

Bee Campus USA - University of California Davis

Report on 2022

Pollinator Habitat Creation & Enhancement

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 Creative native plant habitat in three key locations on main campus: Tri Co-ops Habitat Garden The received a SLLC Green Fellowship grant to re-landscape parts of the Tri Co-ops dominated by invasive grasses with native plants. Volunteers planted 2 hedgerows, a wet meadow, and a summer dry grassland planting to provide a diversity of plant species and habitats for pollinators and other wildlife. Bowley Hall Native Plant Garden Around Bowley Hall, weeds and nonnative landscaping plants were removed and replaced with a diversity of native plants to provide habitat and samples for PLS 102: California Floristics. This class often cannot find particular plant species or must drive far distances to acquire samples for the lab. Now, Bowley Hall is surrounded by a garden containing a variety of rare species, particularly those from California's North Coast region like Phacelia bolanderi, Ribes sanguineum, Physocarpus capitatus, and Philadelphus lewisii. Hunt Hall Wildflower Boxes In front of Hunt Hall, the Davis Rewilding Society removed invasive plants and planted a group of small boxes with annual and perennial wildflowers. We included a mix of annuals including baby blue eyes, goldfields, and purple owl's clover planted under larger Salvia "Celestial Blue" and Eriogonum fasciculatum. Back 40 Native Hedgerow Project 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. Throughout the year of 2022, a 220 x 90 ft area was cleaned up, graded, mulched, and planted with over 350 native plants.

How many habitat projects did you help to create or enhance last year?

12

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

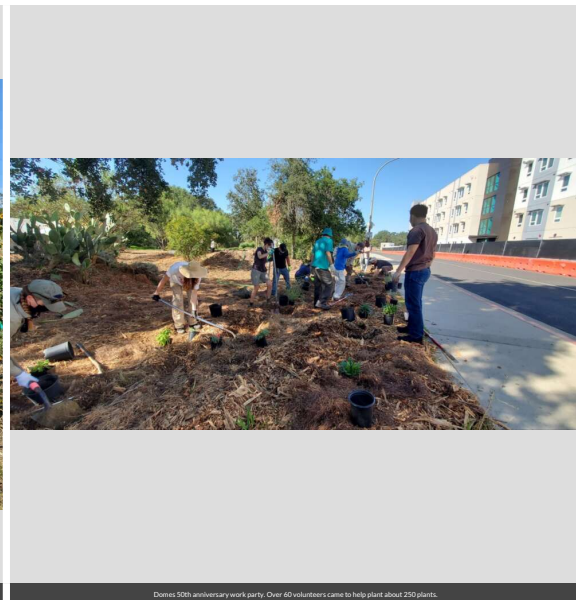
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How many volunteers helped with those projects?

320

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
- 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
- Rain garden/bioswale



Education & Outreach

The UC Davis annual Biodiversity Museum Day on February 20th 2022 brought our biological museum collections under one roof to highlight biodiversity from around the world. The museums were centrally located at our campus convention center to monitor COVID safety protocols while offering engaging in-person education. Several museums highlighted the role of pollinators within our daily lives and offered ways we can support them in the urban environment. 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 7th, 2022. Students and staff tabled about the importance of all pollinators in the agricultural and urban environment. 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 did your affiliate host or help with last year (in total)?

20

How many people attended those events (in total)?

48000



The Learning by Leading™ Habitat Horticulture team created a pollinator matching game for Biodiversity Museum Day.

**The UC Davis Bee Haven
Spring 2023 Classes**

Instructor:
**Christine Casey, Ph.D.,
UC Davis Bee Haven Manager**

<p>Collecting Bees Through Photos April 1 11:30am to 1pm</p> <p>Remote class (\$25): https://registration.ucdavis.edu/Item/Details/937</p> <p>Hybrid remote/in-person class (\$40): https://registration.ucdavis.edu/Item/Details/938</p>	<p>Beginning gardener? I Planted a Bee Garden: Now What? April 1 9am to 10:30am</p> <p>Remote class (\$25): https://registration.ucdavis.edu/Item/Details/939</p> <p>Hybrid remote/in-person class (\$40): https://registration.ucdavis.edu/Item/Details/940</p>
<p>All fees support the UC Davis Bee Haven beegarden.ucdavis.edu</p>	<p>Experienced gardener? Advanced Bee Gardening April 22 9am to 10:30am</p> <p>Remote class (\$25): https://registration.ucdavis.edu/Item/Details/941</p> <p>Hybrid remote/in-person class (\$40): https://registration.ucdavis.edu/Item/Details/942</p>

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.



Interns provide pollinator gardening resources at the California Honey Festival.

Courses & 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. They also continued with a special Master Gardener Pollinator Garden training group. 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 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.

How many of your for-credit courses included pollinator-related information last year?

17

How many students attended those for-credit courses?

150

How many of your continuing education courses included pollinator-related information last year?

5

How many participants attended those courses?

95



Mead Course with the UC Davis Honey and Pollination Center.

Service-Learning

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.

How many service-learning projects did your campus host and/or support to enhance pollinator habitat on and off-campus?

25

How many students participated in service-learning projects last year to enhance pollinator habitat on or off-campus?

250



Interns maintain pollinator habitat and speak to volunteers and the general public about pollinator resources.

Educational Signage

All of our current signage is temporary, designed in-house by different departments. We are working on a Bee Campus Flyer and logo. We hope that these designs can be used on signage and other outreach material.

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

1

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

1

Policies & Practices

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.

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
- Sourced plants for city or campus grounds that were not treated with neonicotinoids
- Encouraged developers and private landscapers to source plants that were not treated with neonicotinoids

In your city or campus, are any policy initiatives underway to further protect pollinators, people or waterways from pesticides?

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:

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

Recommended Native Plant List:

Recommended Native Plant Supplier List:

Learn More

<https://arboretum.ucdavis.edu/bee-campus-usa>
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<https://www.facebook.com/UCDavisArboretum>
https://instagram.com/@ucdavis_arboretum