Bee Campus USA - Colorado State University

Report on 2022

Pollinator Habitat Creation & Enhancement

We have about 75 spaces across CSU campus that have annual and perennial material. The spaces with plant material range from flowerpots to 100sq ft – 1000 sq ft flower beds. For both annual and perennial areas, the plants selected are there to help support and promote local pollinators. Apart from this, this last year we planted and renovated 5 shrub/perennial spaces that were designed with pollinator friendly all-season material. The Facilities Management Horticulture Crew's purview totals about 20,000 sq ft. There is an approx. 14,000 sq ft area that is "permanent" perennial pollinator friendly material. In 2022, the main objective was the enhancement, care, and maintenance of these areas. Since many of the perennials in the areas are established, we are able to see the previously bare area fill up with plant material. In areas where plants are outgrowing their area we are able to divide and transplant to other areas that may be in need of plant material. In 2022, 5 new/renovated shrub/perennial projects were added to the campus with plant material specifically chosen to support pollinators. These 5 areas added up to about 4,000 sq ft. The Horticulture Crew is made up of 3 hourly employees and one full time horticulturist technician. When they had some of their larger installations to work on, they would ask for help from the Outdoor Services crews in the area being worked. Total between 4-6 employees worked on these projects. In 2022 we collaborated with a graduate student and his professor within the HLA Department to create a pollinator research plot on campus near the new Nutrien Building in order for him to collect data on pollinators numbers at ground level vs on a green roof. The research is to see if there is a difference between the two areas. This research is going towards his masters as well as helping show if pollinator gardens on green roofs will promote pollinators the same amount as if they were just at ground level. We were also able to tear out a bed on the south side of Rockwell completely overgrown with weeds and shrubs. This allowed us to install a pollinator garden in this area and give the area a more aesthetic appearance while promoting pollinators.

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? 4000

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

- Flower garden
- Vegetable garden





- Natural area with tree snags and stumps, and bare areas for ground nesting species
- Herb garden
- Native milkweed planting for monarchs and bees (where appropriate)
- Invasive/exotic plant species removal for habitat improvement
- Native pollinator-friendly shrub border/hedgerow planting



Education & Outreach

• Webinar called "Beauty and the Bees: Current research and best practices in supporting pollinators through sustainable landscapes at the CSU Professional Development Institute in January 2023. 55 people attended! (71 total signed up). Lisa Mason, Deryn Davidson, Jennifer Bousselot, grad student Kyle Ruszkowski did a two-hour presentation, which included information about the Pollinator Friendly Campus Committee. Description: What is all the BUZZ about pollinators? We depend on pollinators for about 1/3rd of our diet, and the most nutritious part of our diet including vegetables, fruits and nuts. In Colorado, we have over 900 species of bees, 250 butterflies, approximately 1,000 species of moths, and more! We have an amazing amount of pollinator biodiversity in Colorado. How can we best support them? This class will cover the basics on pollinators, habitat, wasp control, insect stings, and more! The panel of speakers will also talk about the myriad of





pollinator plant research and educational projects happening at CSU including sustainable landscaping, native plants for storm water/rain gardens, green roof projects, the Native Bee Watch community science monitoring program, CSU's Pollinator Friendly Campus Committee, and more! • In the College of Business, Grace Wright did a peer-focused education session for College of Business employees on "Protecting and Supporting our Pollinators". It was attended by ~30 COB employees. In addition to the session, each attendee was gifted a pollinator friendly, native plant, as well as a seed packet. • CSU Student Apiary Club – o Pollinator conservation events within the club included 4 meetings discussing pollinator behavior, specifically honeybees. All meetings were hosted by the club and each meeting had 12-20 participants. o Pollinator habitat creation – In fall/winter 2022, CSU Apiculture Club pursued funding for a pollinator garden within the bee yard on south campus through Associated Students of CSU (ASCSU) and this funding was approved. Creation of this pollinator garden will begin in the spring 2023. • Pollinator Friendly Campus Committee met on 3/22/2022 and 11/02/2022, which included staff, faculty, and student participants from CSU and CSU Extension, as well as the City of Fort Collins.

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

How many people attended those events (in total)? **165**

Courses & Continuing Education

Service-Learning

Educational Signage

Number of permanent interpretive/educational/Bee Campus USA signs installed to date? **3**

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

1





Policies & Practices

Facilities Management and Environmental Health Services collaborated on a detailed multi-page IPM plan for CSU that was finalized in April 2021, posted to Facilities Management's IPM page: https://www.fm.colostate.edu/ipm. Learn more about our Integrated Pest Management program here: IPM Manual (https://www.fm.colostate.edu/wp-dev/wp-content/uploads/Integrated_Pest_Management_Manual.pdf)

What actions have you taken to make pest management practices more pollinator-friendly?

- Implemented or maintained a written IPM plan
- Avoided use of pesticides in public sites containing designated pollinator habitat or other sensitive features (except when targeted use is deemed the best option for invasive or noxious weed, insect or disease management)
- Implemented non-chemical pest prevention and management methods on city or campus grounds
- Reduced the total area of city or campus-managed lands to which pesticides are applied

In your city or campus, are any policy initiatives underway to further protect pollinators, people or waterways from pesticides? City of Fort Collins natural areas specifically mentions pollinators and use of native plants to eliminate need for pesticides and fertilizers. CSU has natural area buffer and corridors along Spring Creek contiguous to our campus that require us to follow city guidelines on these unique natural features. https://www.fcgov.com/naturalareas/native-plants

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?

Integrated Pest Management Plan: Integrated Pest Management Manual.pdf https://www.fm.colostate.edu/ipm/ Recommended Native Plant List: http://www.pollinator.org/PDFs/ColoradoPlateau.rx2.pdf Recommended Native Plant Supplier List:

Learn More

https://www.fm.colostate.edu/pollinators





Julia.Innes@colostate.edu



