CCFRP Volunteer Newsletter Summer 2023



A Summary of the 2022 Sampling Season California Collaborative Fisheries Research Program Bodega Marine Lab — North-Central Coast



Greetings valued volunteers,

Thank you all again for your efforts during our 2022 field sampling season. Because of your continued support and dedication we were able to complete our 5th season of data collection inside and outside our site's Marine Protected Areas (MPAs). This season, in spite and defiance of foul weather, we

Stewarts point caught fishes:

MPA: 1790 (170 Tagged) **REF**: 718 (178 tagged)

Bodega Head Fishes caught:

MPA: 604 fish (162 tagged) REF: 270 fish (123 tagged)



uillback Rockfish

2022 Total fish catch:

3382



Tagged Copper Rockfish

completed **11** trips with the collective efforts of **33** anglers and **19** science crewmembers. Across those trips, we caught a total of **3,382** fish from 22 different species and tagged **633** of them, across **22** different species. Although we say it every day out on the water, it is worth repeating – this science truly could not get done without all of you championing the work that we do. Thank you all so much and we hope to see you all out on the water with us this summer!



Lingcod, featuring Jess C. and angler Lynette W.D.

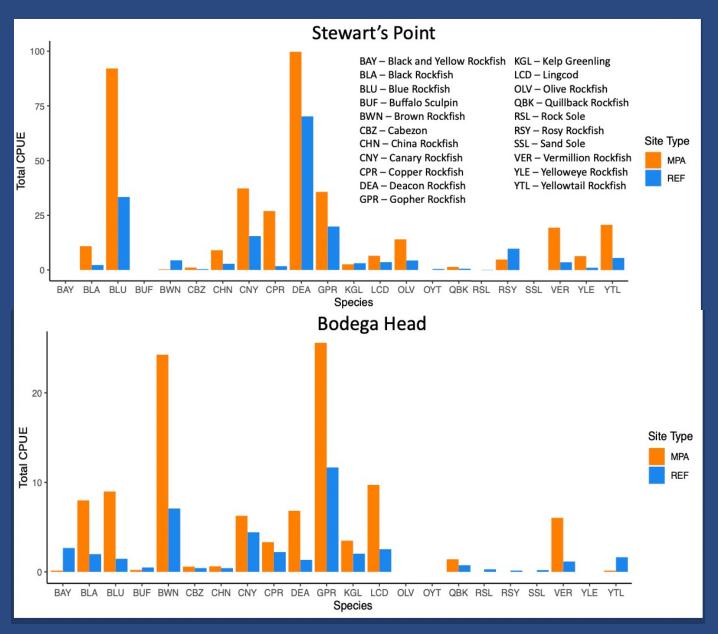


Copper rockfish, featuring Jordan. and angler Scotty

1st recapture of the season!

Species Breakdown

Of our two sites, Bodega Head state marine reserve (SMR) and reference (REF) sites yielded fewer fish than Stewart's Point SMR and REF. Below is the 2022 species-specific catch-per-unit-effort (CPUE) for the Bodega Head and Stewart's Point sampling locations, measured as the number of fish caught divided by the total angler hours. The orange bars indicate the catch-per-unit-effort in the MPA, and the blue bars indicate the catch-per-unit-effort in the MPA.



Blue (Sebastes mystinus) and deacon rockfish (Sebastes diaconus) dominated the catch at Stewart's Point SMR/REF, whereas brown (Sebastes auriculatus) and gopher rockfish (Sebastes carnatus) were our most prominent species at Bodega Head SMR/REF!

CCFRP Crew Updates

For those of you that have been volunteering with the Bodega Marine Lab (BML) CCFRP for some time, you may have noticed that last year's science crew sported some fresh faces. In 2022 it was our privilege to congratulate our previous BML CCFRP Principal Investigator, Dr. Steven Morgan, on his retirement, and our previous lead technician, Sadie Small, in her new position investigating seaweed physiology. During this transition, we have welcomed our new BML



Vermilion rockfish, featuring Su C. and angler Scotty

CCFRP Principal Investigator, Dr. Christina Pasparakis, our two new lead technicians, Francine De Castro and Jordan Colby, and our core science crewmember Sujung Chung to the team! As the new team settled into their roles, we relied heavily on help from other CCFRP institutions – both Erin Johnston and Robert Moon from Cal Poly San Luis Obispo, Claire Stuart from Cal Poly Humboldt, Jake Todd from San Jose State University's Moss Landing Marine Labs, and our fearless Statewide Coordinator Rachel Brooks. The National Oceanic and Atmospheric Administration's (NOAA) Southwest Fisheries Science Center also generously lent us the invaluable expertise of Jessica Choi and Rebecca Miller.

This was also our first year with Captain Mike Cabanas and Deckhand Mike Juanes from the New Captain Pete Sportfishing, and with Captain Ryan Giammona and Deckhand Josh Peterson from North Bay Charters. We couldn't have asked for better a boat crew, and we look forward to working with them again this year!



Meet Our New Leads



Dr. Christina Pasparakis is our new Bodega Marine Lab CCFRP Principal Investigator. When she's not busy helping our science crew prepare for another season of fieldwork, Christina spearheads the Toxicology, Physiology, Ecology, and Conservation Lab (ToPEC Lab) at BML.



Buffalo sculpin featuring lead tech Francine

Francine De Castro is one of our new lead technicians at BML CCFRP! When she's not on the water busy trying to keep her breakfast down, Master's student Francine investigates the combined effects of pesticides and ultraviolet radiation on early life stage aquatic organisms. After last year's field season, this lab rat is excited to be back out on the water with you all!

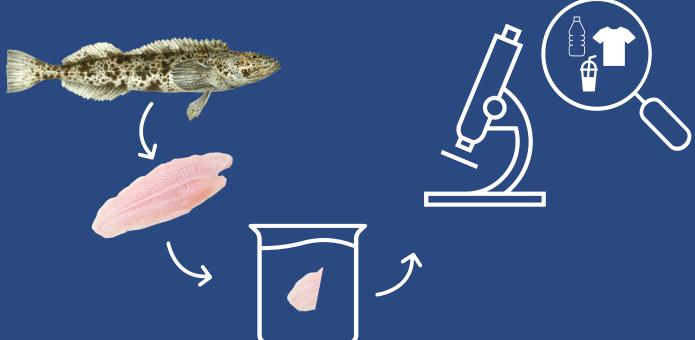


Yelloweye rockfish featuring lead tech Jordan

Jordan Colby is another one of our new lead technicians for BML CCFRP! When Master's student Jordan isn't squeezing and slinging fish for CCFRP, he spends his time studying microplastic bioaccumulation in our native groundfish. Jordan is raring to go, and stoked to see y'all out on the water this year! He says, "Let's get some fish! Let's get some good fish!"

New Projects: Investigating Microplastics in Rockfish

After an educational first season, the Bodega Marine Lab CCFRP crew retained some muscle and liver tissue samples from our sampling trips. With these samples in mind, the BML CCFRP crew developed a microplastic extraction protocol that would enable us to effectively remove/distill/filter out microplastic debris from tissue samples. Jordan is excited to focus his research on microplastic bioaccumulation in our local rockfish, and is looking forward to collecting tissue samples from the other CCFRP institutions to gain more insight into which rockfish of which regions may be sequestering increased amounts of microplastic debris.



To extract microplastics from rockfish samples, we remove a small plug of tissue. We then dissolve that tissue in the lab, leaving behind only the tiny microplastic particulates, which we catalogue using microscopy. Common microplastics in the environment can be traced back to single-use plastics and fibers from textiles!



Fleet Updates



HALF MOON BAY CA

Although the 2022 field season was characterized by foul weather, morale was high- we could not have asked for better from our charter partners. Their dedication, passion, and expertise were invaluable to our efforts and we are so grateful to both the crews of The New Captain Pete based out of Half Moon Bay and the Take Five with North Bay Charters based out of our home port in Bodega Bay!

Our partnership with North Bay Charters was welcomed by the Bodega Bay community as charter captains throughout the Bay expressed excitement to be a part of monitoring their home waters.

In 2023 we hope to continue the effort to work with local captains and look forward to a great upcoming season!



2023 Volunteer Appreciation Event

As a token of our appreciation, we are excited to invite you all to our annual volunteer angler appreciation event at the University of California Davis Bodega Marine Lab. All interested volunteers are welcome to attend-we are excited to present you all with the data we collected this past season, and introduce new projects that we'll be incorporating into our sampling protocols this year. If you are available to attend we would be heartened by your presence.

University of California Davis - Bodega Marine Lab 2099 Westshore Rd, Bodega Bay, CA 94923 Saturday, July 8, 11AM – 2PM



You'll all be receiving more information from us about this appreciation event, so keep an eye out for an email from us! Lunch is on us, so if you're able to make it, please RSVP to the form we'll be sending out.

