

Bee Campus USA - University of Wisconsin-Green Bay

Report on 2022

Pollinator Habitat Creation & Enhancement

Major steps were taken toward the restoration of oak savanna, shallow wetlands, and gallery forest at the Wequiock Creek Natural Area. CCB staff and students, in collaboration with UWGB faculty members Dr. Amy Wolf and Dr. Karen Stahlheber and the Northeast Wisconsin Land Trust, are implementing a multidimensional ecological restoration initiative. During spring 2022, we planted approximately 5,500 native tree and shrub saplings representing 13 species that once occurred or still occur (in reduced numbers) in the gallery forest and floodplain. The NRDA grant supported 12 separate contracts with environmental consulting firms to manage invasive species and to help with forest shrub and tree plantings. Three former agricultural fields totaling about 33 acres (excluding including the wetland restorations) were planted with a mixture of 32 native grasses and forbs in late October 2022. This historic planting led by CCB staff ecologists Andrew LaPlant and Bobbie Webster included UW-Green Bay faculty collaborators Howe, Wolf, and Stahlheber, other CCB staff, and student employees Patrick Brodhagen and Andrew Bowker; other student and community volunteers; and approximately 25 students from Dr. Wolf's Conservation Biology class. A different mixture of 26 sedges, grasses, and wetland forbs was planted in the restored wetland excavations, later augmented by 3,500 mature plants from Marshland Transfer I Omro. During 2022, 850 "plugs" of specially targeted native plants obtained from Stone Silo Nursery in De Pere were planted in both the wetland margins and in the grassland/savanna restoration. During summer 2022, 12 student employees engaged in extensive monitoring and restoration activities at the Wequiock Creek Natural Area. In addition to assisting with native plantings, these students conducted baseline assessments and monitoring of native bees, reptiles and amphibians, birds, mammals (including bats), butterflies, dragonflies, and plant communities. Several of the students now are contributing to the development of signage and outreach materials. Invasive species were treated on about 35 acres of affected areas in the Cofrin Arboretum. Target species included *Phragmites australis*, garlic mustard, buckthorn, Japanese honeysuckle, teasel, non-native thistles, Queen Anne's lace, crown vetch, and dame's rocket. CCB staff contributed to a plan for habitat restoration at the former Shorewood Golf Course property. Opportunities exist to replace non-native plants with native grasses and forbs in areas not used for athletics and recreation. (Funding was obtained in September 2022 to begin the restoration process.) Students from Dr. Amy Wolf's Conservation Biology class worked with Andrew LaPlant and Bobbie Webster to establish native forbs in abandoned sand traps during 2021 and 2022.

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

5

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

1720820

How many volunteers helped with those projects?

50

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

- Flower garden
 - Meadow
 - Invasive/exotic plant species removal for habitat improvement
 - Native pollinator-friendly tree planting
 - Native pollinator-friendly shrub border/hedgerow planting
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Education & Outreach

During Pollinator Week (June 20-26, 2022), Dr. Wolf and a student hosted 2 events open to the community. One event was a Pollinator Walk (15 community members) in the Keith White Prairie during Pollinator Palooza, and the other was a Monarch Tagging event with students (21 students). In the fall, a native prairie seed collection event was hosted during the annual Day of Service, engaging about 20 faculty, staff, student, and community members in volunteering. Subsequently, about 10 students and faculty/staff were held to help process the seeds.

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

4

How many people attended those events (in total)?

56

Courses & Continuing Education

For-credit: ENV SCI 469. Conservation Biology, taught by Dr. Amy Wolf Overview of the major issues and ecological principles underlying the field of conservation of biology, including patterns and measurement of biological diversity from genetic to community scales. BIO 306 Principles of Ecology, taught by Dr. Amy Wolf Ecological principles governing interactions of plants and animals in their physical and biotic environments. Focuses on organisms and their environment, populations, communities, ecosystems, and global dimensions. Continuing Education through UWGB's Lifelong Learning Institute (1) The Mysteries of the Monarch Butterfly Every fall, millions of monarchs make their way to central Mexico for

the winter and every fall hundreds of thousands of tags are placed on monarchs to help scientists answer questions about their migratory behavior. Naturalist and 20+ year monarch researcher, Jessica Miller, will teach participants about monarch biology, population trends, testing, tagging, and one of the coolest phenomena on Earth, monarch migration. (2) Monarch Butterfly Biology and Conservation Monarch butterfly populations have been declining over the last 20 years. It is important to move beyond documenting this decline and toward responding to the challenge posed by monarch conservation and insect conservation in general. Karen will describe the amazing biology of migratory monarchs, how citizens and scientists are documenting monarch numbers across their migratory cycle, and what the Arboretum and other individuals and organizations are doing and can do to preserve this charismatic insect for generations to come.

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

2

How many students attended those for-credit courses?

45

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

2

How many participants attended those courses?

49

Service-Learning

None reported, though it's possible there were some completed.

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

Educational Signage

2 original. 2022: a few signs added in Arboretum and in Sand Prairie in Shorewood.

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

2

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

3

Policies & Practices

Restarting conversations with new staff

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

Restarting conversations with new staff

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?

Restarting conversations with new staff

Integrated Pest Management Plan: [IPM Program.docx](#)

Recommended Native Plant List: [Native Pollinator Plants Wisconsin.pdf](#)

https://www.uwgb.edu/UWGBCMS/media/Sustainability/images/homepage/Native-Pollinator-Plants_Wisconsin_1.pdf

Recommended Native Plant Supplier List:

<https://www.uwgb.edu/sustainability/bee-campus-usa/>

Learn More

<https://www.uwgb.edu/sustainability/bee-campus-usa/sustainability@uwgb.edu>

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