



Credit: Bee Campus USA – Portland Community College, OR

# Mobilizing Communities to Protect Pollinators

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Bee City USA & Bee Campus USA  
The Xerces Society  
June 2025



Two Xerces blue butterflies are shown against a dark blue background. The butterfly at the top is viewed from above, showing its brown wings with numerous white spots and a black border. The butterfly at the bottom is viewed from below, showing its brown wings with white spots and a black border. The butterflies have a fuzzy, blue-grey thorax and head.

# The Xerces (Zerr-Sees) Society for Invertebrate Conservation

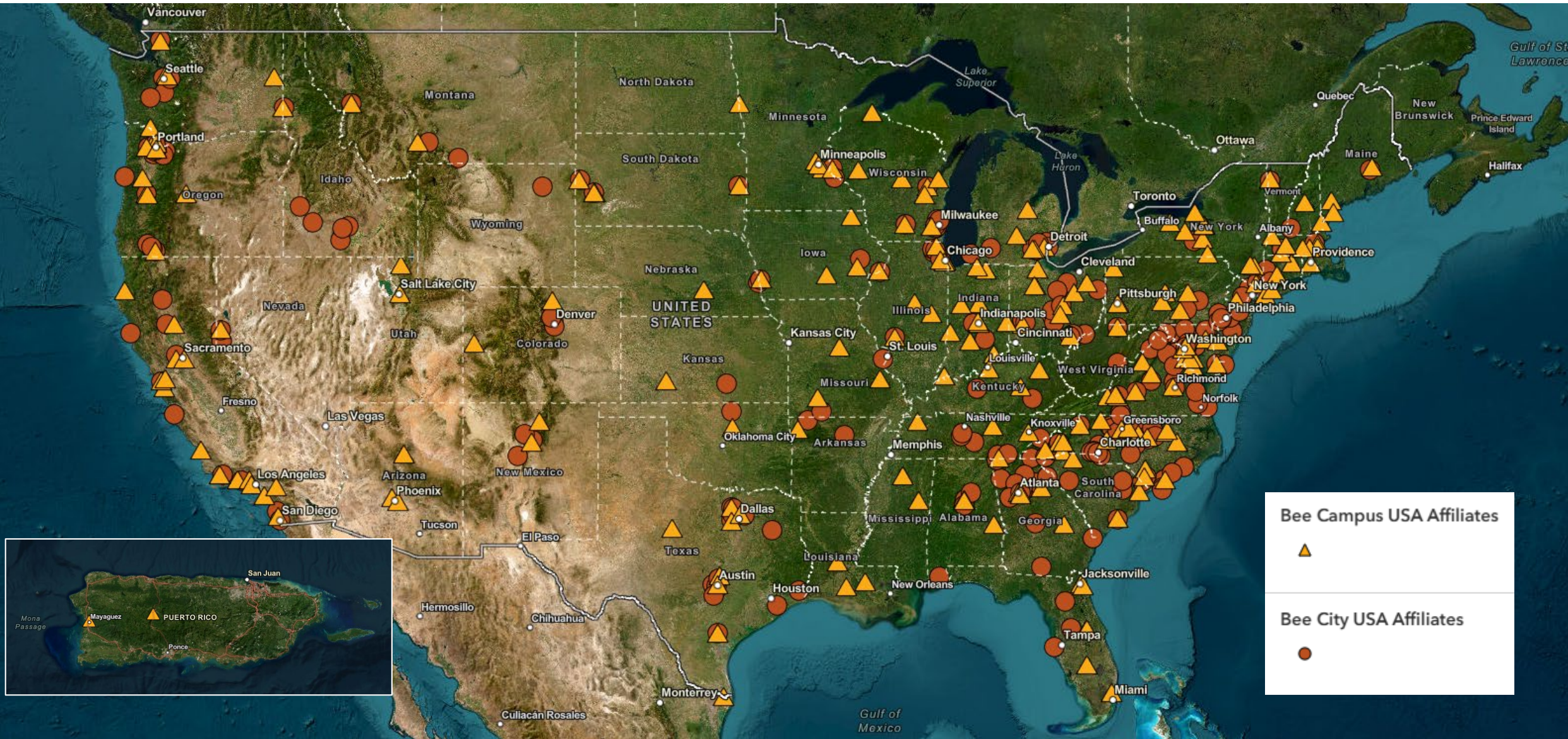
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- ~100 staff around the US
  - Endangered Species
  - Pesticide Reduction & Mitigation
  - Policy
  - Pollinator & Agricultural Biodiversity

Photo: Xerces blue; Xerces Society / Larry Orsak

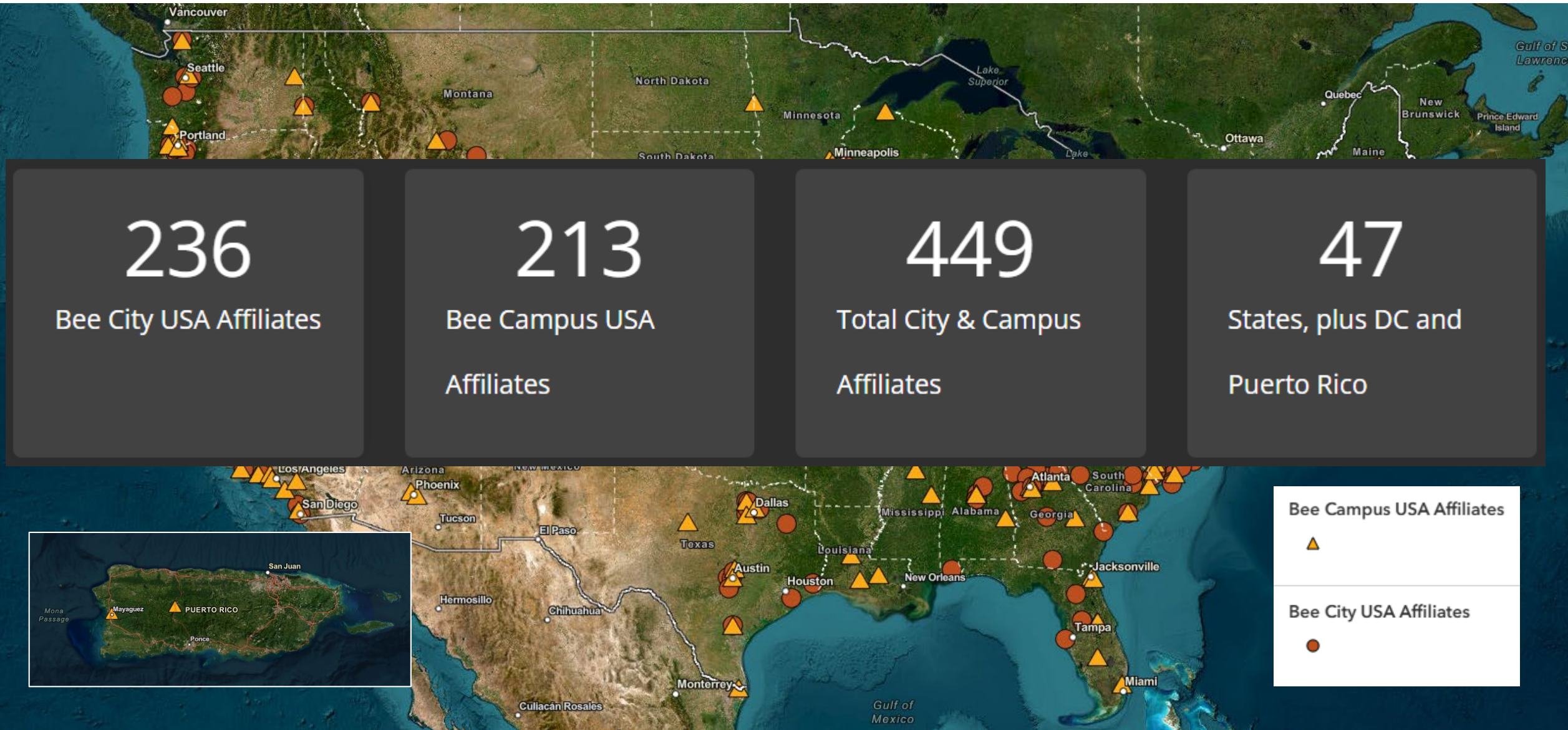


# Bee City USA and Bee Campus USA Affiliates





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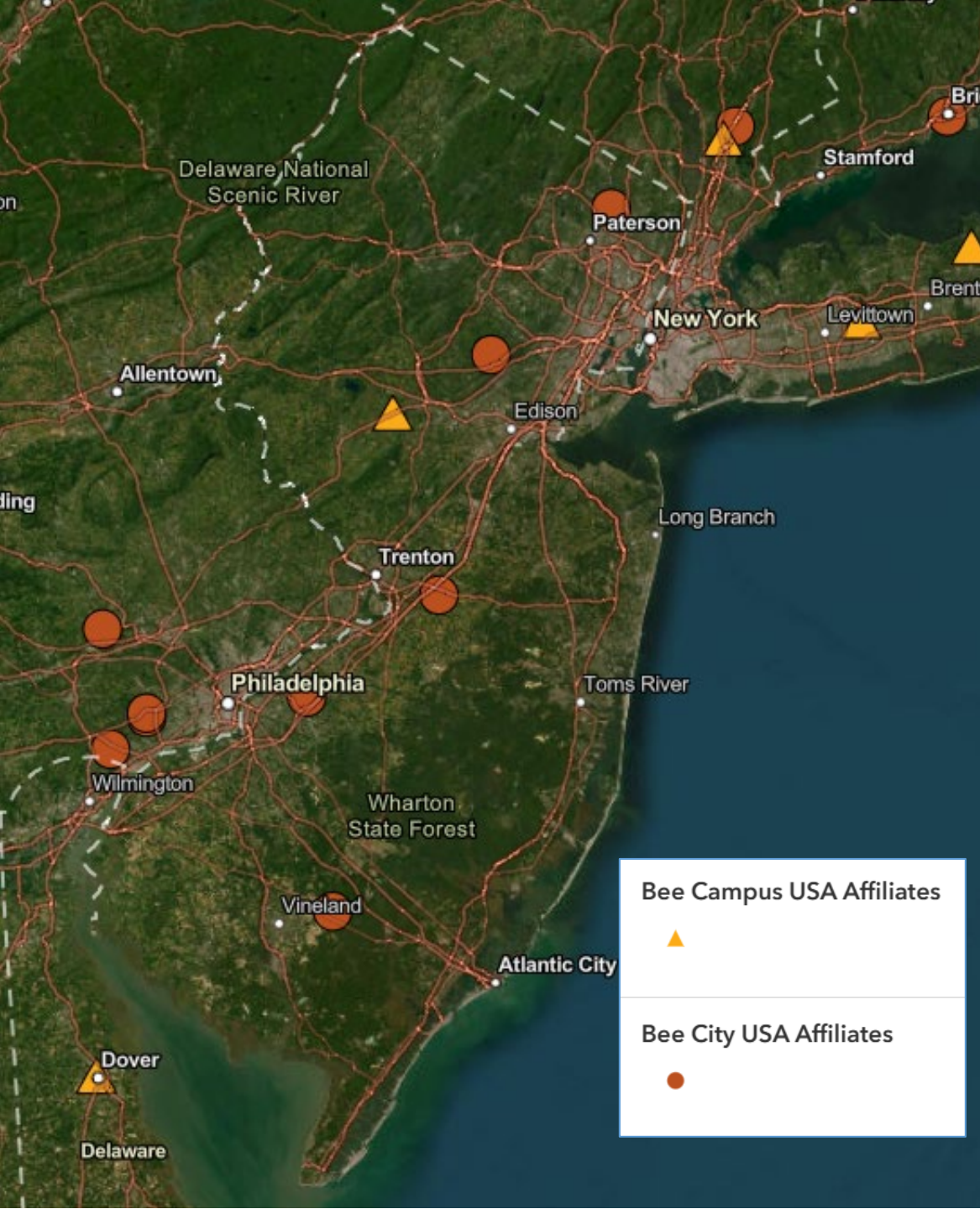
# New Jersey Affiliates

## Bee Cities

- Allentown Borough
- Berkeley Heights
- Buena Vista
- Moorestown Township
- Ridgewood

## Bee Campuses

- Raritan Valley Community College







Photos: Bee City USA – Talent; Bee City USA - Beaumont

# Bee City USA & Bee Campus USA

- Est. 2012 by Phyllis Stiles
- Adopted by Xerces in 2018
- Since 2019:
  - 1.76+ million people engaged
  - 18,600+ acres of habitat
- Plays to each community's unique strengths, interests, and enthusiasm.
- We focus on progress not perfection!



# The City Application Process

**Application, Bee City resolution** passed by city council & application **fee** paid (\$100-\$500)

Form a Bee City **committee** with a city department sponsor, & a staffer acting as liaison

Main Commitments: At least one **habitat** project & **outreach** event each year, plus **IPM\*** **plan** for city

Annual renewal **report & fee** (\$100-\$500, based on population), after first full calendar year

\*Integrated Pest Management Plan



# Who Are Our Pollinating Neighbors?

Butterflies, moths, flies, beetles, wasps, ants, birds, bees, and more



Photos: Bryan E. Reynolds (3); Matthew Shepherd; Xerces Society/Sarah Foltz Jordan; Xerces Society/Mace Vaughan



# But Bees Are #1!

- Bees pollinate more than other species
- 3,600 species of bees in the US!
- Huge range of shapes, sizes, flight distances
- Some are generalists, others only use certain flowers



Photo: USGS Native Bee Inventory and Monitoring Lab



# Honey Beekeeping ≠ Bee Conservation

- Honey bees are not endangered
- They compete with native bees and spread disease and parasites to them.
- One honey bee hive needs 1-5 acres of flowers. That's a lot of mouths to feed!
- Bonus: You don't need to buy, build, or manage a beehive to help native bees.



Photo: Thien Gretchen, Flickr



# Where do Native Bees Nest?

70%  
nest underground

90%  
are solitary-  
nesting (no hive)



L to R: Heather Holm, Sara Morris, Emily May



# Pollinator Declines

**Globally:**  
Up to 40% of  
pollinator species  
may be at risk of  
extinction in the  
coming years.

**North America:**  
More than a  
quarter of bumble  
bees species are  
in decline



Photo: USGS Native Bee Inventory and Monitoring Lab



# Drivers of Pollinator Declines

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Habitat &  
biodiversity loss  
and degradation



# Drivers of Pollinator Declines



Habitat & biodiversity loss and degradation



Pesticide use



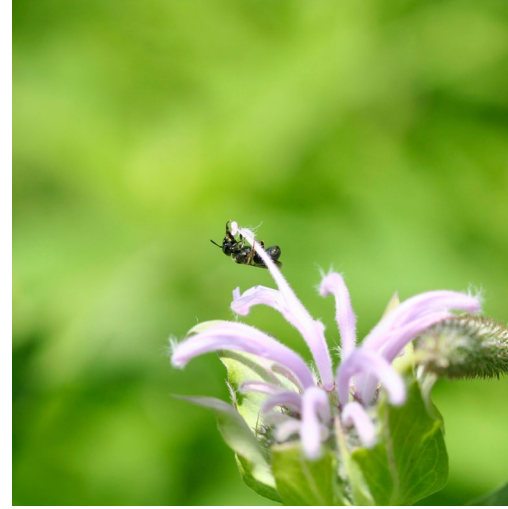
# Drivers of Pollinator Declines



Habitat &  
biodiversity loss  
and degradation



Pesticide use



Diseases and  
pathogens



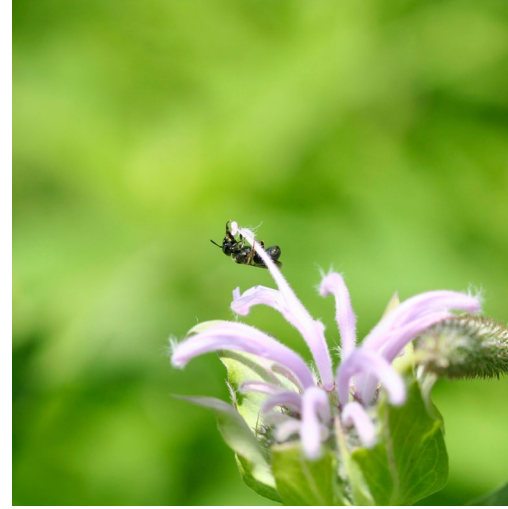
# Drivers of Pollinator Declines



Habitat & biodiversity loss and degradation



Pesticide use



Diseases and pathogens



Climate change



# We Know How to Help Pollinators



**Native flowering plants:** host plants & blooms = food all growing season long



**Natural nesting sites:** bare ground, dead leaves, stems, logs



Reduce or eliminate **pesticide** use



**Spread the word!**  
Post signs, talk to friends, write articles, tell electeds

Photos (L to R): Sara Morris, Sara Morris, Jennifer Hopwood, Rachel Dunham



# What Does Pollinator Habitat Look Like?



Photo: Jeff Norcini

“I want Texas to look like Texas and Vermont to look like Vermont and every state to look like itself.” – *Lady Bird Johnson*



# Habitat = Building Landscaping

Great opportunity  
to bring flowers  
into built areas

- Use variety of flowers to provide extended bloom
- Include native species & caterpillar hosts
- Irrigation can extend bloom period in dry summers
- Helps meet environment or climate goals



Photo: Matthew Shepherd



# Habitat = Wetlands & Bioswales

## Creek corridors and more

- Opportunity for extended bloom: early (e.g., willow) and late (e.g., beggartick)
- Snags
- Opportunities in the surrounding uplands as well as the wetlands themselves
- Connectivity



Photo: Matthew Shepherd



# Habitat = Rights-of-Way like Utility Lines

Space,  
connectivity, and  
corridors

- Beautification
- Plants of low stature
- Forest / woodland edges as valuable nesting areas



Photo: Matthew Shepherd



# Habitat = Roadsides

Space,  
connectivity, and  
corridors

- Beautification
- Plants of low stature
- Forest / woodland edges as valuable nesting areas



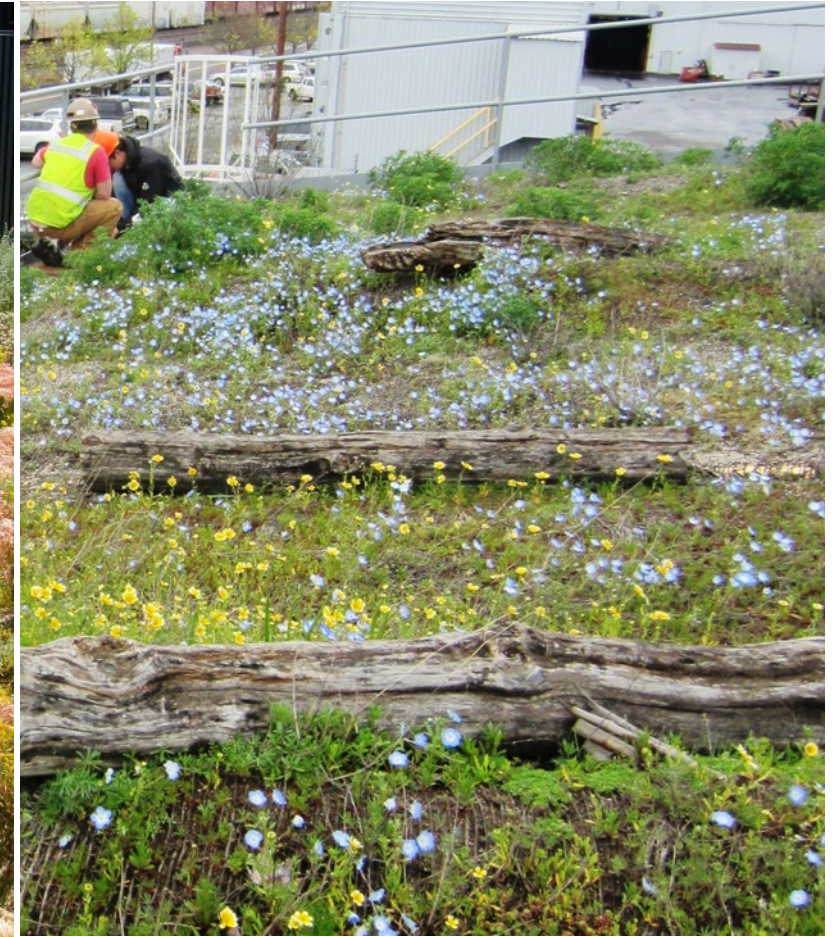
Photo: Darleen Adamo / SJTA READI Program



# Green Roofs

## Often overlooked opportunity

- Flowers
- Vary depth of substrate to allow ground-nesting
- Include non-flower components to create “complete” habitat
- Stormwater management, too



Photos Casey Cunningham/BES © City of Portland, courtesy Bureau of Environmental Services.



# Habitat = Trees

## Street trees, yards & more

- 1 tree = 1 meadow's worth of flowers
- Lower pest pressures
- Less watering
- Include native species & caterpillar hosts
- Helps meet environment or climate goals



Photo: Preston Keres, USDA/FPAC



# Add a Little Chaos!



Photo: Justin Wheeler

- Add a water feature or shade garden
- Leave logs and leaf litter
- Plant native plants
- Allow for some unkempt areas
- Strict rules on appearance? Try mullet gardening: business in the front, party in the back!



# Stepping Stones of Habitat Can Become Corridors

Graphic: Xerces Society / Sara Morris

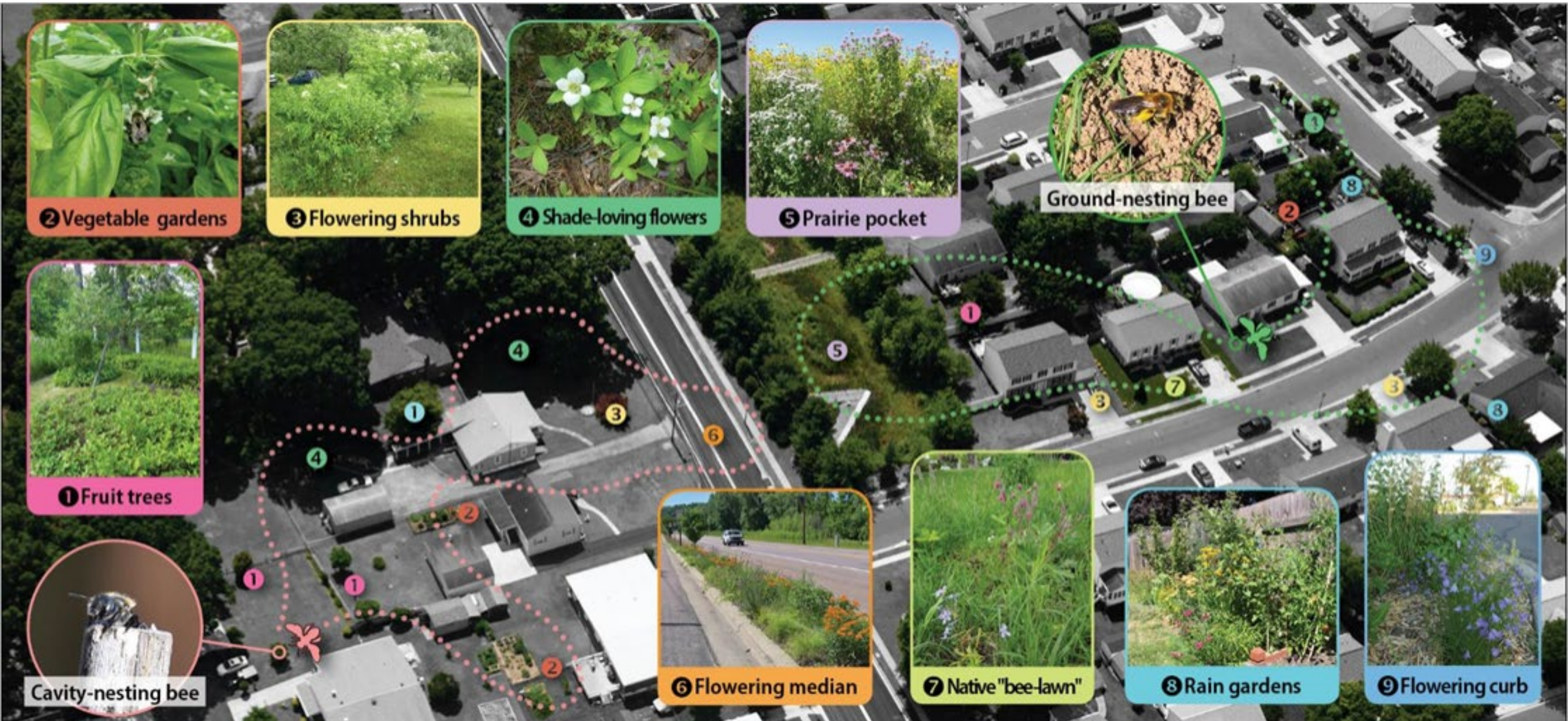






Photo: (L to R) Daniel Ballard, Beecatur

# Signs - Decatur, GA (Beecatur)

This year, we've expanded our "Mining Bees At Work" sign program a bit this year, and are now encouraging city residents to report aggregates where these bees are active.

If those spots are on city property or along the right of way, we've been placing educational signage with a QR code link to information about the bees.





# \*Many\* Ways to Reduce Pesticides

- Weed by hand (it's a classic for a reason)
- Mulch
- Organize a volunteer crew to “adopt” medians/parks.
- Change mowing times (keep flowers, but reduce weed seeds).
- Switch to native plants over time.
- Use a steam-weeder or flame-weeder.
- Rent goats or sheep!



Credit, top to bottom: Bee City USA - Westminster, CO; Bee City USA - Greenwood, SC



# Steam Weeders

“The Grounds Work Unit purchased a steam weeder [it] looks like a vacuum cleaner with a long hose that superheats water up to 250 degrees. This machine uses a unique combination of boiling water and saturated steam at low pressure...When weeds are hit, they are cooked instantly, leaving behind a chemical-free mulch for soil organisms to feed on. As a result, the soil health improves over time.”

University of Wisconsin – Stevens Point



Credit: Tommy Reeder, City of Wilsonville



# Bee City All Stars

The following Bee Cities dropped pesticide use *altogether* on city grounds:

- Bethania, NC
- Santa Barbara, CA
- Seaside, CA
- Talent, OR
- Williamstown, WV



Photo: L to R, Bee City USA – Williamstown, WV; Bee City USA – Seaside, CA





# SIMPLE STEPS FOR **BUYING BEE-SAFE PLANTS**

**1**

Seek out organic plants and seeds.

**2**

Avoid plants grown with neonicotinoids and other similar systemic insecticides.

**3**

Ask what steps your nursery takes to offer plants grown using pollinator-friendly pest management.



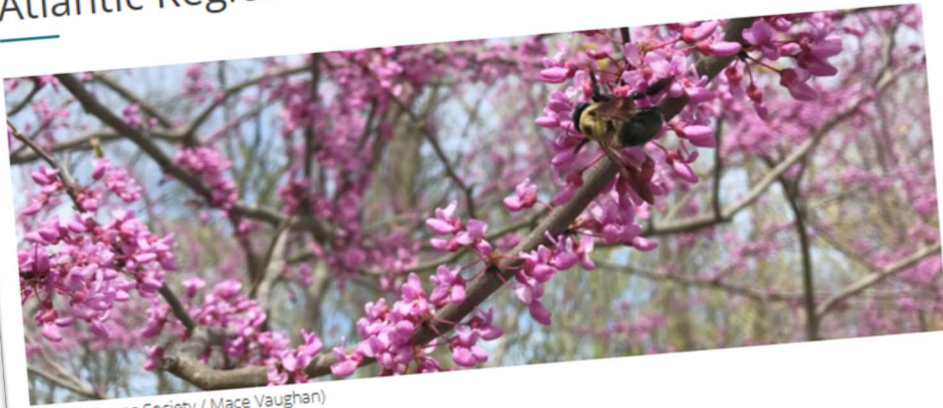


# Free Online Resources

Regional pollinator resources (w/plant lists!):  
[xerces.org/pollinator-resource-center](http://xerces.org/pollinator-resource-center)

Bee City Application Resources:  
[beecityusa.org/apply-to-bee-city-usa](http://beecityusa.org/apply-to-bee-city-usa)

## Pollinator Conservation Resources: Mid-Atlantic Region



(Photo: Xerces Society / Mace Vaughan)

Welcome to our Pollinator Conservation Resources for the Mid-Atlantic Region! Here you'll find region-specific collections of publications, native plant and seed suppliers, and other resources to aid in planning, establishing, restoring, and maintaining pollinator habitat—as well as materials to help you learn about the species of invertebrates and native plants you might encounter. For more resources, see our [Publications Library](#) or learn about our [Pollinator Conservation Program](#).

**We also offer free pollinator habitat kits to eligible partners in the Mid-Atlantic region! Please visit our [Mid-Atlantic Monarch And Pollinator Habitat Kit Program](#) webpage to learn more.**

[Click to return to the Pollinator Conservation Resource Center home page.](#)

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Pollinator-Friend



To support the w  
across the count  
released Pollina  
Communities b  
Parks and Oth

You Can

## APPLICATION RESOURCES



Photo: Matthew Shepherd

### Bee City USA Materials

- ✓ Brochure
- ✓ Bookmark
- ✓ Draft Letter of Support

### Template Resolution

Use this template to draft your resolution.

- ✓ Word
- ✓ PDF

### Application Preview

This is meant to give you a preview of the application. To complete the application, please scroll down and click on "apply now" to access our online portal.

- ✓ Word
- ✓ PDF

### Bee City USA Presentation

This presentation is meant to provide an introduction to the program. It is approximately 15 minutes and you can either download a copy with recordings to present yourself or the recorded presentation.



# Free Brochures & Bookmarks

In Spanish and English. Free to print. For free hard copies email [beecityusa@xerces.org](mailto:beecityusa@xerces.org).



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AN INITIATIVE OF THE XERCES SOCIETY

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# Questions?

Learn more at [BeeCityUSA.org](https://BeeCityUSA.org)  
[beecityusa@xerces.org](mailto:beecityusa@xerces.org)



Photo: Jackie Morgan, Norcross Bee City Committee