Volunteer Newsletter

A Summary of the 2023 Sampling Season
By Claire Stuart

California Collaborative Fisheries Research Program – North Coast Collaborative Fisheries Research

Greetings Volunteers,

It's with gratitude and joy that we present this annual newsletter to you, our angler volunteers, who make the California Collaborative Fisheries Research Program possible! Thanks to your continued enthusiasm and assistance, in 2023 we completed the 9th season of CCFRP hook and line surveys here on the North Coast.

Since 2017, we have:

- Conducted **138** hook and line surveys
- Enlisted **108** volunteer anglers
- Caught and released **15,534** fish (**11,017** tagged)
- Captured a total of **28** different species

This season, we:

- Completed **12** trips total
- Caught **2,291** fish (**529** tagged)
- Captured **23** different species

Please enjoy these pictures and updates from 2023. Watch your emails for the 2024 sampling schedule to come out this spring!
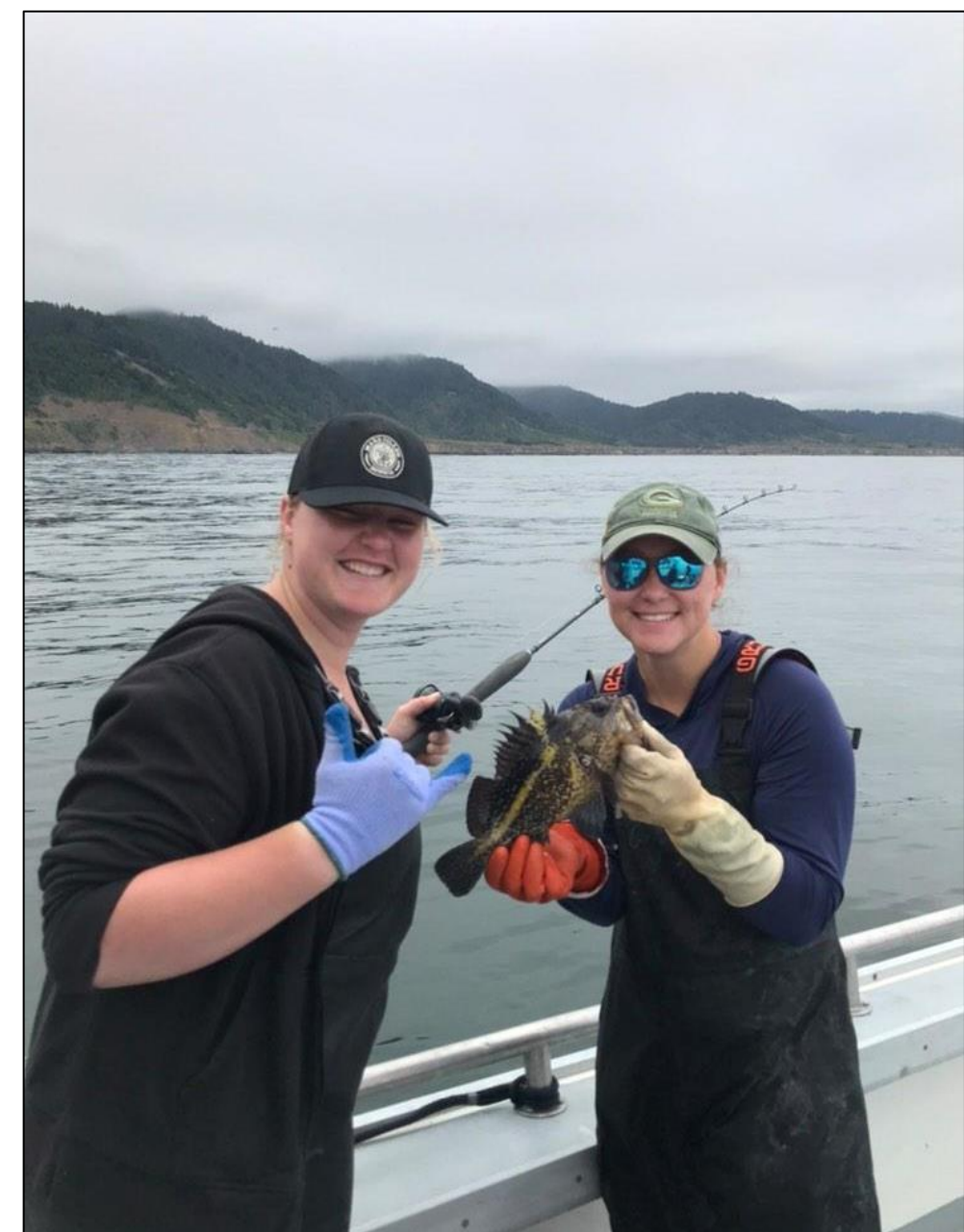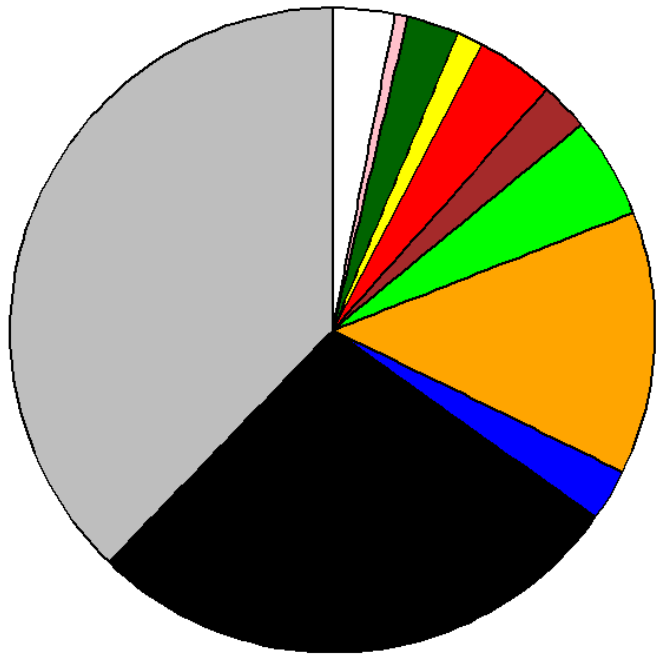
Don't forget to follow us on Facebook at **NorthCoastCFR** and follow **CCFRP** on Facebook, Instagram, YouTube, and X (formally Twitter) @CCFRP to stay up to date on MPA monitoring throughout the state! Visit **ccfrp.org** to access all reports and newsletters!
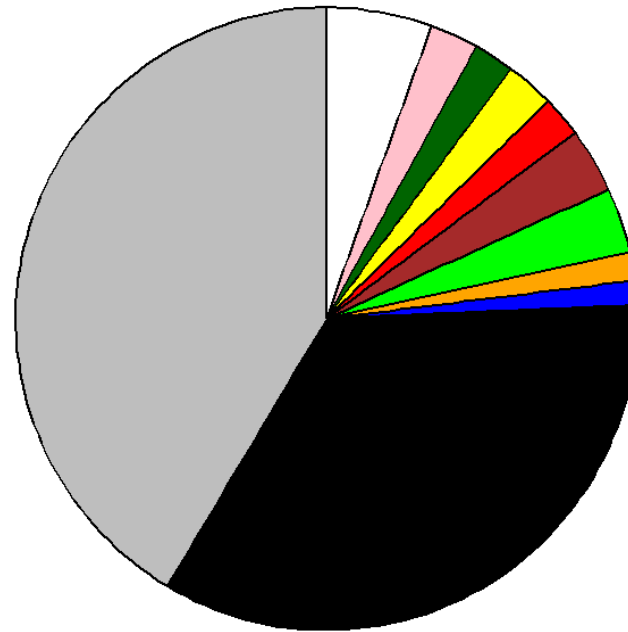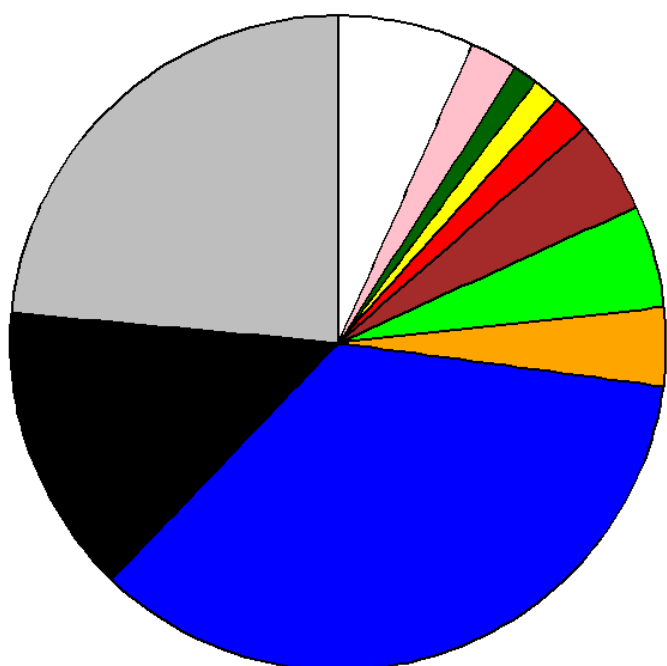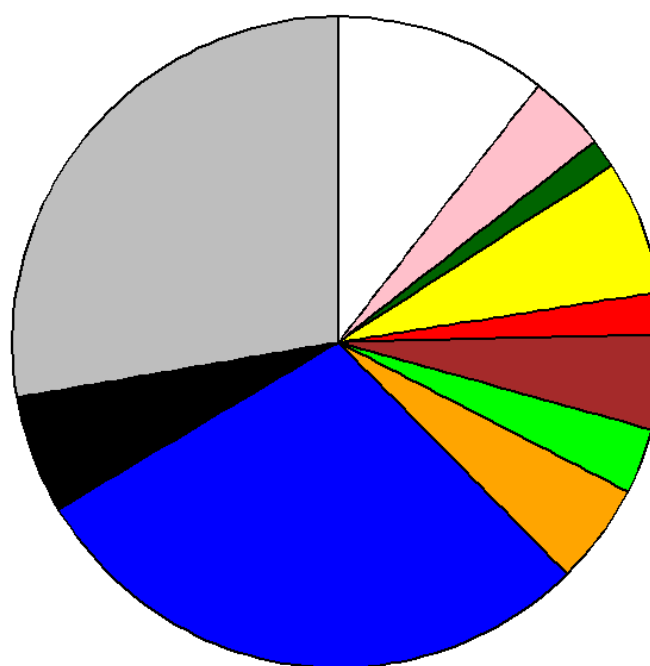
2023 Species Composition

Cape Mendocino MPA

Cape Mendocino REF

Species

- Deacon Rockfish
- Black Rockfish
- Blue Rockfish
- Canary Rockfish
- Copper Rockfish
- Lingcod
- Vermilion Rockfish
- Yellowtail Rockfish
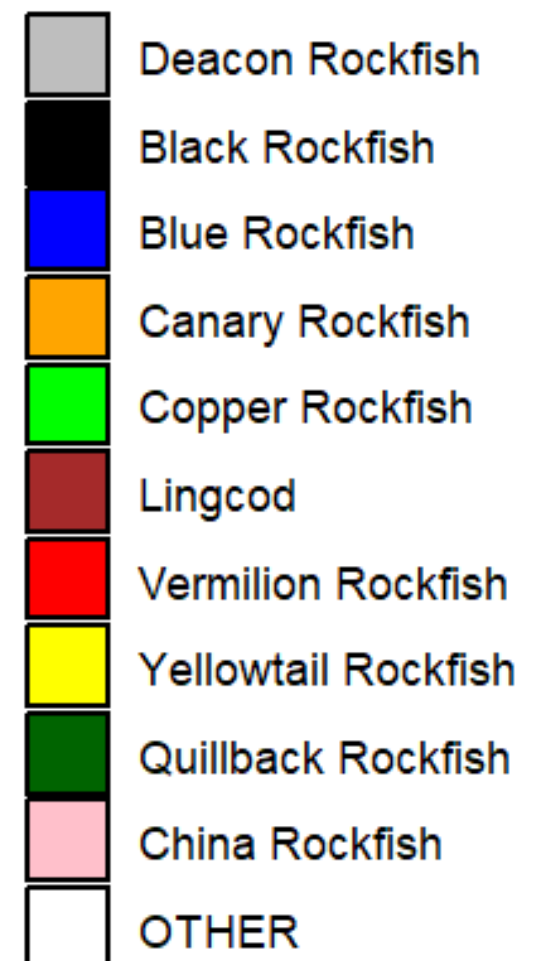- Quillback Rockfish
- China Rockfish
- OTHER

Ten Mile MPA

Ten Mile REF

These pie charts show the 2023 species composition of the **top ten species**, with an "OTHER" category for the rest of the species observed. Species composition was most similar between the paired sites (MPA + reference site, or REF). At the **Cape Mendocino paired sites**, 60-75% of our catch was made of Deacon and Black Rockfish. Comparatively, Blue Rockfish make up a larger proportion at the **Ten Mile paired sites**. Blue and Deacon Rockfish together make up approximately 60% of catch at the Ten Mile paired sites. The Ten Mile REF had the highest proportion of Yellowtail Rockfish and "OTHER" species of all the sites, and the Cape Mendocino MPA has the highest proportion of Canary Rockfish. Interestingly, there was a **4-fold increase** in the amount of Deacon Rockfish we caught at Cape Mendocino this year compared to 2022.

New CCFRP Publication

The California Collaborative Fisheries Research Program (CCFRP) is a partnership of researchers, recreational anglers, and charter boat captains invested in MPA monitoring and fisheries research in California. In December 2023, **the latest on CCFRP MPA monitoring** was published by Ziegler et. al. It analyzes CCFRP catch and size data from 12 MPAs and their reference sites, from 2017-2022, to evaluate **MPA efficacy on California's coast**. The paper is open-access and can be found with the link on the **QR code** on this page! Displayed below are a few of the figures that pertain to our sampling locations, Cape Mendocino and Ten Mile.
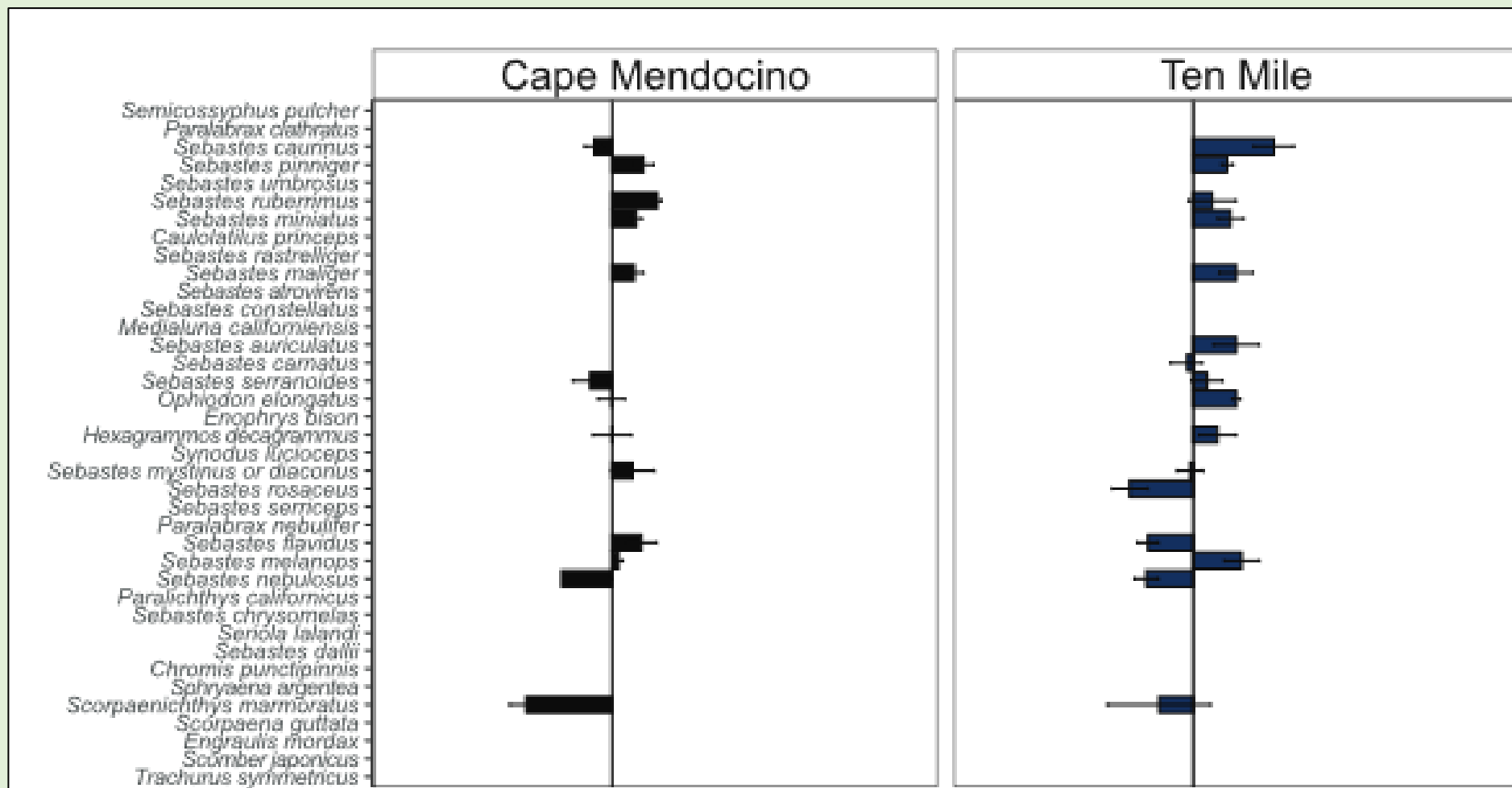

Figure 5 from the paper shows the **species-specific responses** to MPA vs. reference sites, using an index of **biomass per unit of fishing effort (BPUE)**, averaged over the 6 years of available data. A value of 0 means there is no difference in BPUE between the MPA and reference site. Bars to the left indicate a negative value, or that the BPUE in the reference site was greater than the MPA. Bars to the right indicate the BPUE was greater in the MPA.
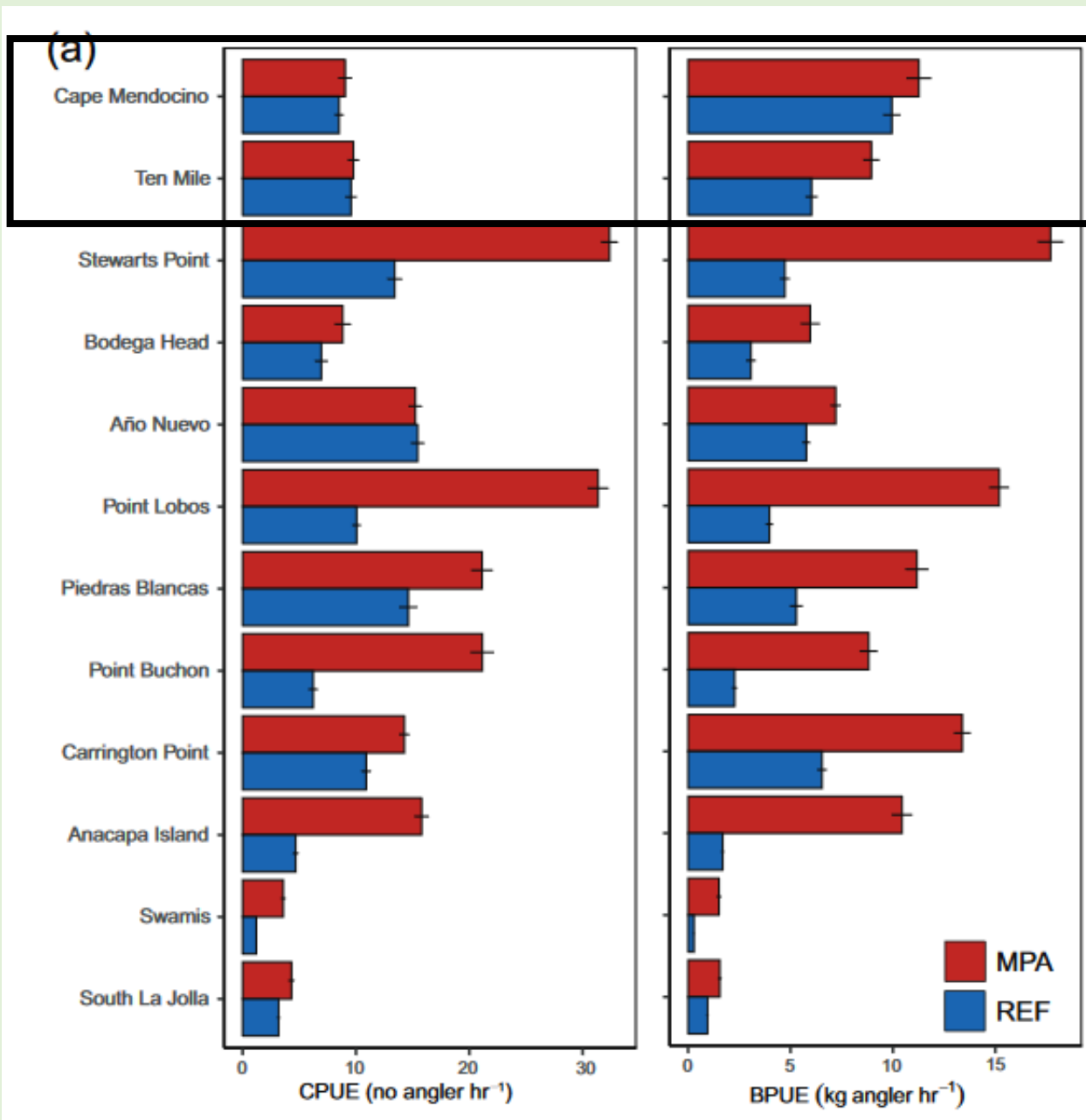

Scan with your phone camera for the full paper!

Figure 2a shows the **average catch per unit of fishing effort (CPUE) and average biomass per unit of fishing effort (BPUE)** over the 6 years of data for the **MPAs (red bars) and reference sites (blue bars)** for all combined fish species. The Cape Mendocino and Ten Mile sites are at the top of the graph in the box – you can see that the differences in CPUE might not be tangible yet but the BPUE is slightly higher in the MPAs. The relatively **young age** of the northern MPAs and **low fishing pressure** (compared to the more southern locations) are factors that influence this.

Cooperation for more data

The first main goal of the CCFRP is to conduct scientifically sound research to better inform resource managers. Our surveys and collection permit provide the opportunity to **contribute high-quality data to fisheries management and stock assessments**. This year, the need for these data became even more apparent, and the CCFRP partnered with the National Marine Fisheries Service (NMFS) and recreational charter captains in a **cooperative recreational sampling effort** to provide more biological data for rockfish populations in California. Our crew at Cal Poly Humboldt receives carcasses from charter captains to dissect and record information like sex and maturity and collect genetic samples and otolith structures. These extra data inform managers about the **life history of rockfish on the North Coast**. We are excited to be contributing to this effort and collaborating with the recreational community towards a better understanding of the fishery!

Hey, I know you!

This year we reunited with old friends, both people and fish!

Ian was a graduate student and lead technician back in the early days of North Coast CCFRP and baseline monitoring. It was great listening to his sampling stories!

We **recaptured 5 tagged fish** this year while sampling. This is a Copper Rockfish we tagged in 2022, at liberty for 400 days.

Ian and Lloyd were technicians for the CCFRP while they were at Humboldt. This year they both came back aboard as a volunteer anglers with extra expertise.

Biggest of 2023

Yelloweye Rockfish

Lingcod

Vermilion Rockfish

Species	Length*
Black Rockfish	50 cm (20in)
Blue Rockfish	41 cm (16in)
Lingcod	71 cm (28in)
Canary rockfish	50 cm (20in)
Deacon Rockfish	48 cm (19in)
Copper Rockfish	52 cm (20in)
China Rockfish	40 cm (16in)
Quillback Rockfish	47 cm (19in)
Vermilion Rockfish	56 cm (22in)
Yellowtail Rockfish	40 cm (16in)
Kelp Greenling	39 cm (15in)
Yelloweye Rockfish	66 cm (26in)
Cabezon	61 cm (24in)

*Fork lengths rounded to the nearest centimeter and inch, respectively

Thank you for your continued support!
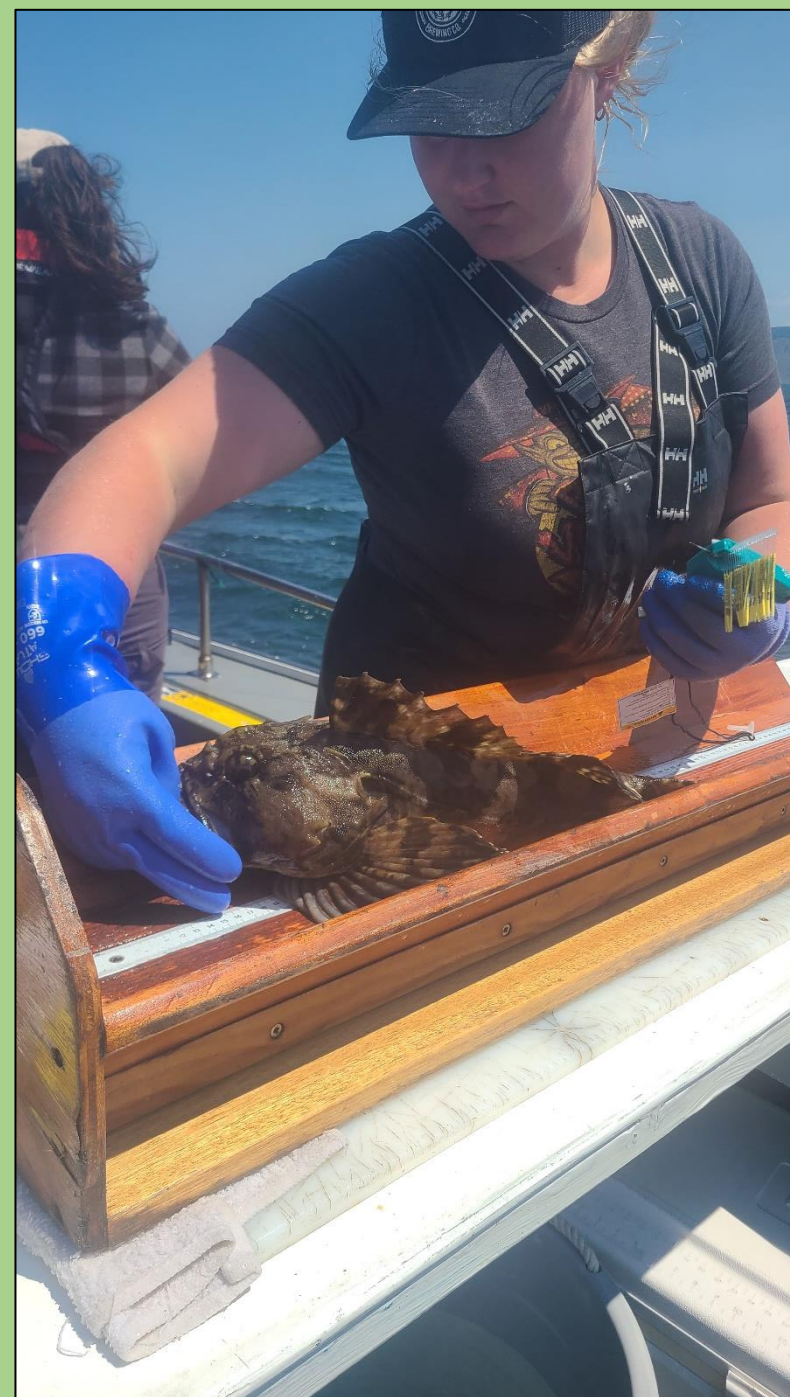
Looking forward to catching you next summer!