

Bee City USA - Madison

Report on 2021

Pollinator Habitat Creation & Enhancement

Olbrich Botanical Gardens Had a total of 6,489 hours of volunteer service maintaining the gardens at Olbrich. Olbrich installed an Indigenous Herb Garden in 2021 showcasing herbs, vegetables and other native plants not traditionally considered to be edible (i.e. common milkweed) that are important to Ho-Chunk culture, cuisine and medicine. City of Madison Parks The Parks team completed a number of beautification projects throughout the park system. The team planted annuals in the flowerbeds at Goodman Pool, Period Gardens and Forest Hill Cemetery. Added supplemental plants to existing planting beds at Beld, Eken, Elver, Heistand and Kingswood parks. More intensely rehabilitated other planting beds by removing non-beneficial plants and replacing them with native and pollinator friendly species. These other projects included plant beds at Bernies Beach, Demetral, Forest Hill Cemetery, Garner, Marshall, Nakoma, Paunack, Reston Heights, Tenney and Warner parks. In addition, prairie and native seed mixes were sowed at Orton, Apple Ridge and Vilas effigy mounds. Purchased and planted over three thousand flower bulbs in the signature sign beds at 20 parks throughout the city to give a burst of color that should continue for years to come. Started a new pollinator planting at Portland Park-size of 1 acre using "Pollinator-Palooza" mix from Prairie Moon Nursery and 800 native plugs from Agrecol Nursery. City of Madison Engineering Dept. The Engineering Department planted 5632 native plugs in 2021, primarily in newly constructed terrace rain gardens, one newly constructed city rain garden, and one new pollinator planting.

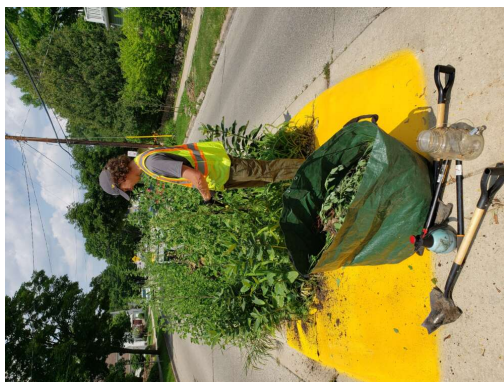
Pollinator Plantings and New Rain Gardens: 2021 saw the continued enhancement of existing pollinator plantings as well as the prep work and native distribution on a number of new pollinator plantings and new rain gardens. Site Size (sqft) Habitat Progress in 2021 Inner Drive Pollinator Planting 11940 Sunny-mesic Light invasive control, distributed seed Woodman's N-S Channel Pollinator Planting 3751 Shady-mesic Moderate invasive control, distributed seed Lussier YMCA East Pollinator Planting 7505 Shady-mesic Intense invasive control, distributed seed Southwest Bikepath @ Parman Terrace 33059 Sunny-mesic Intense invasive control, distributed seed Sycamore Landfill Pollinator Planting 20887 Sunny-mesic Intense invasive control, distributed seed Mineral Point Landfill Pollinator Planting 7843 Sunny-mesic Intense invasive control, distributed seed Greentree Landfill Pollinator Planting 65280 Sunny-mesic Prepped site, distributed seed Roger Bannerman Rain Garden 380 Shady-wet Constructed site, planted native plugs 26 Terrace Rain Gardens Street Reconstruct 3900 Wet-mesic Constructed site, planted native plugs, residents took over management Total Area 154545 Total Area in Acres 3.55 2. Greenways, Ponds, and Shorelines: The Engineering Department continues to enhance native habitat on storm water land. The following is a breakdown of the areas and the type of management they receive. Site Size (acres) Habitat Management Method/Conditions Engineered Rain Gardens 1.75 Wet-mesic Received most intensive invasive and general weed control, some received native seed or plugs where necessary, 90-100% native plant cover Engineered Greenways, Ponds, and Shorelines 83 Wet-mesic Invasive species control, some received native seed where necessary, 75-100% native plant cover Engineered Greenways, Ponds, and Shorelines (Low-Tier) 129 Wet-mesic Limited invasive species control, 50-100% native plant cover Total Area 213.75 3. Turf ☐ Prairie/Low-mow Bee



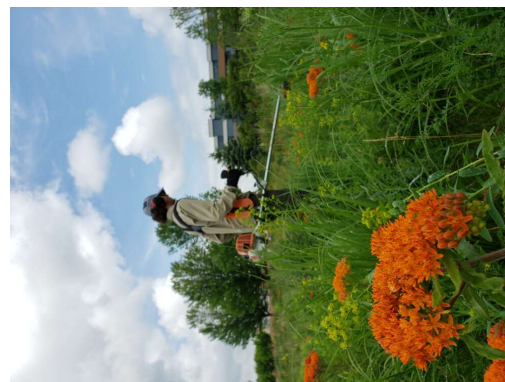
Lawn Traffic Medians: In 2021, the Engineering Department continued with efforts to convert suitable medians to either shortgrass prairie or to low-mow bee lawn. Site Size (sqft) Habitat Progress 2021 Medians converted to shortgrass prairie 69717 Sunny-dry Contractors installed shortgrass prairie on select medians Medians converted to low-mow bee-friendly cover 31366 Sunny-dry Contractors began installation of low-mow fescue & pollinator friendly forbes on select medians. To continue in 2022. Total Area 101083 Total Area in Acres 2.32



Brush mowing to control invasive reed canary grass in a prairie stormwater retention pond



Weeding in native planted median



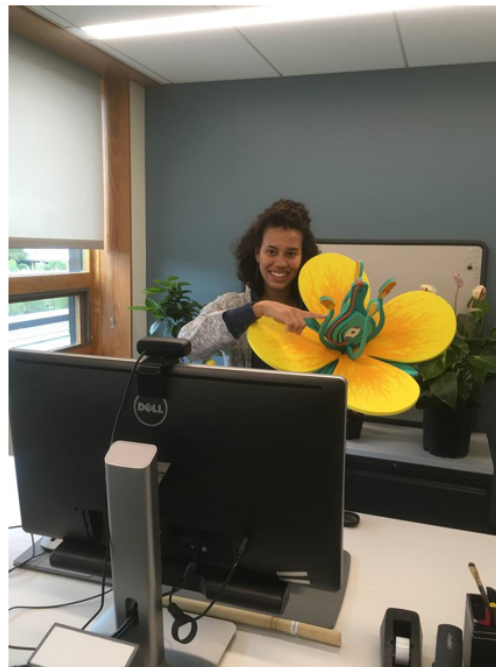
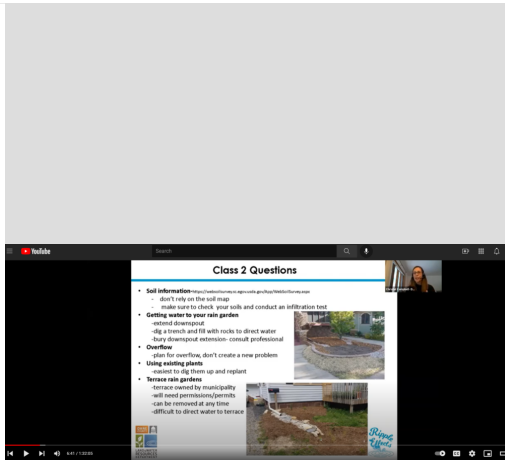
Brush mowing invasive teasel in prairie planted stormwater pond

Education & Outreach

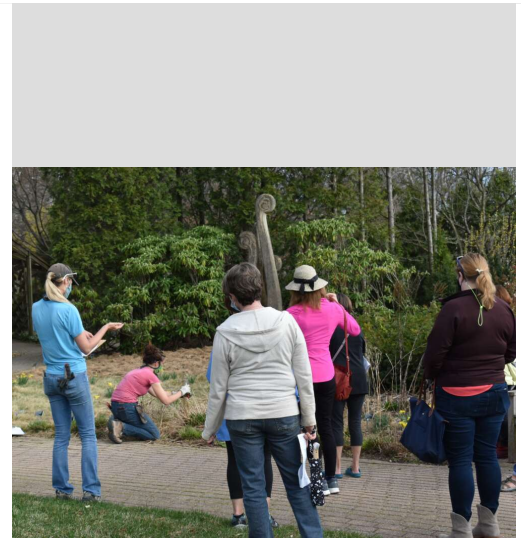
Pollinator Plant Sales Summer Sale – June 12 – varieties – 673 plants sold – 113 customers Fall Sale – August/September 6 – varieties – 202 plants sold – 50 customers I-SPY Pollinators Activity Over 3,000 children participated in the I SPY Pollinators activity highlighting the vital relationships between insects and plants. Four interpretative signs were placed in the outdoor gardens near featured plants that support pollinators by providing food or habitat. There was also a virtual I SPY Pollinators for groups that weren't yet doing field trips to Olbrich. StoryWalk: Señorita Mariposa From July 8 – August 8, the Gardens offered a StoryWalk along the Birch Walk featuring Señorita Mariposa, a bilingual children's book that celebrates the monarch butterflies' remarkable migration. Youth librarians from the Madison Public Library kicked off the StoryWalk with a pop-up pollinator themed craft at the Gardens. Olbrich donated a copy of Señorita Mariposa to every Madison Public Library and the librarians also created pollinator book displays at the public libraries to promote the StoryWalk. Approximately, 38,668 visitors enjoyed the outdoor Gardens during this period. The book was sold in Olbrich's Gift Shop. Little Library Collaboration Olbrich Botanical Gardens provided free native milkweed plants, grown from seed in Olbrich's greenhouses, to over forty local little library stewards to be planted around the base of the libraries throughout the city. In an outreach effort, copies of Señorita Mariposa were donated to local little free libraries that planted milkweed around their little library to spread the message of the importance of pollinators. Membership Appreciate Week During Member Appreciation Week Olbrich gave out 15 bee houses and had "What's Buzzing?" observation stations in the outdoor gardens. Volunteer Hours In 2021, we had 6,489 hours of volunteer service maintaining the gardens at Olbrich Gardens. Here is a snapshot: • Family & Early Childhood Programming = 19 classes,



200 children and 113 adults • Community Programming = 1 class, 25 children and 15 adults • School Programming (Virtual field trip) = 1 trip, 80 children, 10 adults • Adult Programming = 11 classes, 1,249 people Here are the 2021 pollinator related programming details: • Little Sprouts Story & Stroll (ages 2-5 and adults) o Summer Bugs Pollinator Series ☐ 6 classes total ☐ 64 children, 42 adults • Little Sprouts Gardening (ages 2-5 and adults) o Life in a Garden series ☐ 12 classes total ☐ 126 children, 63 adults • Family Class (ages 5-11 and adults) o Tastes & Tales – The Bee Tree ☐ 1 class ☐ 10 children, 8 adults • Pop-Up Story Time with Olbrich at Monona Library (Sarah was the featured storyteller) o 2 pollinator stories read o 40 people attended • Adult classes with a pollinator focus: o The Bombus Among Us (Virtual Lecture), 174 people o Nature’s Best Hope (Virtual Lecture), 264 people o Spring into Gardening Walk, 18 people o Diversifying Your Garden Design (Virtual Lecture), 204 people o Perennial Garden Maintenance, 13 people o Answering the Call (Virtual Lecture), 133 people o Creating Pollinator Gardens (Virtual Lecture), 120 people o The Benefits of Adding Natives to Your Garden (Virtual Lecture), 152 people o Low Growing Shrubs for Pollinators (Virtual Lecture), 141 people o Lawn Alternative Walk, 18 people o Putting your Garden to Bed Walk, 12 people Dane Co + City of Madison Virtual Rain Garden Workshop 1. The Engineering Department had two employees present at the virtual Rain Garden Workshop through Ripple Effects attended by 70 people on 2/16, 3/2, and 3/16 from 6-7:30PM. The workshop is now free on Youtube: Site Selection (Class 1), Sizing, Design Considerations, and Construction (Class 2), and Plant Selection and Maintenance (Class 3).



Olbrich Botanical Gardens virtual class on flowers and pollination for students



Spring into Gardening Walk

Dane County + City of Madison Virtual Rain Garden Workshop, Class 3, Plant Selection and Maintenance

Olbrich Botanical Gardens virtual class on flowers and pollination for students



Policies & Practices

In 2021, the Engineering Department continued to tackle invasive species control with an IPM approach. Wherever possible, alternative methods to herbicide application were used. Where herbicide was used, staff made all efforts to use the lowest rate possible at the prime stage in plant development in order to control the infestation in one application. Staff also strives to keep herbicide equipment maintained to reduce drip/spills and utilizes a control flow valve which greatly reduces quantity of herbicide used and off-target spray. When herbicide application is necessary, sprayed areas often receive native seed afterwards to promote native replacement to compete with undesired vegetation in that space. The following breakdown of work activities shows how much herbicide applications were used in relation to other methods:

Row Labels	Sum of Labor Hours	Percentage of Time
BEES	12	0.80%
FIRE	95.75	6.40%
GERM	9	0.60%
HERB	363.625	24.31%
MAN	489.975	32.76%
MOW	225.24	15.06%
PLANT	107	7.15%
SEED	153.5	10.26%
SURV	39.5	2.64%
Grand Total	1495.59	100.00%

BEES – Time spent beekeeping/learning to beekeep
FIRE – Time spent conducting prescribed burns
GERM – Time spent starting seeds
HERB – Time spent applying herbicide either foliar or cut stump
MAN – Time spent doing manual removal of weeds and invasives including digging, pulling, and removing seed heads
MOW – Time spent conducting spot mows (often in preparation for later spraying) including first round JKW cuts
PLANT – Time spent planting plugs as well as watering plugs (includes terrace rain gardens)
SEED – Time spent collecting, processing, mixing, or distributing seed
SURV – Time spent surveying sites where other maintenance activities didn't occur simultaneously (ie; mapping JKW and TOH along SWBP)

Integrated Pest Management Plan: [PesticidePolicyOnCityProperty.pdf](#)

Recommended Native Plant List:

<https://www.cityofmadison.com/engineering/stormwater/programs-initiatives/rain-gardens/rain-garden-plant-list>

Recommended Native Plant Supplier List:

Learn More

