

Bee Campus USA - College of San Mateo

Report on 2024



Pollinator Habitat Creation & Enhancement

Please describe pollinator habitat creation or enhancement projects in your community in 2024, and whether your committee hosted them or not.

Our focus was on outreach and maintaining existing projects; thus we did not create or enhance any new projects in 2024.

How many habitat projects did you help to create or enhance in 2024?

2

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

10

How many projects benefit monarchs, milkweed, or nectar plantings?

2

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...)
- Native milkweed planting for monarchs and bees (where appropriate)
- Invasive/exotic plant species removal for habitat improvement
- School garden



CSM Community Garden in honor of Cesar Chavez 2017 (Molly Munson)

Education & Outreach

Please describe pollinator conservation events or outreach activities in your community in 2024, indicating whether your committee hosted them or not.

In 2024, our committee hosted its 2nd annual Earth Fest at the College of San Mateo (CSM) which featured various pollinator-friendly stations. The California State Parks department tabled 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. We also

partnered with the CSM Sustainability as Social Justice committee to host a film series on Climate and Food Justice, which highlighted indigenous agricultural practices across North America and the importance of conserving native species and local pollinators. We also created a “Bee Learning Corner” in our office where students can drop in to learn about pollinators. It is a small start, but we are hoping to expand this into a larger permanent display once we move into a new workspace later this year. Over the summer, CSM hosted a 2 week Bay Area Pathways Academy for youth. One of the featured classes was Intro to Gardening which highlights caring for native and pollinator friendly plants.

How many pollinator-related events or outreach activities did you host or help with in 2024 (in total)?

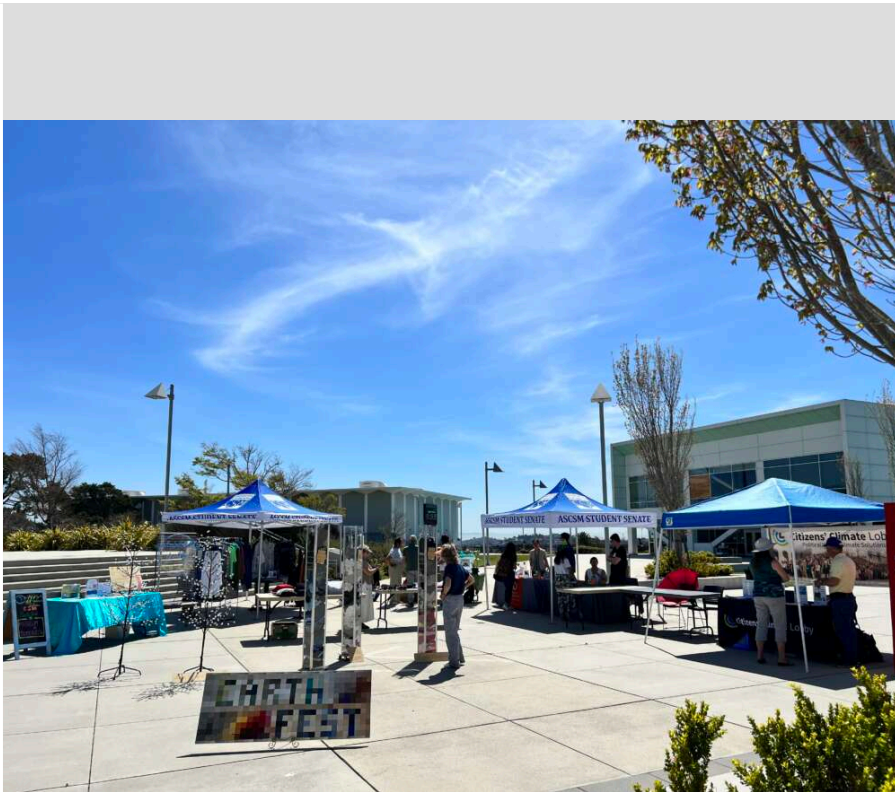
2

How many people attended those events (in total)?

200

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

2



Annual Earth Fest Student Sustainability Fair (Jessica Ho)



College of San Mateo Bee & Pollinator Corner (Molly Munson)



Curriculum, Continuing Education, & Service Learning

Please describe the curriculum your campus engaged in 2024, 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 2024?

5

How many students attended those for-credit courses?

95

Please describe the service-learning projects your students were engaged in 2024, indicating which, if any, were associated with a course.

A member of our committee participated in an invasive weeding volunteer day at Edgewood Park and Natural Preserve in San Mateo County to learn more about the surrounding native plant habitats and conservation efforts. Edgewood is located just south of College of San Mateo and north of our sister college, Cañada College. The area is home to is the Bay checkerspot butterfly which is an endangered species found only in a few areas throughout San Mateo and Santa Clara Counties. Many rare and native plant species also grow in this area and the volunteer coordinator shared many facts about the ecology of the preserve and ongoing conservation efforts.

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

1

How many students participated in service-learning projects in 2024 to enhance pollinator habitat on or off-campus?

1

Biology Courses

Course Listings

| Number | Course Title | Units | Transfer |
|----------|--|-------|----------|
| BIOL 109 | Introduction to the Life Sciences | 3 | CSU/UC |
| BIOL 102 | Environmental Science and Conservation | 3 | CSU/UC |
| BIOL 110 | General Principles of Biology | 4 | CSU/UC |
| BIOL 121 | Immunoassays Workshop: Techniques and Applications | 1 | CSU |
| BIOL 122 | Seminar in Immunology and Applications in Biotechnology | 1 | CSU |
| BIOL 123 | Biotechnology Workshop: Techniques and Applications of the Polymerase Chain Reaction | 1 | CSU |
| BIOL 124 | Seminar in DNA and Applications in Biotechnology | 1 | CSU |
| BIOL 129 | Biotechnology: Research and Industrial Applications | 3 | CSU/UC |
| BIOL 130 | Human Biology | 3 | CSU/UC |
| BIOL 132 | Human Biology Laboratory | 1 | CSU/UC |
| BIOL 145 | Plants, People, and Environment | 3 | CSU/UC |
| BIOL 184 | Wildlife Biology | 3 | CSU/UC |
| BIOL 195 | Biology Field Laboratory | 1 | CSU/UC |
| BIOL 210 | General Zoology | 5 | CSU/UC |
| BIOL 229 | General Botany | 5 | CSU/UC |
| BIOL 230 | Introductory Cell Biology | 4 | CSU/UC |
| BIOL 240 | General Microbiology | 4 | CSU/UC |
| BIOL 250 | Human Anatomy | 4 | CSU/UC |
| BIOL 260 | Human Physiology | 5 | CSU/UC |
| BIOL 310 | Nutrition | 3 | CSU/UC |
| BIOL 311 | Sports Nutrition | 3 | CSU/UC |

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Find Courses

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Accounting (ACTG)

Additional Content

Minimum Grade for Prerequisites

Unless otherwise indicated, a grade of C or higher is required for all prerequisite courses.

BIOL 220 General Botany

Course Description

Principles of biology as illustrated by plants with emphasis on structure, physiology, evolution, comparative diversity, and reproduction in plants, fungal, and protistan phyla. One or more field trips may be required. Extra supplies may be required.

Units: 5

- Degree Credit
- Letter Grade Only

Lecture hours/semester: 48-54

Lab hours/semester: 96-108

Homework hours/semester: 96-108

Prerequisites: Successful completion of Intermediate Algebra or equivalent, or placement by other measures as applicable.

Corequisites: None

Recommended: BIOL 110 or BIOL 195 or equivalent biology course with lab and CHEM 192 or CHEM 210 or CHEM 410 or equivalent chemistry course with a lab.

AA/JAS Degree Requirements: Area E5a

Transfer Credit: CSU (CSU GE Area B2 and B3), UC (IGETC Area 5B and 5C).

C-ID: BIOL 210+220 = BIOL 130S; BIOL 210+220+230 = BIOL 135S



Policies & Practices

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

CSM promotes using preventative and non-chemical approaches to control pests and provide protection against infestation. We prescribe to the University of California Statewide Integrated Pest Management Program which recommends techniques such as biological control, habitat manipulation, modification of cultural practices, and use of resistant varieties. Pesticides are used only after monitoring indicates they are needed according to established guidelines, and treatments are made by removing only the target organism. Strategies include education, habitat modification, physical controls, biological controls, least toxic chemicals, and preventative measures.

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

As of January 2025, neonicotinoid pesticides in California for non-agricultural outdoor use will only be available for sale at licensed pest control dealers and limited for possession and use by certified pesticide applicators. This pesticide group has been linked to the decline in honey bee and other pollinator populations. As such they will no longer be sold in retail nurseries and garden centers, and the possession or use of these pesticides by unlicensed applicators will be banned per AB363. The City of San Mateo is continuing to participate 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?

Our committee attended the Xerces Society Toolkit Webinar Training in 2024

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

- Implemented or maintained a written IPM plan
- 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)

Committee Photo



Districtwide Sustainability Committee Meeting (Marisa Thigpen)

Learn More

Integrated Pest Management Plan: [2016 Integrated Pest Management Program.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

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