

Bee City USA - Raleigh

Report on 2021

Pollinator Habitat Creation & Enhancement

Pollinator habitats were created at park locations, along greenways, and in other city projects, including green infrastructure stormwater projects. One example project includes the Glen Eden Pilot Park project. In 2021, a 5,000 sq.ft. bioretention device was installed in this 20.4-acre park along Eden Croft Drive. The Green Stormwater Infrastructure project provided a contracted plan for regrading and replanting the area to mitigate water pollution in the Crabtree Creek watershed. The retention basins were plugged and seeded with a variety of native perennials and grasses while the surrounding banks were seeded and stabilized with a mix of fescues and rye. Another example project in the spring of 2021, included the Raleigh Garden Club installing a 200 square foot pollinator garden on the south side of the newly renovated, Gregory Poole All Faiths Chapel at Dorothea Dix Park. With the assistance of Raleigh Parks staff, three Club volunteers planted a variety of mostly native perennials and followed up with a bulb planting in the fall. Raleigh also has over 23 park locations that have been certified by Monarch Watch. These certified monarch habitats demonstrate our commitment to creating, conserving, and protecting monarch habitats, sustaining their migration, supporting other pollinator species, and providing a diversity of colors and textures for visitors to enjoy. The following are some example landscapes that include dedicated pollinator health & habitat environments, of predominately native plants. Many of the pollinator habitats are combined with existing Stormwater Control Devices, and/or green roofscapes. The Abbott's Creek and River Bend gardens are 2021 installations. The gardens at Buffalo Road Athletic Park, Forest Ridge Park, Green Road Park, Hill Street Park, and Marsh Creek Park were enhanced in 2021 with either the addition of plant material and/or enlargements of adjacent wildflower fields added, or pollinator-friendly lawn areas sowed. Many of these properties are also part of the Monarch Watch Monarch Waystation Program and are certified Monarch Waystation Habitats. At the Forest Ridge Park, a pollinator-friendly low meadow (red clover sowed) was installed and is continuously maintained/augmented in partnership with the Neuse River Hawks, a chapter of the N.C. Wildlife Federation, the River Hawks 2021. Habitats are also created along greenways by seeding annual wildflowers, and by removing an invasive shrub (Chinese privet) that increases native bee diversity and abundance in riparian forests of the southeastern United States. There is a Greenway Conservation Mowing Area along the Neuse River Trail and in 2021 the annual mowing keeps this area in an early-successional state which benefits certain populations of wildlife. The Thornton Road Meadow on the Neuse River Trail is actively managed through mowing, seeding native plants, planting milkweed plugs, planting oak trees and longleaf pines, and controlling invasive plants and woody plant encroachment. We sowed sunflowers in a fallow field across from the Wetland Center on Little Rock Creek Trail which was previously full of invasive plants such as tall fescue, johnson grass, and Callery pear. We also planted milkweed species as a host plant for the monarch and seeded zinnias to provide a nectar source for the adult butterflies





Meadow Planting



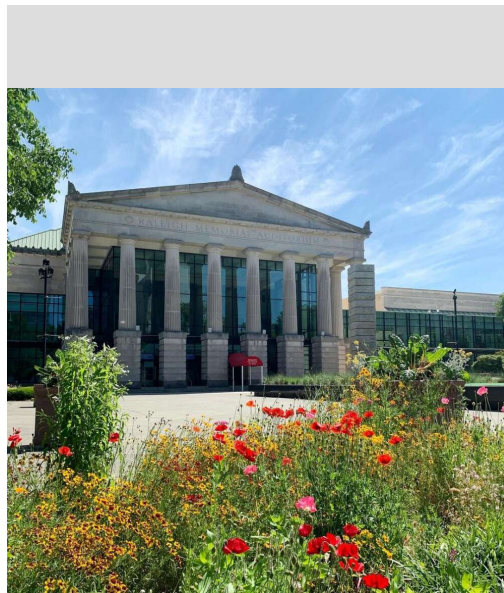
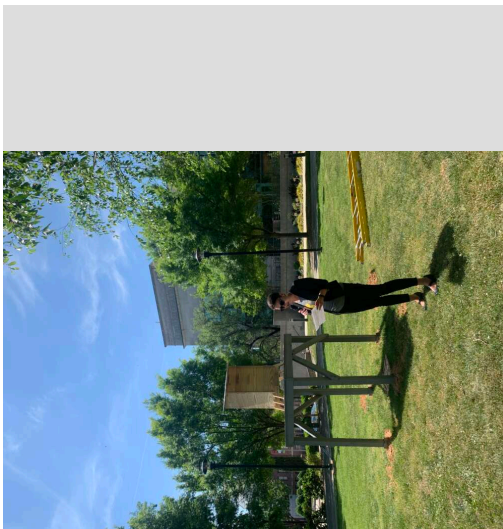
Raleigh Garden Club tending the pollinator garden

Education & Outreach

The City of Raleigh hosted classes and events both virtually and in-person over the last year to continue to educate the community about pollinators and pollinator habitats. In March of 2021, Mayor Baldwin signed the National Wildlife Federation's Mayors' Monarch Pledge joining hundreds of other U.S. communities committed to creating habitat for the monarch butterfly and pollinators, and to educate residents about how they can make a difference at home and in their community as part of Raleigh's commitment to promoting this valuable ecosystem. The installation of the new hive at the Duke Center for the Performing Arts included the naming of the new beehive on World Bee Day, May 20th. The installation was live-streamed on Youtube and their website. Local elementary schools were invited to participate in naming the new queen bee and Ms. Ali's class from Powell Elementary School was selected as the winner naming the queen "Queen Elizabuzz" which was announced by Raleigh's Mayor Pro Tem, Nicole Stewart. Alice Hinman from Apiopolis answered questions focusing on education and awareness of pollinators at the event. There were a number of Pollinator Week classes and educational presentations, and a plant giveaway was hosted at the Moore Square Market on June 27. Some of the educational presentations included Diversity of Native Bees with Dr. Hannah Levenson, to learn about the diversity of native bees in North Carolina and how these species can differ in their habitats and behaviors. Developing Habitats for Birds and Bees in Your Home Garden with Debbie Hamrick, Director of Specialty Crops at NC Farm Bureau Federation, on personal gardens and developing habitats for birds and bees. She also discussed her work with the NC Farm Bureau Federation which is geared to commercial beekeepers, the green industry, and the NC Pollinator Conservation Alliance. A class on How to be "Bat Friendly" Neighbors with Becky Skiba, from the NC Wildlife Resources Commission, provided information about the benefit of bats and how to be "bat-friendly" neighbors through small changes in landscaping and structure, how bats influence agricultural and forestry management, the life needs of bats, and



conservation challenges facing bats in NC. Let's Talk Pollinator Gardening! by Danesha Seth Carley, Ph.D., and Ms. Anne M. Spafford, MLA, ASLA was held and they discussed their latest book about how to plan, plant, and maintain successful and beautiful pollinator gardens. Lastly, our partners as NC State hosted a Bee Campus USA Scavenger Hunt and Presentation with faculty from NC State's Bee Campus USA committee to learn about the steps NC State has taken to receive certification as a Bee Campus USA for its ongoing efforts to conserve pollinator species. A bee scavenger hunt to win prizes was also held on campus. Raleigh is also convening quarterly meetings of the "Wake County Swarm," a collective of Bee Cities and Bee Campuses in Wake County, NC, to share information and our celebrations. Members include Garner, Apex, and Bee Campus North Carolina State University. This group plans to collaborate on education and outreach promotions for Pollinator Week, generating maps for pollinator habitats in the county, and cross-promoting events for residents of the County. All of this work was performed on behalf of the residents of the City of Raleigh. It was a great year to celebrate pollinators and spread the word about what can be done to protect them. Wildlife and Pollinator Program | Raleighnc.gov Pollinator Protection Projects | Raleighnc.gov Urban Agriculture and Pollinators in Raleigh | Raleighnc.gov Pollinator Week Activities Around Wake County | Raleighnc.gov Invasive Species Program | Raleighnc.gov



City of Raleigh Council Member Stewart at the hive installation

Pollinator Garden at Memorial Auditorium

Hive Market at Lichten Plaza

Policies & Practices

The City of Raleigh Parks, Recreation and Cultural Resources Department (PRCR) promotes environmentally sensitive landscape pest and vegetation management by using Integrated Pest Management (IPM) and reducing overall pesticide



use while preserving landscape assets and protecting the health and safety of the public and our employees. The PRCR Department has adopted IPM as a comprehensive approach to pest management including biological, cultural, mechanical, and chemical controls. The policy regulates the use and application of pesticides on the landscape and grounds of city parks, greenways, highway shoulders, medians, and any other property owned, controlled, or managed by the City of Raleigh Parks, Recreation, and Cultural Resources Department. We also have an invasive species page with more information and links for the public about our program and ways for people to get involved. A new initiative for the City of Raleigh this year is to transition some Parks' maintenance equipment to electric. Recent studies suggest that gasoline-powered equipment and the associated emissions or air pollutants react with plant scent molecules and can modify their chemical makeup and odor. The scent changes that are caused by this reaction will decrease the concentration requiring bees to spend more time looking for food and thereby decreasing their foraging and pollinating efficiencies. We're Plugged In! Raleigh Parks Uses Electric Maintenance Equipment | Raleighnc.gov Raleigh PRCR also suggests using the list published by the NC Native Plant Society for native plants the list does contain links to local suppliers.

Integrated Pest Management Plan:

Recommended Native Plant List:

Recommended Native Plant Supplier List:

[Learn More](#)

