Bee Campus USA - Washtenaw Community College

Report on 2020

Pollinator Habitat Creation & Enhancement

1. We enhanced our nature trails and native planting areas on campus by removing invasive species, timed mowing to control perennial weeds, and allowing the dried vegetation to remain all winter to decompose and return to the soil. 2. We allow dead trees & stumps to remain on the forest floor after dropping any dangerous hazard trees and also placed wood chips in the Food Forest area to reduce invasive and exotic plants from overgrowing the edible plants. 3. Installed 4 new deciduous flowering trees. 4. We assisted with the installation of a pond observation deck along the nature trail to serve as an outdoor classroom and opportunity for learning about native plants and pollinators. 5. Installed approximately 9000 annual spring flowers, including many species that support pollinators. 6. All other planned garden projects were postponed due to Covid-19. 7. Food Forest --- The Students for Sustainability club planted kale, garlic, lilies, apples and shitake mushrooms in the 37' X 100 ' Food Forest. We were limited by money and planted/transplanted what we already had in our gardens. Student volunteers researched and planned the forest, wrote grant proposals, saved cardboard for mulching, weeded, mulched, raked, watered, dug, planted, harvested and cooked! We also had tremendous support from the Grounds Department in lending us equipment, expertise, and their time and energy to prepare the food forest.

Volunteers from the Union Sportsmen's Alliance and Local 190 installed a new overlook deck adjacent to one of WCC's ponds and connected nature trails, for classroom and leisure activities.

Various landscape beds throughout WCC are planted with thousands of annual flowers each spring, which are visited by different types of pollinators.

Volunteers from the Students For Sustainability Club and members of the community established the Student Food Forest starting in 2019. Even though we were not permitted to work on campus during the pandemic, the Student Food Forest still looks great. Here are our 3 apple trees setting buds and we also had crops of garlic, lilies and shitake mushrooms. Photo credits, 2020, Emily Thompson.

Education & Outreach

The WCC Bee Campus USA Committee scheduled eight events from late fall 2019 through 2020. The events included Take a Walk on the Wild Side, Natural Pollinators Walk, WCC Welcome Day Bee Campus promotion table, the viewing of the documentary The Pollinators during STEAM Week 2020, Bee Hotel Workshop, and a virtual program Bee Friendly Fall 2020. The Natural Pollinators Walk speaker, Greg Vaclavek, a native species expert, led an educational nature walk through the WCC nature area for students. He identified pollinator-attracting plants native to Michigan. Two programs canceled due to COVID-19 were Bee Hotel Workshop March 2020, and the Earth Day April 2020 campus event. Each event focused on educating students, campus constituents, and community members about pollinators and the importance of their role in food production as well as their current state of decline and what we can do to support our pollinators. The Fall 2020 Bee Friendly virtual panel discussion emphasized bee ecology, native bee houses and plants, campus bee life, bee gardens, bee friendly pesticides, native bee species, and many other topics. The pollinator friendly habitat webinar was a collaboration of many WCC departments included Dr. Emily Thompson (Biology and Environmental Sciences) and David Wooten (Biology), Dr. Kimberly Hill-Edwards (Environmental Sciences) and Monica Milla (WCC Community Enrichment), Holly Herman (Landscape and Grounds), and Sandy McCarthy (Librarian). The event also included a virtual discussion and tour of the WCC bee hive located at the Hoop House. In fall 2020, the annual Tree Campus USA Tree Walk was replaced with a virtual tree campus walk tour by Campus Grounds highlighting our campus trees and pollinators.

Making the World Safer for Pollinators
Bee Campus USA
One Campus at a time
An initiative of the Xerces Society

XERCES SOCIETY
for Invertebrate Conservation

Greg Vaclavek, Natural Pollinators Walk September 2019

STEAM Week 2020 viewing of the award winning documentary The Pollinators

Bee Friendly: Fall 2020 virtual presentation by the WCC Bee Campus USA team

Service-Learning

The Bee Campus USA service learning projects included projects from Washtenaw Technical Middle College, WCC Students 4 Sustainability (S4S), and the Seed Library. Washtenaw Technical Middle College (WTMC) Hoop House Flower Garden- Students planted three outdoor boxes with a variety of bee friendly plants that bloom at different times of the year. The project was canceled due to COVID-19. Plans are in place to resume fall for 2021. WCC Seed Library -- Students help with sorting seeds into small packets for borrowing by patrons. Seed selection includes a wide variety of flowers to support bees, birds, and butterflies. Students from WTMC and Students 4 Sustainability sorted seeds. WCC Students 4 Sustainability with the guidance of Dr. Emily Thompson, Biology and Environmental Science Departments, established the new Food Forest on campus. The Food Forest is also designed to support all pollinators. The student group also hosted the canceled Bee Hotel Workshop in March 2020 due to COVID-19.

Students worked in the Student Food Forest before the pandemic. Photo credits, Emily Thompson.

WTMC students and WCC Students 4 Sustainability volunteer to sort seeds for the WCC Seed Library.

Bee Hotel Workshop cancelled in March 2020 due to COVID-19

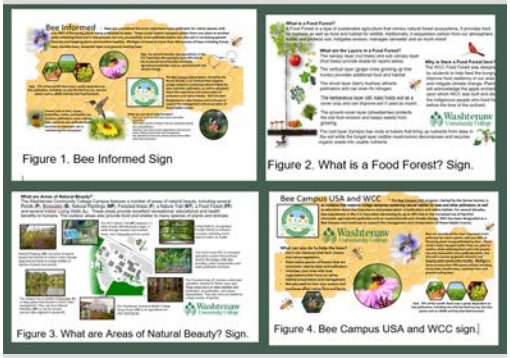
Educational Signage

Two new permanent signs were installed in 2020 that focus on pollinators and sustainable systems. Our “Bee Informed”

sign is located along WCC's dedicated nature trail and perennial meadow area, and adjacent to an existing pond. "Bee Informed" discusses the importance of bees for pollination, highlights WCC as a Bee Campus USA, and provides facts and tips for protecting all pollinators. The second new sign, "What is a Food Forest" provides an explanation of a Food Forest, describes the layers and properties of the special area, and why WCC, and the Students for Sustainability, chose to take on the project. Apple trees were selected as one of the initial Food Forest plants to be installed, to acknowledge the history and remember that campus was built on the site of a former apple orchard.

One of four new permanent educational signs that identify special green spaces on WCC's campus. Our "Bee Informed" sign describes the importance of bees for pollination, and provides facts and tips for protecting all pollinators.

One of four, new permanent educational signs that identify special green spaces on WCC's campus. This one describes the Food Forest, which is a form of sustainable agriculture that mimics natural forest ecosystems.



Four educational signs by Emily Thompson and David Wooten.

Policies & Practices

Maintain a written IPM Plan, and review annually for updates and revisions. The IPM plan outlines a four tiered approach not to eliminate pests, but to find a balance in the landscape. Avoid pesticide use in sensitive areas and gardens, such as the Food Forest, Core Garden, green roofs, and Children's Center and designate pesticide free zones. Utilize, and specify contractors must use pollinator friendly products such as Acelepryn for turf care and limited to one single application. Installed chipped mulch to all landscape planting beds, and around bases of trees to reduce the applications of pesticides for controlling invasive and undesirable weeds. Avoid installing plant materials and shrubs that are known to require pesticide applications for sustaining proper health, and utilize pest free native and adaptive plant materials. Grounds staff attend regular training on proper use of pesticides, and are required to be licensed by the State of Michigan to handle and

apply pesticides to the landscape. Proper timing, application rate, pest identification, education, etc. are all factors that contribute to reducing pesticide applications.

Integrated Pest Management Plan: IPM_Plan_LandscapeGrounds.pdf
https://libguides.wccnet.edu/BeeCampus/habitat_plan
Recommended Native Plant List: Athletic Field Bioswale Plant List.pdf
https://libguides.wccnet.edu/BeeCampus/habitat_plan
Recommended Native Plant Supplier List:
http://www.nativeplant.com/index.html

The Hoop House and outdoor classroom, utilized by the WTMC Program, is one of several pesticide free zones on WCC's campus.

Learn More

https://libguides.wccnet.edu/BeeCampus
mccarthy@wccnet.edu; holly@wccnet.edu

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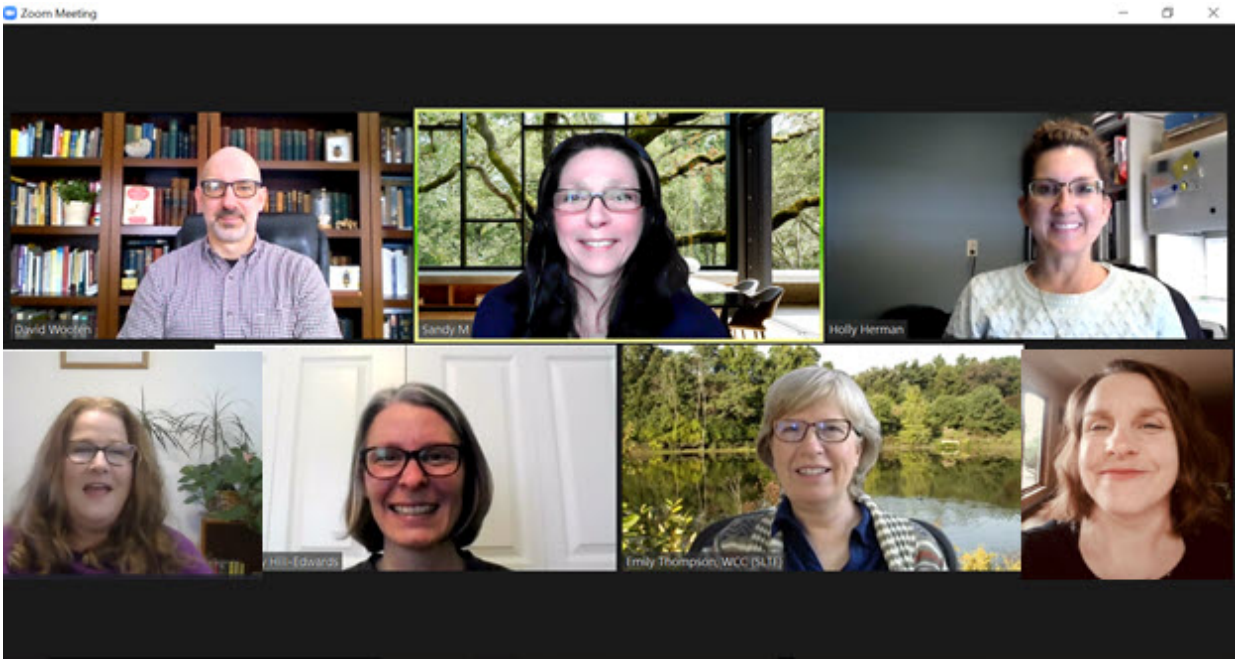

Bee Campus USA Team Dave Wooten, Sandy McCarthy, Holly Herman, Monica Milla, Kimberly Hill-Edwards, Emily Thompson, and Eli Zemper