Bee Campus USA - Central Community College

Report on 2021

Pollinator Habitat Creation & Enhancement

This year also saw the continuation of our pursuits to extend pollinator habitats on and around campus locations. At least seven separate native planting events occurred, including the addition of new, native plants to the Ord, Hastings and Grand Island, NE gardens. Although not every garden experienced a shift in size, increases in plant diversity and density were appropriate given the current gardens' maturation levels. The garden in Ord, nearly doubled in size, growing by a fabulous 150 ft2. A concerted effort by the Hastings facilities staff was also undertaken to include select native species into their routine landscaping practices. It saw the inclusion of 2,340 ft2 added to the already existing pollinator gardens in Hastings. In two separate planting days, the Hastings campus doubled-down on their contributions with an assortment of twenty-eight trees, planted with the assistance of students, staff, and led by facilities, Aaron Theissen.







Fall Blooms in the Ord Pollinator Garden, planting day in Ord, Nebraska

Sara Buckley- Nebraska Statewide Arboretum, Aaron Theissen- Central Community College Groundskeeping Supervisor, and Benjamin Newton-Central Community College Environmental Sustainability Director planting day in the Hastings campus pollinator garden.

Blazing Star in the Central Community College Grand Island pollinator garden





Education & Outreach

The rise of virtual events continued to trend into 2021 due to the pandemic. Many local organizations, including our own, chose to host fewer and smaller in-person events and instead opted to go remote. Although in-person events more sparsely dotted our calendars, a plethora of webinars, online conferences, meetings, and collaborations filled in much of our remaining schedules. Our office also continued to participate and assist in the facilitation of the ongoing Sustainability Leadership Presentation Series. The presentation series continues to link multiple institutions and organizations throughout the state, on matters of sustainability. Pollinators were the central focus at several of the webinars over the last year, including the March 19th Greener Towns celebration with the Nebraska Statewide Arboretum. Each campus and the Kearney Center held their annual Earth Month events in April. The Grand Island and Kearney Center event held student sustainability project showcases and exhibitions. In Grand Island, visiting partner organizations included: Conservation Nebraska, Nebraska State Fair, Nebraska Recycling Council, and the Crane Trust. Similarly, Kearney also featured visiting organizations that included: the Audubon Society, Nebraska State Fair, Kearney Re-use It Center and Conservation Nebraska too. Each organization had booths set-up to interact with students and guests. Kearney featured a clean-up tour of the Kearney Outdoor Learning Area hosted by Cody Wagner of the Audubon Society. The Hastings campus featured a presentation from their Groundskeeping Supervisor, Aaron Thiessen, on the Emerald Ash Borer. This was directly followed by a tree planting in honor of Arbor Day. The Columbus campus held a composting demonstration and exhibited the growing pathways to STEM student projects on display outdoors. Activities such as pollinator bingo, flower/leaf impressions, sidewalk chalk art, and a sustainability scavenger hunt completed the Earth Month activities. We also hosted Merit badge university in which Boy Scouts of America toured the Grand Island pollinator garden on campus and earned the Sustainability badge. Sustainability interns Kazia Marquez and William Gordon led Fall tours of the Grand Island pollinator garden and also presented on native seed collection. Guest speaker, Sarah Buckley of the Nebraska Statewide Arboretum, was invited to lead a planting workshop where volunteers and guests were able to assist with hands-on education re: native landscaping.







Sara Buckley from the Nebraska Statewide Arboretum giving a pollinator garden hands on tour and planting demonstration at Central Community College in Hastings, Nebraska

Courses & Continuing Education

Throughout the year, opportunities to pursue continuing education and curriculum advancement have included presentations, webinars, conferences, workshops and tours. In early April, our office presented to two different Environmental Science sections. In Spring of 2021, our offerings from Lexington entailed a Community Education class called Get Your Garden Growing (AVOR 9000 DLE11). Columbus offered a complimentary event titled "Celebrate Spring Gardening" in April. Over the course of the State Fair, the Grand Island Adult Education Office presented six, 30-minute instructive bee-hive extraction demonstrations. Fall was peppered with a series of interactive events and webinars. The kickoff of the Sustainability Leadership Presentation Series (SLPS) began with a complimentary Pollinator garden workshop lead by Sarah Buckley from the Nebraska Statewide Arboretum (NSA) on Friday, September 24 on the Hastings Campus. Through Bloom Box, and other NSA programs, she helps gardeners across the state learn how to make their home and community landscapes more sustainable. During the event, guests were taught about a selection of native plant varieties and guided in planting. After the event, everyone was invited to meet our office back on the Grand Island campus





for a tour of the established pollinator garden. Less than a month later the Nebraska Recycling Council hosted its virtual fall conference on October 5th -7th. The conference included keynote speaker Gary Cuneen, the founder and executive director of Seven Generations Ahead- the organization has implemented zero waste school programs, residential curbside composting, and statewide efforts to advance food scrap composting. The final SLPS webinar of the year was Metropolitan Community College's Closing the Loop. Guest speakers were Brian O'Malley, the Associate Dean of Culinary Hospitality and Horticulture, Casey Craven, Culinary Lab Technician, and Tyler Magnuson, Horticulture Operations Specialist and Culinary Liaison. This presentation identified ways in which behavioral changes related to sustainable practices can be attained through guidance and project implementation versus persuasion. In mid-November, Conservation Blueprint also hosted Pets and Pollinators: Using Business as a Force for Good.



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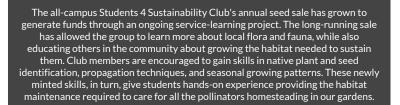
Service-Learning

This summer saw our continued participation in the Nebraska State Fair Sustainability Pavilion to be another exciting annual mainstay in our community outreach, involvement and service learning. Highlights, as always, have included our exhibitions of sustainable student projects and sharing our vast pollinator knowledge base with elementary students from surrounding communities. Some of the year's projects included: a stationary power-generating bike, an algae bioreactor, the Guinness Book World Record holding Myconoe, a mural made from plastic waste, a sword and stone sculpture made from recycled plastic and aluminum, as well as homemade beeswax wraps. The all-campus Students 4 Sustainability Club's annual seed sale has grown to generate funds through an ongoing service-learning project. The long-running sale has allowed the group to learn more about local flora and fauna, while also educating others in the community about growing the habitat needed to sustain them. Club members are encouraged to gain skills in native plant and seed identification, propagation techniques, and seasonal growing patterns. These newly minted skills, in turn, give students hands-on experience providing the habitat maintenance required to care for all the pollinators homesteading in our gardens. Garden workdays are scheduled throughout the year, the first was in May, held on the Hastings Campus. The last collective garden workday was held at the very tail end of September, where the Ord pollinator garden was extended. Additional ground cover was planted to help mitigate future weeding and more flowering species to assist in furthering biodiversity. October's tree planting with Over the past year, office staff have worked endlessly to photograph, identify and compile an inventory of each plant from the gardens. The primary goal of the inventory being to aid future staff or students in their garden management ventures. Each plant ID contains seed and growing profiles, medicinal or health attributes/warnings, seasonal considerations, and plant descriptions.











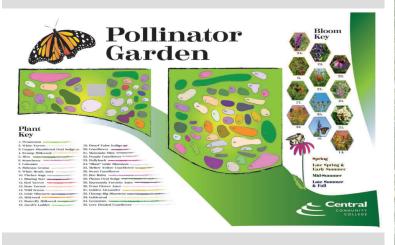
Bee MycHotels are an innovation combining ecology with solitary bee and wasp conservation and that use of novel fungal building material. The Bee MycHotels, grown from a native Nebraska fungus in sawdust, provide nesting habitat for native pollinating insects. These insects are hard to quantify, therefore research regarding their populations, behaviors, and pollination services are limited. This project aims to illuminate the lifestyle of solitary bees and wasps while testing a sustainable building material and it's impacts on the overall wellbeing of these insect populations.

Educational Signage

The myriad of additions to the plant diversity of the HAS pollinator garden was cause enough to spur the creation of a new map. More than 30 varieties of native plant species are named and 12 plant species are pictured to assist visitors with identification. Completion of the map took place in early December and the permanent signage will be placed before the end of the year. Temporary signage was also placed in both the Grand Island and Hastings pollinator gardens over the Summer. Aimed at providing visitors a quick way to spot plant locations, each sign was hand-painted with a small illustration of the surrounding blooms. Hastings groundskeeping staff also incorporated small permanent signage, with easily interchangeable labels, at the bases of all newly planted native landscaping. All newly planted trees were similarly given nameplates for the enjoyment and education of visitors and students.











Policies & Practices

Each campus maintains a written IPM plan which includes the avoidance of pesticides in designated pollinator habitats and other sensitive sites (except when targeted herbicide use is deemed the best option for invasive or noxious weed management like circumstances listed above). The Grand Island campus continues to utilize non-chemical pest prevention and management methods. Each campus has eliminated pesticide uses that are solely to maintain aesthetics and reduced the number of sites where pesticides are used. Additionally, we have continued to further restricted the pesticides used to organic pesticides and dropped pesticide use altogether where possible.

Integrated Pest Management Plan:





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Recommended Native Plant List: Plant list.docx

https://plantnebraska.org/file_download/inline/c9385c9d-c453-4e9e-ad39-f0d766ed4810

Recommended Native Plant Supplier List:

https://plantnebraska.org/store/



The Nebraska Statewide Arboretum issued Central Community College the Community Landscape Award for each of our Columbus, Grand Island, Hastings campuses, and the Ord Center.

Learn More







From left to right- Madison Hajek, Crystal Ramm, Kim Garretson, Dan Deffenbaugh, Sara Buckley, Benjamin Newton, William Gordon, Kazia Marquez, and College President Dr. Matt Gotschall



