

# Bee City USA - Howard County

Report on 2021

## Pollinator Habitat Creation & Enhancement

The Howard County Office of Community Sustainability (OCS), in partnership with University of Maryland, Columbia Association, and Howard County Bureau of Utilities were awarded an Innovation Grant to study the use of lawn mimics in combination with meadows and other arrays of native plants as a novel nature-based climate solution. Lawn mimics are mixes of slow growing grasses and clovers that reduce GHG emissions from mowing and fertilizer by up to 80% while retaining the overall appearance of lawn to reduce the need to mow and use chemical inputs. Lawn Mimic Pilot Planting This project uses replicated field trials and statistical analyses to identify effective strategies for partial replacement of environmentally costly mowed turfgrass with climate-friendly "lawn mimics" and pollinator meadows. Once widely used, these methods can reduce carbon dioxide emissions from mowing, improve soil health, reduce fertilizer contamination of streams and boost pollinator populations in the County. In the lawn mimic trials, we compared a total of 8 different seed mixes and two planting strategies. As part of the Innovation Grant, four demonstration gardens were installed to illustrate the procedures for planting low maintenance pollinator plots to the public. The pollinator garden located in Kennedy Gardens is on the east side of Lake Kittamaquundi along a well-used pathway. Approximately 250 native perennials (6 species) and 17 inkberry shrubs were planted. Kennedy Gardens is in a floodplain and the plants were selected to thrive in sunny and moist conditions. The pollinator planting at Long Reach Village Center is located in Columbia and featured a partnership between Columbia Association, Howard County Government, Volunteers, and Howard County Bee City. This project is in a highly visible area and features 270 plants consisting of eight different native plants species. This project is approximately 300 square feet and was installed in Spring 2021. A 4' x 14' pollinator plot was planted at Owen Brown Interfaith Center (OBIC), Unitarian Universalist Congregation of Columbia (UUCC) using 4 different species of native plants. A second demonstration garden was installed at Wilde Lake Interfaith Center on a traffic island in front of the building using 5 different species of native plants. Columbia Association hosts "Pull and Plant" events where groups of volunteers remove invasive plants and replace with natives. Several of these events occurred last year. A new pollinator meadow was installed at the Savage Mill Trail through Howard County Department of Recreation and Parks. This meadow also had one of our Bee City Howard County habitat signs installed to increase awareness about the importance of sustaining pollinators. We also assisted in the installation of a pollinator trail at Howard Community College, through a spring and fall event. The spring planting consisted of trees and shrubs, while the fall planting consisted of native perennials. The spring project was a partnership between Howard Community College, Howard EcoWorks, VolunTeens, and Master Gardeners. We planted 25 trees and shrubs to increase pollinator habitat on campus. This is part of our larger Trees for Bees campaign which is a tree giveaway this spring. The fall planting took place during the campus' Sustainability Day and we installed six pollinator garden beds along the College's new Pollinator Trail, adding to the tree plantings that were completed this Spring. The garden beds were planted with a variety of native plants that bloom throughout the spring, summer and fall. These plants will provide pollen and nectar sources to a variety of pollinators throughout their life



cycle. In addition, these native plants help control erosion, filter stormwater runoff, and sequester carbon in the soil. Featured plants include, Golden Ragwort (*Packera aurea*), Blue Flag Iris (*Iris versicolor*), Narrow leaved mountain mint (*Pycnanthemum tenuifolium*), Golden fleece Goldenrod (*Solidago sphacelata*), Aromatic Aster (*Symphotrichum aromaticum*), Eastern bluestar (*Amsonia tabernaemontana*), Threadleaf Coreopsis (*Coreopsis verticillata*), Coneflower (*Echinacea purpurea*), Obedient plant (*Physostegia virginiana*), Penstemon (*Penstemon digitalis*), Butterfly weed (*Asclepias tuberosa*), Blazing Star (*Liatris spicata*), Bee Balm (*Monarda didyma*), Gray Goldenrod (*Solidago nemoralis*), Calico Aster (*Symphotrichum laterifolium*). This pollinator planting was a collaborative effort between multiple environmental leaders, including Howard Community College, Howard County Master Gardeners, Howard County Bee City, Howard EcoWorks, Audubon Society of Central Maryland, Sierra Club, Howard County Bird Club and Chesapeake Conservation Corps.



Long Reach Village Center planting



Pollinator Planting - Kennedy Gardens at Lake Kittamaqundi



Spring Planting at the Howard Community College Pollinator Trail



## Education & Outreach

During Pollinator Week 2021, we hosted nine different events, both in person and virtual. These events included a Pollinator Story Walk, Meet the Pollinators, Butterfly Walks, a Bee ID course by Heather Holm, Intro to Beekeeping, Pull-and-Plant, Gardening for Pollinators, and Meadow Exploration Kits. Programs were hosted and delivered by different partner member organizations and the committee worked collaboratively to develop programming for the week. In addition to our Pollinator Week events, our committee hosted a virtual presentation by Doug Tallamy titled "A Guide to Restoring the Little Things that Run the World" which was a huge hit within our community. We also use online tools to educate the public and advertise events. Tools include a webpage ([www.livegreenhoward.com/land/pollinators/](http://www.livegreenhoward.com/land/pollinators/)), a Facebook page (<https://www.facebook.com/HCbeecityUSA>), and including information in the Live Green Howard social media and newsletters.



Meet the Pollinators Event



Featured Presentation by Doug Tallamy



Bee City table

## Policies & Practices

The purpose of this policy is to protect and enhance both natural and developed landscapes. These procedures define and strengthen the existing proactive approach to landscape management by strengthening current integrated pest management protocols and limiting the use of pesticides to the circumstances defined herein. To the extent allowed by law, Howard County shall implement sustainable land and building pesticide management practices on all County controlled, managed, or owned buildings and grounds that adheres to generally accepted integrated pest management practices and procedures, including thorough documentation and reporting of all pesticide applications. Howard County government employees required to possess a Maryland Pesticide Applicator's certification are required to attend an annual Maryland State approved recertification training. Non-certified staff, that handle pesticides are required to attend a County/State Pesticide Application training. Following training, staff shall be registered with the Maryland Department of Agriculture. (b) Employees are also strongly encouraged to attend sustainable sites, landscaping, or similar trainings to



better understand alternatives to pesticide application, as well as other approaches to reduce the need for applications. 3. Contractor Requirements: Contractors applying pesticides on County property shall adhere to the following requirements : Must possess a Maryland Pesticide Applicators License and submit a copy to the County Follow all Maryland Department of Agriculture regulations. Submit product label prior to application Review Maryland Pesticide Sensitivity List prior to application. Apply IPM principals and submit a copy of the Maryland pesticide application record post-application. Any submissions required above shall be made to the contract administrator that supervises the contract. 4. Management of Noxious Weeds as Required by State Law: All work done on County property as part of any program to control noxious weeds will be done in compliance with State law. The noxious weed program will submit an annual report to be included with the reports from the Directors of Public Works and Recreation & Parks as specified in Subtitle I. Neonicotinoids, Glyphosate and Chlorpyrifos: The use of chlorpydfos is prohibited on all County property. The use of neonicotinoids and glyphosate is prohibited on all County property with the exceptions of: (a) County property under agricultural lease; and (b) all work done under the County's cooperative agreement with the Maryland Department of Agriculture for the control and eradication of noxious weeds. Exemptions for the use of glyphosate and neonicotinoids, for other uses, may be granted by the Director of Recreation & Parks or Director of Public Works if a request is submitted in writing that identifies the proposed location of application and pesticide to be used and shows: (a) (b) The use is to prevent or combat an infestation of a species that can only be controlled by using neonicotinoids or glyphosate; and An alternate pesticide will not provide effective and safe control of the pest; and 3 POLICY & PROCEDURE (C) The benefits of saving a species population in the County by applying pesticides outweigh the potential negative impacts of treating with neonicotinoids or glyphosate at this location. Such exemptions must be granted in writing. 5. Agricultural Lease: Agricultural land managers and their subcontractors shall adhere to the following requirements when utilizing restricted use pesticides on County property: (a) (b) (C) (d) Adhere to the Conservation Plan written by the Natural Resource Conservation Service and approved by the Howard County Department of Recreation and Parks. Must possess a Maryland pesticide applicator's license and submit a copy to the County Lease Administrator. When available, agricultural land managers are encouraged to use alternatives to neonicotinoids and glyphosate in their farming operations. Agricultural land managers shall provide an annual pesticide use report to include a listing of pesticide uses by location, pesticide name, and amount of concentrate used (in ounces) for the past 2 years, to include any noxious weed treatments, as well as, pesticide application protocols, which will be reviewed on an annual basis by the Howard County Department of Recreation and Parks lease administrator. (c) REPORTING The Directors of the Departments of Recreation & Parks and Public Works will each present an annual report to the County Executive (due April 22 for the previous calendar year) that contains the following: (a) A listing of pesticide uses by location, pesticide name, and amount of concentrate used (in ounces) for the past 2 years, to include any noxious weed and guardrail maintenance treatments, (b) (C) An explanation of why any pesticide had more than a 15% increase or decrease in usage over the 2 years reported, A list and copies of all exemption requests approved and denied, for the reporting period and a comparison to the year prior, 4 POLICY & PROCEDURE (d) A narrative describing staff trainings, alternatives considered, education initiatives, successes and challenges. If applicable, any forecasted needs or adaptive management strategies anticipated based on potential environmental or situational changes should be included in the narrative, and (e) A narrative explaining plans for future pesticide use and reduction in coordination with the Office of Community Sustainability. (d) POLICY REVIEW AND MODIFICATION This policy shall be evaluated biennially and



updated by the Office of Community Sustainability in cooperation with other departments as new environmentally sensitive products and methods are developed. Howard County will continue to follow Integrated Pest Management practices as updated and recommended by a recognized authority. Modifications to this policy must be approved by the County Executive.

**Integrated Pest Management Plan:** [Pesticide-Use-on-County-Property-rev.-10.22.19.pdf](#)

<file:///C:/Users/jcostantino/Desktop/Telework/NP%20SC/Pesticide-Use-on-County-Property-rev.-10.22.19.pdf>

**Recommended Native Plant List:** [Howard County Native Plants.xlsx](#)

<https://livegreenhoward.com/land/pollinators/>

**Recommended Native Plant Supplier List:** [Native Plant Suppliers During Coronavirus.pdf](#)

<https://livegreenhoward.com/land/pollinators/>





# MOSQUITO SPRAYING KILLS BEES

Residential mosquito control is typically accomplished by spraying, fogging or misting broad-spectrum, non-targeted insecticides on plants and shrubs around the home. In addition to killing adult mosquitoes, these pesticide treatments can also kill many beneficial insects like bees, butterflies, moths, ladybugs, dragonflies, lightning bugs and more.

## Don't Turn Your Backyard Into A Graveyard!

Urban and suburban habitats are vital to supporting numerous beneficial pollinator species. Before calling a mosquito control service, consider a variety of other pest management strategies first, including:

- Regularly eliminating sources of standing water (flower pots, pet bowls, etc.) where mosquitoes breed
- Keeping rain gutters clear of organic debris
- Adding mosquito "dunks" (BTI) to fountains, ornamental ponds, etc. (These larvicides kill mosquitoes before they become biting adults.)

## Collateral Damage

It's easy to see the deadly effects of residential mosquito spraying on honey bee colonies belonging to backyard beekeepers. But the U.S. is home to some 4,000 species of native bees, most of which are solitary and nest in the ground or in plant stems. These bees and other pollinators are the unseen victims of mosquito barrier treatments and misting systems.



*A local honey bee colony killed by backyard mosquito spraying.*

## Don't Believe The Hype

Terms like "green," "biodegradable," "natural," "derived from flowers," etc. are often used to market residential mosquito control services. These buzz words are intended to make consumers feel more comfortable applying pesticide barrier treatments to their properties. Commonly used pyrethroid insecticides are enhanced, synthetic versions of natural pyrethrins, which – while originally derived from Chrysanthemum flowers – are deadly to most insects.

## Protect Yourself From Mosquitoes

(The same way you protect yourself from the sun!)



### < Protect Your Skin

You wouldn't go to the beach without your sunblock! Apply safe, effective insect repellents when outside during mosquito season. Don't like DEET? Choose a product containing Picaridin or Eucalyptus oil.

### Timing is Everything

Just like you should avoid sun exposure during peak hours, avoid mosquitoes by limiting activities during times when mosquitoes are most active (dusk and dawn).



### Dress Appropriately >

Rash guards and hats keep you sunburn free during a day at the pool. Protect yourself from biting mosquitoes by wearing loose fitting long sleeves or pants.



### < Just Don't Do It

The very young and the very old should take extra precautions – whether out in the sun or being exposed to biting mosquitoes.



### < Keep Your Cool

Relaxing under a fan is perfect on a hot, sunny day. Limit mosquito bites by keeping the air moving when chilling outdoors.

## LEARN MORE:

[BeecaturGA.com/mosquito-spraying](http://BeecaturGA.com/mosquito-spraying)



*This flyer was originally created by Bee City USA - Decatur, GA ([www.beecaturga.com](http://www.beecaturga.com)) and has been adapted for Howard County Bee City.*

Mosquito Flyer

Learn More

<https://livegreenhoward.com/land/pollinators/>  
[hocopollinator@gmail.com](mailto:hocopollinator@gmail.com)





Bee City Howard County Committee Members

