



Bee City USA Annual Report Pollinator Conservation & Education 2019



Carrboro, North Carolina

EDUCATION & OUTREACH



Table set up by Town staff and the Carrboro Bee City USA Committee with educational outreach material and native pollinator plant seeds for Carrboro residents at the Carrboro Farmers' Market.



Table set up by Town staff and the Carrboro Bee City USA Committee with educational outreach material and native pollinator plant seeds for Carrboro residents at the Carrboro Farmers' Market.

Town of Carrboro staff and the Town's Bee City USA Committee hosted an outreach event at the Carrboro Farmers' Market on Saturday, June 15, 2019, to celebrate National Pollinator Week. At the event, Town staff and the Bee City USA committee Chair worked to educate Carrboro residents about native pollinators and how to create pollinator habitat. Staff also distributed seeds for native milkweed (*Asclepias* spp.) plants for Carrboro residents to plant in their yards and provided instructions for plant growth and care. On Sunday, June 16, 2019, Town staff held a free Father's Day screening of *Vanishing of the Bees*, directed by George Langworthy and Maryam Henein and narrated by Ellen Page. The documentary explored potential causes and solutions to Colony Collapse Disorder and discussed the impacts of honeybee loss to agriculture and society. Before the screening, a Carrboro resident provided a presentation on deterring mosquitoes from residential yards without using pesticides, which can harm native insects and pollinators. Staff also provided free native pollinator plants to all attendees to expand residential pollinator habitat in Carrboro.



Carrboro residents view the documentary titled, "Vanishing of the Bees"

POLLINATOR HEALTH & HABITAT



Bee City USA Committee Members and Town staff work to maintain and enhance the pollinator garden on Hillsborough Road.



Members of the Carrboro Bee City USA Committee, a Carrboro resident, and a Carrboro Town Council Member share native plants they will be planting at their residences to increase native pollinator habitat in Carrboro.



The pollinator garden on Hillsborough Road



The final design approved by the Town Council for Dr. Martin Luther King, Jr. Park in Carrboro. Park construction began in 2019 and the park will contain multiple pollinator gardens.

The Town's Bee City USA Committee and Town staff worked to maintain and enhance the Town's pollinator garden on Hillsborough Road. Town staff and the Bee City USA Committee also worked to distribute native pollinator plants and native milkweed seeds to Town residents at outreach events for National Pollinator Week. Members of the Bee City USA Committee also worked to plant pollinator plants at their residences to enhance native pollinator habitat in their yards.

In addition, in 2019, construction began on the Town's Dr. Martin Luther King Jr. park, which will feature native pollinator gardens. In 2019, Town staff also worked to amend the Town code to address an inconsistency between language in the Town Code and the Town's commitment to native plants in the Community Climate Action Plan and the Bee City USA program. Town staff are currently working to finalize a draft to amend Chapter 11, Article 2, Section 11-8 of the Carrboro Town Code relating to Noxious Growth to allow for managed natural landscapes. The ordinance will discuss how the establishment and maintenance of managed natural landscapes is beneficial to the Town's environment and its residents and serves to further adopted Town goals and promote public health, safety, and welfare by:

- 1) Promoting microhabitats in urban areas for the conservation of wildlife such as birds, pollinators, and other beneficial insects;
- 2) Creating larger, more connected plant populations, helping ensure the future of native plant species by increasing their ability to migrate in response to changes in climate;
- 3) Conserving water resources by promoting water-efficient landscaping through the use of appropriate native plants which, once established, typically require less water than other species;
- 4) Protecting water quality by reducing the use of fertilizers and other inputs used to maintain landscaping;
- 5) Reducing the negative impacts of landscape maintenance equipment on local air quality and climate change;
- 6) Reducing the financial costs of landscape maintenance;
- 7) Improving stormwater retention and preventing erosion;
- 8) Increasing biodiversity;

9) Storing carbon; and

10) Meeting goals of Carrboro's Bee City USA commitment to promote healthy, sustainable habitats and communities for bees and other pollinators.

POLICIES & PRACTICES

The Town of Carrboro seeks to establish an integrated pest management program which:

- Includes site assessment and a comprehensive listing of pest control methods proposed for use. In order to promote ecological sustainability and to demonstrate a due diligence to the community and to the environment, least toxic methods of control shall strongly be considered before any other means of control are implemented
- Establishes an inspection and monitoring program to identify infested zones, monitor pest levels, and set thresholds at which action should be taken
- Describes procedures for selecting the appropriate pest management technique(s) for the identified pest
- Provides education to employees and facility users in order to facilitate an understanding of the program
- Emphasizes prevention and recommends appropriate changes in facility construction or maintenance to help prevent re-infestation from occurring.

Plant Health Care (PHC) is defined as a process of scheduled preventative maintenance, based on monitoring and the use of cultural and chemical tactics, to enhance plant vitality. The plant and its requirements become the central focus of management activities, rather than responding to symptoms caused by pest presence, physical agents, or nutritional deficiencies. A plant health care practice addresses the basic causes of the reduction in plant health and provides corrective measures to promote plant health. This proactive approach to plant health care is another tool that pest managers can utilize in the landscape in order to promote plant vigor which in turn can help minimize the need for pest control. Healthy plants are typically less likely than unhealthy plants to become infested by pests and infected by disease.

Plant Health Care (PHC) is a new addition to IPM methodology. PHC was not a factor when the original IPM was created. Very proactive system.

GOAL

The goal of the IPM and PHC policy is to develop a systematic course of action to prevent pest infestations, and to manage pests successfully, while minimizing adverse effects on people and the environment. The IPM and PHC policy will be a cornerstone of the Town of Carrboro's pest management program. The purpose of establishing an IPM and PHC program is to assure municipal employees, visitors, and residents that no unacceptable public or environmental health risk is taken to control pests. The adoption of a holistic IPM and PHC program will provide the town with long-term control of pests and invasive weeds as well as maintenance of rights-of-way, landscapes, and parks that have an impact on town employees, residents, and visitors. The Least Toxic IPM Manual will be a working document which provides pest managers with recommended sources of information about pest identification, pest biology, monitoring guidelines, options relative to action thresholds and general pest management procedures. It will also include the guidelines for creating Department IPM plans. The manual will be revised on an ongoing basis as the town gains further experience with IPM and PHC in facing specific pest situations.

Excerpt of 2017 update to Carrboro's Least Toxic Integrated Plant Management (IPM) and Plant Health Care (PHC) Plan

The Town of Carrboro's Least Toxic Integrated Plant Management (IPM) and Plant Health Care (PHC) program:

- 1) Includes site assessment and a comprehensive listing of pest control methods proposed for use. In order to promote ecological sustainability and to demonstrate a due diligence to the community and to the environment, least toxic methods of control shall strongly be considered before any other means of control are implemented;
- 2) Establishes an inspection and monitoring program to identify infested zones, monitor pest levels, and set thresholds at which action should be taken;
- 3) Describes procedures for selecting the appropriate pest management technique(s) for the identified pest;
- 4) Provides education to employees and facility users in order to facilitate an understanding of the program; and
- 5) Emphasizes prevention and recommends appropriate changes in facility construction or maintenance to help prevent re- infestation from occurring.

In 2019, Town of Carrboro staff also worked with a local resident to design a volunteer invasive species removal program for Town properties for implementation in early 2020.

Recommended Locally Native Plant Species List — At this URL, the Town lists recommended species for landscaping:

<https://www.townofcarrboro.org/DocumentCenter/View/674/Appendix-E-Screening-and-Trees-PDF>.

The Town has also drafted updates to the Land Use Ordinance provisions related to landscaping, adding a table of recommended plants that includes pollinator tree and shrub species to put these species more clearly on the radar for new plantings as part of development projects. Members of the Town Council met in 2019 to discuss this update and discussion will continue in 2020.

On this page, <http://www.townofcarrboro.org/986/PollinatorHabitat>, the Town links to the following resource from the North Carolina State University Cooperative Extension, <https://growingsmallfarms.ces.ncsu.edu/growingsmallfarms-pollinatorconservation/>, which provides this list of native plant species for bee forage:

<https://growingsmallfarms.ces.ncsu.edu/wp-content/uploads/2012/08/BeePlants2015.pdf?fw=no>.

Regional Native Plant Supplier List — On this page,

<http://www.townofcarrboro.org/986/PollinatorHabitat>, the Town links to this resource:

<https://growingsmallfarms.ces.ncsu.edu/growingsmallfarms-pollinatorconservation/> from the North Carolina State University Cooperative Extension. The page lists native plants and seed suppliers for the area.

Pollinator Friendly Integrated Pest Management Plan —

<https://carrboro.legistar.com/LegislationDetail.aspx?ID=3030764&GUID=B8E95E4E-9276-4D8B-95E2-371F64D12FC8&Options=ID|Text|Attachments|Other|&Search=ipm>

CONTACT US!



Members of the Carrboro Bee City USA Committee, a Carrboro resident, and a Carrboro Town Council Member share native plants they will be planting at their residences to increase native pollinator habitat in Carrboro.

Committee — Environmental Advisory Board

Website — <https://townofcarrboro.org/986/PollinatorHabitat>

Social Media — <https://www.facebook.com/CarrboroTownGov>