**Desiree Zhuk**

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**Education**

Master of Science in Interdisciplinary Marine & Estuarine Sciences | San Francisco State University | San Francisco, CA | 2023 - 2025

Thesis work on Southern sea otter prey accessibility in low risk areas within San Francisco bay, advised by Ellen Hines.

Bachelor of Science in Marine Biology | University of California, Santa Cruz | Santa Cruz, CA | 2017 - 2021

Focused on animal behavior ecology, kelp forest ecology, genetics, and research paper writing.

**Skills Summary**

Scientific diving NAUI certified 2019 through University of California, Santa Cruz.

RStudio and GitHub analysis and data infographic creation earned during thesis writing.

Lesson planning and

Scientific illustration through species guidebook creation for local fishermen, painted murals in large facilities, maintained observation sketchbooks, created infographics for students.

**Experience**

Presented science curriculum to Pre-K through College students with a range of programs that include: on site stations, aboard the research vessel Robert G.BrownLee, visited schools with mobile aquariums, hosted public events, and traveled to Richmond, San Francisco, and Antioch to host city specific programs tailored to the ecosystem located there. Taught classes through inquiry based learning and hands-on activities, tailored to each program’s needs, and included hydrology data collection and animal handling aboard research vessels and on land. Responsibilities included the docking of the research vessel as well as assisting the captain.

Volunteer Guide | Monterey Bay Aquarium | Monterey Bay, CA | May. 2022 – Present

Educating the general public on current aquarium displays and Leading schools through educational demonstrations. Responsibilities include handling animals, overseeing stations, public speaking on marine science and assisting aquarium staff.

Artist and Educator | Minorities In Shark Science | ​Bradenton, FL | Jan. 2022 – Jul. 2022

Created scientific infographics for classrooms, public events and online curriculum. Responsibilities included lesson plan making, dichotomous key creation, and both illustrating and curating a 32 page elasmobranch field guide for the waters of Florida which included information of life history, characteristics, habitat, fishery regulations and carefully illustrated images used to identify each species; with fishermen and scuba divers being the targeted audience.

Education and Aquarist Intern | Pennington Marine Science Center | Avalon, CA | Jun. 2021 – Aug. 2021

Created and taught lesson plans surrounding oceanography and aquaristry for the public while maintaining a large aquarium facility containing fragile and protected specimens native to Catalina Island. Produced standard protocol for future paid interns while helping re-establish the aquarium after covid related shutdowns. Collected a variety of specimens through scuba and freediving. Assisted graduate students from Stanford with their population genetic screening for white pointer shark presence, using samples collected on-site and PCR to amplify suspected species DNA.

Undergraduate Research Internships | University of California, Santa Cruz | Santa Cruz, CA | Dec. 2019 – May. 2021

Created research papers through the RaimondiI-Carr Lab and Undergraduate Research in EEB: Scientific Writing Lab, on kelp forest ecology: specifically kelp and urchin relationship dynamics and fish transect survey methodology. Assisted graduate students Ellen Willis-Norton and Casey Sheridan with thesis projects including the sea urchin mesocosm lab researching interactions and responses of purple sea urchins through predator/prey dynamics and response cues as well as the ocean acidification lab researching the effect of future predicted water quality on fish larval development through remote data analysis, using the ImageJ program.

Volunteer Scuba Diver | Long Marine Lab | Santa Cruz, CA | Nov. 2019 – May. 2021

Upkept marine mammal facilities, scuba dove within designated tanks using power tools to clean and help provide proper care for bottlenose dolphins.

Volunteer Assistant | Bodega Bay Marine Labs | Bodega Bay, CA | Jun. 2016 – Aug. 2016

Worked in a wet lab with researchers on various studies. General upkeep of tanks, displays and animal care such as meal prep for large rockfish, size checks on scallops, and fish.

**Past Papers** https://desireezhuk.com/written-works/

Purple Sea Urchin Avoidance Response to Specific Predation Cues of Red Rock Crabs.

Sexual Behavior Tactics for Hierarchical Male Elephant Seals: when too much can be detrimental to one’s success.

Analyzing the Methodology used to Survey Fish in Kelp Forests.

Bottom-Up or Top-Down? The Relationship Between Giant Kelp and Purple Urchins in Monterey Bay, California.