

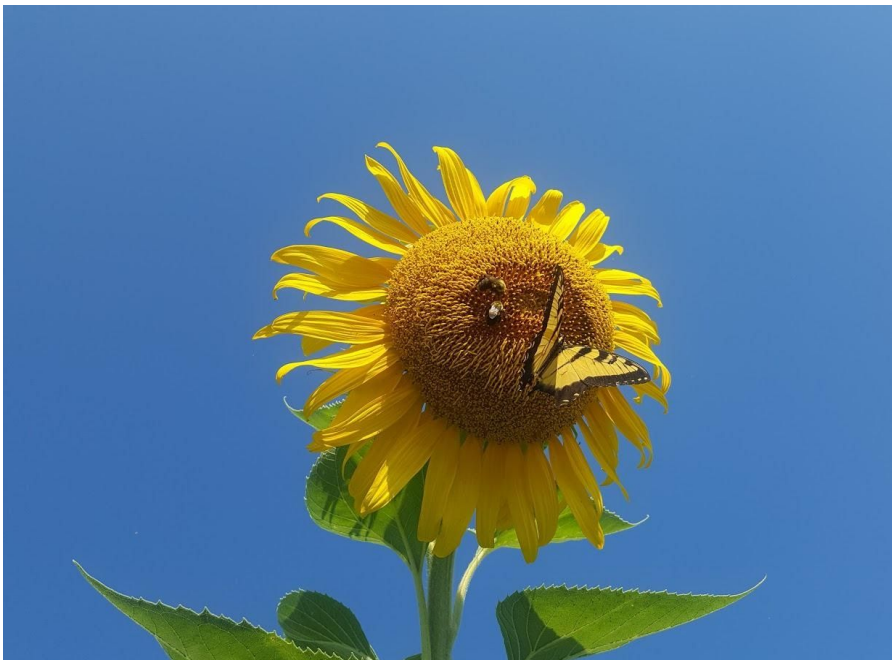


Bee City USA Annual Report Pollinator Conservation & Education 2019



Raleigh, North Carolina

EDUCATION & OUTREACH



Sunflowers planted for Sunfest at Dorothea Dix Park



Helen Yoest hosts a talk for Bee Better Naturally

Raleigh, as a city and as a community, has a long history of supporting and celebrating its pollinator species. In 2019, this tradition continued with at least 35 community events drawing over 56,000 people. The events ranged from small gardening workshops to grand public celebrations.

Raleigh has a strong community of pollinator-supporting organizations, including urban farms, educational organizations, and motivated individuals engaging in advocacy and education. Community partners in Raleigh reported 24 events in 2019 drawing over 30,700 participants. The Raleigh City Farm, a one-acre nonprofit urban farm, held a number of workshops and a large Earth Day celebration which drew large crowds and engaged several other local pollinator organizations. Additionally, Raleigh's community of pollinator protection organizations received national attention.

Leigh-Kathryn Bonner of Bee Downtown was named to 'Forbes 30 under 30'. She has installed over 250 honey bee hives at more than 50 company campuses across the southeast. Ms. Bonner partners with businesses to raise awareness about the importance of pollinators while engaging their employees in hive installation and maintenance.

In 2019, over 25,000 people came to BugFest at the North Carolina Museum of Natural Sciences in Raleigh to interact with entomologists and learn about the fascinating world of bugs. This all-day event was hosted in collaboration with Phyllis Stiles of Bee City USA and the Xerces Society, and gave the public an opportunity to engage with experts on the importance of insects in our ecosystem. The museum also hosts regular Science Cafes. In 2019, two of those events were focused on pollinators and each attracted over 100 people.

The City of Raleigh also organized nine pollinator related presentations, including an educational talk on Raleigh as a Bee City USA. In 2019, Raleigh launched its Garden Corps Program, a partnership of the Department of Parks, Recreation and Cultural Resources (PRCR), the Housing and Neighborhoods Department, Office of Sustainability, the Wake County Master Gardeners, and the Food Bank of Central and Eastern North Carolina. This program engages a cohort of youth gardeners and senior volunteers in a 12-week education and gardening program which includes classroom time, practical gardening, and cooking lessons using the garden harvest. The program was launched through the City's Strategic Plan, pilot tested in 2018 and officially launched in 2019.

In 2019, Dorothea Dix Park hosted its second annual Sunfest Celebration. Five acres of sunflowers are planted each year in Dix Park and each year while the flowers are at peak bloom, the City hosts a huge public celebration, drawing at least 25,000 people. This event not only engages the Raleigh community, but draws attendees from throughout the Southeast! The Dix Park sunflowers are such a draw that the City publicizes not only the blooms, but the sunflower harvest as well, informing the community that the oils from the sunflowers are processed to create biofuels for the City's farm equipment. Education and hands-on activities at the SunFest event included information about pollinators and the importance of plants like sunflowers for pollinators.

Honeybee hives have been installed at two of Raleigh's largest public venues, the Raleigh Convention Center and the Duke Energy Center for the Performing Arts. The gardens on site that support the hives are irrigation and fertilizer free. These hives are part of a pollinator partnership; the gardens are maintained by Raleigh's PRCR Department and the hives are maintained by Apiopolis, one of the City's community pollinator partners. Educational signs are posted near the hives and an opening event was held to showcase these pollinator-friendly additions to Raleigh public spaces.

In 2019, the City of Raleigh's Environmental Advisory Board awarded its Urban Agriculture Grant to recognize three urban gardens: The Highland Community Victory Garden at Highland United Methodist Church; the Inter-Faith Food Shuttle Urban Agriculture Program; and the Children's Garden at the Beginning and Beyond Child Development Center. All of these gardening projects focus on community-building, education and food security and each of them utilize native plantings to provide pollinator habitat.

POLLINATOR HEALTH & HABITAT



Planting the Dorothea Dix Park Sunflower field



Invasive removal event with volunteers for the City of Raleigh Parks, Recreation and Cultural Resources Department

In 2019, the City and its community partners preserved or enhanced over 1692 acres of habitat. Community groups, working with almost 1000 hours of volunteer labor, protected or enhanced over two acres of habitat in the form of community garden projects, urban farm projects, and hive or apiary installations. Together, these groups planted hundreds of native plants, removed invasive species and preserved natural habitats for pollinator protection.

North Carolina State University's JC Raulston Arboretum unveiled its Air Bee & Bee at the Moonlight in the Garden. This "five star urban habitat for pollinators" has different sized holes to house a wide range of wild bees. It is designed to house solitary bees and wasps.

In August, NC State held its second annual Pollinator Field Day, bringing together farmers, beekeepers, Soil and Water Conservation District supervisors and staff, urban planners, landscapers and landscape architects, Master Gardeners and nursery and greenhouse workers to learn about pollinator habitat, native bees, butterflies and beneficial insects, bee identification, and pesticide application techniques to protect pollinators.

The City of Raleigh, led by the Raleigh Water utility and the Department of Parks, Recreation and Cultural Resources (PRCR) preserved or enhanced 1690 acres of City-owned land with pollinator habitat, utilizing 222 volunteers committing over 1,000 hours of labor. The Neuse River Resource Recovery Facility includes a farm that has long been planted with sunflowers, wildflowers and soybeans. These crops are reclaimed after the growing season to generate biofuels for the City's farm equipment. This property includes nearly 250 acres of sunflowers and soybeans, and nearly 300 acres of lands left natural.

At Dorothea Dix Park there are two annual bloom events. Five acres of sunflowers are planted each year, which generate quite the buzz at Sunfest. Additionally, each Spring, 50,000 daffodil bulbs bloom in Flowers Field.

Raleigh's PRCR Department also removed invasive species from over 30 acres of property and left over 300 acres of property in a natural state. PRCR pollinator projects include new garden construction, green roof and garden restoration, and garden enhancement projects.

The PRCR Department also engaged volunteers and City staff in the installation of over 5,200 square feet of gardens at City sites, planting nearly 2,000 native trees, shrubs and other plants.



The Air Bee and Bee at NC State University's JC Raulston Arboretum

POLICIES & PRACTICES

Raleigh's Parks, Recreation and Cultural Resources (PRCR) Department is in the process of implementing an Integrated Pest Management (IPM) program for the Parks Maintenance Division to complement its Parks Pesticide Policy. The pesticide policy serves as a guiding document for IPM in the PRCR Department. As part of the IPM implementation, PRCR provides IPM education to staff at its monthly gardeners' meetings. These workshops include proper pest identification, weed identification, thresholds, and invasive control methods. The IPM Leadership Team meets regularly to evaluate, update and refine herbicide use. PRCR promotes "freedom lawns," low-maintenance open areas where plants can bloom without mowing.

The Department has also piloted projects using torches, organic herbicides, prescribed burning, and smothering weeds with cardboard-newspaper mulch. As for chemical pest control, the PRCR Department does not use herbicides in natural area parks except for invasive plant control, and in some parks herbicide use has been eliminated altogether. No restricted use herbicides are ever applied in Raleigh City Parks. No insecticides are used on any plant material in City Parks. The city is currently investigating the elimination of herbicides on greenway trail edges. PRCR promotes planting native plants in City parks. All new plant designs are judiciously reviewed, and invasive species are not allowed. All new plantings are approved by the Parks Horticulturist, Park Superintendent, and Assistant Parks Director before being implemented in a park. This process is designed to promote native plants, educate staff and to understand any potential restrictions or setbacks.

Recommended Locally Native Plant Species List —
https://www.ncwildflower.org/native_plants/recommendations

Regional Native Plant Supplier List — https://ncwildflower.org/native_plants/nurseries

Pollinator Friendly Integrated Pest Management Plan — not available

CONTACT US!

Committee — City of Raleigh Environmental Advisory Board, Graham Smith and Brian Starkey

Website —

<https://raleighnc.gov/environment/content/AdminServSustain/Articles/CommunityGardeningInRaleigh.html>

Social Media — not available