

Hi! My name is Cassie, and I am an undergraduate entering my third year of my Biology with a Zoology Emphasis degree at San Diego State University. Of all the internships I applied for, CMIL MURPs was both one of the ones I was most excited at the prospect of, and one of the ones I was most intimidated by. As someone who is often quiet and unsure in group situations, I knew going in that it would push me outside my comfort zone. I did not anticipate



how much this would therefore further my scientific understanding and communication. I have found the way this internship sets up its “pods”, composed of a mentor, SDSU student, and community college student all working on a common project is incredibly effective as it gives the group a diverse array of experiences, perspectives, and skillsets to draw upon. At CMIL MURP, I have felt consistently uplifted both by my pod and the broader community at CMIL. I have had opportunities to both directly interact with other intern pods working on different projects than I, as well as overhear conversations or be introduced to students outside of the internship program who work on various other projects. This program has reinforced my joy in marine biology and has provided me with a community I can reliably connect with and count on.

For the summer of 2026, I served as the undergraduate SDSU intern and worked alongside my mentor Sara and fellow intern from San Diego Mesa College, Cyn. Our



project worked with Baited Remote Underwater Videos, also known as BRUVs, and used these as a tool to record fish abundance and diversity in both Marine Protected Areas and non-Marine Protected Areas. Going in, I didn't even know these existed, much less what they could be used for. On our second week of the program, we got dropped right in the deep end and taken on a boat trip to deploy these structures. Not only

was this my second time ever on a boat of any sort (and first time in the ocean!), but I

barely knew what to expect. I showed up with about a pound of jerky, three layers of clothing (two of which I shedded within the hour), and an utter lack of sea legs. Despite feeling like a fish out of water upon starting, I ended the day having done nearly every role one could possibly help with for dropping the BRUVs. I assisted in writing down coordinates, pulling up the BRUVs, coiling the rope, setting up the cameras, securing the flashlights, and more. Though exhausting, the day was deeply rewarding and I ended it feeling proud and satisfied with what I had learned.

While there was a lot of physical labor and technical skill involved, one of my favorite parts about this field work experience was seeing how creative science can be. The cameras we used were just GoPros in a waterproof case, and the BRUVs were in two parts—one being the heavy weighted bottom to limit toppling, and one being the top with the flashlights and cameras—both connected via a ziptie, so that if it were to get stuck and unable to be pulled out, we could theoretically snap the two sections apart so we could save the valuable flashlights, cameras, and associated footage. I found this delightful. For me, as someone with no scientists in my family or around me growing up, a main misconception I have always held about science is that it is overly official and even pretentious, with little room for creativity or simple solutions to scientific problems. To see the fun ways scientists continue to innovate, especially in spite of budget cuts and lack of financial support was inspiring.

Though the activities at the start of the summer were incredibly busy, the remainder of the program eased into a more manageable workload. Now that we had the videos, we had to actually get some data out of it. This involved using the videos to identify different fish species, determine habitat information, and find out the MaxN—which is the most of each



species you can see at a time in each video. This data we now are using to determine whether in La Jolla—where this data was taken—there is a significant difference between the Marine Protected Areas (MPAs) and non-MPAs for abundance of targeted fish species. In other words, in protected areas where there are limits on fishing compared to areas with no limits on fishing, do we see a meaningful difference in the amount of fish that are often targeted by fishing?

At the end of the semester, we condensed our findings into a poster to present. While as of writing this I have not yet presented the poster, I look forward to the ways it will benefit my science communication skills. This internship was a wonderful experience

and I would recommend it to anyone considering or pursuing a career in the marine sciences, anyone looking to find their place in science, and anyone seeking to improve their science communication.