

Bee City USA - Hendersonville

Report on 2022

Pollinator Habitat Creation & Enhancement

With a renewed economic up-tick during 2022, housing developments were a frequent topic of discussion at Hendersonville Tree Board meetings. The Tree Board advises City Council on tree preservation and protection on new developments, and because of the number of new developments presented during the year, the Tree Board decided to examine and update sections of the City Code and regulations in regards to existing trees and proposed plantings. By the end of the year, a grant request was proposed to help fund a Tree Canopy Survey in order to have concrete numbers as the City continues to grow. Loss of tree canopy and general loss of trees in the City's Urban Forest coverage appears to be significant – something the Tree Board wants to address. Along with the popular Bee City USA programs, the Tree Board organized other events and projects this year, which helped focus residents' interest in trees. -Yarn-Bombing Project. During four winter months, seven trees near the Historic Train Depot on Maple St. were wrapped in decorative, colorful yarn by the STEAP organization. This art installation was approved by the Tree Board. -Fall NeighborWoods projects – Several NeighborWoods projects were successfully completed this fall: Druid Hills (40 trees), Wolf Chase (16 trees), Blue Ridge Villas (15 trees), Oklawaha Village (13 trees). Most participants planted their own trees, but for the large job in Druid Hills students in West Henderson HS Key Club were lined up to help. In all, 84 trees were added to our city's tree canopy. Through the NeighborWoods program, the Tree Board supplies free saplings to property owners who have signed up for the program, promising to plant and maintain their trees for long-term successful growth.

How many habitat projects did you help to create or enhance last year?

6

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

250680

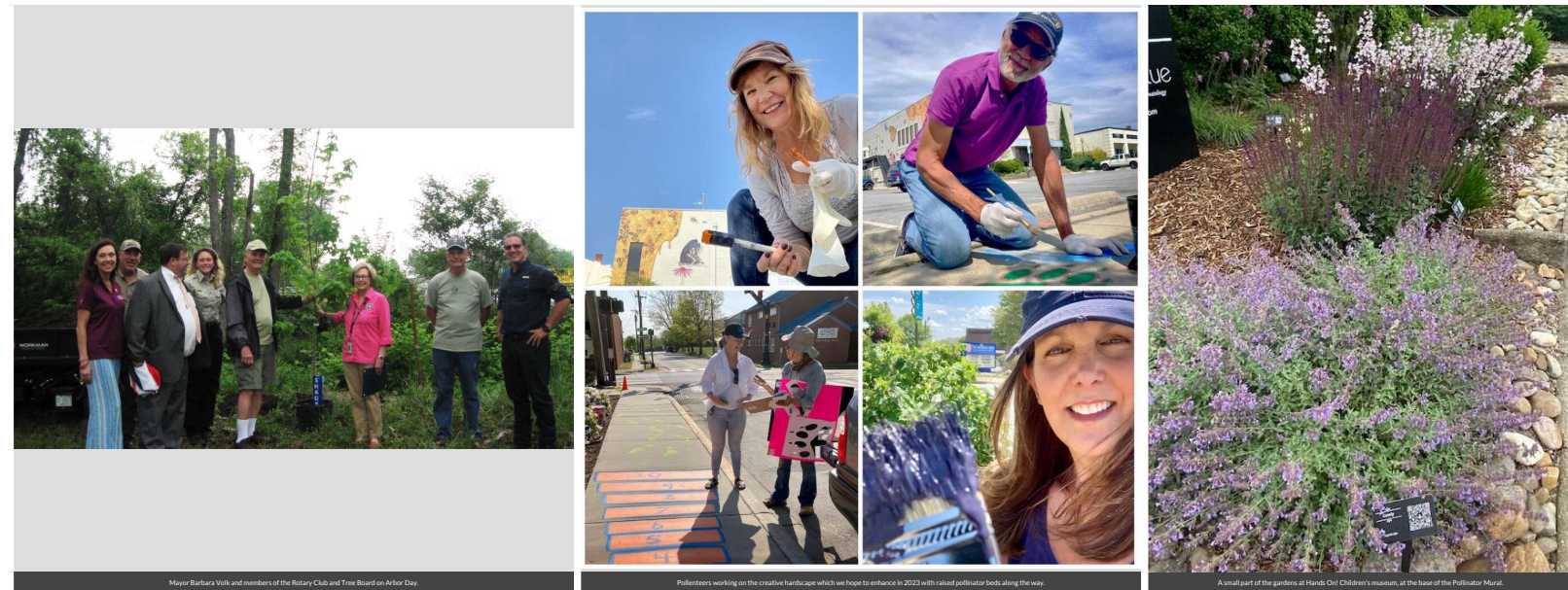
How many volunteers helped with those projects?

66

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

- Flower garden
- Meadow
- Native milkweed planting for monarchs and bees (where appropriate)

- Invasive/exotic plant species removal for habitat improvement
- Native pollinator-friendly tree planting
- Roadside/rights of way planting
- Other



Mayor Barbara Volk and members of the Rotary Club and Tree Board on Arbor Day.

Pollenters working on the creative hardcape which we hope to enhance in 2023 with raised pollinator beds along the way.

A small part of the gardens at Hands On! Children's museum, at the base of the Pollinator Mural.

Education & Outreach

The first few weeks of 2022 Bee City USA – Hendersonville saw many changes and organizational structuring. The City Of Hendersonville granted management of the program to Bullington Gardens, a 501c3 public garden and horticultural therapy and education organization in partnership with the Hendersonville Tree Board. February is not too early to begin publicizing and calling for events, activities and programs for June pollinator month and rallying the pollenters required to run them. Three different calls to prospective participants were sent out with an eye toward the press release deadline of March 15. During first quarter a new leadership team was established and a monthly meeting schedule set for 2nd Mondays at 3pm at Bullington Gardens. The 2022 Leadership Team was: Patrice German, Program Coordinator Annie Higgins, Treasurer Sheila Clendenning, Recording Secretary Debbie Roundtree, Tree Board/City Council Member Will Garvey, Environmental Sustainability Board Rachel Meriweather, Blue Ridge Community College, Bee Campus USA Stephen Tillotson, Environmental Advisory Council (County) William Kelley, NC Agricultural Extension Office Lewis Cauble, NC Dept of Agriculture Rose Jenkins Lane, Conserving Carolina Jim Poe, Henderson County Beekeepers Association Pam & Randy Knowles of HoneyBee Bliss Apiaries, Community members Elle Travis, Caregivers of Mother

Earth Community member Elizabeth Queen, Hendo Beeline muralist, Community member We have established a strong online presence on the Bullington Gardens website, our Bee City USA – Hendersonville Facebook page and on Instagram. In March, an “Affiliate Spotlight” article was written for the national Bee City USA blog, highlighting Bee City USA-Hendersonville: the first portion was written by Kim Bailey, Program Coordinator 2015-2022, who gave an outline of the program’s extensive history and background; the second portion, written by Patrice German, current Program Coordinator, focused on the transition from the city to Bullington Gardens and upon future plans. See <https://beecityusa.org/category/affiliate-spotlight/> 2022 Outreach and Education events in which Bee City USA-Hendersonville participated/sponsored: -Presentation to Kiwanis Club – March 24 (with Annie Higgins, Bullington Gardens Administrative Director) -Pollinator information Booth at Bullington Gardens Spring Plant Sale, April 28-30 - Presentation to Kenmure Garden Club – April 12 (with Jim Poe, Henderson County Beekeepers) -Pollinator information booth at Growing Gods Garden, May 7 – First Congregational Church, Laurel Park -Garden Jubilee Booth – May 27, 28 & 29 – Hundreds of visitors accepted free seeds, info on sustainable gardening, gardening with native plants, pesticide/herbicide dependency reduction etc. Partnered with Henderson County Beekeepers Association. On display were butterflies, eggs, caterpillars, chrysalids, and the always popular honey bee observation hive. Pollinator plants were for sale. Eight pollenteers helped and other volunteer beekeepers also. -June Pollinator Month, coordinated by Patrice German, Program Coordinator for Bee City USA-Hendersonville, had many participants. To name a few: Echo Hill Farm; NC State Agricultural Extension Office; Sideways Brewery; Milkweed Meadows Farm; Book & Bee Cafe; City of Hendersonville; Hands On! Children's Museum; Lewis Creek Nature Preserve; The Park at Flat Rock; and others. Bee City USA – Hendersonville supported or participated in the following activities: -Free seed giveaway at the City Operations Center on Williams Street all through June -Creation Care Camp at St. John in the Wilderness – Monarch life cycle lesson, live monarchs and chrysalids provided, and spicebush swallowtails. A butterfly emerged from its chrysalid for all the children to see! -Pollinator Days at two local farm markets: June 4, Hendersonville Train Depot and June 25 at Mills River Farm Market, Schoolhouse Road. Kids activity (Plant a sunflower seed, make butterfly or bee antennae to wear, coloring pages) -Pollinator Walk and Talks at Bullington Gardens June 4, 11, 18 and 25 -Outreach interview with Brookley Cromer of Fox Carolina at Bullington Gardens, aired on local television on June 30. -45 classrooms/groups participated in the Symbolic Monarch Migration program this season, up from 29 in 2021 and 14 in 2020. Mid-September through early October is the best time to watch for migrating monarch butterflies in our area. To celebrate this wondrous natural phenomenon, two educational programs were hosted in Hendersonville, sponsored by Hendersonville’s Bee City USA program. Estela Romero, international monarch expert and educator from the town of Angangueo in Michoacán, Mexico, visited to present a program at Bullington Gardens on September 22. Also, a program was offered for classroom use, for homeschoolers, individuals, and groups participating in the international celebration of the Symbolic Monarch Migration program. In March 2022, the City of Hendersonville committed to saving the monarch butterfly and other pollinators with the signing of the Mayors’ Monarch Pledge to continue to engage residents in building more pollinator habitat throughout the city. -A Monarch’s Journey: From NC to Mexico and Back Estela Romero, monarch educator and journalist who works in the overwintering sanctuaries near her home in Angangueo, Michoacán, Mexico, and Kim Bailey, local educator and farmer/owner of Milkweed Meadows Farm in Fruitland, NC, will present up-close and personal views of the monarch’s remarkable life cycle and epic migration. Participants learned how to invite monarchs into their gardens by planting a

succession of nectar-producing native flowers throughout spring, summer, and fall. -Symbolic Monarch Migration to Mexico Mid-September to Friday, October 7 Presented by: Bee City USA – Hendersonville (a City program managed by Bullington Gardens), City of Hendersonville Mayor’s Monarch Pledge, and Milkweed Meadows Farm From the Hendersonville area, the monarch migration is an epic journey to Mexico covering at least 2,000 miles. Like clockwork, the first migrating monarchs typically reach their overwintering habitats high in the mountains of central Mexico by the first of November. Local classrooms, youth organizations, and individual students were invited to create symbolic butterflies corresponding with the living monarchs’ actual journey south ... and as the real-life monarchs arrived in Mexico for the winter, the symbolic butterflies were delivered to schools in the monarch sanctuary region. Sometime in spring after the living monarchs’ departure from Mexico, groups of paper butterflies will also return north, carrying special messages from the students in Mexico. United by the monarch butterfly, children across North America learn authentic lessons of conservation, cooperation, and ambassadorship. Funds from Bee City USA – Hendersonville made it possible for Henderson County classrooms and youth organizations to participate at no charge. -Over 40 classrooms/groups adopted live monarch caterpillars and/or chrysalides either as a supplement to the Symbolic Monarch Migration program (as was planned) or as a stand-alone activity (as was requested by several educators). -In addition to the classrooms who received potted swamp milkweed plants to feed their caterpillars (and to then plant later), 5 other schools/classrooms received semi-dormant milkweed plants (9-15 each) to plant in their school gardens. Milkweed transplants were grown and donated by Costa Farms and their partners as part of a ~5,000 milkweed plant give-away in June 2022. Bee City hosted a “Monarchs & Margaritas” Educator Appreciation Event for participating teachers at Bullington Gardens on Thursday, September 22. The purpose of the event was to 1) thank teachers for involving their students in the program, 2) give them the opportunity to network and share ideas/experiences with each other, and 3) have them meet Estela Romero and learn firsthand from her what the program means to the students/teachers/families in Mexico. The event was offered at no charge to teachers thanks to donations from Bullington Gardens (venue, wine, dahlias, door prizes), Patrice German of Bee City USA – Hendersonville (food and lots of help setting up/cleaning up), Kim Bailey of Milkweed Meadows Farm (event coordination, food, margaritas, door prizes, stipend for Estela), and Symbolic Monarch Migration (door prizes and lots of help setting up/cleaning up). WLOS News 13 also came to interview Estela and some of the participating teachers for a possible future “Never Stop Learning” segment. -An added benefit of having Estela Romero at Bullington Gardens for this Symbolic Monarch Migration event was she also agreed to teach a monarch class that was open to the public. This class was also included as part of HVL Bee City USA’s Monarch Month activities. On Tuesday, October 11, Kim Bailey visited two 7th grade classrooms at Hendersonville Middle School to assist with a culminating project the students and teachers are doing to wrap up their Project Based Learning unit centered around the Symbolic Monarch Migration. The City requested for “City of Hendersonville Mayor’s Monarch Pledge” to be listed as a presenter of the Symbolic Monarch Migration program in Bullington Garden’s online postings and press releases. -The Hendo Beeline is a collaboration between local artists Elizabeth and David Queen and this community and will be on Maple Street from 5th Avenue to the Historic Train Depot. It is a honey-combed, yellow brick road through which pedestrians of all ages can hop, skip, meander through an illustrative border garden made up of native pollinators. The pathway salutes our status as a Bee City USA affiliate and the recent For the Good of the Hive mural painted on the rear wall of the Hands On! Children’s museum in downtown Hendersonville. Fusing our past with our present, there are links to our master gardeners, quilt makers, gem

mines and more. Most importantly, it celebrates the different stages of our lives and our community as it explores diversity and the importance of sustainable interactions between man and nature, especially pollinators. An important part of the creation of The Hendo Beeline was the invitation to local artists and the community to help with the painting – and the age range of participants was three years to seventy years old! -Caregivers of Mother Earth Founder and Chief Pollinator Elle Travis is a member of our Bee City USA Leadership Team. Caregivers is a grassroots movement to help children connect with nature. Partnering with Historic Johnson Farm, 4-H and Bullington Gardens, and Fruitland Farmstead. In all, 80 children become Official Caregivers of Mother Earth during the summer of 2022! -Educational Program – Bees and Trees: What Pollinator-Friendly Trees and Shrubs to Plant This Spring and Why. Henderson County Library auditorium. Phyllis Stiles, Founder of Bee City USA, described the need for more trees in urban environments and which pollinator-friendly ones are best to plant this spring, not only to support wildlife but to help alleviate the threats of global warming. About 50 people, with questions and interest, attended this visually informative program open to the public at no charge. -The North Carolina Apple Festival is a huge event each year, attracting thousands of visitors to our area. Bee City provides material and helped man the exhibit table with the NC State Agricultural Extension Service. -Community Film Screening – "My Garden of a Thousand Bees". There were 145 attendees at this collaboration of Bee City USA-Hendersonville and Bee Campus USA-Blue Ridge Community College. Phyllis Stiles introduced the film and Spriggly's BeeScaping fielded an excellent Q&A session afterward. Exhibitors in the vestibule were: Conserving Carolina; Henderson County BeeKeepers Association; Bee City USA – Hendersonville; Spriggly's BeeScaping. Native plants were given as door prizes and SkyTop Orchard donated apple cider for the event. The film company provided native bee guides and pollinator seed packets for all attendees.

How many pollinator-related events did your affiliate host or help with last year (in total)?

35

How many people attended those events (in total)?

10000

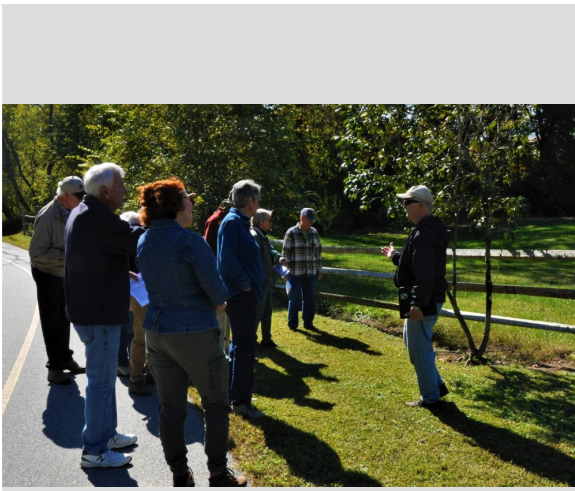
How many Bee City USA logo street signs have you installed to date (in total)?

4

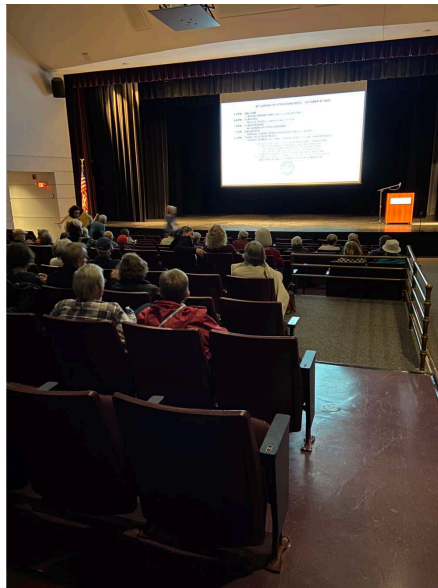
Did your city council/county commission (highest elected body) issue a proclamation for National Pollinator Week last summer?

Please note: this is now an optional activity.

- No



Hendersonville Tree Board Winter Tree Identification Walk



The community film screening of "My Garden of a Thousand Bees" was a huge success. Folks are still buzzing about it!



On Pollinator Day at the Hendersonville Farmer's Market, kids and adults alike were on a quest to find all the pollinator vendors. Once their card was filled, they were entered into a raffle to win pollinator-themed prizes and plants. Some vendors also bestowed a gift to their visitors.

Policies & Practices

The City of Hendersonville focused on maintaining and improving our pollinator beds rather than increasing square footage. We focused on tilling and bushhogging our major 6-acre bed and attempted to fight back weeds and invasive species. We are developing a funding plan and a volunteer workforce to help maintain the beds. Maintenance of some of the smaller beds has been contracted out. The Friends of the Oklawaha Greenway also maintain a pollinator garden of native species there, working the garden year round.

What actions have you taken to make pest management practices more pollinator-friendly?

- 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)
- Reduced the total area of city or campus-managed lands to which pesticides are applied
- 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

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.

Laurel Park, a neighborhood within Henderson County is planning to participate in No-Mow May to encourage awareness of pollinators in all residents there.

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

During 2022 the City Council voted unanimously for Hendersonville, NC to become the cornerstone Caregivers of Mother Earth (COME) city. Going forward we hope to see more edible landscapes and community gardens as Caregivers of Mother Earth helps weave other sustainability programs such as Bee City, Tree City and Bird Sanctuary together as a model for other cities and communities to follow.

Please describe actions by your affiliate to attend training on ecologically-based Integrated Pest Management and/or to review IPM plans and programs considered of high quality by Bee City USA?

The City of Hendersonville Public Works Department employees are trained in best practices for IPM and pesticides are not used within pollinator habitat areas. The planter beds along Main Street are managed by hand and hand tools; no pesticides are used to control weeds in these beds. For invasive plants, city employees cut the stalk then spot apply an herbicide to the stalk to control those plants. In areas where pesticides/herbicides are used, Best Management Practices are followed as required by licensed applicators. Recommended Native Plant List:

https://bullingtongardens.org/wp-content/uploads/2022/02/hvl_bee_city_usa_species_list_2021-2.pdf Recommended Native Plant Supplier List:

https://bullingtongardens.org/wp-content/uploads/2022/02/Bee_City_USA_HVL_Plant_Suppliers_Garden_Designers.pdf

Integrated Pest Management Plan:

Recommended Native Plant List:

https://bullingtongardens.org/wp-content/uploads/2022/02/hvl_bee_city_usa_species_list_2021-2.pdf

Recommended Native Plant Supplier List:

https://bullingtongardens.org/wp-content/uploads/2022/02/Bee_City_USA_HVL_Plant_Suppliers_Garden_Designers.pdf

Learn More

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Bee City Hendersonville Leadership Team