

Sarah Caso (environmental scientist)



Sarah Caso works in the City of Santa Monica's community garden program in the Office of Sustainability and the Environment. Sarah has a bachelor's degree in environmental science with a focus on insect ecology and another bachelor's degree in history with a focus on history of science in the United States. She received both degrees from the University of California at Berkeley (UC Berkeley).

Her science journey began when Sarah Caso was born in Los Angeles in 2001. She had always loved science through middle school and high school. She knew she would get a science degree in college, but she kept changing her mind on what scientific field she wanted to enroll in. She went from microbiology to marine biology to chemistry. When she was in high school, she joined the Eco Club and that made her fall in love with environmentalism. She decided to become an Environmental Science major.

Her teacher who led the Eco Club in high school, Mrs. Brako, was always very encouraging about Sarah's interests. Her high school did not have any environmental science classes so being part of the Eco Club was as close as she could get to environmental science before going to college. The summer before she started college, she worked for her town's conservation mission, doing educational work in invasive plants and insects, light pollution, composting, and so forth. Her supervisors were very supportive! One in particular, Heather, was very helpful and became her idol. Heather used to be an environmental scientist at the University of

Connecticut's (UConn) extension program in water quality but now is the chair of the conservation commission and focuses on homesteading and leading field trips for middle schoolers to the beach, marshes, and forests to teach ecology



hands-on with her time. In her freshman year at UC Berkeley, Sarah was also a part of the Global Environmental Theme House, which was a living-learning community focused on environmentalism. They had lectures throughout the year from a variety of professors on campus

in different areas of environmental science-from green chemistry to forestry-all of whom solidified her resolve to study environmental science.

Sarah was a college student during the pandemic, so it was a struggle to take some of the science classes required for her major remotely. They had the labs online through a simulation application which made it hard to learn. To get more hands-on lab work, Sarah joined a research lab studying bees in agricultural landscapes in her sophomore year, which sparked her interest in insect ecology. She ended up staying with bee research through college, looking at floral visitation patterns, reproductive health of bees along an urban gradient, nesting behavior of ground nesting bees, and the impact of heatwaves on bee development. Sarah took time off from college in what was supposed to be her senior year and worked full-time split between a lab manager at UC Berkeley and research technician at UC Davis, both in bee research labs. Since she had to write a thesis to graduate, the bee research was very helpful. At first, she was worried about writing a thesis to graduate and thought about changing her major to one where she did not have to write a thesis-but it ended up being one of the best parts of her major and made it



clear to her that she could succeed as a scientist. At UC Berkeley, there were more female students than male, and majority of her lab mates were women so that made her feel very welcome.

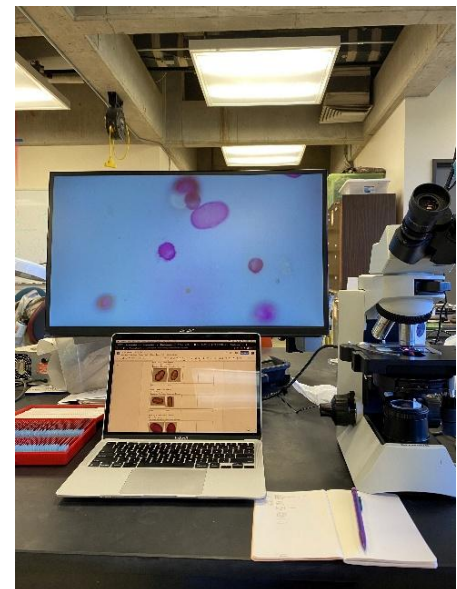
WORK AFTER COLLEGE

Sarah had a hard time looking for a job after college. Companies were just starting



to recover after the pandemic! There were plenty of opportunities in the environmental science field, but many jobs were looking for experience or a master's degree or both. Right after she graduated, she got a short-term position as a research technician working on a USDA sponsored project at UC Davis. Sarah worked in

Davis for three months on a project studying the impact of heatwaves on the development rate of bees from different geographic locations. After the project finished, she found a job in the City of Santa Monica, California. She works in the community garden program in the Office of Sustainability and the Environment. She loves her job! She gets to spend a lot of time outside and gets to integrate her interest in pollinators. One of the main focuses of her job is increasing pollinator habitat and creating resources for the public to learn about pollinators and gardening. Her goal in the future is to be a pollination ecologist at USDA so this gives her experience she can put on her resume. Sarah is planning to get a master's degree in Pollination



Ecology at the University of British Columbia next fall, doing research in landscape restoration in agricultural landscapes.

She has accomplished a lot in her short time in the City of Santa Monica. She is currently designing her fourth pollinator garden for the city, having already completed three. It was harder than she had imagined finding land in the city that she was allowed to transform, but it has also been rewarding to see her gardens grow and look at the pollinator populations changing and to know that she had created a lasting change in the local landscape. The photo on the monitor is of dried pollen.

WORK-LIFE BALANCE

Sarah has a dog named Maya who she treats like her own child. She appreciates being able to work from home at least once a week, because it gives her more time to play with Maya. Sarah is a subscriber to the San Francisco Opera and the SF Ballet programs and occasionally will fly to the Bay Area to watch an opera or ballet and catch up with her friends.

MENTORING WOMEN SCIENTISTS

While she doesn't currently mentor any other women in science, she did in college. She actually gave presentations to the Girls Advancing in STEM club that she had been a part of in high school. She ended up mentoring one of the girls in the club once she began college; the girl applied to work in the research lab where Sarah was the lab manager because she was impressed with Sarah's presentation. Sarah also helped mentor new undergraduates in her other research lab, helping them to learn how to do literature reviews and come up with research questions.

ADVICE TO NEW GRADUATES

Having been a recent graduate, Sarah knows exactly how hard it is to get a job right now. Her advice to new graduates is to keep in mind that your first job out of college doesn't have to be your job forever and it may not be exactly what you wanted to do. Sarah loves her current job, even though she doesn't get to do scientific research. She is very lucky that her boss encouraged her to go to graduate school so she can find a job in scientific research. Sarah thinks that it is more

important to find a supportive community for your first job, because it is hard to be inspired to persist when you don't have a supportive community.

HOW CAN WE GET GIRLS INTERESTED IN SCIENCE?

Sarah thinks that clubs like Girls Advancing in STEM (GAINS) are an incredible way to get young women interested in science. Being able to see other women that currently works as scientists and hearing about their journey is so important because it is hard to imagine being something that you've never seen anyone like you do before.

HER SCIENCE JOURNEY

2001- Sarah Caso was born in Los Angeles

2019-Sarah graduated from Daniel Hand High School in Madison, Connecticut

2023- Took time off from college and worked as a lab manager and research technician in bee biology at UC Davis

2024-Received her degrees from UC Berkeley, bachelor's degree in environmental science with a focus on insect ecology and a bachelor's degree in history with a focus on history of science in the United States.

- worked as a research technician on a USDA project at UC Davis

- started working in the City of Santa Monica Office of Sustainability and Environment