

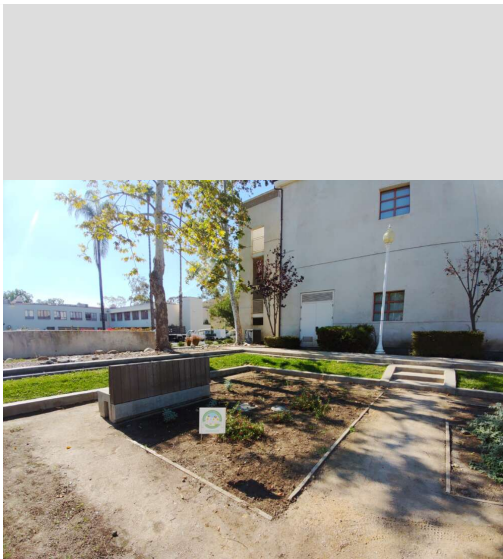
Bee Campus USA - California State University Channel Islands

Report on 2021

Pollinator Habitat Creation & Enhancement

Project 1: A-4 Parking Lot planter renovation project. Facilities Landscape Services staff installed new Dwarf bottle brush, Red Salvia and yellow wave flax plants as part of a campus planter renovation project consisting of a 3,049 sq. ft. area.

Project 2: Iron Wood Hall planter area project. Facilities Landscape Services installed more Red Salvia plants along Iron Wood Hall building as part of a campus planter renovation project consisting of a 2,613 sq. ft. area. Project 3: Aliso Hall pollinator habitat project. Facilities Landscape Services installed a new pollinator habitat with native plant species in the courtyard next to one of the campus science buildings. The new pollinator habitat is approximately 450 sq. ft. Project 4: University Hall pollinator habitat project. Facilities Landscape Services installed a new succulent rock garden featuring pollinator-friendly succulents next to University Hall, consisting of approximately 200 sq. ft.



New pollinator habitat in the Aliso Hall courtyard with native plants.



New pollinator plants and rock garden installed next to University Hall.

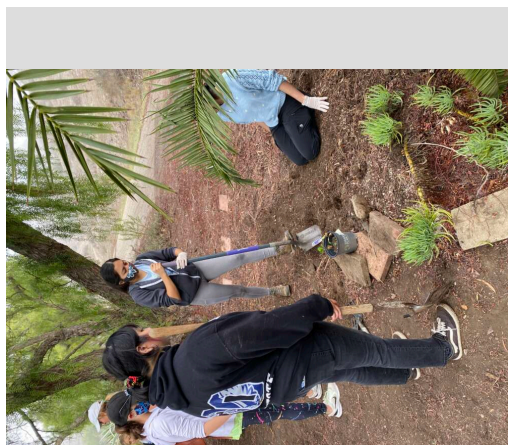


New pollinator plants installed at the A4 parking lot.



Education & Outreach

The Green Generation Club at CSU Channel Islands hosted two pollinator events in 2021, open to all students. During these events, students learned about the importance of bees and their contributions to the environment and our lives. The Green Generation Club also held recurring gardening days, where students worked in the CSUCI Student Therapy Garden to help restore the garden and plant more native and pollinator friendly species. During June 2021, in celebration of pollinator month, we posted pollinator facts on our social media platform to engage and educate the community. The post reached a total of 246 individual accounts, had 319 impressions, was shared by 11 users, and was saved by 4 users.




Students learning about native pollinator plants.



Students planting a pollinator succulent garden.

ECONOMIC VALUE

The work of pollinators contributes **\$217 BILLION** to the global economy! Honeybees alone contribute \$1.2-\$5.4 billion in agricultural productivity in the U.S.



Source: <https://www.pollinator.org/pollinators>

Sample of social media post for Pollinator Month highlighting the value of pollinators.

Courses & Continuing Education

CSU Channel Islands offers several for-credit courses focused on the importance of pollinators. Several of these courses expand on the role pollinators play in the context of ecosystem services, biodiversity, and agricultural diversity. The Conservation Biology course highlights the dependence on pollinators for agriculture and ecosystems. Additionally, in Intro to Environmental Science students explore the impact of pesticides and GMO crops on pollinators. Another course, Ecology and the Environment, includes lecture and lab components that discuss pollination as a form of plant-animal interaction within community ecology context, as well as pollination examples comparing specialized and generalized mutualisms. In the lab students observed pollinators in the field on campus and many students also recorded informal observations while writing in their field journals off campus. In an independent research course, observations were made of hummingbirds foraging from and defending flowering plants throughout campus as well as incidental observations of insect pollinators including butterflies and bees. Finally, in the Principles of Organismal and Population Biology course where pollination is analyzed through the lens of ecology and local plant biology. The university also offers several






continuing education courses that include pollinator-related information. For example, “Postcards from America’s National Park System” is a photo-essay course that deploys the power of images and stories to memorably connect participants with nature and human cultures in our National Parks. Another course that engages the community in pollinator education is “Science Fun for Kids and Their Grandparents” where science is portrayed as fun and exciting. This course includes new and old generations learning together by playing and asking questions. Another course, “With Whom we Share the Planet- An Exploration of Biodiversity”, demonstrates an appreciation of the botanical diversity in the Santa Monica Mountain foothills surrounding the university. Finally, “How the Government Makes Decisions about the Environment” is a course in which students learn methods the government uses to interact with the public, highlighting opportunities to have a voice in local decisions and discussion of community issues.

Ecosystem services related to biodiversity

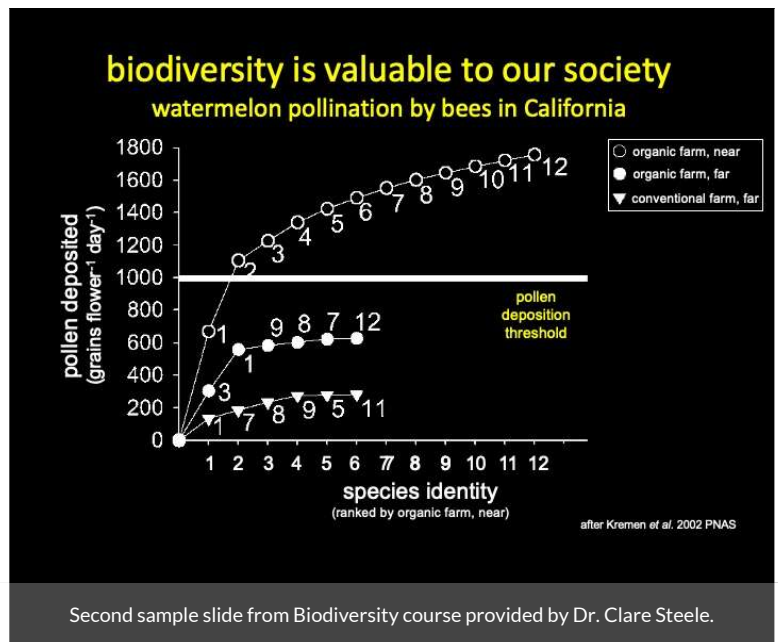
Bee pollination of crops

- classic ecosystem service = 2/3 of crops, worth many \$ billions globally (WWF)
- 15-30% of U.S. food production depends on insect pollination, primarily bees (MacGregor 1976)
- widespread honeybee decline

Images: T. Ricketts & B. Brosi

Sample slide from Biodiversity course provided by Dr. Clare Steele.



Service-Learning

Service-learning projects were still limited this year due to COVID-19 related measures and policies. The university hosted one service-learning event in 2021 with a select group of students to learn about the relationship between trees and pollinators. Students assisted with planting two new flowering Magnolia trees in an area lacking pollinator plants. The students learned about how to properly plant trees, adjusting irrigation practices to support growth throughout the life cycle, and benefits to pollinators.



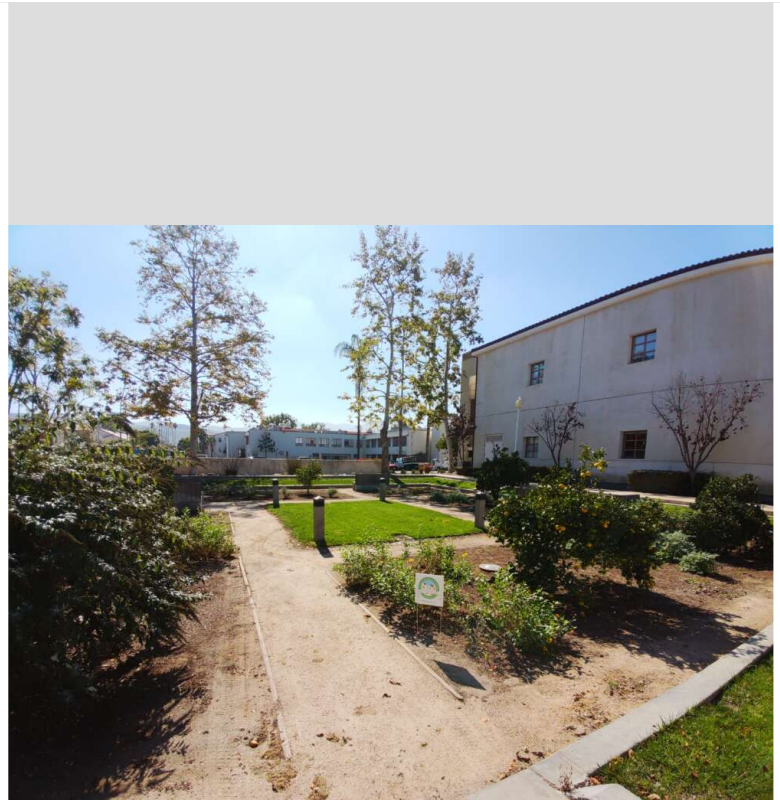


Educational Signage

CSU Channel Islands installed 4 new temporary signs last year for the new pollinator garden projects. We also replaced one temporary corrugated plastic sign with the new permanent sign provided by Bee Campus USA and the Xerces Society.



New permanent pollinator habitat sign at Sierra Hall pollinator succulent garden.



Temporary Bee Campus USA sign at new Aliso Courtyard pollinator garden.



Policies & Practices

The university maintained the campus IPM plan and limited pesticide use to essential applications only, prioritizing mechanical and natural pest management strategies.

Integrated Pest Management Plan: [integrated-weed-management-plan.pdf](#)

Recommended Native Plant List: [PollinatorFriendlyPlants.docx](#)
<https://nativeplants.csuci.edu/index-commonnames.htm>

Recommended Native Plant Supplier List:

Learn More

