Bee Campus USA - Vassar College

Report on 2022

Pollinator Habitat Creation & Enhancement

1) Bee Campus Committee members participated 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. 2) Founders plots were established in collaboration with the Ecotype Project, Bee Campus members planted three plots with local ecotypes of black – eyed susans, late blooming aster and great blue lobelia. These plots will be used as local seed sources for both on campus and community projects. 3) The Willow Labyrinth located on the Preserve has been designated as a pollinator garden. Areas adjacent to the Labyrinth were prepped and will be planted in 2023 with native grasses and wildflowers. In 2022 Bee campus members helped to prep the area that will be planted. 4) Bee Campus members maintained local pollinator gardens and habitats on campus at Wimpfheimer nursery school, Sunset Lake, and the Kenyon tree planting. 5) Restoration continues on the Preserve at Vassar at an old large-scale composting area that we are working to restore to a forested area. Bee Campus Committee members are intimately involved in this project. Within this area herbs and shrubs were planted near a pre-existing native meadow. Over 400 native trees and shrubs were planted in 2022 in an area adjacent to this restoration area. The plantings complemented other restoration efforts, including soil amendments, constructing three vernal pools, tree plantings, and native wildflower plantings in previous years. An additional fenced area is managed heavily and has taller fences to allow the growth of rare plants without deer browse or invasive takeover. The overall goal of the plantings is to supplement the restoration efforts currently taking place on-site which will ultimately connect the forest corridor for the health of the preserve as a whole and the animals that utilize it.

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

6

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

5000

How many volunteers helped with those projects?

85

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

- Flower garden
- Meadow

- 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

Vassar student Ethan Nurick, holds asters that will be planted in one of Vassar's pollinator founder's plots. pc:Vanessa Vazquez

Vassar student Duvan Aaron Lopez standing next to recently planted founder's plot of asters. pc: Vanessa Vazquez

Education & Outreach

Tree planting event – May 4,5 2022 – 48 student volunteers helped plant 403 native trees and shrubs on the Preserve at Vassar. Reforestation project on the Preserve at Vassar to connect current forested habitats and project sensitive streams and vernal pools. This project was part of the NYS DEC Trees for Tribs program. Planted 403 native shrubs and trees. 48 volunteers. Movie Screening – My Garden of 1000 Bees, June 22, 2022 – 15 participants During 2022, several tours were given for students and Vassar families of the Preserve at Vassar restoration site which includes plantings of native trees,

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shrubs and herbaceous species. These events included class visits, first year orientation and families weekend events. Approximately 150 people attended these events in total. Invasive species removal 10/8/22, and 10/18/22. 21 students from Oakwood Friends school and Vassar College removed invasive vines to improve habitat on the Preserve.

How many pollinator-related events did your affiliate host or help with last year (in total)?
8

How many people attended those events (in total)?
215

Courses & 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.

How many of your for-credit courses included pollinator-related information last year?
3

How many students attended those for-credit courses?
55

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

How many participants attended those courses?

Service-Learning

The Environmental Cooperative hosted a series of gardening work days at College Hill Park, a local city park in Poughkeepsie. Attendees help with maintenance and planting of native pollinator species in the Lown Memorial Rock Garden. A local historic landmark in the city. The Cooperative worked closely with a local non-profit, the Revive College Hill Park Coalition to co-host 30 gardening days from April to November 2022. On average 5-7 people attended each event. Approximate 15 Vassar students attended these event over the course of the season.

How many service-learning projects did your campus host and/or support to enhance pollinator habitat on and off-campus?
30

How many students participated in service-learning projects last year to enhance pollinator habitat on or off-campus?
15

Educational Signage

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

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

Policies & Practices

Goals of Vassar's IPM plan: 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. The Vassar's IPM plan uses pest management when and where needed, not blanket coverage. Vassar has used the goals listed above this past year.

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

- Implemented or maintained a written IPM plan
- Encouraged developers and private landscapers to source plants 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?
We are currently exploring the idea of creating land management guidance for the campus that would apply to new capital projects as well as stewardship of what already exists. Currently, new capital projects go through the Bee campus committee for review of species used in landscaping projects.

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 grounds department foreman, Evan Lasher, attended two trainings in 2022/23: "Going Native" with Dan Wilder by Reearth Boston on 3/15/22 and IPM training by NY State Turf and Landscape Association, 2/22/23.

Integrated Pest Management Plan: Vassar College IPM_FINAL.pdf

Recommended Native Plant List: nativeplantspt2.pdf

Recommended Native Plant Supplier List: nativeplantsupplierword.docx

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Learn More

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