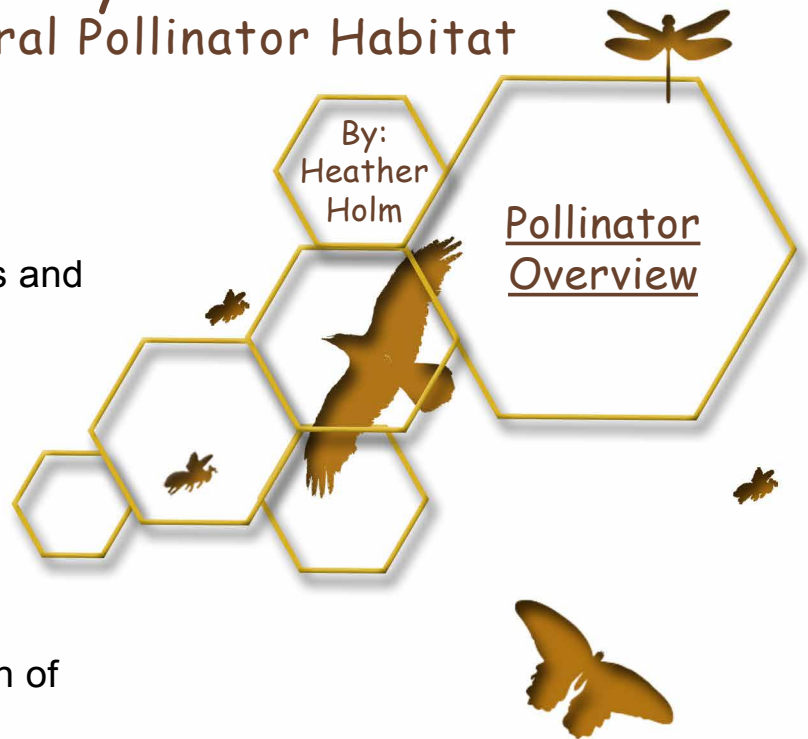
- i) Wind, water and insect

B. Honey bees' lifestyle characteristics

- i) Sociality
- ii) Commercialization and its effects on the health of pollinator populations
- iii) Issues facing honey bees and many other pollinators
 - Diseases and pests
 - Chemical usage

C. Native bees - the "Cinderella" pollinator

- i) The real 'at risk' bee
- ii) Pollination of food crops and flowering ornamental plants
- iii) Nesting biology, habitat needs
 - Focus on:
 - a. Lack of year-round foraging
 - b. Lack of adequate distribution of habitat, landscape dispersal
 - c. How we can better incorporate pollinator/native bee habitat into urban areas



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II. Retrofitting the Urban Environment to Support Pollinator Habitat

A. Lifestyle characteristics:

Honey bees vs native bees

- i) Safety
- ii) Efficiency
- iii) Activity duration and plant selections

B. Existing knowledge gaps

- i) Limiting & non-limiting characteristics for native bees
- ii) Appropriate ratio of nesting to foraging
- iii) Habitat distribution

C. Site design framework, 4 steps

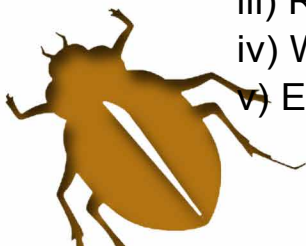
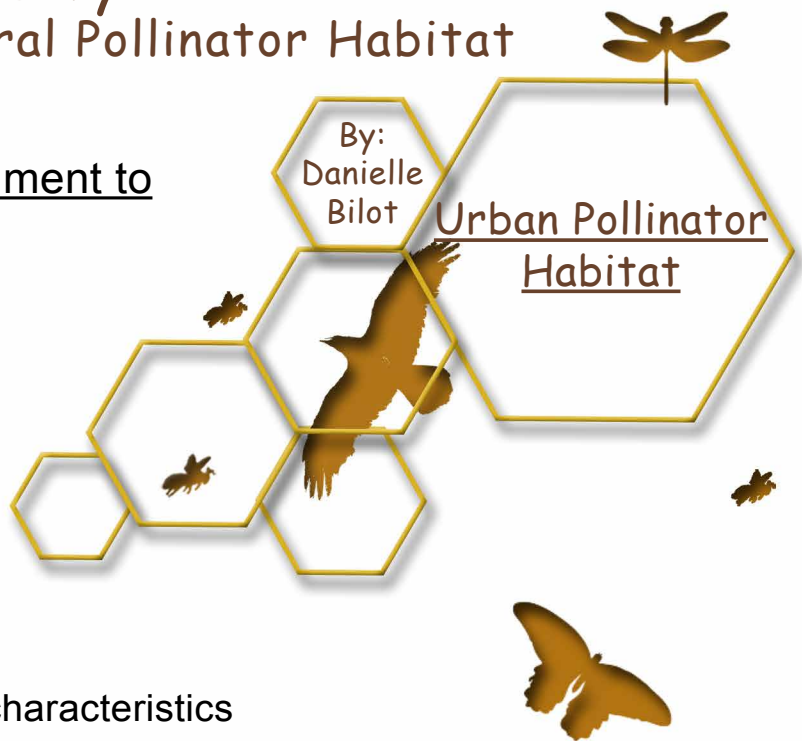
- i) Identification of local native bee species
- ii) Prioritization of foraging plants
- iii) Site design strategies
- iv) Habitat distribution strategies

D. Case study: Houston, TX

- i) Implementation of 4-step framework
- ii) Integration of underused urban land
- iii) Habitat maps

E. Implications

- i) Design Process
- ii) LEED + SITES analysis
- iii) Rural lands - same distribution techniques
- iv) Wildlife corridor habitats that bisect cities
- v) Education | Awareness



Re-Envisioning Diversity: Integrating Urban and Rural Pollinator Habitat

III. Pollinator Partnerships and Opportunities for Landscape Architects

A. Introduction to the Pollinator Partnership
and the NAPPC Collaboration

B. National initiatives and
opportunities for
Landscape Architects

- i) White House Pollinator Action Plan
- ii) Million Garden Pollinator Challenge
- iii) S.H.A.R.E. projects
- iv) Highway BEE Act

C. Individual Initiatives for Landscape Architects

- i) Corporate campuses, roofs, worship centers,
schools, etc.
- ii) Business for Bees
- iii) Monarch Wings Across America
- iv) Bee Buffers
- v) School Garden Kit
- vi) Pesticide (continuing education)

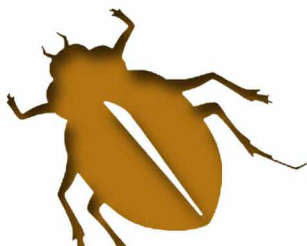
D. Resources

- i) Ecoregional Guide | App
- ii) National Pollinator Week
- iii) Monarch manuals

E. Ideas | Challenges

By:
Laurie
Adams

Partnerships
and
Initiatives



Re-Envisioning Diversity: Integrating Urban and Rural Pollinator Habitat

IV. Federal Sustainability: General Services Administration [GSA]

A. GSA Great Lakes Regional Sustainability Plan

- i) A holistic approach for integrating sustainability into the way we manage our buildings, our supply chain, our fleet, our workplaces, and our communities

B. GSA as a driver of innovation and industry standards

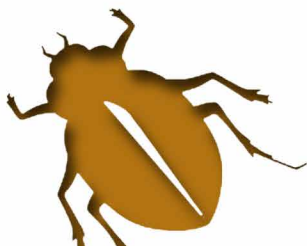
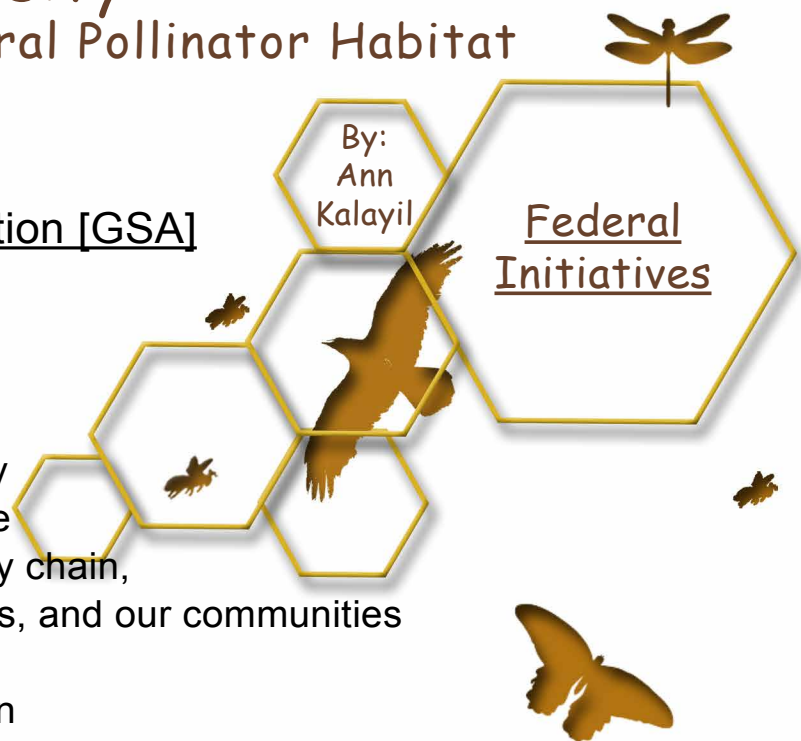
- i) Planning for Federal sustainability in the next decade
- ii) White House Pollinator Action Plan involvement
- iii) Public Buildings Service P-100

C. Case Study: US Courthouse, Hammond, IN

- i) Native plants and water conservation
- ii) Maintenance cooperation
- iii) Sustainable pest management solutions

D. Empowerment and Relationships

- i) Educating colleagues, managing public expectations
- ii) Sustainability as a process instead of a goal



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For More Information...

Highway BEE Act:

<http://www.pollinator.org/BEEAct.htm>

National Pollinator Week [U.S.]:

http://pollinator.org/pollinator_week_2015.htm

North American Pollinator Protection Campaign | NAPPC:

<http://pollinator.org/nappc/>

Pollinator Partnership:

www.pollinator.org

U.S. General Services:

<http://www.gsa.gov/portal/category/100000>

University of Minnesota Bee Lab:

<http://www.beelab.umn.edu>

White House Pollinator Research Action Plan:

<https://www.whitehouse.gov/sites/default/files/microsites/ostp/Pollinator%20Research%20Action%20Plan%202015.pdf>

The Xerces Society [for Invertebrate Conservation]:

<http://www.xerces.org>

