Bee Campus USA - Medical University of South Carolina

Report on 2023

Pollinator Habitat Creation & Enhancement

Please describe pollinator habitat creation or enhancement projects in your community in 2023, and whether your committee hosted them or not.

The new Pocket Urban Farms described: • West of Library – with (13) raised planters and a new gathering area. • New Pollinator Garden by the MUSC Wellness Center contains many rescued pollinator plants and houses the observation beehive. • Ashley River Tower mezzanine with (5) raised beds • Sean Jenkins Children's Hospital outdoor atrium with (3) raised beds • Institute of Psychiatry – President St and West garden Additionally, in 2023, we restored our Porcher Medicinal Garden which had been closed for an adjacent building Addition. We also designed and began collecting plant material for a new camellia garden, which we installed in February 2024. It currently contains over 93 varieties of camellia.

How many habitat projects did you help to create or enhance in 2023?

7

How many people (staff, volunteers, students, partners, etc.) helped with those projects?

60

How many projects benefit monarchs, milkweed, or nectar plantings?

4

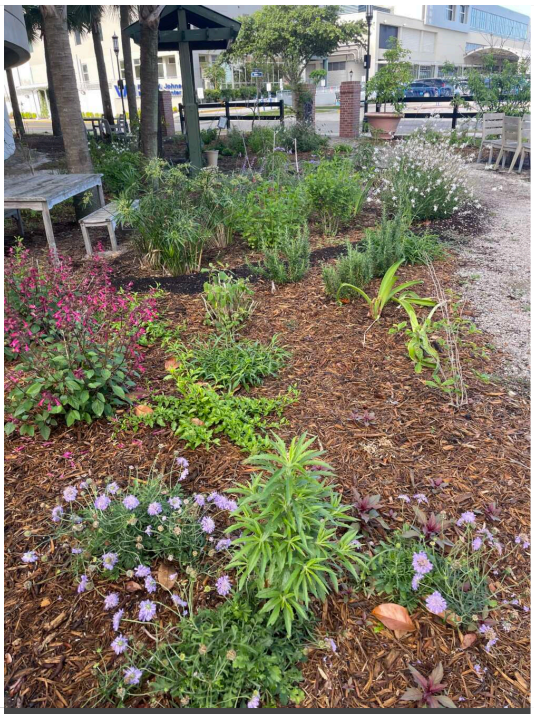
How many total square feet of habitat were created or enhanced?

1200

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
- 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



New Pollinator Garden Pocket Urban Farm at MUSC Wellness Center PC Noni Langford

New Pocket Urban Farm at MUSC Colbert Library PC Noni Langford

Renovated Porcher Medicinal Garden at MUSC PC Noni Langford

Education & Outreach

Please describe pollinator conservation events or outreach activities in your community in 2023, indicating whether your committee hosted them or not.

2023 was a year of major changes on our campus. In February, we officially learned that we would be losing our half acre Urban Farm, established in 2012, to make way for the new College of Medicine and College of Health Professions buildings. Our staff was tasked by leadership to come up with some form of replacement for this important pollinator and green space. Due to microclimates caused by tall buildings in this urban landscape, we had trouble finding one location that would receive the required six hours of sunlight needed to grow vegetables. Eventually we developed a plan to install Pocket Urban Farms located throughout campus. The loss of the Urban Farm which closed in late fall affected our ability to provide our usual number of Education and Outreach programming. Given the circumstances

and the actual work involved with the relocation to Pocket Urban Farms, we are still proud of our accomplishments. While we all miss the original Urban Farm, we are excited to be able to reach more people – especially staff and patients with this new model. We use our green spaces to provide weekly horticulture therapy sessions. This garden-based therapy provides participants an opportunity to be in nature and use gardening to improve mental and physical health. Additionally, we serve patients who are restricted to in-hospital by bringing horticulture therapy to them in weekly workshops. We use plant material collected from our green spaces for these sessions. We see over 65 individuals in group settings each week including the MUSC STAR Program, Addiction, Elder Care Adolescents/Children and General Care Units at IOP and in the Sean Jenkins Children's Hospital. Some of the organizations that currently volunteer or seek horticulture therapy with us are Lantana (addiction recovery), Healing Farms and Beyond Basics (young adults with disabilities), Hearts Inclusive Arts Community, Breast Cancer Survivors Fit Club, MUSC Pain Management Department, Charleston Horticulture Society, Magnolia Garden Club, Ashley Hall School, Charleston Parks Conservatory and many others. Here is a list some of the pollinator conservation events and outreach events we held in 2023: Jan 10: Worked with Ashley Hall School to plot their trees as part of the MUSC Arboretum and to consult with them about their pollinator garden. We eventually provided them with transplants from the Urban Farm. (Service-Learning Project – 25 students) Feb 27: Started an 8-week program for College of Medicine Humanities Class in the MUSC Urban Farm focusing on pollinators, beehive education and pollinator habitats on campus. (Service-Learning Project – 28 2nd year med students) Mar 8: Attended Hunley Park Career Day where we discussed careers in horticulture and explained our work at the Urban Farm including our pollinators. Mar 23: Attended the Senior Expo to provide awareness about the MUSC Urban Farm. (over 400 people attended) Mar 25: Hosted over 300 high school kids for Basic Science Career Day. Mar 31: Conducted a campus-wide sustainability tour for Winthrop College so they could see what we are doing at MUSC. Apr 3: Hosted volunteers in the Urban Farm for Public Health Week. (Service-Learning Project – 20 med students) Apr 5: Conducted MUSC campus tour for the Trident Tech Sustainability students. Apr 6: Sustainability Institute (Service Learning Project – 12) Apr 13: As a wrap up to the COM Flex class, we harvested, prepped, cooked and delivered collards with Chef Regina of Destiny Café. Apr 15: Hosted the Climente Group in the Urban Farm. We counted pollinators. (Service-Learning project – 35 College of Charleston students) Apr 20: Celebrated The Greenest Day – a combination of Arbor and Earth days on campus. We had over 70 vendors – including local beekeepers. Apr 23: Hosted Global Surgery Cookout and volunteer session in the Urban Farm. Apr 24: Hosted many events in the Urban Farm for MUSC Innovation Week including a cooking competition using plant material from the farm and tours to explain the role of pollinators. Apr 25: Staff presented at the MUSC Arboretum quarterly meeting to discuss the new Pocket Urban Farm planning. Apr 28: Visited with AARP members in West Ashley to discuss the Urban Farm and our pollinators. May 15: Started specific planning for the new Pocket Urban Farms and presented our plans to the MUSC President's Council for approval. May 17: Hosted Memminger Elementary School for pollinator tour and count. May 19: Presented to the Sullivan's Island Garden Club on pollinators. Jun 23: Presented to MUSC Occupational Therapists Doctorate students about Pocket Urban Farms and pollinators on campus. Jun 1: Attended the Bee a Friend to Pollinators 2023 Online Class Jun 12: Traveled to Knoxville for the National Children and Youth Garden Symposium. Jul 17: Pollinator count and tour with students from SC State College Jul 18: Urban Farm Farewell event Aug 8: Beekeeper removed Observation hive from Urban Farm

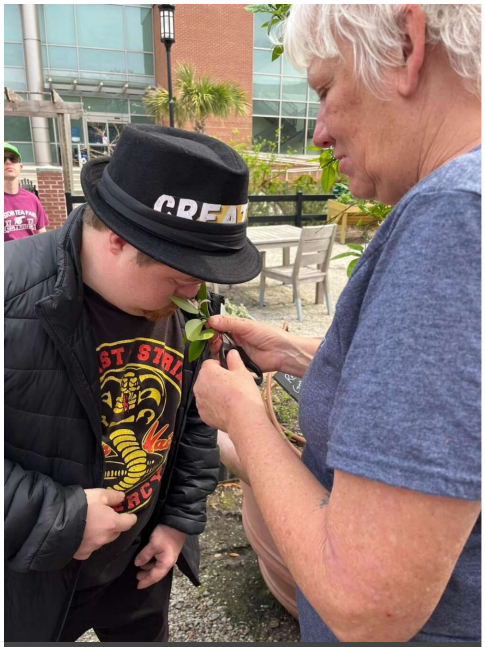
Aug 9: Started transferring pollinator plant material to new Pollinator Garden Pocket Urban Farm with the help of Charleston Parks Conservancy (Service-Learning Project – 15 adults) Aug 24: College of Pharmacy Urban and Pocket Farm tours Sept 13: Student Fair Day with Urban Farm tours and pollinator discussions Sept 18: Aprendiendo Juntos Organization Urban Farm and Pocket Urban Farm Tours. Sept 18: Planted black gum tree with Healing Farms Oct 1: Installed rain garden in the new Pollinator Garden Pocket Urban Farm with funding from Clemson University. Service-learning project – 18 med students) Oct 3: Applied for Pollinator Grant with the BeeCause Project. Oct 5: Conducted Golden Grads Arboretum Tour. Discussed pollinators. Oct 9: Attended Native Plant talk on campus Oct 21: Attended Sugar Free Fall Festival on campus Nov 6: Presented at Connect To Purpose Leadership Training Nov 18: Presented to the Women Empowered Council about the Urban Farm and Pocket Urban Farms Dec 2: Campus Arboretum tour Dec 11: Attended workshop to start researching a Food Pharmacy at MUSC

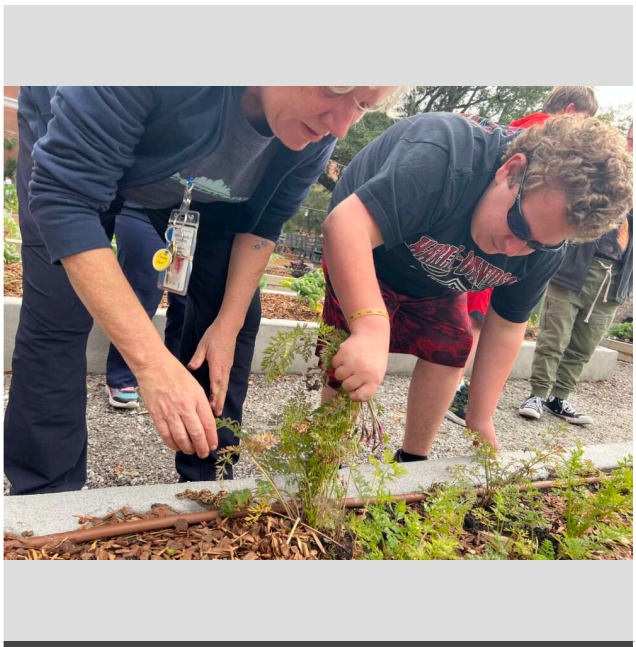
How many pollinator-related events or outreach activities did you host or help with in 2023 (in total)?
39

Number of permanent interpretive/educational/Bee Campus USA signs installed to date?
-3

Number of temporary interpretive/educational/Bee Campus USA signs installed in 2023?
3


Volunteer at MUSC Urban Farm PC Noni Langford


Learning about pollinators at MUSC Urban Farm PC Robin Smith


Healing Farms visiting MUSC Urban Farm PC Robin Smith

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for Invertebrate Conservation

Rain Garden Sign (New signs under construction) PC Noni Langford

Former Children's Sensory Garden at MUSC Urban Farm (new signs under construction PC Noni Langford

Curriculum, Continuing Education, & Service Learning

Please describe the curriculum your campus engaged in 2023, indicating whether it was part of a for-credit course or continuing education.

Staff attended SCGreen Conference, South Carolina Nurserymans Asso. Conference, National Landscape Architecture Conference, CharlestonGreen Conference, National Children and Youth Garden Symposium, several beekeeping workshops, several Charleston Horticulture Society workshops and Clemson Ext. Rain Garden workshop

How many of your continuing education courses included pollinator-related information in 2023?

6

How many participants attended those courses?

16

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

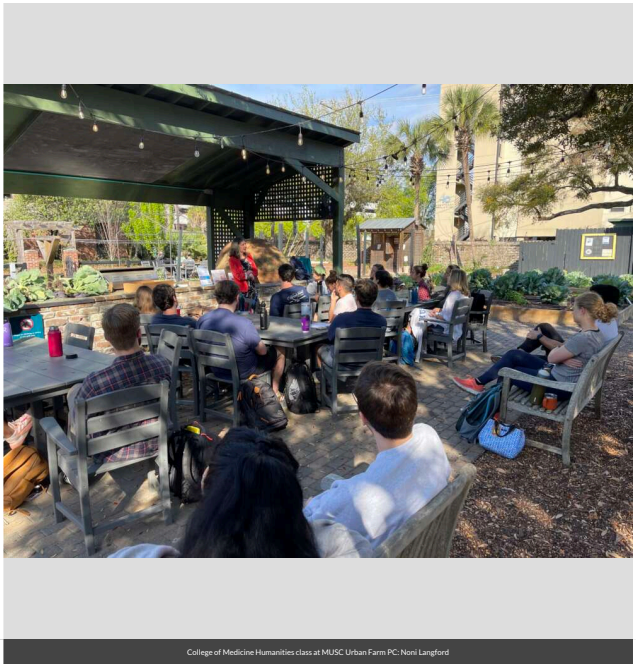
7

How many students participated in service-learning projects in 2023 to enhance pollinator habitat on or off-campus?

125

Please describe the service-learning projects your students were engaged in 2023, indicating which, if any, were associated with a course.

Please see list above in essay question #1.



College of Medicine Humanities class at MUSC Urban Farm PC: Noni Langford

Grounds Team tours Clemson Extension Research Farm

National Children and Youth Garden Symposium PC Noni Langford

Sustainability Institute working in MUSC Urban Farm PC Noni Langford

SC State College Pollinator count and tour PC Noni Langford

College of Medicine Humanities Class Prepping food from MUSC Urban Farm

Policies & Practices

Please describe actions taken to make pest management more pollinator-friendly.

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. We are in the process of adjusting our IPM management to address this new Pocket Urban Farm model.

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

Yes

Did your committee participate in any continuing education on ecologically-based Integrated Pest Management planning?

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.

Please check actions you have taken to make pest management practices more pollinator-friendly.

- Implemented or maintained a written IPM plan
- Only use pesticides as a last resort within the 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
- 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
- Distributed educational materials to residents or students to encourage the reduction or elimination of pesticide use
- 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

Any lessons learned you would like to share?

Change is hard.

MUSC Bee Campus Committee PC David Attard

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Learn More

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:
https://www.rootsandshootsnursery.com/%20%20https://www.ritasroots.com/%20%20https://parsonsnursery.com/%20%20%20https://gmnursery.com/%20%20%20https://oelschigs.com/%20%20%20https://www.seaislandsavoryherbs.net/%20

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