Bee Campus USA - University of Minnesota Twin Cities

Report on 2021

Pollinator Habitat Creation & Enhancement

We received a grant from the St. Paul Garden Club to renovate some plantings in the pollinator garden at the Bee Lab. We removed sod and weeds and replanted 490 native forb and grass plugs, 1 bee pollinated native shrub and 1 bee pollinated native tree. UMN Land Care reseeded parts of the bee lawn at the Bee Lab that had not established well. The Masonic Institute for the Developing Brain is a new property purchase by UMN that has 99,342 sf of woodland, 15,753 grassland (not turf), 8,639 sf of perennials. Total habitat added 123,734 sf. that are being managed for pollinator habitat.







Thea Evans

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Education & Outreach

The University of Minnesota Bee Squad worked with a variety of organizations during 2021 to offer information about pollinators. Some of the events included: a local fair in Mankato, MN, Lower Phalen Creek Pollinator Festival, Minneapolis Monarch Festival, Prospect Park Bee Fest, Metro Blooms Open House, Emergence Festival at Lake Como, and other local community events. At these events, we had a table set up with interactive games and informational pamphlets. We





engaged with community members to offer information about pollinators and answer any potential questions. UMN Bee Squad also taught at a summer day camp for elementary school students. The UMN Bee Campus committee was not a host for these events.



Bee Squad members Elise Bernstein, Stephen Tolentino, and Emma Jo Elder participating in pollinator education at the Emergence Festival at Lake Como in Minneapolis, Minnesota. Photo credit: Stephen Tolentino



Bee Squad members Elise Bernstein, Stephen Tolentino, and Emma Jo Elder engaging with community members in pollinator education at the Emergence Festival at Lake Como in Minneapolis, Minnesota. Photo credit: Stephen Tolentino



Elise Bernstein, member of the University of Minnesota Bee Squad providing a variety of pollinator outreach tools at the Lower Phalen Creek Festival at Bruce Vento Nature Sanctuary in St. Paul, Minnesota. Photo credit: Stephen Tolentino

Courses & Continuing Education

For credit curriculum included bee nutrition and importance of pollinator habitat, pollinator biology and conservation, common pollinators (bees, flies, beetles), including family level identification of most North American bee families, evolution and natural history of pollinators, "what is pollination", "what is the value of pollination", "threats to pollinators", crop pollination, ecosystem services, and using art to promote pollinator conservation and awareness. Continuing education included bumble bee identification, beekeeping, training for educators to teach others about pollinators, and pesticide applicator training.

Service-Learning

Educational Signage

We produced signs that will be installed in the spring the ground isn't frozen.





Policies & Practices

Landcare maintenance IPM practices for pollinator plant areas: 1st – Cultural controls; 2nd – Mechanical removal; 3rd Spot treatment with systemic herbicide. For our natural areas plant management, we use a combination of physical removal of weedy plants, as well as carefully timed chemical application. We try to apply herbicides when plants are not flowering, as well as when bees and other pollinators are not active. We have not applied any insecticides in the natural areas. Our most commonly used herbicides are triclopyr, clopyralid, and aminopyralid. We also use a sparing amount of glyphosate on invasive grasses. When we apply herbicides, it is usually to individual plants as a spot treatment with a backpack sprayer. We have also adjusted when we mow our natural areas, in an effort to promote stem nesting pollinators.

Integrated Pest Management Plan: <u>UMN Twin Cities Landcare maintenance IPM practices for pollinator plant areas.docx</u> https://beelab.umn.edu/pesticide-free-plants

Recommended Native Plant List:

https://drive.google.com/file/d/1UfpemJGEeV72P3muVFqPSuOLVeGj047u/view

Recommended Native Plant Supplier List:

https://beelab.umn.edu/help-bees/actions-help-bees/plant-bee-flowers/native-plants

Learn More



