

Bee Campus USA - Vassar College

Report on 2021

Pollinator Habitat Creation & Enhancement

The Vassar Bee Campus Committee with support from the The Environmental Cooperative at the Vassar Barns held a pollinator garden maintenance and invasive species removal event on 10/1/21. 10 students at Vassar college joined Environmental Cooperative Director Jen Rubbo and Environmental Outreach and Education Assistant Lucy Kolpa for a morning of maintenance at the Sunset Lake Pollinator Garden, located on Vassar's campus. Students worked in the pollinator garden to remove weeds and carry out fall cleaning work. The garden remains in very good condition. Restoration continues on the Vassar Farm and Ecological Preserve 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. Shrubs were planted within 3 fenced-in areas for protection from deer. Herbaceous species were also planted on a barren area that was once used to dump silt from construction on Vassar College's main campus. The plantings complemented other restoration efforts including: soil amendments, constructing three vernal pools, and planting 200 tree saplings and shrubs. Additional herbaceous species were also planted in a pre-existing fenced area for rare plant protection. This fenced area is managed heavily and has taller fences to allow the growth of the 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.





Vassar students plant pollinator friend plants at a restoration site on Vassar's Campus. PC Karl Rabe 2021

Education & Outreach

Members of Vassar's Bee Campus Committee hosted pollinator garden maintenance and invasive species removal events on 10/1/21 and 10/15/21. Fifteen students at Vassar college joined Environmental Cooperative staff for an afternoon of maintenance at the Sunset Lake Pollinator Garden, located on Vassar's campus. Students helped to execute a fall clean up, weeding, and also helped with the removal of invasive species from nearby tree plantings. On May 24, 25 and 26, members of the Bee Campus committee hosted planting events to plant native species received from the Xerces Society and Bee Campus USA. Over several days about 20 students and staff helped to plant 628 transplants in a restoration site on the Vassar Farm and Ecological Preserve. During 2021, several tours were given for students and Vassar families of the Ecological preserves restoration site which includes plantings of native trees, shrubs and herbaceous species. These



events included class visits, first year orientation and families weekend events. Over 250 people attended these events in total. Bee Campus Committee members participated in a local Pollinator Pathway initiative, collaborating with our local municipality to promote pollinator habitats. As part of this we implemented an online education program with 4 local schools that are working on installing pollinator gardens in their school yards. We also propagated and planted swamp milkweed to be used as a future seed source to support other local efforts.

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.

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 25 gardening days from April to November 2021. On average 5-7 people attended each event. Approximate 12 Vassar students attended these event over the course of the season.





Vassar students and community volunteers working at the College Hill Park pollinator garden in the City of Poughkeepsie NY. PC Jen Rubbo 2021

Educational Signage

A pollinator habitat sign was installed near the planting completed with support from Xerces and the Bee City USA

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.

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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