

# Bee Campus USA - Medical University of South Carolina

Report on 2022

## Pollinator Habitat Creation & Enhancement

We conducted ongoing opportunities to volunteer and offer group sessions in the Urban Farm and on campus to create and enhance pollinator habitats. Here are a few examples: January – December (weekly) Work and Learn volunteer sessions January – December (monthly): Pain Management Rehab attended sessions in the MUSC Urban Farm to learn about pollinators and ways to manage pain through gardening and being in nature. January – December (monthly): Healing Farms sessions in the MUSC Urban Farm and around campus for young adults with disabilities learning about pollinators and our bees. January – December (weekly): Lantana Recovery Group attended working sessions in the MUSC Urban Farm.

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

7

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

200

*How many volunteers helped with those projects?*

65

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

- Flower garden
- Vegetable garden
- Pollinator-friendly lawn (with flowering clover, dandelions...)
- Herb garden
- Native milkweed planting for monarchs and bees (where appropriate)
- Invasive/exotic plant species removal for habitat improvement
- Native pollinator-friendly tree planting
- Native pollinator-friendly shrub border/hedgerow planting
- Rain garden/bioswale

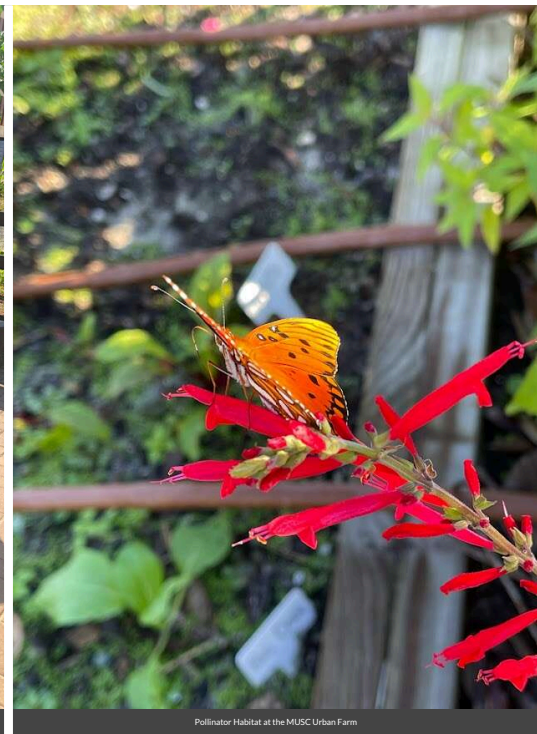
- School garden
- Other



Work and Learn at the MUSC Urban Farm



Planting in accessible raised bed at the MUSC Urban Farm



Pollinator Habitat at the MUSC Urban Farm

## Education & Outreach

Here are some of the Education and Outreach events we held in 2022: Jan 18th: We started an 8-week program for College of Medicine Humanities students in the MUSC Urban Farm focusing on pollinators, beehive education and pollinator habitats on campus. Students learned to monitor our observation hive and how to report any unusual activity to us. February 2nd: Staff presented at a Black History Event to talk about Bee Campus USA at MUSC and the mission of the MUSC Urban Farm to connect eating healthy with overall health. Feb 16: SCETV's "Making It Grow" featured MUSC campus and Urban Farm. February 22: Staff went to Beyond Basic Life Skills in Summerville SC (a program for young adults with disabilities) to talk about pollinators and to design a significant pollinator garden on site. Feb 24, 2022: MUSC hosted the Horticulture Therapy Institute Fundamentals 4-day long class for 20 students from around the country. Campus tours for the students included several pollinator gardens and the MUSC Urban Farm. Discussions focused on how pollinator habitats play an important role in Horticulture Therapy. April 6th: Hosted Trident Tech Horticulture class for in-depth campus-wide sustainability tour including several pollinator gardens and the MUSC Urban Farm. April 10th: Charleston Horticulture Society hosted a spring tour of the MUSC campus. Staff served as tour guides to discuss our

pollinator gardens and the MUSC Urban Farm. April 13th: Hosted the Daniel Island Garden Club to plant pollinators around the perimeter of the MUSC Urban Farm. April 14: Staff presented at the Charleston Yacht Club to discuss pollinators and the MUSC Urban Farm. April 28th: Campus wide (over 200 participants) Stress Less Bash for Innovation Week held in MUSC Urban Farm with tours to explain the role of pollinators. June 18th: Staff presented at Juneteenth Festival to talk about pollinators. July 13: Candy Strippers toured the Urban Farm to learn about pollinators. September 28: Staff attended Outstanding in the Field dinner on Johns Island to talk about MUSC Pollinator gardens Oct 19th Staff attended MUSC Arboretum Board Meeting to update BOD members on our pollinator gardens. Oct 29th: Sugar Free Fall Festival in the MUSC Urban Farm including farm and garden tours. Nov 13: Staff presented on pollinators at Family Day at the College of Charleston Nov 19th: Bonner Leader Program at the College of Charleston educational tour and cooking class. Nov 28: Public Health Interest Group toured the Urban Farm and learned about pollinators. Nov 30: Staff attended the Wellness Fair at MUSC Wellness Center to present about pollinators and growing healthy vegetables.

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

15

*How many people attended those events (in total)?*

350



Horticulture Therapy Institute class at MUSC



Teaching kids about butterfly habitats



Native Live Oak in the MUSC Urban Farm

## Courses & Continuing Education

Staff attended the following training opportunities for continuing education in 2022: American Gardens Association

Annual Conference SCGreen Conference South Carolina Nurserymans Association Conference National Landscape Architecture Conference SCTrees Arbor Workshop CharlestonGreen Conference

*How many of your for-credit courses included pollinator-related information last year?*

*How many students attended those for-credit courses?*

*How many of your continuing education courses included pollinator-related information last year?*

6

*How many participants attended those courses?*

15



## Service-Learning

Service Learning Events: February 14th : 24 College of Medicine Humanities students participated in planting a pollinator habitat at Hollings Cancer Center Pearlstine Healing garden. All plants were native. June 23rd: MUSC Occupational Therapy Department attended a workshop and planting event in the MUSC Urban Farm. July 21st City of Charleston Volunteer Corps planted pollinator garden Aug 11th: Sustainability Institute conducted a workday event in the MUSC Urban Farm and in pollinator gardens on campus Sept 13th: Porter Gaud students conducted a planting event in the Children’s Sensory Garden. Nov 20: Clemente Course students from College of Charleston planted pollinator garden at the Medical District Greenway. Dec 4th: Tree planting event for faculty and students.

*How many service-learning projects did your campus host and/or support to enhance pollinator habitat on and off-campus?*

8

*How many students participated in service-learning projects last year to enhance pollinator habitat on or off-campus?*

150



College of Medicine students preparing raised bed for new pollinator habitat



Tree Planting at MUSC Hollings Cancer Center



Memorial Pollinator Planting Activity

## Educational Signage

We installed one permanent educational sign last year.

*Number of permanent interpretive/educational/Bee Campus USA signs installed to date?*

4

*Number of temporary interpretive/educational/Bee Campus USA signs installed last year?*

# Rain Gardens

Green Solutions to Stormwater Pollution



**Stormwater** is water that originates from rain events. Stormwater that does not soak into the ground becomes surface runoff and flows to nearby ditches, storm drains and waterways. Stormwater picks up pollution from the landscape, but does not go to a treatment plant.

**Rain gardens** are landscape design tools that capture stormwater runoff and improve water quality before it reaches ditches, storm drains and waterways. These gardens have several benefits:

- Store and absorb water that is not otherwise available to plants
- Provide habitat
- Beautify the landscape
- Naturally remove most pollutants

## How do rain gardens work?



- Reduce soil erosion
- Reduce water consumption
- Filter pollutants
- Reduce heat island effect
- Reduce the bacteria

**Will a rain garden work on my property?**  
Rain gardens can be placed on almost any property that drains well in areas not to be landscaped. More guidelines available in the South Carolina Rain Garden Manual for Homeowners.





## Policies & Practices

We use an ecosystem-based strategy for long-term prevention of landscape pests and their damage through a number of mechanical and biological techniques specific to the Lowcountry of South Carolina such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties of plants. We provide preventative measures in our planning, planting and care. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made with the goal of getting rid of the target organism. The objective of practicing this integrated pest management approach is to acquire long-term equilibrium of pests, and provide ecological habitats for pollinators on campus through a range of integrated methods. We develop and update guidelines include lists of acceptable and prohibited species, soil analysis and amendments, plant material quality and conditions, transportation and handling, proper planting procedures, irrigation requirements, proper pruning techniques, tree removal, tree protection during construction and tree damage assessments.

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

- **Implemented or maintained a written IPM plan**
- **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)**
- **Implemented non-chemical pest prevention and management methods on city or campus grounds**
- **Eliminated pesticide uses that are solely to maintain aesthetics on city or campus grounds**
- **Reduced the total area of city or campus-managed lands to which pesticides are applied**
- **Restricted pesticides used to organic pesticides on city or campus grounds**
- **Eliminated use of neonicotinoid insecticides on city or campus grounds**
- **Sourced plants for city or campus grounds using “Buying Bee-Safe Plants” methods recommended by Xerces Society. (See <https://xerces.org/publications/fact-sheets/buying-bee-safe-plants>)**
- **Sourced plants for city or campus grounds that were not treated with neonicotinoids**

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

Yes.

*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?*

**We research and provide staff training regularly to be sure we are up to date on ecologically-based Pest Management.  
We review our IPM plans at least annually.**

**Integrated Pest Management Plan:** [bee campus hand out.docx](#)

<https://web.musc.edu/resources/health-and-wellness/arboretum/bee-campus>

**Recommended Native Plant List:**

<https://scnps.org/about-the-plants/sc-native-plant-list>

**Recommended Native Plant Supplier List:**



Andrew, our Arborist checking tree health

Learn More

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Our mission: Healing Through Nature at MUSC.