

Bee Campus USA - Vassar College

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.

In the fall of 2023, volunteers helped plant over 200 native trees and shrubs at a riparian buffer restoration site alongside a stream on the Preserve. The restoration project will not only improve water quality and reduce erosion, but also promote a native habitat for plants and animals, including pollinators. Bee Campus Committee members continued participating in a local Pollinator Pathway initiative, collaborating with our local municipality to promote pollinator habitats. We also propagated native wildflowers that were given away to local community groups and used on campus to supplement current pollinator gardens. In 2023, the Foundation Plots were enhanced to amplify native seed for campus restoration projects, pollinator gardens, and to share with groups in the community. The Foundation Plots were planted with local ecotypes of Blue Lobelia, Late Blooming Purple Aster, and Black Eyed Susans. In 2023, native grasses and wildflowers were planted along the edge of the Willow Labyrinth located on the Preserve, which has been designated as a pollinator garden. Bee Campus members maintained local pollinator gardens and habitats on campus at Wimpfheimer nursery school, the Environmental Cooperative Barn, the Priscilla Bullitt Collins Field Station, Sunset Lake, and the Kenyon tree planting.

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

3

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

183

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

6

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

61900

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

- Flower garden
- Natural area with tree snags and stumps, and bare areas for ground nesting species

- Meadow
 - Invasive/exotic plant species removal for habitat improvement
 - Native pollinator-friendly tree planting
 - Native pollinator-friendly shrub border/hedgerow planting
-

Education & Outreach

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

1) K-12 Pollinator Education Programs Summer programs were held at the Riparian Buffer site on the Preserve, allowing opportunities for different groups of students to see pollinators and other insects up close and to learn about the meadow ecosystem. The BioBlitz event at the Riparian Buffer held on 7/18 and 7/19 involved 79 students from different community programs, as well as 121 other participants. 2) Tours: During 2023, several tours were given of the Preserve at Vassar restoration site which highlighted plantings of native trees, shrubs and herbaceous species. These events included reunion, class visits, prospective transfer students, and Vassar Families Weekend. Approximately 90 people attended these events in total. 3) Riparian Buffer Planting Tree plantings on 9/18, 9/19, 9/20, and 9/21 helped begin restoration efforts at the Preserve's Riparian Buffer site. 117 people helped plant trees. Invasive species removal events: 40 total volunteers helped remove invasive species from the Riparian Buffer site during events held on 3/17, 4/20, 6/9, 6/26, and 10/17. 4) Willow Labyrinth planting events: Continued work on the Willow Labyrinth in 2023 included specific pollinator-friendly planting events. 14 people assisted with wildflower plantings on 5/4 and 5/4. 11 people assisted with native grass plug plantings on 11/2 and 11/3.

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

19

How many people attended those events (in total)?

472



Vassar students plant trees in the Riparian Buffer area in Spring 2023. pc: Adam Deen



Vassar students plant native pollinator-friendly wildflowers that were propagated from seeds collected on the Preserve at Vassar, Spring 2024. pc: Jennifer Rubbo

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.

Conservation Biology Biol/ENST 352 Uses a multidisciplinary approach to study how to best maintain the earth's biodiversity and functioning ecosystems. We examine human impacts on biodiversity and ecosystem function and discuss how to develop practical approaches for mitigating those impacts. We start the semester by assessing the current human footprint on global resources, asking questions about what we are trying to preserve, why we are trying to preserve it, and how we can accomplish our goals. We critically examine the assumptions made by conservation biologists throughout, using case studies from around the world to explore a range of perspectives. Discussion topics include conservation in an agricultural context, the efficacy of marine protected areas, the impact of climate change on individual species and preserve design, restoration ecology, the consequences of small population sizes, conservation genetics, the impacts of habitat fragmentation and invasive species, and urban ecology. Margaret Ronsheim. Ecology BIOL 241 Population growth, species interaction, and community patterns and processes of species or groups of

species are discussed. The course emphasizes these interactions within the framework of evolutionary theory. Local habitats and organisms are used as examples of how organisms are distributed in space, how populations grow, why species are adapted to their habitats, how species interact, and how communities change. Field laboratories at Vassar Farm and other localities emphasize the formulation of answerable questions and methods to test hypotheses. Lynn Christenson. Biol 208 Plant Diversity and Evolution Plant structure and function is examined in a phylogenetic context. Emphasis is placed on adaptations to novel and changing environments as well as plant-animal and plant-fungal coevolution, including plant-pollinator and plant-herbivore interactions. Laboratories include comparative study of the divisions of plants and the identification of locally common plants and fungi in the field. Margaret Ronsheim. BIOL 393 - Restoration Ecology utilizes our ecological understanding of population, community and ecosystem dynamics to reverse environmental damage caused by centuries of unsustainable human activities. In this Intensive we will be utilizing the principles of restoration ecology to implement a series of long-term restoration and management projects on the Preserve. These restoration projects focus on maintaining and improving overall ecosystem resilience, restoring native plant communities, and monitoring changes in ecosystem health over time. These projects also provide opportunities to engage with the local community through outreach efforts and educational programming. Margaret Ronsheim

How many of your for-credit courses included pollinator-related information in 2023?

4

How many students attended those for-credit courses?

62

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

4

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

117

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

Riparian Buffer Planting – This project seeks to repair and restore a riparian (aka stream-side) buffer along an impounded tributary of the Casperkill Creek at the front of the Preserve. By planting native trees and shrubs, we will expand the riparian buffer and diversify its edge. This will improve water quality by reducing erosion, sedimentation, and runoff and will provide new habitat for plant and animal species, including pollinators. Student volunteers and classes assisted with the plantings over 4 days. Over 200 trees and shrubs were planted at the site. 7 students from BIOL 393, Restoration and Management assisted in the Riparian Buffer Planting project.

Policies & Practices

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

In 2023, Vassar maintained an Integrated Pest Management Plan. Vassar's IPM plan uses pest management when and where needed, not blanket coverage. An Integrated Pest Management plan is a set of guidelines which provides a framework for sustainable management of pests by using educational, biological, physical, and chemical tools to reduce both economic, environmental, and health risks. In this document, "pests" refers to both animals and plants that pose some risk to the college or campus users. This includes organisms such as invasive vines, insects and mammals that are destructive to landscaping, natural areas, and infrastructure. At Vassar College, the goals of the IPM program are the following: 1. Control pests which pose a threat to campus users, landscaping, and the ecology of campus natural areas. 2. Prevent pest caused damages to buildings and infrastructure. 3. Protect the health of the community by employing the least-toxic strategies for pest control. 4. Reduce the use of chemicals known to be toxic to both humans and the environment. 5. Create protocols for applying pesticides in secured and targeted areas. 6. Establish standards for what context pesticides should be used given that all other protocols have either failed or are known to be ineffective.

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

n/a

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

no

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

- Implemented or maintained a written IPM plan

Learn More

Integrated Pest Management Plan: [Vassar College IPM_FINAL.pdf](#)

Recommended Native Plant List: [nativeplantspt2.pdf](#)

Recommended Native Plant Supplier List: [nativeplantsupplierword.docx](#)

[https://offices.vassar.edu/environmental-cooperative/
thecoop@vassar.edu](https://offices.vassar.edu/environmental-cooperative/thecoop@vassar.edu)

https://instagram.com/@eco_vc