

Bee Campus USA Annual Report Pollinator Conservation & Education 2019



Colorado State University Fort Collins Fort Collins, Colorado

EDUCATION & OUTREACH





The CSU Pollinator Friendly Campus Committee gives a presentation for the campus community that is a basic introduction to pollinators, their habitat, and simple practices and ways for the community to engage in supporting pollinators. Outreach occurrences since receiving our Bee Campus USA status in 2018 through 2019 include:

- CSU Professional Development Institute "Truth Bee Told" session, 1/08/2018
- Lunch n Learn presentation about Pollinators, 04/25/2018
- CSU Professional Development Institute "Truth Bee Told" session, 1/15/2019

On-Campus Awareness Events also include Apiculture Club meetings throughout the semester, as well as the Club sharing information during Earth Week in April of each year. The Apiculture Club has also partnered with Housing and Dining Services to share information about beekeeping and the honey they've received from their hives (Environmental Eats event).





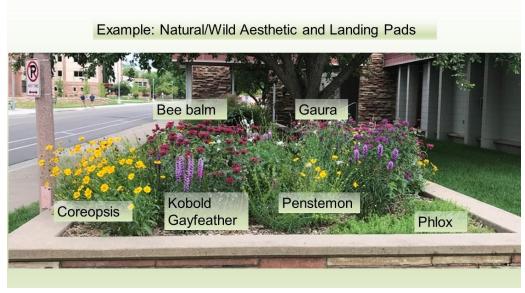


All photos are of the Pollinator Friendly Campus Committee presenting pollinator information at CSU's Professional Development Institute in January 2020.

Additional education/outreach activities off-campus included Apiculture Club engaging with youth:

5/15/2019 - Participated in Knowledge Quest Academy Scienterrific Night in Millikin Colorado 8/23/2019 - Brought bees into Knowledge Quest Academy kindergarten class in Millikin Colorado 9/6/2019 - Brought bees to and lead an assembly at Leman Academy of Excellence in Parker Colorado 11/5/2019 Environmental Eats -students learn about CSU hives and honey, CSU Fort Collins, CO

POLLINATOR HEALTH & HABITAT



Pollinator-Friendly Garden on Pitkin in the heart of campus



Supporting Nesting Sites: Winter Habitat

Campus Pollinator Garden, December 2018



Coronado Red Hyssop Agastache Pstessene

Supporting Nesting Sites through Winter Habitat

Foothills Campus Pollinator beds







CSU Annual Perennial Beds 2019

Pollinator Perennials:

Coneflower Salsa Red (June – Oct)
Gaura Whirling Butterflies (May – Sept)
Yarrow (June – Sept)
Monarda Bee Balm (July – Sept)



Pollinator-Friendly Perennial beds at the entrance to CSU

Pollinator-Friendly Perennial landscaping along a CSU building

The efforts CSU has taken around creating pollinator habitat are primarily implemented by CSU Facilities Management Outdoor Services employees. We design intentional campus landscape and garden locations with consideration for pollinators and for pollinator winter nesting sites. With intention, we have added pollinator friendly gardens and beds both on Main Campus and Foothills Campus in multiple locations, and are adding perennials into some of the traditional annual spaces. This is an ongoing effort and does not have a start or end date. Additionally, the Apiculture Club is developing a pollinator garden at the site of their new bee hives by the Horticulture Center on South Campus.

We added 7,300 square feet of plantings that include mostly perennials and some shrubs, all planted with pollinators in mind. This 7,300 sqft was comprised of 25 projects (projects range from about 50 sqft to 500 sqft)

Total square footage of Annuals and Perennials (Including all new projects from 2019) – 21,200 sqft.

Total projects (including new projects from 2019) that utilize perennials/shrubs to support pollinator habitat – 13700 sqft

Total square footage of annual flowers (or rotating landscapes) that help to support pollinators – 7500 sqft

SERVICE LEARNING

The Apiculture Club participates in service learning - among other experiences, the following off-campus outreach activities included working with K-12 students:

- 5/15/2019 Participated in Knowledge Quest Academy Scienterrific Night in Millikin Colorado
- 8/23/2019 Brought bees into Knowledge Quest Academy kindergarten class in Millikin Colorado
- 9/6/2019 Brought bees to and lead an assembly at Leman Academy of Excellence in Parker Colorado
- 11/5/2019 Environmental Eats -students learn about CSU hives and honey, CSU Fort Collins,
 CO

CURRICULUM & CONTINUING EDUCATION

EDUCATIONAL & INTERPRETIVE SIGNAGE



We try to educate the campus and Fort Collins community about the value of pollinators through basic interpretive signage that highlights the fundamental need for habitat that sustains their and our existence. These temporary signs can be moved around easily.

Pollinator Garden Temporary Sign Graphic

POLICIES & PRACTICES

CSU practices safe application according to EPA standards. The Grounds Department considers reasonable non-pesticide alternatives over chemical controls by following IPM procedure. CSU takes measures to alleviate weeds in turf grass areas by maintaining a healthy stand of turf grass throughout the university. They evaluate alternatives to chemical treatment including the cost-effectiveness of the treatments.

Additionally, the Grounds Department maintains the condition of natural and undeveloped landscapes on CSU properties, meeting requirements for items such as weed control, stormwater management, and protection of environmentally sensitive areas.

The Grounds Department manages pest control through the following IPM procedures.

Prevention – This is the most effective pest management strategy. By reducing the landscape's capacity to support the target weed or pest populations through design and appropriate management, the opportunities for pest establishment can be reduced or eliminated.

Cultural – Cultural control is the use of management activities that prevent weeds and pests from developing due to enhancement of desired conditions.

Mechanical – Mechanical control is accomplished by using physical methods or mechanical equipment to control weeds and pests. The most common practice of weed management for undeveloped landscapes is accomplished through mowing.

Biological – Biological controls include maintaining healthy turf landscapes, proper plant material selection and diversity, and the introduction or enhancements of naturally occurring populations to target pests.

Chemical – Reasonable non-pesticide alternatives are considered in our management practices. Pesticides are used only in combination with other approaches for more effective long-term control. Pesticides are selected and applied in ways that minimize their possible harm to people, non-target organisms, and the environment. Restricted-use pesticides are not used on main campus landscapes.

As a committee, we have worked to define a clear protocol for swarm response and sting response. In addition to enhancing pollinator activity on campus, the university has a response plan for swarming or nuisance insects. Anyone concerned about bee swarms, which are more common starting in February through spring, or nuisance bees, wasps or hornets, should contact Environmental Health Services (EHS). Environmental Health Services will manage next steps, including calling beekeepers for assistance in removing a bee swarm from campus and safely relocating it.

Recommended Locally Native Plant Species List —

https://www.pollinator.org/PDFs/ColoradoPlateau.rx2.pdf
https://www.fm.colostate.edu/sites/default/files/Suggested_Plant_List.pdf
https://www.fm.colostate.edu/sites/default/files/Clark A Pollinator Habitat-Example Plant List.pdf

Regional Native Plant Supplier List — N/A

Pollinator Friendly Integrated Pest Management Plan — https://www.fm.colostate.edu/ipm

CONTACT US!

Committee — Pollinator Friendly Campus Committee

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

Social Media — Apiculture Club Instagram: @csuapicultureclub