Bee Campus USA - University of Connecticut

Report on 2022

Pollinator Habitat Creation & Enhancement

UConn students completed invasive species removal and trail maintenance in the Hillside Environmental Education Park (HEEP) a number of times this year on 4/04/2022, 9/28/2022, 10/07/2022, 10/17/2022, 10/21/2022, and 10/31/2022. Cumulatively, these trail cleanups had 25 volunteers. Spring Valley Student Farm continued to host its 'Farm Fridays' during the Fall and Spring semesters in which volunteers removed invasives, planted pollinator friendly plants, and seeded milkweed with a total of 590 volunteers. The EcoGarden club continued to plant and harvest mint and garlic, in addition to letting wildflowers like aster and goldenrod proliferate around the garden. Throughout all these plantings, EcoGarden had a total number of 25 volunteers. The UConn Master Gardener Program replanted an area of about 25 square feet in the Litchfield Extension Center to be a pollinator garden across 3 days with 5 volunteers. This work included reseeding some annuals, planting five new different perennial plants. Again, in 2022, the Ocean Research and Conservation Association partnered with a variety of organizations on campus such as the Office of Sustainability and the UConn Recovery Community to cleanup litter all across campus on 10/30/2022 with 200 volunteers. The UConn Arboretum continued to plant hundreds of native tree species including the usual oaks, pine trees, and dogwoods along with the annual class tree planting of a three-flowered maple on 4/20 with 6 volunteers. The UConn Beekeeping Club began to host 4 hives at the Spring Valley Student Farm. Throughout the spring and fall semester they showed students how to take care of bees, while also educating UConn on the effects and benefits of pollinator. The total square footage enhanced or created comes from Spring Valley Student Farm, EcoGarden Club, HEEP trail cleanups, and the Master Gardener Program.

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

35

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

63668

How many volunteers helped with those projects?

905

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

- Natural area with tree snags and stumps, and bare areas for ground nesting species
- Meadow
- 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
- Rain garden/bioswale

UConn Beekeeping club taking care of their 4 new bee hives at Spring Valley Student Farm.

Students volunteering at a Spring Valley Student Farm 'Farm Friday' taking care of weeds and harvesting squash.

EcoGarden Club letting wildflowers including Aster and Goldenrod proliferate around the garden.

Education & Outreach

All events listed below were hosted by groups and organizations that have representatives on our UConn Bee Campus Committee and/or participate in pollinator-related outreach and education within our UConn campus and local communities. 1. UConn Bug Week UConn Extension celebrated Bug Week from July 17 – 23 with virtual programs and resources for the entire family. All ages were welcome for the events, which included bug-related crafts, recipes, an activity to win a free bug kit, Connecticut Science Center programs and a photo contest. 2. NatureRx Forest Bathing with Reagan Stacey The Office of Sustainability and NatureRx went forest bathing on April 29th as Regan Stacey lead us through the forests of the HEEP. Forest bathing is the practice of immersing yourself in nature in a mindful way, using your senses to derive a whole range of benefits for your physical, mental, emotional, and social health. It is also known as Shinrin-yoku in

BEE CAMPUS USA™
AN INITIATIVE OF THE XERCES SOCIETY

XERCES SOCIETY
for Invertebrate Conservation

Japan. ‘Shinrin’ means forest and ‘Yoku’ stands for bathing. 3. Ornamentales/Webinars for Spanish-Speaking Workers in the Green Industry The UConn Greenhouses hosted a virtual workshop discussing how spanish speaking individuals work in the Green Industry 4. Connecticut Invasive Plant Working Group Symposium The Connecticut Invasive Plant Working Group hosted its annual symposium on November 3rd for 6 hours of presentations featuring current science-based research and information on supporting pollinators in managed landscapes. This program is designed for growers and other green industry professionals, landscape service providers, landscape architects and designers, town commissions, municipalities, schools, and homeowners. 5. UConn Teale Lecture Series: America's Public Lands: A Political & Conservation Success Story As Part of the Teale Lecture Series distinguished Professor Emeritus from the UC Berkeley Dr. John Leshy presents on the history of conserved land in the United States and how as emerging citizens in the era of climate change, students can be hopeful for the future. 6. Digitization TCN: iDigBees Network, Towards Complete Digitization of US Bee Collection The Biodiversity Research Collections, with Katrina Menard in the lead, was recently awarded a National Science Foundation grant to digitize it’s bee collection as part of an effort to track the effects of climate change in this enigmatic group of pollinators. The University of Connecticut collection is particularly important as one of the largest collections of New England bees, and by making these data available to researchers and the public through digitization and imaging, we hope to better understand how climate change affects the distribution and diversity. 7. CT Chapter of Future Farmers of America Greenhouse EEB Greenhouse staff and volunteers hosted the CT Chapter of the Future Farmers of America to discuss the diverse plant collection here. Topics ranged from procurement of specimens to the ecology of species in their native environments with a particular focus on agriculturally relevant plants. 8. Farm Fresh Markets The Farm Fresh Market offered fresh seasonal produce from our own Spring Valley Student Farm and baked goods from our Not Just Desserts Bakery. Pedestrians got to stop by and chat with the student farmers and learn more about some interesting varieties they grow, their farming practices, and what they love about Spring Valley Student Farm. 9. Trip to Rose Berry Farm A morning of picking apples and squash at Rose’s Berry Farm in Glastonbury, CT. Winny Contreras, farm manager, discussed crop production as well as the realities of Mexican migrant farm labor in CT. Ms. Rose discussed family farming in the CT River Valley and challenges to bringing you local, healthy food. Sponsored by CLAS Activist-in-Residence Program, The Asian and Asian American Studies Institute, the Honors Program, UConn Spring Valley Student Farm, El Instituto, Anne Gebelein, Kimberly Vasquez. 10. Know Your Farmer Fair Storrs residents had the opportunity to help the Windham Community Food Network maintain their gardens. They also supported the Willimantic community combat the larger issue of food insecurity. Volunteers were advised to wear long pants and long sleeved shirts. Garden clean-up tasks varied from weeding, mulching, building garden beds, or composting garden beds. Community Outreach Transportation was provided to and from the service site. 11. Rachel Carson Talk about the Environment Rachel Carson became a founder of the environmental movement in the 1960s with her book “Silent Spring,” which outlined the death of life on earth as we know it due to the indiscriminate use of pesticides. This talk, hosted by Bev York, Museum Educator, Windham Mills Museum, and Adjunct Instructor, gave an illustrated and interactive view of Carson’s struggles to expose “forever chemicals” and discusses action steps for our ongoing crisis. 12. Doctoral Dissertation Oral Defense of Krista Dotzel Department of Anthropology Doctoral Dissertation Oral Defense title "When the Corn is in the Milk: Phytoliths, Plant Processing Strategies, and Agriculture in Southern New England 2500-500 BP". 13. A Visit to the Miniature Forest Attendees had the opportunity to gain insights into the mosses of Northeastern Connecticut with Dr.

Bernard Goffinet of the University of Connecticut's Department of Ecology & Evolutionary Biology. People got to join Dr. Goffinet on an easy hike through a portion of the 165-acre parcel known as the "HEEP", or Hillside Environmental Education Park. Participants explored, discovered, and heard stories about native mosses and the miniature forest that can be found right below their feet. 14. The Green Careers Panel The Green Careers Panel was an event sponsored by the Office of Sustainability to provide an opportunity for students to see how their interests align with real-life sustainability and environmental career paths and to gain general career advice as well. As there is increased momentum of student interest in careers in sustainability and the environment, they believed 2022 would be extremely helpful in providing students with insight into the many paths they can take to pursue a "green" career! 15. Earth Day Spring Fling The UConn Office of Sustainability invited campus to celebrate the planet and sustainability! They had plenty of events, food, and eco-community members out and about campus: Dining Services zero waste BBQ + Dairy Bar Truck + Tree Cupcakes -Environmental Art Show -GOAT YOGA! Noon-1pm on Founder's Green -Party Peddler Bike around campus -Earth Day Vendors/Student Orgs -Class Tree Planting Ceremony (125th Year!) 16. SoilShop Talia Clark, a NRCA Conservation Ambassador, and high school student in Waterbury conducted a free lead soil screening to residents. 17. Planet Forward 2022 Storytelling Summit Students, staff, and faculty were invited to join experts, media leaders and students nationwide to offer solutions and share narratives that address the climate crisis and other pressing issues in Oak 439 for Planet Forward's 2022 Storytelling Summit! 18-22. UConn Home and Garden Center Presentations and Outreach The UConn Home & Garden center gave several talks on pollinators including the following speeches: "Native Bees in their Natural Habitats", "Pollinators with the Chaplin Library", "Plants for Pollinator Gardens" and "HillStead Museum Bug Walks" and 2 presentations on "Good Bug Bad Bug".

How many pollinator-related events did your affiliate host or help with last year (in total)?
22

How many people attended those events (in total)?
3642

Office of Sustainability Senior Intern, Lauren Pawlowski, poses with a zero-waste bee cupcake provided by UConn Dining Services at Earth Day Spring Fling. Dining Services highlighted pollinator friendly practices as they passed out cupcakes.

Roadside sign developed at Lock 12 State Park by Sierra Ciak for the Natural Resource Conservation Academy's Cheshire Pollinator Data. This data will be used for understanding pollinator pathways in Connecticut.

Spring Valley Student farmers at Rose's Berry Farm in Glastonbury, CT. Here, they learned about sustainable, local agriculture and the importance of immigrant labor to our food systems.

Courses & Continuing Education

For-Credit Courses: ARE 1110: Population, Food, and the Environment ARE 2260: Food Policy ARE 2261: Writing in Food Policy ARE 4305: Sustainable Economic Development AGNR: Hispanic Culture and Communication in Agriculture AH 3175: Environmental Health ANSC 1645: The Science of Food ANTH 1010E: Global Climate Change and Human Societies ANTH 3200: Human Behavioral Ecology ANTH 3340: Culture and Conservation ANTH 3512: African Ecology ANTH 3523: The Origins of Agriculture BIOL 1108: Principles of Biology II BIOL 1110: Introduction of Botany EEB 2100: Global Change Ecology EEB 2208E: Introduction to Conservation Biology EEB 2222E: Plants in a Changing World EEB 2244: General Ecology EEB 2245: Evolutionary Biology EEB 2250: Introduction to Plant Physiology EEB 3203: Developmental Plant Morphology EEB 3271: Systemic Botany EEB 4120: Paleobiology EEB 4260: Ornithology EEB 5369: Current Topics on Biodiversity EDLR 1161: Husky Reads: Introducing Food and Nutrition to Children through Reading ENVE 1000: Environmental Sustainability ENVS 2000: Integrating Humans and the Environment ENVS 3100: Climate Resilience and Adaptation: Municipal Policy and Planning EVST 3200: Sustainable Community Food Systems Seminar GEOG 2400: Introduction to Sustainable Cities GEOG 3410: Human Modifications of Natural Environments HIST 2570: American Indian History HIST 3542: New England Environmental History JOUR 3046: Environmental Journalism LAND 3230W: Environmental Planning and Landscape Design NRE 1000: Environmental Science NRE 2455: Forest Ecology NRE 2600: Global Sustainable Natural Resources NRE 3245E: Environmental Law NRE 4000W: Natural Resources Planning and Management NUSC 1167: Food, Culture, and Society PHIL 1108: Environmental Philosophy PHIL 3216: Environmental Ethics PLSC 5820: Ecology and Control of Weeds SOCI 2705: Sociology of Food SPSS 1060: The Great American Lawn: History, Culture, and Sustainability SPSS 2100: Environmental Sustainability of Food

BEE CAMPUS USA™
AN INITIATIVE OF THE XERCES SOCIETY

XERCES SOCIETY
for Invertebrate Conservation

Production in Developed Countries SPSS 2110: Sustainable Plant Pest Management SPSS 2500E: Principles of Agroecology SPSS 3150: Advanced Turfgrass Management SPSS 3410: Woody Plants: Common Trees, Shrubs, and Vines SPSS 3440: Small Fruit Production SPSS 3550: Urban Plant Systems Construction and Maintenance SPSS 3610: Organic and Sustainable Vegetable Production SPSS 3820: Ecology and Control of Weeds SPSS 3830: Horticultural Entomology SPSS 3840: Integrated Pest Management —- Continuing Education Courses: Propagating Native Plants from Seeds Winder Seed Sowing Workshop Creating a Path for Pollinators and Other Wildlife by Eradicating Invasive Species: Enabling Native Plants to 'Do Their Thing' Lessons from the Smithsonian Gardens: A Pollinator Oasis & A Focus on Foliage First Grow a Meadow, Large or Small Attracting and Protecting Monarch Butterflies

How many of your for-credit courses included pollinator-related information last year?
58

How many students attended those for-credit courses?
4167

How many of your continuing education courses included pollinator-related information last year?
6

How many participants attended those courses?
220

Students at the Botanical Conservatory Greenhouses learning about the variety of research done by staff, faculty, and students in the greenhouses.

Michelle E. Hernandez '22 (CLAS) recently collected a milestone specimen for @uconn's George S. Torrey Herbarium, which now hosts the world's largest collection of plants native to the Nutmeg State.

Jake (JOUR) interviewing student plant care specialist, Olivia, in research greenhouses.

Service-Learning

Talia Clark, a National Resource Conservation Academy ambassador and Waterbury high school student, did free lead soil testing for the residents of Waterbury and Storrs. The UConn Home and Garden center hosted 5 talks and presentations in collaboration with a number of towns including Chaplin, Stratford, Simsbury, and Glastonbury. These presentations educated residents on the health and wellness of pollinators and the negative effect of pollinators and pesticides. Spring Valley Student Farm hosts a number of educational tours for the local communities about pollinator-friendly species and permaculture at the farm. They do so at every 'Farm Friday' and at other extra events. They hosted the UConn American English Language Institute, the Windham Community Food Network, Barrow School, Manchester Community College, Girl Scouts Brownie Troop, and UConn Student Health and Wellness. Spring Valley Student Farm also attended the 'Celebrate Mansfield Festival' where they had a booth that discussed the importance of organic farm practices. Here, they gave away over 1000 native wildflower seedlings to the local community.

How many service-learning projects did your campus host and/or support to enhance pollinator habitat on and off-campus?
12

How many students participated in service-learning projects last year to enhance pollinator habitat on or off-campus?
392

Spring Valley student farmers hosted the UConn American English Language Institute to discuss the number of sustainable and organic practices at the farm.


Spring Valley student farmers showing off their booth with the local Mansfield community.

Flyer distributed for Talia Clark's free soil testing.

Educational Signage

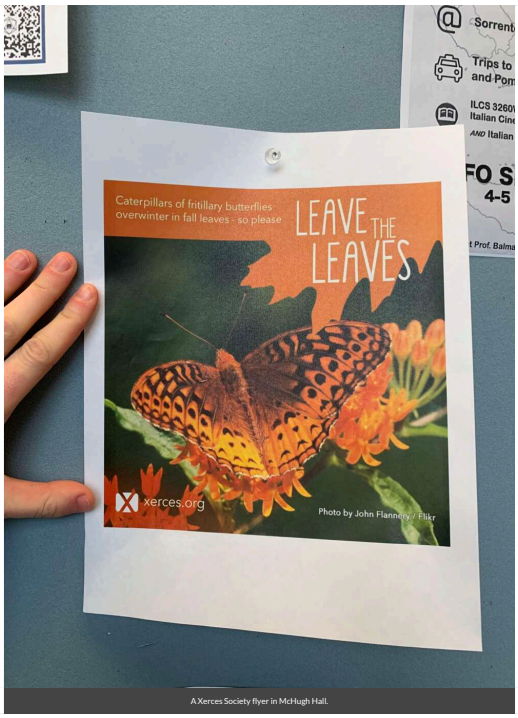
No new permanent signage was installed this year. A variety of temporary signage was placed around campus advocating

for the health of pollinators. Flyers designed by the Xerces society were posted all around campus in buildings like McHugh Hall. Such spaces have high visibility so many students see and interact with these posters.

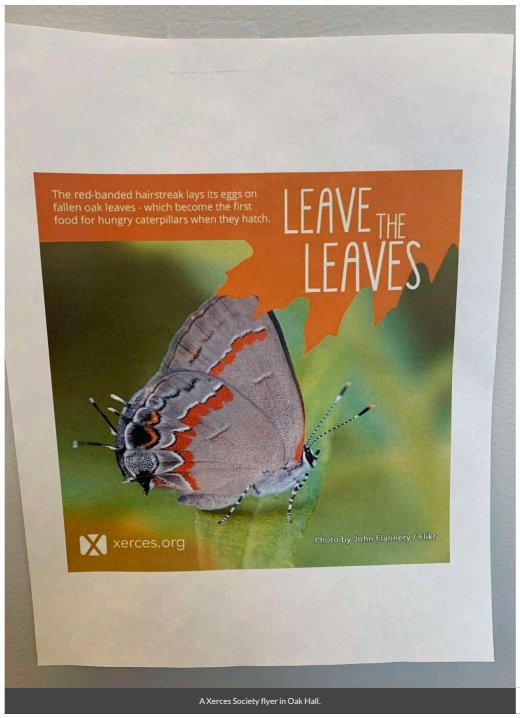
Number of permanent interpretive/educational/Bee Campus USA signs installed to date?
10

Number of temporary interpretive/educational/Bee Campus USA signs installed last year?
20

One of UConn's permanent signs in McMahon Dining Hall.



A Xerces Society flyer in McHugh Hall.



A Xerces Society flyer in Oak Hall.

Policies & Practices

The UConn Spring Valley Student Farm (SVSF) is located about 2 miles from the Storrs campus and is a collaborative venture between Dining Services, Residential Life, EcoHouse Learning Community, First-Year Programs, the College of Agriculture, Health and Natural Resources, and the Office of Sustainability. SVSF houses 11 student farmers each year who grow crops, raise bees, and host educational events and opportunities for UConn and the local community. They use only organic methods for growing and pest management and actively work to enhance pollinator habitat through milkweed and wildflower plantings. Across the Storrs campus, UConn Landscape Services follows the UConn IPM plan, which was last updated in November 2019. The staff tries to use plant varieties that attract pollinators across different areas of campus. Recently, UConn has focused on wildflower and native plantings on Discovery Drive. They leave

unmaintained plots while also removing invasives. In the past, they have collaborated with student organizations to develop pollinator gardens; they ask student organizations care for them over time. For their signature plantings on campus (Mansfield island, NE island, and Gulley circle) they try to avoid pesticides/herbicides unless necessary. As indicated in the UConn IPM plan: "Preventive herbicide applications may only be performed when the previous year's monitoring has indicated a likelihood of weed infestation that cannot be deterred by biological pest control methods. Preventive applications should be made only to specific problem areas, such as roadside curbs. Priority is given to those herbicides having the lowest toxicity, taking into consideration the method and frequency of application and the risk of exposure to building occupants." UConn Landscape Services follows these guidelines for best practices and maintains campus landscaping with human and pollinator health in mind.

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

In your city or campus, are any policy initiatives underway to further protect pollinators, people or waterways from pesticides?
UConn Landscape Services follows guidance from the IPM plan, but at this time there are no policy initiatives underway related to the use of pesticides. They did discontinue the use of neonicotinoid insecticides on the trees and haven't been using them on the lawn, however there are times when Landscaping may do spot treatments.

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?
Our affiliate has not yet pursued training on ecologically-based IPM in the recent year, but we will try to focus on this for the future. UConn Landscape Services last updated their IPM plan in November 2019, so this department will likely review it again within the next few years, if not sooner.

Integrated Pest Management Plan: UConn IPM Plan Nov 2019.pdf
https://ecohusky.uconn.edu/wp-content/uploads/sites/2041/2020/02/UConn-IPM-turf-and-ornamental-Final_112019.pdf
Recommended Native Plant List: Native Pollinator Plants List CT.pdf
https://nenativeplants.psla.uconn.edu/wp-content/uploads/sites/3415/2021/11/Some-Pollinator-Plants-for-Connecticut..pdf
Recommended Native Plant Supplier List: Native Pollinator Plants Suppliers List.pdf

https://beecityusa.org/wp-content/uploads/ultimatemember/187/file_c8f6bbcc_fcf14cf79d2d6ad62e69fe9eed72edf5b3869086.pdf

Wild Bloodrot for pollinators blooming just off Discovery Drive in the Hillside Environmental Education Park (HEEP).

Learn More

https://sustainability.uconn.edu/bee-campus-usa/
sustainability@uconn.edu

https://www.facebook.com/UConnOS/

BEE CAMPUS USA
AN INITIATIVE OF THE XERCES SOCIETY

XERCES SOCIETY
for Invertebrate Conservation

https://www.instagram.com/uconnos/?hl=en
https://twitter.com/uconnos?lang=en

UConn Bee Campus USA logo.

BEE CAMPUS USA™
AN INITIATIVE OF THE XERCES SOCIETY

XERCES SOCIETY
for Invertebrate Conservation