

Bee Campus USA - University of California Davis

Report on 2021



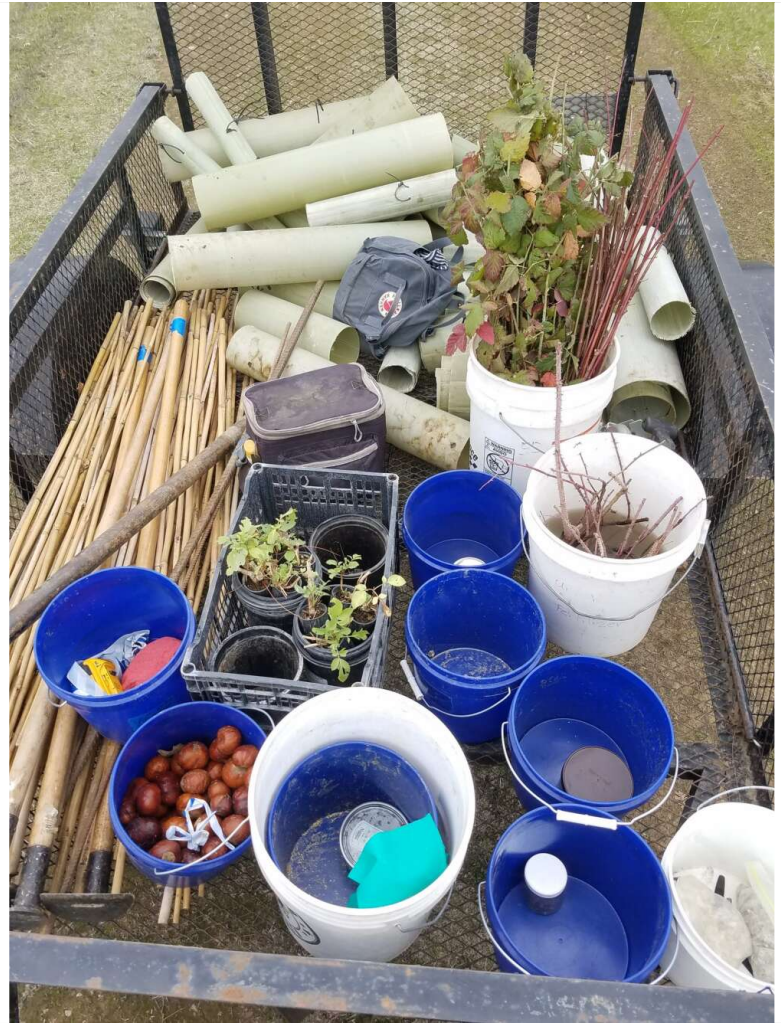
Pollinator Habitat Creation & Enhancement

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 Urban Tree Stewardship Team started 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. The current largest test plot is 3.5 acres. Our campus updated bridge infrastructure, allowing for an opportunity to upgrade the surrounding landscaping into pollinator supporting native plant landscapes. In the Putah Creek Riparian Reserve, Learning by Leading™ teams created and enhanced habitat restoration projects and planted hedgerows that support pollinators.





The Urban Tree Stewardship Team hosted a climate ready tree canopy planting day in the 3.5 acre zero long-term irrigation test plot for the Texas Tree Trial Research project. Several of the species are flowering trees or host trees for insects.



The Ecological Land Management Team gears up for landscape transformation.

Education & Outreach

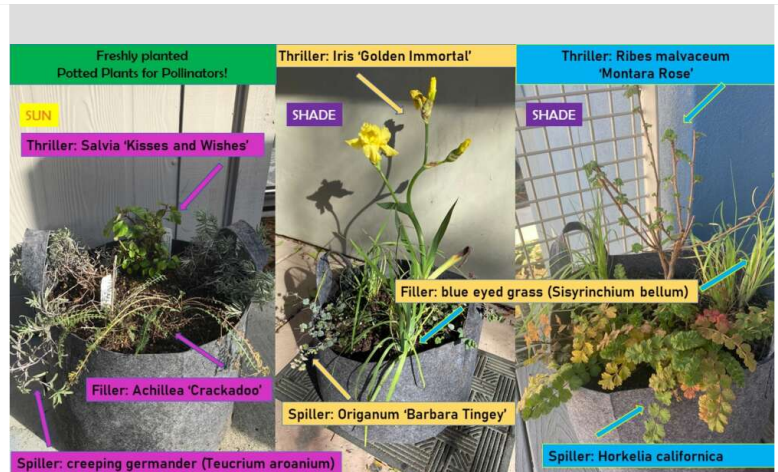
Several campus departments participated in remote events of our annual Biodiversity Museum Day on February 13th 2021 with several museums highlighting the role of pollinators. Many departments also celebrated our annual Picnic Day event on April 17th 2021. We held the following events that supported Bee Campus USA initiatives: Arboretum and Public Garden: Growing Better Together: Finding the Silver Linings through Nature Zoom 11 AM – 12 PM Over the last year especially, nurturing plants has become a great way to relax, reflect, and find the silver linings. No matter where you call home, join us as we discover the benefits and versatility of container gardens while hearing stories from Arboretum and Public Garden plant sale enthusiasts! Bohart Museum of Entomology: All About Butterflies Zoom Zoom Passcode: 160485 1 PM Learn about a local butterfly and its fascinating natural history, then travel to the famous insect collection



and explore the deceitful world of butterfly and moth mimicry live. Questions and answers are encouraged. This will be a combination of document camera and slide show and Q and A. We will record it and upload it afterwards. Vannette Lab: Landscaping With Native Plants to Support Local Pollinators Zoom Meeting ID: 980 2830 2647 Zoom Passcode: 078510 Downloadable Pamphlet 1 PM – 2 PM Learn how to choose native plants for your home or garden that provide food for insects, including bees, butterflies and birds! Learn how to choose plants that provide nectar or pollen that support Pollinators. Bee Hummer: How to make the sound of a swarm of bees? Pre-Recorded Video In this activity, we will show you how you can recreate the sound of a swarm of bees with just a stick, rubber band, and index card. Credits: Exploratorium San Francisco. Science Snacks. Can bumble bees take the heat? Pre-Recorded Video Will the increase in extreme heat in California affect these cool-weather loving pollinators and their ability to persist going forward? A UC Davis research group is trying to figure it out! Help them conduct this work by submitting observations of bumble bee nests in the Davis/Sacramento area so that monitoring efforts can begin gathering critical data Guided Honey Tasting Pre-Recorded Video Amina Harris, Director of the Honey and Pollination Center, will lead a honey tasting of UCD's three honeys. Purchasing the honeys from the UCD Bookstore is recommended. This Exhibit is for demonstration purposes only. DO NOT FEED honey to any infant under the age of 12 months. Be the Bee: how to cross pollinate plants! Pre-Recorded Video PT. 1 Pre-Recorded Video PT. 2 We will be showing instructional videos on how cross pollination works with different plants, including peppers, tomatoes and different types of beans. The Student Farm hosted a field day Fall 2021 and featured pollinator projects. They also produced educational videos that feature learning opportunities like this one in the Ecological Garden: <https://www.youtube.com/watch?v=Y5fyQ6pmo9s>



Interns learn about small-scale organic mixed vegetable production.



The Arboretum and Public Garden's Habitat Horticulture Learning by Leading™ Team created more Potted Plants for Pollinators "recipes" for Biodiversity Museum day so that students could bring a piece of the Arboretum home during the pandemic and contribute to biodiversity corridors in urban areas.



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 Häagen-Dazs 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.

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.





Students plant food crops and pollinator plants in the Good Life Garden in the courtyard of the Robert Mondavi Institute for Wine and Food Science.

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.



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. 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/>. We have recently hired new groundskeepers who we are integrating into our landscape management trainings, including considerations for habitat gardening.

Integrated Pest Management Plan:

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

Recommended Native Plant List:

Recommended Native Plant Supplier List:



Our campus has adopted more bonus weeding days during the week and weekends in order to decrease herbicide use.



[Learn More](#)

