

Bee City USA - Durham

Report on 2023

Pollinator Habitat Creation & Enhancement

Please describe pollinator habitat creation or enhancement projects in your community in 2023, and whether your committee hosted them or not.

City of Durham's General Services Department (Landscape Services) Throughout the year, the City of Durham's Landscape Services Division has been working to enhance pollinator habitat in 12 landscapes across downtown Durham, covering approximately 27,500 sqft. They planted 818 trees of 22 different species and 3848 herbaceous perennials or shrubs of 35 different species, all of which are generally accepted as beneficial to pollinators. Durham County Engineering and Environmental Services The open space program hosted two habitat restoration days at New Hope Creek Bottomlands, where volunteers removed invasive plants and planted native pollinator-friendly species. Durham County Sustainability Office In December, the sustainability office partnered with Jewish for Good to plant 30 trees at the Durham Center for Senior Life. Extra Terrestrial Projects In collaboration with Keep Durham Beautiful, Extra Terrestrial Projects has been working on a prairie restoration project. Throughout the year, volunteers worked to remove invasive plants and planted 200 native plant species in the area. A 20,000 sqft area has been converted into a prairie. Inter-Faith Food Shuttle Inter-Faith Food Shuttle hosted Pollinator Garden Love Day in June, inviting volunteers to help tend to their community garden. The volunteers also got to create pollinator-related art pieces in the garden. Merrick-Moore Community Development Corporation (MMCDC) With the help of 10 volunteers, the MMCDC beautified the Samuel Green Sr. Community Garden in November by planting azaleas. Museum of Life and Sciences In February, the Museum of Life and Sciences partnered with the NC Botanical Garden to install a pollinator garden on their campus with 24 high school students as a part of their Youth Climate Summit. New Hope Audubon In May, the New Hope Audubon Society went to Lyons Farm Elementary to create a pollinator garden. They used native plants that are beneficial to pollinators and will also encourage birds to visit the garden. North Carolina Wildlife Federation (NCWF) Throughout the year, NCWF hosted a total of 9 pollinator habitat restoration events across the Durham area, where a total of 96 volunteers were engaged. NCWF partnered with two schools, two churches, an HOA, and another non-profit to create six different gardens that consist of native plants that are ideal for pollinator habitats. Sarah P Duke Gardens Throughout 2023, the Sarah P Duke Gardens installed three gardens on Duke's campus to create a habitat for pollinators and wildlife and continued to enhance their pocket prairie. In total, they converted 49,460 sqft on their campus using native plants. Urban Community AgriNomics (UCAN) Urban Community AgriNomics created a pollinator garden on their farm at Catawba Trail Farm. Volunteers with the Extension Master Gardener Volunteers of Durham County helped to select native plant species for the habitat, and NC Wildlife Federation helped provide the plants.

How many habitat projects did you help to create or enhance in 2023?

How many people (staff, volunteers, students, partners, etc.) helped with those projects?

584

How many projects benefit monarchs, milkweed, or nectar plantings?

16

How many total square feet of habitat were created or enhanced?

98600

Please check all that describe the habitats your affiliate helped to create or enhance in 2023 with pollinator benefit in mind.

- Flower garden
- Vegetable garden
- Natural area with tree snags and stumps, and bare areas for ground nesting species
- Meadow
- Pollinator-friendly lawn (with flowering clover, dandelions...)
- Native milkweed planting for monarchs and bees (where appropriate)
- Invasive/exotic plant species removal for habitat improvement
- Native pollinator-friendly tree planting
- Native pollinator-friendly shrub border/hedgerow planting
- Rain garden/bioswale
- Roadside/rights of way planting
- School garden
- Other



Gardeners with EMCV of Durham County working on a pollinator garden at Catalpa Trail Farm in partnership with UCAN and NCWF. Photo by Seana Finn



Volunteers were helping at the Geer St. Learning Garden during Inter-Faith Food Shuttle's Pollinator Garden Love Day event. Photo by Inter-Faith Food Shuttle



Volunteers with the Durham County Sustainability Office and Jewish for Good preparing to plant native trees at the Durham Center for Senior Life. Photo by Tobin Fried

Education & Outreach

Please describe pollinator conservation events or outreach activities in your community in 2023, indicating whether your committee hosted them or not.

Durham County Engineering and Environmental Services In October of 2023, the Open Space Program used a Burt's Bees grant to fund a study to identify Piedmont Prairie remnants in Durham, and they found eight areas with Piedmont Prairie affinities through soil analysis. In the study report, researchers recommend conservation management methods to protect the species-rich ecosystems. Inter-Faith Food Shuttle Inter-Faith Food Shuttle hosted a community festival at Geer St. Learning Garden in April. They gave attendees a tour of their community garden and offered free compost. Keep Durham Beautiful (KBD) In June, the Durham Bee City USA Committee and Durham Farmer's Market hosted a celebration of bees and pollinators for National Pollinator Week. Over 200 people attended to receive free plants, seeds, taste honey, see demonstration hives, and a parade. Duke Gardens and Inter-Faith Food Shuttle generously donated the plants to giveaway. Partners included We Plant it Forward, Durham County Beekeepers Association, NC Native Plant Society, New Hope Audubon Society, Durham County Master Gardeners, NCSU Entomology, & NC Wildlife Federation. On June 7th, KDB collaborated with New Hope Audubon and EPA to host a Beyond the Backyard Forum, where landscape architects, plant nurseries, land owners, government entities, corporate businesses, and HOAs learned about the importance of native plants for the health of our ecosystem and ways to integrate native plants into large public landscapes. KDB also hosted four community plant giveaways, handing out native perennials and trees. Museum of Life and Sciences In July, the Museum of Life and Sciences hosted a Pollinator Day with a workshop where attendees connected with nature through a hands-on crafting session. They created pompoms and carried them through the gardens, like a bee carrying pollen granules from flower to flower. North Carolina Wildlife Federation (NCWF) In preparation for the community science challenge, the Great SE Pollinator Census, NCWF hosted a pollinator identification class at Sandy Creek Park in July. An entomologist from NCSU gave attendees tips they could use to identify different pollinating insects. In August, NCWF partnered with the Extension Master Gardeners of Durham Co and Geer St. Garden to set up stations at different gardens around Durham to encourage people to participate in the Great SE Pollinator Census. Sarah P Duke Gardens Duke Gardens has implemented signs promoting

the use of pollinator plants to educate the high volume of visitors they experience. Last year, there were approximately 500,000 visitors. Duke Gardens has hosted plant sales and has donated native plants to many groups, including the NC Pollinator Conservation Alliance. Toxic Free NC In May, Toxic Free NC hosted a plant giveaway that distributed pollinator and phytoremediation plants to 25 families and farm workers. In June, Toxic Free NC hosted a Pesticide-Free Gardening Workshop in collaboration with the Merrick-Moore Community Development Corporation (MMCDC) to encourage members of the Merrick-Moore community to adopt gardening practices that avoid the use of pesticides. Toxic Free NC also presented to the Durham Academy in June, where they talked to students about pesticides and their impact on bees. In September, Toxic Free NC hosted the discussion, "(Re)Imagining a World Without Pesticides," at Abanitu Organics farm, where they invited farmers, gardeners, and the community to talk about the impact of agrochemicals. Lastly, Toxic Free NC hosted and stipend facilitation for quarterly meetings of the BIPOC Beekeeper Association.

How many pollinator-related events or outreach activities did you host or help with in 2023 (in total)?

22

How many people attended those events (in total)?

4082

How many Bee City USA logo street signs have you installed to date (in total)?

1





Policies & Practices

Please describe actions taken to make pest management more pollinator-friendly.

City of Durham's General Services Department (Landscape Services) The City of Durham Landscape Services does its best to avoid pesticide use in city sites with pollinator habitats and has eliminated pesticide use for aesthetics. They have adopted a no-neonicotinoid insecticide practice and implemented non-chemical pest prevention and management methods to reduce the area of city-managed lands to which pesticides are applied. Extension Master Gardener's Volunteers (EMGV) EMGV hosted a landscaping seminar on integrative pest management. The seminar invited municipal employees and landscapers to teach them the importance of incorporating sustainable landscaping and pest management tactics that are not harmful to pollinators. Toxic Free NC In July, staff from Toxic Free NC went to D.C. for the Pollinator Protection strategy meeting and served on the conference steering committee. Toxic Free NC also distributes bilingual Spray Free Zone yard signs year-round.

In your city or campus, are any policy initiatives underway to further protect pollinators, people or waterways from pesticides?

The City of Durham landscaping services have implemented a no-neonicotinoid insecticide practice on city-managed properties. The landscaping services have reduced the area of city lands where pesticides are applied. They no longer use pesticides for aesthetic purposes and have adopted non-chemical pest prevention methods.

Did your committee participate in any continuing education on ecologically-based Integrated Pest Management planning?

Yes, multiple organizations within the Durham committee have hosted their pest management education events. Staff from Toxic Free NC also went to D.C. in July to attend the Pollinator Protection strategy meeting and serve on the steering committee.

Please check actions you have taken to make pest management practices more pollinator-friendly.

- Implemented or maintained a written IPM plan
- Only use pesticides as a last resort within the IPM plan
- Avoided use of pesticides in public sites containing designated pollinator habitat or other sensitive features (except when targeted use is deemed the best option for invasive or noxious weed, insect or disease management)
- Implemented non-chemical pest prevention and management methods on city or campus grounds
- Eliminated pesticide uses that are solely to maintain aesthetics on city or campus grounds

- Reduced the total area of city or campus-managed lands to which pesticides are applied
- Restricted pesticides used to organic pesticides on city or campus grounds
- Eliminated use of neonicotinoid insecticides on city or campus grounds
- Distributed educational materials to residents or students to encourage the reduction or elimination of pesticide use
- Sourced plants for city or campus grounds using “Buying Bee-Safe Plants” methods recommended by Xerces Society. (See <https://xerces.org/publications/fact-sheets/buying-bee-safe-plants>)
- Sourced plants for city or campus grounds that were not treated with neonicotinoids
- Encouraged developers and private landscapers to source plants using “Buying Bee-Safe Plants” methods recommended by Xerces Society. (See <https://xerces.org/publications/fact-sheets/buying-bee-safe-plants>)
- Encouraged developers and private landscapers to source plants that were not treated with neonicotinoids

Are efforts underway in your community to further reduce pesticide use in residential or business areas? This may include neighborhood-led efforts, outreach to landscapers, etc. If so, please describe.

Multiple organizations, including Keep Durham Beautiful, New Hope Audubon Society, and Extension Master Gardener’s Volunteers of Durham County have hosted workshops and forums to educate the community, landscapers, and businesses alike on integrative pest management tactics. In addition, Toxic Free NC has continued to distribute bilingual “spray free” pesticide zone signs year-round to the local community.

Any lessons learned you would like to share?

Having a diverse group of businesses and organizations be a part of the committee is important because each group has its own unique resource.



Toxic Free NC's spray free zone sign in Spanish. Photo by Alexis Luckey



Durham Bee City Committee members tabled for their organizations at the 2023 Bee Day Celebration. Photos by Keep Durham

Learn More

Integrated Pest Management Plan:

<https://ipm.ces.ncsu.edu/>

Recommended Native Plant List:

<https://ncwf.org/habitat/native-pollinator-plants/>

Recommended Native Plant Supplier List:

<https://docs.google.com/spreadsheets/d/1HAFFrqkUSgBfgAVmmx3H-zEJxJnKjq7of926ElwOsE/edit#gid=0>

<http://www.durhambeecity.org>

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