Stanford



Joe Kesler

Ph.D. Student in Biology, admitted Autumn 2024

Bio

BIO

I am a Ph.D. student studying evolutionary ecology and biogeography in the Daru Lab. My research focuses on how species assemblages evolve and shift with changing environments across temporal and spatial scales. My current project integrates biogeographic analyses and phylogenetic data to understand the evolutionary and ecological forces shaping the biodiversity of the world's marine life.

In June 2023, I received a B.S. in Ecology, Behavior, and Evolution from UC San Diego, where I worked primarily with Professor Elsa Cleland, researching the demography of the California poppy (Eschscholzia californica) and how its traits vary across different climates within the state. I also participated in two other labs, broadly investigating plant-pollinator interactions and plant genetics respectively. After graduating, I assisted the Green Biome Institute at CSU East Bay by collecting DNA samples of endangered California plant species, followed by work as a habitat restoration technician for Recon Environmental in the marshes around the San Francisco Bay Area.

In the Daru Lab, I am excited to investigate how marine species respond to environmental changes over varied timescales, with the ultimate goal of informing habitat restoration management and conserving biodiversity worldwide.

EDUCATION AND CERTIFICATIONS

- Bachelor of Science, University of California San Diego , Ecology, Behavior, Evolution (2023)

Publications

PUBLICATIONS

- **Can species adapt to drought using multiple strategies? Lessons from the California poppy.** *The New phytologist*
  Schwab, S. T., Lam, K., Thornton, F., Brown, R., Kesler, J., Merow, C., Sexton, J. P., Cleland, E. E.
  2026