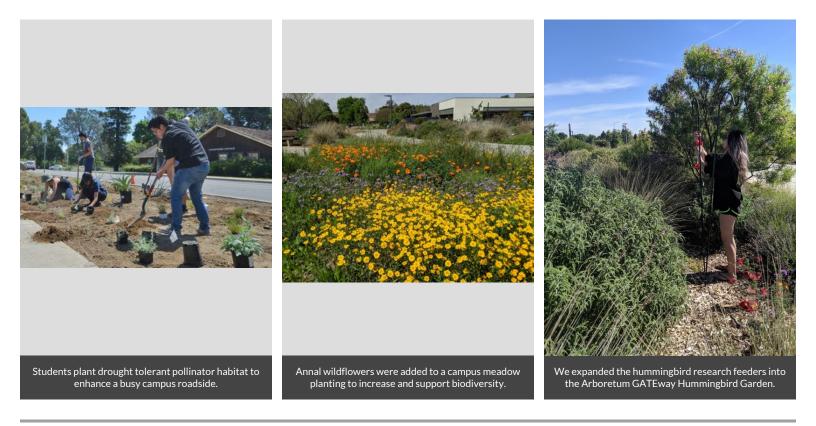
# Bee Campus USA - University of California Davis

Report on 2020

### 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 Häagen-Dazs Honey 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 even more 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 Sustainable Horticulture Learning by Leading<sup>™</sup> team designed and planted lawn conversions and roadside sites on main campus. The SmartScape Learning by Leading<sup>™</sup> team created a Pollinator Study Garden in collaboration with the NSF-granted Vanette Lab. https://ccuh.ucdavis.edu/smartlandscape/pollinator-study-garden. In the Putah Creek Riparian Reserve, several Learning by Leading<sup>™</sup> teams conducted habitat restoration projects and planted hedgerows that support pollinators.







## Education & Outreach

The Arboretum and Public Garden hosted four "Pollinator Paradise" themed plant sales in Fall 2019. During Spring quarter 2020, we offered programming around safely interacting with nature by using iNaturalist as a community science tool. We opened it up to collecting all types of organisms but had a special emphasis on pollinators. iNaturalist Training for "Naturing at Home Project" https://www.youtube.com/watch?v=G1E9G24y4bg&feature=youtu.be, Using iNaturalist for the City Nature Challenge -- Overview, Pro Tips and More

https://www.youtube.com/watch?v=UVilgdzg2Jc&feature=youtu.be, Report on iNaturalist's "Naturing at Home" Project https://www.youtube.com/watch?v=49Nj3XrCqJ4&feature=youtu.be. Our original Habitat Horticulture iNaturalist project focused on observing pollinator species on plants throughout our campus to collect data on frequency and seasonality of visitation, as well as biodiversity of visitation per plant species.

https://www.inaturalist.org/projects/habitat-horticulture-uc-davis-arboretum-and-public-garden. We also offered pollinator-themed children's read aloud books. Bees are the Best

https://www.youtube.com/watch?v=9-DZTNx\_1Bc&feature=youtu.be, If Hummingbirds Could Hum https://www.youtube.com/watch?v=pnwnFCRhsA8&feature=youtu.be, and Señorita Mariposa

https://www.youtube.com/watch?v=uXeD\_2hXczo&feature=youtu.be. The Student Farm hosted a field day Fall 2019 and featured pollinator projects. The Häagen-Dazs Honey Bee Haven gave bee garden tours and offered hands-on educational pollinator activities at Biodiversity Museum Day during Winter 2020. Several Departments came together for the Taste: Wine, Art, Beer, Music event in Fall 2019. There was some educational material about the role pollinators in food and mead production and there was a tour in the pollinator-friendly food garden.

https://rmi.ucdavis.edu/events/taste-wine-art-beer-and-music Honey and Pollination Center with SolaBee Farms hosted Sips and Bites https://rmi.ucdavis.edu/events/sips-and-bites-hidden-world-honey. We frequently post about pollinatorrelated content on the Arboretum and Public Garden social media account. We did a full week of targeted posts during National Pollinator Week and released the pollinator Read Aloud books during that time.



The Arboretum and Public Garden's Habitat Horticulture Learning by Leading<sup>™</sup> Team offered native wildflower seeds as a "Research to Retail" initiative to connect campus pollinator research to community outreach.



Due to restrictions under COVID-19, we encouraged our community to use iNaturalist as a way to enjoy nature safely while contributing to community science.



Taste: Wine, Art, Beer, Music event in October 2019. TASTE celebrates all things foodie against the backdrop of the world's leading scientific programs for food and beverage research. Several tables mentioned the role of pollinators in the food system and the food garden featured pollinator signage.





# 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, Wild Davis, Apiculture, and Kids in Garden and Farm. 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 and the Arboretum and Public Garden's Learning by Leading<sup>™</sup> 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.



Community volunteers are trained to help steward the Arboretum and Public Garden collections to maintain healthy, sustainable landscapes.

#### Students from an Animal Biology lab conduct plantpollinator interaction research on a native plant.

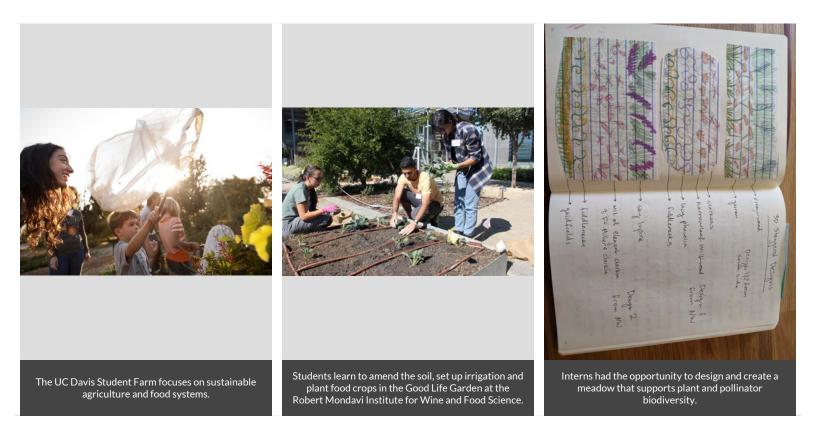
# Interns learn plant identification and pollinator habitat gardening strategies.

#### Service-Learning

Pre-COVID, 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. One of our Learning by Leading<sup>™</sup> students took on an extra project to help design a pollinator-friendly Main Street planting for neighboring Bee City USA Woodland, CA. After restrictions are lifted and interns are allowed to return, we hope to host more of these servicelearning projects to our campus and broader community.







## Educational Signage

All of our current signage is temporary, designed in house by different departments. For the Arboretum and Public Garden, our Museum Outreach team worked with other teams to create a Bee Campus USA interpretive sign. We are in the middle of finalizing a Bee Campus Flyer. We hope that this design can become our logo to use on signage and other outreach material.







#### Planting Wildflowers to Attract Pollinators



#### (530) 752-4880 arboretum@ucdavis.edu

The Arboretum and Public Garden is working with researchers to make campus more pollinator friendly

As a Bee Campus USA, UC Davis has pledged to raise awareness and create healthy habitats for pollinators. The Arboretum and Public Garden is working with the UC Davis Pollination Ecology lab, lead by Dr. Neal Williams, to cultivate pollinator friendly plants. Dr Williams and his colleagues work to identify California native plants and plant traits that are suitable for pollinators.

These wildflower species have been locally tested to attract native pollinators. Take this research home and create your very own pollinator paradise by shopping for wildflower seeds at the Arboretum and Public Garden Plant Sales.

This sign was developed by students in the Museum Education Learning by Leading" Internship.

Co-created temporary signage in the Habitat Gardens of the Arboretum and Public Garden.





UC Davis joins Bee campus USA, an initiative of the Xerces society for invertebrate conservation, whose mission is to galvanize communities and campuses to sustain pollinators by providing them with a healthy habitat, rich in a variety of native plants and free of pesticides.

Draft Flyer and Design for UC Davis Bee Campus outreach.

### Policies & Practices

Pre-COVID, we had 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. However, with the decrease in workforce due to the effects of COVID-19, we have had to manage the weeds in some areas with herbicide treatment to stay on top of the invasion. We do not spray neonicotinoids in our public landscapes. We follow the University of California IPM plan: http://ipm.ucanr.edu/. When our grounds staff team regroups after the pandemic, we hope to offer training on habitat maintenance.

#### Integrated Pest Management Plan:

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





Recommended Native Plant List:

Recommended Native Plant Supplier List:

Learn More



