

# Bee Campus USA - University of California Davis

Report on 2023

## Pollinator Habitat Creation & Enhancement

*Please describe pollinator habitat creation or enhancement projects in your community in 2023, and whether your committee hosted them or not.*

The Student Farm continued creating and maintaining agricultural fields and demonstration gardens to highlight best practices that support pollinator habitat. The UC Davis Bee Haven continued to maintain and enhance the .6 acre bee garden. At the Robert Mondavi Institute for Wine and Food Science, the Good Life Garden was planted with pollinator plants to enhance food production. In the Arboretum and Public Garden, volunteers, students and staff created or enhanced pollinator habitat throughout campus. In the Arboretum collections, we maintained and enhanced valued habitat gardens. Our Urban Tree Stewardship Team continued to plant their Texas Tree Trial Research plots to plan for a climate ready tree canopy. Tree selection includes keystone oak species and several flowering trees that support pollinators. In the Putah Creek Riparian Reserve, Learning by Leading™ teams created and enhanced habitat restoration projects and planted hedgerows that support pollinators. The Davis Rewilding Society created native plant habitat on main campus. The “Back 40” section of the UC Davis campus was selected to be the site of a grant-funded California native planting project in 2022. This site was originally inhabited by mostly non-native invasive plants, as well as trash, pieces of cement, and rusty metal remnants of past use of the site. This site continues to be enhanced with native plants and proper maintenance.

*How many habitat projects did you help to create or enhance in 2023?*

15

*How many people (staff, volunteers, students, partners, etc.) helped with those projects?*

375

*How many projects benefit monarchs, milkweed, or nectar plantings?*

15

*How many total square feet of habitat were created or enhanced?*

3049200

*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
- Orchard
- Natural area with tree snags and stumps, and bare areas for ground nesting species
- Meadow
- Pollinator-friendly lawn (with flowering clover, dandelions...)
- Herb garden
- Native milkweed planting for monarchs and bees (where appropriate)
- Invasive/exotic plant species removal for habitat improvement
- Native pollinator-friendly tree planting
- Native pollinator-friendly shrub border/hedgerow planting
- Rain garden/bioswale
- Roadside/rights of way planting
- School garden



## Education & Outreach

*Please describe pollinator conservation events or outreach activities in your community in 2023, indicating whether your committee hosted them or not.*

For UC Davis annual Biodiversity Museum Day on February 18th 2023 the Arboretum and Public Garden hosted our museum's event in the Habitat Gardens, surrounded by pollinator gardens and native plant meadows. Five Learning by Leading™ teams showcased projects within the theme of "Backyard Biodiversity." The UC Davis Honey Bee Haven gave bee garden tours and offered hands-on educational pollinator activities throughout the year to bee keepers, local land managers, private groups, school groups, garden clubs and scouts. UC Davis partnered with the City of Woodland to host the California Honey Festival on May 6th, 2023. Students and staff tabled about the importance of all pollinators in the agricultural and urban environment. We created a one-day pollinator garden as a demonstration garden and conversation starter. We encouraged visitors to plant their own pollinator gardens and we provided resources to get them started. This event attracted 45,000 visitors.

*How many pollinator-related events or outreach activities did you host or help with in 2023 (in total)?*

10

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

50000

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

1

*Number of temporary interpretive/educational/Bee Campus USA signs installed in 2023?*

32



Learning by Leading™ student teams tabling at Biodiversity Museum Day.



California Honey Festival tabling and Pollinator Garden Demonstration

# Did you know sweat bees love to visit yarrow?



## Common Yarrow | *Achillea millefolium*

Sun/Shade:

Flower Color: white, yellow, orange, and red

Yarrow has clusters of disc-shaped daisy-like flowers. It has a distinctive smell and is attractive to many species of pollinators. It provides nectar and pollen for bees, butterflies, and ladybugs, making it perfect for gardens!

## Texas Striped Sweat Bee | *Agapostemon texanus*

Sweat bees are great pollinators and are shiny gems with metallic bodies. Unlike the well-known honey bee, female sweat bees live alone in underground nests they make for themselves. You can find the males sleeping on flowers overnight! Keep an eye out for sweat bees on hot days as they like to seek out overheated humans to lap up their sweat!



Pollinator Personality Quiz temporary signage. Participants get a sticker of their matching pollinator and are tasked to find these signs in the garden.

## Curriculum, Continuing Education, & Service Learning

Please describe the curriculum your campus engaged in 2023, indicating whether it was part of a for-credit course or continuing education.

**For-Credit:** Many for-credit courses are offered that cover the role of pollinators through several lenses – ecology, agriculture, culture and land management. These include classes like Pollination Ecology, Agrosystem Management, Introduction to Sustainable Agriculture, Organic Crop Production Practices, Alternatives in Agriculture, Garden and

Farm-based Experiential Education Methods, Wild Davis and Apiculture. One Animal Biology lab captures pollinator data every Fall quarter, allowing students to develop their own plant-pollinator interaction research project with a native plant species. We offer pollinator-related for-credit internships through the Student Farm (Market Garden, Ecological Garden and Flower Project, Fresh Focus, SCOPE), the UC Davis Honey Bee Haven and the Arboretum and Public Garden's Learning by Leading™ program (Habitat Horticulture, Sustainable Horticulture, SmartScape, GATEways Outreach, Habitat Restoration). Continuing Education: The Arboretum and Public Garden offered its annual volunteer training that includes pollinator and habitat gardening training. We also hosted a Climate-Ready Gardening Training with a specialized Master Gardener training group that learned alongside our Learning by Leading student interns. The Honey and Pollination Center offered Master Bee Keeper Training, a Honey Sensory Course and Mead 101. The Student Farm offered research and special projects in subjects like beekeeping, biological control of insects and promotion of native pollinators. The UC Davis Honey Bee Haven hosted multiple bee garden tours and offered remote and hands-on educational pollinator activities throughout the year to master gardeners, bee keepers, local land managers, private groups, school groups, garden clubs and scouts.

*How many of your for-credit courses included pollinator-related information in 2023?*

7

*How many students attended those for-credit courses?*

86

*How many of your continuing education courses included pollinator-related information in 2023?*

20

*How many participants attended those courses?*

831

*Please describe the service-learning projects your students were engaged in 2023, indicating which, if any, were associated with a course.*

The Student Farm and the Arboretum and Public Garden hosted field days for landscape maintenance. Students learned plant and insect identification while carrying out best management practices for weed control, IPM, planting and maintenance. These were tied to our respective internship programs.



Climate-Ready Gardening Training with Master Gardeners and Habitat Horticulture interns.

---

## Policies & Practices

*Please describe actions taken to make pest management more pollinator-friendly.*

We have resolved to specifically not spray in many of our gardens and planting sites, except for a select few weed species. We are trialing a chemical application-free pollinator garden with hand pulling only. We do not spray neonicotinoids in our public landscapes. We follow the University of California IPM plan: <http://ipm.ucanr.edu/>. We have recently hired new groundskeepers who we are integrating into our landscape management trainings, including considerations for habitat gardening.

*Any lessons learned you would like to share?*

Get buy-in from multiple departments and write these practices into overall campus initiatives. We have done this with our Living Landscape Adaptation Plan.

Learn More

**Integrated Pest Management Plan:**

<https://sarep.ucdavis.edu/sustainable-ag/ipm>

**Recommended Native Plant List:**

**Recommended Native Plant Supplier List:**

<https://arboretum.ucdavis.edu/bee-campus-usa>  
arboretum@ucdavis.edu

[https://instagram.com/@ucdavis\\_arboretum](https://instagram.com/@ucdavis_arboretum)  
<https://www.facebook.com/UCDavisArboretum>