

Bee Campus USA - Northeastern University

Report on 2024

Pollinator Habitat Creation & Enhancement

Please describe pollinator habitat creation or enhancement projects in your community in 2024, and whether your committee hosted them or not.

The Northeastern Arboretum oversees both the campus pollinator committee and much of the landscape work on campus. There have been multiple significant pollinator projects since our accreditation, most importantly the establishment of a pollinator garden surrounding the apiary we established in 2023. We currently have three honeybee hives and a wild bee hotel there, and to support these pollinators we planted a network of beds with herbaceous plants like Joe Pye weed, black-eyed susan, goldenrod, catmint, and more, along with trees like hawthorn and viburnum. We also completed a redesign of our koi pond, which had previously been bordered with all turf. Now, the site has a variety of flowering shrubs, including many cultivars of azalea and sweet pepperbush, and other pollinator-friendly material. In 2023, the arboretum worked together with professor Valencia-Mestre, who sits on our committee, to establish sustainable agriculture beds on campus. These four beds are planted, tended, and harvested by her Sustainable Agriculture class, maintained in accordance with IPM principles, and includes flowers as co-plantings. Larger capital projects on campus have also benefited pollinators, including the finishing of a large science and engineering building (located on a former parking lot) which features a well-planted bioswale at street level and a roof garden with hardy natives like cranberry and blueberry.

How many habitat projects did you help to create or enhance in 2024?

7

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

26

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

7

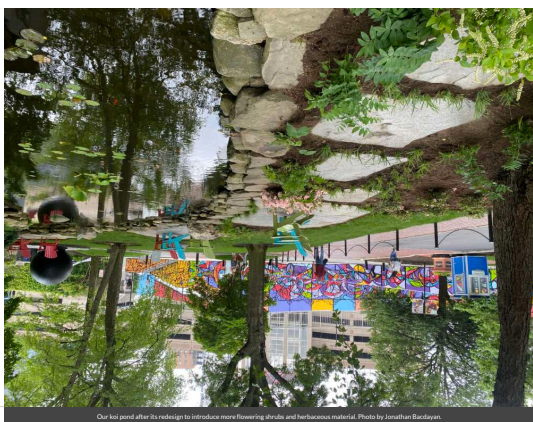
How many total square feet of habitat were created or enhanced?

2400

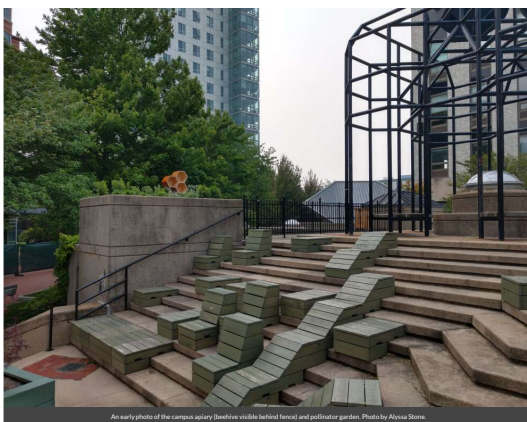
Please check all that describe the habitats your affiliate helped to create or enhance last year with pollinator benefit in mind.

- Flower garden

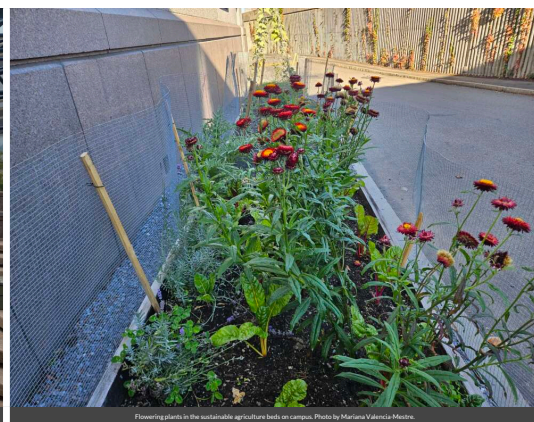
- Vegetable garden
- Orchard
- Herb garden
- Native pollinator-friendly tree planting
- Native pollinator-friendly shrub border/hedgerow planting
- Rain garden/bioswale



Our hot pond after its redesign to introduce more flowering shrubs and herbaceous material. Photo by Jonathan Backdayan.



An early photo of the campus apiary (beehive visible behind fence) and pollinator garden. Photo by Alvinna Stone.



Flowering plants in the sustainable agriculture beds on campus. Photo by Mariana Valencia Mestre.

Education & Outreach

Please describe pollinator conservation events or outreach activities in your community in 2024, indicating whether your committee hosted them or not.

The pollinator committee and groups associated with it have hosted many public pollinator events since our accreditation. Our contracted beekeeping company hosts 3 events per year, which have included honey extraction and beeswax candle making, and which students and staff can sign up for on a first-come-first-serve basis. These are very popular and fill up quickly every time! They also perform public hive visits, where community members can ask the beekeeper questions and observe their work. Alongside that hive are multiple hives kept by our Campus Bee Society, which hosts many events each semester, including introductions to beekeeping, workshops, hive visits, and pollinator education events, all run by and for Northeastern students. The Northeastern Arboretum does tabling on campus each year during Pollinator Week, where we talk with students about our pollinator-focused work and hand out native coneflower seeds, themed stickers, and pollinator info sheets.

How many pollinator-related events or outreach activities did you host or help with in 2024 (in total)?

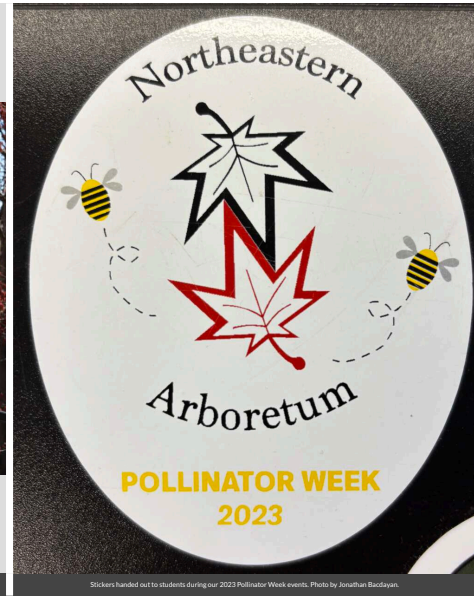
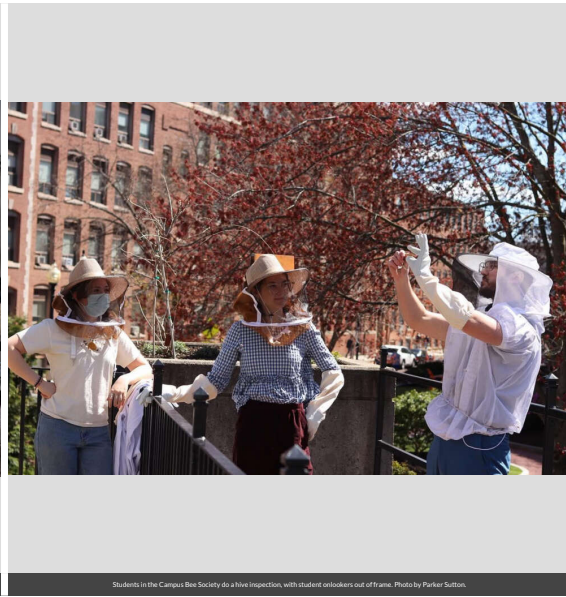
19

How many people attended those events (in total)?

300

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

1





Even in winter months, signage at our campus apiary and pollinator garden reminds people of their presence and importance. Photo by Jonathan Bacdayan.



Interpretive Signage



Conceptual work for interpretive signage we hope to put up this summer. By Indira Holdsworth.

Curriculum, Continuing Education, & Service Learning

Please describe the curriculum your campus engaged in 2024, indicating whether it was part of a for-credit course or continuing education.

The Department of Marine and Environmental Sciences has a number of classes which include pollinator-specific elements in the curricula, namely: Sustainable Agriculture, Landscape and Restoration Ecology, Food Systems and Sustainability, and Wildlife Ecology. Sustainable Agriculture (taught every spring/summer) involves pollinators through the lens of natural pest management and pesticide reduction, which students get to practice hands-on with raised beds on campus. Landscape and Restoration Ecology (taught every fall) examines the importance of pollinator habitat and how it can be created. In fall 2024, this class did a campus-wide survey of pollinators, and the species and location information they gathered will help determine where new habitat should be prioritized. Food Systems and Sustainability (offered every semester) goes over the role pollinators play in food system, how modern pesticides harm them, and what attempts to sustainably incorporate pollinators into food systems look like. Wildlife Ecology (taught every spring) also teaches the importance of pollinators and the role they play in ecosystems. Northeastern's College of

Professional Studies does not have any continuing education curricula that involve environmental topics.

How many of your for-credit courses included pollinator-related information in 2024?

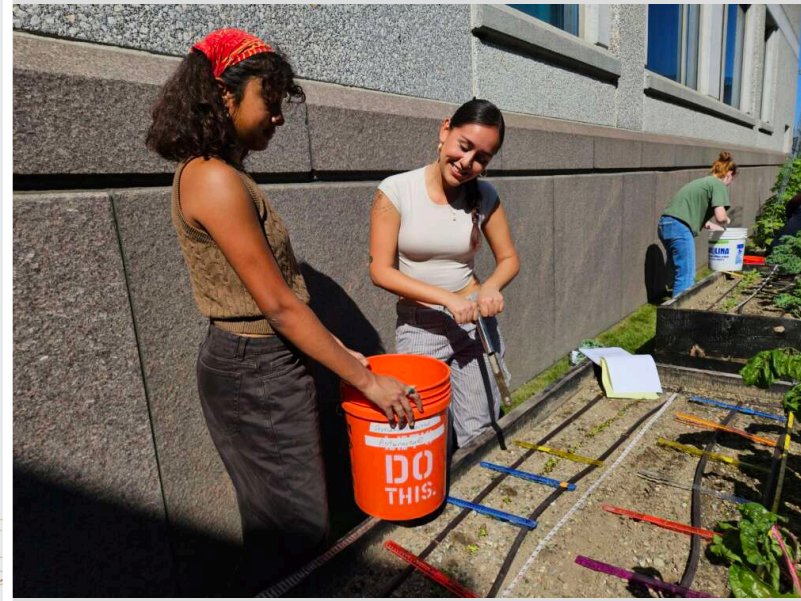
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How many students attended those for-credit courses?

306

Name	Number	Name	Number
Bombus impatiens	42	Bombus griseocollis	2
fly	30	eastern hornet fly	2
Apis mellifera	19	Hylaeus sp.	2
Lasioglossum sp.	11	M. Sculpturalis	2
Agapostemon virescens	8	Marsh fly	2
Ceratina sp	8	Quebec Sweat Bee	2
House fly	5	Toxomerus marginatus	2
Syrirta pipiens	5	Black fly	1
Bee	4	Bombus bimaculatus	1
Halictus sp.	4	Cabbage White Butterfly	1
wasp	4	Common tiger fly	1
X. Virginica	4	Delphinia picta	1
yellow jacket	4	green fly?	1
M. bimaculatus	3	Hover fly	1
Oblique stripetail	3	perplexing bumblebee	1
		Tiger Fly	1
		transverse banded flower fly	1

The results of a Fall 2024 pollinator survey conducted by the restoration ecology class. Data from Stephanie Eby.



Students planting flowers (Amaranthaceae and asteraceae) in one of the Sustainable Agriculture beds, spring 2024. Photo by Mariana Valencia-Mestre.



Students posing with Boston Park Rangers after volunteering to rescue an exposed hive of wild bees on Boston Common. Photo by Steve Schneider.

Policies & Practices

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

Northeastern has an Integrated Pest Management structure in place, based on a model provided by the Xerces Society and the recommendations of the UMass Amherst Agricultural Extension. This includes regular pest scouting, use of non-toxic and non-chemical pest control options, plant health-based action thresholds, and the elimination of pesticide use on sensitive areas of campus, like around our apiary.

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

A more in-depth IPM program is being developed as part of a broader effort to develop a Landscape Management Plan and a Plant Healthcare Plan, which are underway as of winter 2025.

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

Staff from the Arboretum have attended webinars from the Xerces Society and other sources about this topic.

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

- 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
- 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
- Encouraged developers and private landscapers to source plants using “Buying Bee-Safe Plants” methods recommended by Xerces Society. (See <https://xerces.org/publications/fact-sheets/buying-bee-safe-plants>)
- Encouraged developers and private landscapers to source plants that were not treated with neonicotinoids

Committee Photo



Stephen Schneider
Director, Grounds & Horticulture



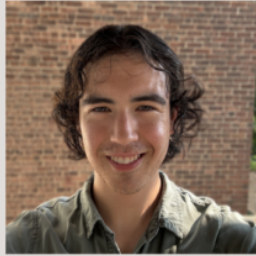
Dr. Stephanie Eby
Teaching Professor



Dr. Mariana Valencia-Mestre
Teaching Professor



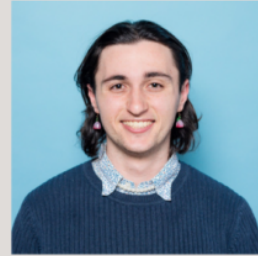
Indira Holdsworth
Plant Recorder



Jonathan Bacdayan
Plants Records Assistant



Connor Martin
President, Campus Bee Society



Parker Sutton
VP, Campus Bee Society

The Campus Pollinator Committee, 2023-2025 (headshots courtesy of respective individuals)

Learn More

Integrated Pest Management Plan: [IPM Plan Draft-2.docx](#)

Recommended Native Plant List: [The Northeastern Arboretum's Pollinator Planting Guide.pdf](#)

Recommended Native Plant Supplier List: [The Northeastern Arboretum's Pollinator Planting Guide.pdf](#)

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