

Update

Marine Protected Area Management Program e-news

August 2018

Issue 4



"You're a marine biologist? That's amazing! What do you do?" While a career in marine biology isn't nearly as glamorous as it is portrayed in movies, and most of the time is spent crunching numbers or writing papers at a desk, I always answer this question in the same way. "Honestly, it's amazing! Apart from time in the office, I get to spend time outside studying the ocean scuba diving, living on a boat, or monitoring the coast on land! Let me tell you about my most recent research trip..." In this case they would hear all about monitoring the tidepools in Northern California.

Waking up well before sunrise ensures our early morning arrival to the coast to take advantage of summer's low tides. Upon arriving at our survey site we immediately begin unrolling our transect tapes (imagine a long measuring tape on a spool) throughout the area. Then, just as the first rays of morning light begin to show on the horizon, we begin counting and identifying the marine life that is submerged beneath the cold Pacific waters during high tide.

Assisting partners from the University of California, Santa Cruz, Humboldt State University, and California State Parks, and using a protocol developed by the [Multi-Agency Rocky Intertidal Network](#) (MARINe), we conducted both [biodiversity surveys](#) and [fixed plot surveys](#) at six sites throughout Humboldt and Mendocino counties, including two sites within marine protected areas (MPAs). This July 2018 trip concluded the first year of long-term MPA monitoring surveys for mainland rocky intertidal habitats.



Surveys have occurred at many North Coast sites over the past decade, prior to MPA implementation. "The North Coast MPAs went into effect in late 2012 with data collection for a number of MPA monitoring projects starting soon after," says California Department of Fish and Wildlife (CDFW) Environmental Scientist Adam Frimodig. "However, having MARINe data collected before the MPAs were implemented is a huge benefit for tracking changes over time."

A frequent participant on these surveys and fellow CDFW Environmental Scientist, Sara Worden adds, "One of the aspects I love most about monitoring a site when the MPAs were first implemented and now for long-term monitoring, is that I get to see the changes first hand, not just by looking at a graph or a data table, like the current presence of sea stars."

Following the unprecedented die-off of sea stars beginning in 2013 along the west coast of North America due to "[wasting syndrome](#)," researchers have overserved a large number of young sea stars at some monitoring sites throughout California. According to Worden, "the relatively high number of baby sea stars appearing along our coast is a hopeful sign. It will be interesting to see how the potential return of this key predator will affect the intertidal, especially in our MPAs, as long-term monitoring continues."

Given changing ocean conditions, this line of work can be challenging even for the most dedicated optimist. However getting to see positive stories, like the recent appearance of baby sea stars, makes every survey worth it.



This newsletter provides updates about the [MPA Management Program](#). California's MPA network is managed collaboratively through the MPA Management Program, which includes four focal areas: outreach and education, enforcement and compliance, research and monitoring, and policy and permitting.

QUESTIONS?

Please send all inquiries to ASKMPA@wildlife.ca.gov



LEARN!

Watch this [video](#) to learn how MPAs work to protect our resources.