

# Bee Campus USA - College of San Mateo

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.*

CSM's groundskeeping staff and our botany classes have continued to enhance the Cesar Chavez community garden. Grounds staff also continues to enhance all other native landscaping areas of campus. In addition, CSM was slated to receive plants from the Xerces Society for Invertebrate Conservation for a lawn replacement project in 2023, but the project was ultimately conducted with our Grounds staff and student, staff, and faculty volunteers at Skyline College (a sister campus in the San Mateo County Community College District).

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

1

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

12

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

150

*Please check all that describe the habitats your affiliate helped to create or enhance last year with pollinator benefit in mind.*

- Pollinator-friendly lawn (with flowering clover, dandelions...)
- Invasive/exotic plant species removal for habitat improvement
- Native pollinator-friendly shrub border/hedgerow 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.*

The committee hosted its inaugural Earth Fest at the College of San Mateo (CSM) in 2023 which featured various pollinator-friendly stations. Namely, the California State Parks department discussed and gave out native wildflower seeds and saplings. A local "zero waste store" Byrd's Filling Station tabled and talked about their local honey supply. The committee, with the CSM Sustainability as Social Justice committee also hosted a climate and food justice film series, which highlighted Indigenous agricultural practices across North America and the importance of conserving native species and local pollinators! In the fall, the Sustainability as Social Justice committee traveled to the Collective Roots Community Garden in East Palo Alto to learn more about local urban agriculture and pollinators. Over the summer, CSM hosts the 2 week Bay Area Pathways Academy for youth. One of the featured classes, Intro to Gardening, also highlights caring for native and pollinator friendly plants. Lastly, CSM's Professor Hankamp involves his Botany students in field trips and "Campus as a Living Lab" activities on and off campus to engage with pollinator conservation.

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

3

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

500

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

2

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

4



Pollinator Garden Maintenance Day (Joseph Puckett)



CSM Earth Fest Wildflower Planter Station (Ananya Subramanian)



Pollinator habitat signage (Joseph Puckett)



Educational Signage (Jessica Ho)

## 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.*

At CSM, the standard biology department curriculum contains general information about biodiversity and ecosystem resilience-to which pollinators are integral. In particular, the for-credit courses BIOL 145 – Plants, People & Environment, BIOL 220 – General Botany, BIOL 100 – Intro to the Life Sciences, and BIOL 210 – General Zoology all focus on plants and pollinators and their role as they relate to ecosystem function and connection to human society. Student reviews indicate that these classes have sparked deep interest in conservation and plant biology, even among non-science majors! The summer Bay Area Pathways Academy gardening course description highlights exploring soil science and methods to creatively keep plants alive. This curriculum also involves native plant management.

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

5

How many students attended those for-credit courses?

100

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

5

How many students participated in service-learning projects in 2023 to enhance pollinator habitat on or off-campus?

50

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

The committee hosted a native landscaping planting day at Skyline College, open to all SMCCCD students, with plants provided by the Xerces Society for Invertebrate Conservation. After a few months, the committee hosted a garden maintenance day, involving weeding and mulching. The 4 biology courses mentioned above each require field trips to engage students directly with conservation biology and ecosystem resilience. These interactive/service-learning trips include bayshore restoration, community garden visits, and discussions with officials about policy initiatives to promote ecosystem conservation.

Search by Keywords

Department

Course Type

Transfer

Distance Ed

Advanced

## BIOL 145 – Plants, People & Environment (CRN: 40658)

at College of San Mateo for Spring 2024



This course is offered online and it is recommended you complete a short [self-assessment](#) to ensure readiness before taking an online course.

### BIOL 145 PLANTS, PEOPLE, AND ENVIRONMENT

Introduction to plants and their functions as they apply to people. Covers principles of living organisms, structure-function, evolution, and ecology. Emphasizes the role of plants in the development of human civilization and considers their impact as a primary food source for the human population. One or more field trips may be required.

Units: 3

Degree Credit

Letter Grade Only

Lecture hours/semester: 48-54

Homework hours/semester: 96-108



Pollinator Garden Weeding and Mulching Day (Joseph Puckett)

## Policies & Practices

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

Current weed control protocol regarding pesticides involves limiting usage as much as possible, and involves only spot treating when absolutely necessary as opposed to spraying in a wide application. Gopher and rodent management has

been contracted to an external organization that does not utilize chemical/spray treatment and is friendly to pollinators.

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

The City of San Mateo is participating in a Bay Area wide campaign, the San Mateo Countywide Stormwater Pollution Program (SMCWPP), to "raise awareness about employing principles of Integrated Pest Management to help protect our local creeks and waterways." At this time, no specific policy initiatives or institutionalized campaigns are underway at the College of San Mateo

*Did your committee participate in any continuing education on ecologically-based Integrated Pest Management planning?*

Not this year

*Please check actions you have taken to make pest management practices more pollinator-friendly.*

- Only use pesticides as a last resort within the 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)
- 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

*Any lessons learned you would like to share?*

For increased student engagement, ask faculty to bring their students to an event during class time, as opposed to merely offering extra credit for attendance.

This Integrated Pest Management (IPM) Plan covers the entire building and associated grounds.

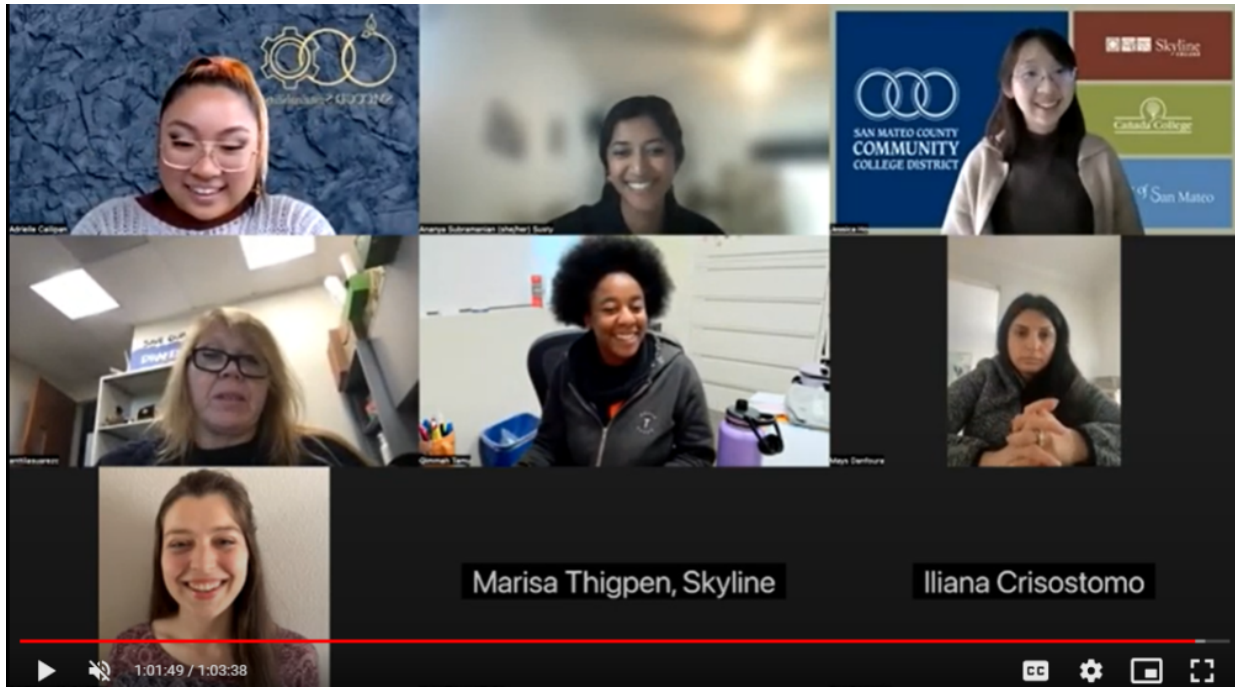
## **SECTION 2: GOALS**

- 1) To protect people, especially, students, staff, faculty and other campus constituents, from potentially hazardous chemical, biological and particle contaminants.
- 2) To enable ecosystem services and mitigate negative biodiversity impacts as a result of site management practices on the local ecosystem.

The Plan addresses environmental best practices for:

- Outdoor integrated pest management
- Indoor integrated pest management

## IPM Plan Snippet



Committee Zoom Screenshot (Ananya Subramanian)

Learn More

Integrated Pest Management Plan: [IPM Plan\\_CSM.pdf](#)

Recommended Native Plant List: [329000 Planting DS V2 201\\_01\\_01.pdf](#)

Recommended Native Plant Supplier List:

<https://sites.google.com/my.smccd.edu/smcccdsustainability/home>  
[smccdsustainability@my.smccd.edu](mailto:smccdsustainability@my.smccd.edu)

<https://www.instagram.com/smcccdsustainability/?next=>