



# FISH ON!

## HOOK-AND-LINE SURVEY VOLUNTEER NEWSLETTER

SPRING & FALL 2024



## GREETINGS VOLUNTEERS!

We had a very fun and exciting year on the water at the Cascade Head and Cape Perpetua Marine Reserves. Thank you to all our volunteers for making our 2024 surveys possible.

We are grateful to our captains and crews. Captain Roman Smolčić and deckhand Grant Howard of the *F/V Sunrise* led surveys at Cascade Head for the first time and adapted quickly to our methods. We were impressed by their expertise and enthusiasm for learning more about our surveys and the species caught. Robert Waddell, owner of the *F/V Misty*, and deckhand Brett Leno led our surveys at Cape Perpetua for the 6<sup>th</sup> time. The hard work and expert knowledge of both captains made our surveys a success!

Many thanks to all our volunteer anglers and biological assistants who caught and recorded data during our surveys. We couldn't gather this valuable long term data without everyone involved.

During our 8<sup>th</sup> year of hook-and-line surveys at Cascade Head we fished some record total fish days in the reserve and caught our very first juvenile Puget Sound King Crab (featured on page 2). In our 7<sup>th</sup> year at Cape Perpetua, we were excited to see many Brown Rockfish again. We also caught a Giant Pacific Octopus at both sites!

Please enjoy this summary of the data you all helped collect in the past year. We hope to see you again in 2025 for surveys at Cape Falcon. We are grateful to have such dedicated volunteers.

Sincerely,  
Moritz, Stephanie, and Ryan



2024 HIGHLIGHTS

2 Sites Surveyed



Cascade Head - 12 days  
Cape Perpetua - 10 days

22 Trips

104 VOLUNTEERS



3583 Fishes Caught

17 Species

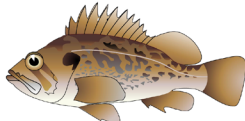
842 Fish Tagged



Black Rockfish  
Min: 22 cm (9 in)  
Max: 54 cm (21 in)



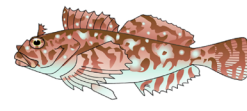
Blue Rockfish  
Min: 35 cm (14 in)  
Max: 35 cm (14 in)



Brown Rockfish  
Min: 29 cm (11 in)  
Max: 51 cm (20 in)



Buffalo Sculpin  
Min: 26 cm (10 in)  
Max: 34 cm (13 in)



Cabezon  
Min: 36 cm (14 in)  
Max: 67 cm (26 in)



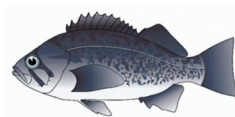
Canary Rockfish  
Min: 17 cm (7 in)  
Max: 49 cm (19 in)



China Rockfish  
Min: 27 cm (11 in)  
Max: 40 cm (16 in)



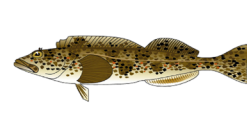
Copper Rockfish  
Min: 31 cm (12 in)  
Max: 53 cm (21 in)



Deacon Rockfish  
Min: 19 cm (7 in)  
Max: 45 cm (18 in)



Kelp Greenling  
Min: 20 cm (8 in)  
Max: 44 cm (17 in)



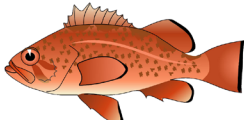
Lingcod  
Min: 31 cm (12 in)  
Max: 105 cm (41 in)



Quillback Rockfish  
Min: 25 cm (10 in)  
Max: 47 cm (19 in)



Red Irish Lord  
Min: 33 cm (13 in)  
Max: 33 cm (13 in)



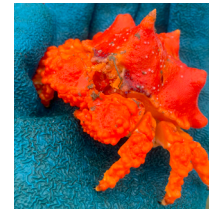
Vermilion Rockfish  
Min: 37 cm (15 in)  
Max: 41 cm (16 in)



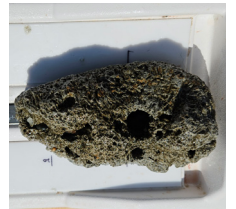
Yelloweye Rockfish  
Min: 28 cm (11 in)  
Max: 54 cm (21 in)



Yellowtail Rockfish  
Min: 24 cm (9 in)  
Max: 47 cm (19 in)



Puget Sound  
King Crab  
(Juvenile)



Rock

Art Credit: Larry Allen, Ryan Fields

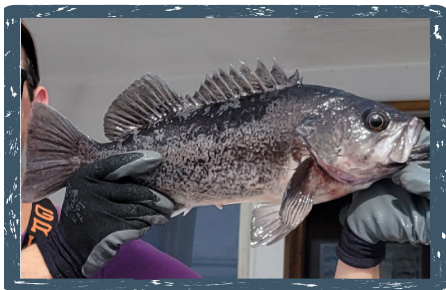




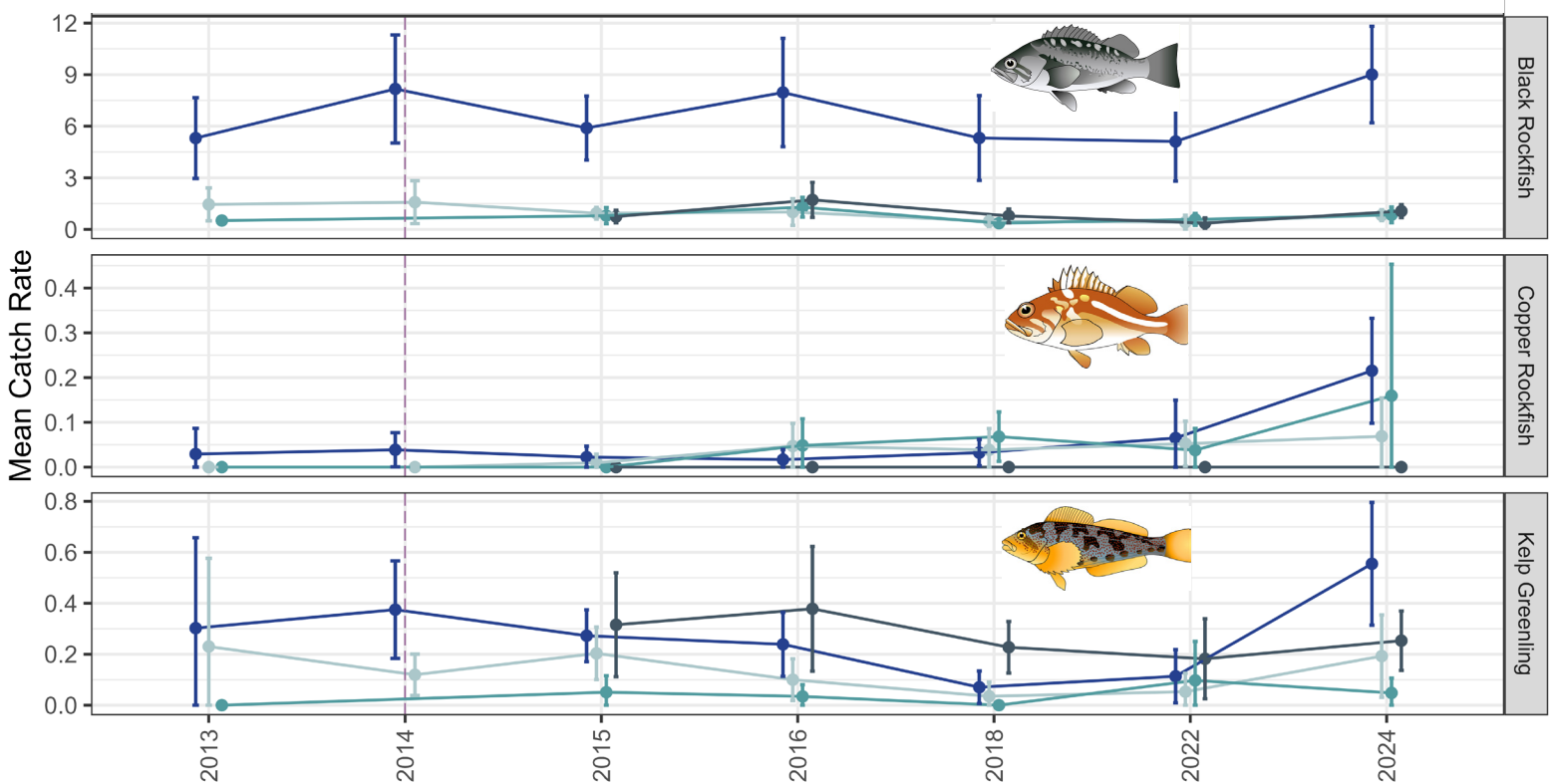
# CASCADE HEAD MARINE RESERVE

## INTERESTING TRENDS IN THREE TYPES OF GROUND FISH

The Cascade Head Marine Reserve was implemented in 2014 and this season marked our 7<sup>th</sup> year collecting data from this site. Highlighted below are patterns in the relative abundances of three species representing three different types of fishes. Black Rockfish, a semi-pelagic schooling rockfish species, have consistently had the highest catch rates within the marine reserve, and this trend has remained stable through time. The 2024 average abundance of Black Rockfish is the highest to date. Copper Rockfish are a more solitary benthic (i.e. lives close to the seafloor) species and infrequently encountered, but in 2024 we noticed an increase in our catch rate inside the reserve and one of the comparison areas. Kelp Greenling represent a non-rockfish benthic species and are commonly caught both inside and out of the marine reserve. This season we observed an increase in the catch rate inside the reserve. These patterns are preliminary but will be worth tracking with future years of data. This sampling allows us to characterize year-to-year variability in catch rates and will better allow us to detect patterns of change in the future.



● Cascade Head MR  
 ● Schooner Creek CA  
 ● Cavalier CA  
 ● Cape Foulweather CA



**Figure:** Mean catch rates of Black Rockfish (top), Copper Rockfish (middle), and Kelp Greenling (bottom) at the Cascade Head Marine Reserve (MR) and surrounding comparison areas (CA). The vertical dashed line indicates the start of reserve closure.



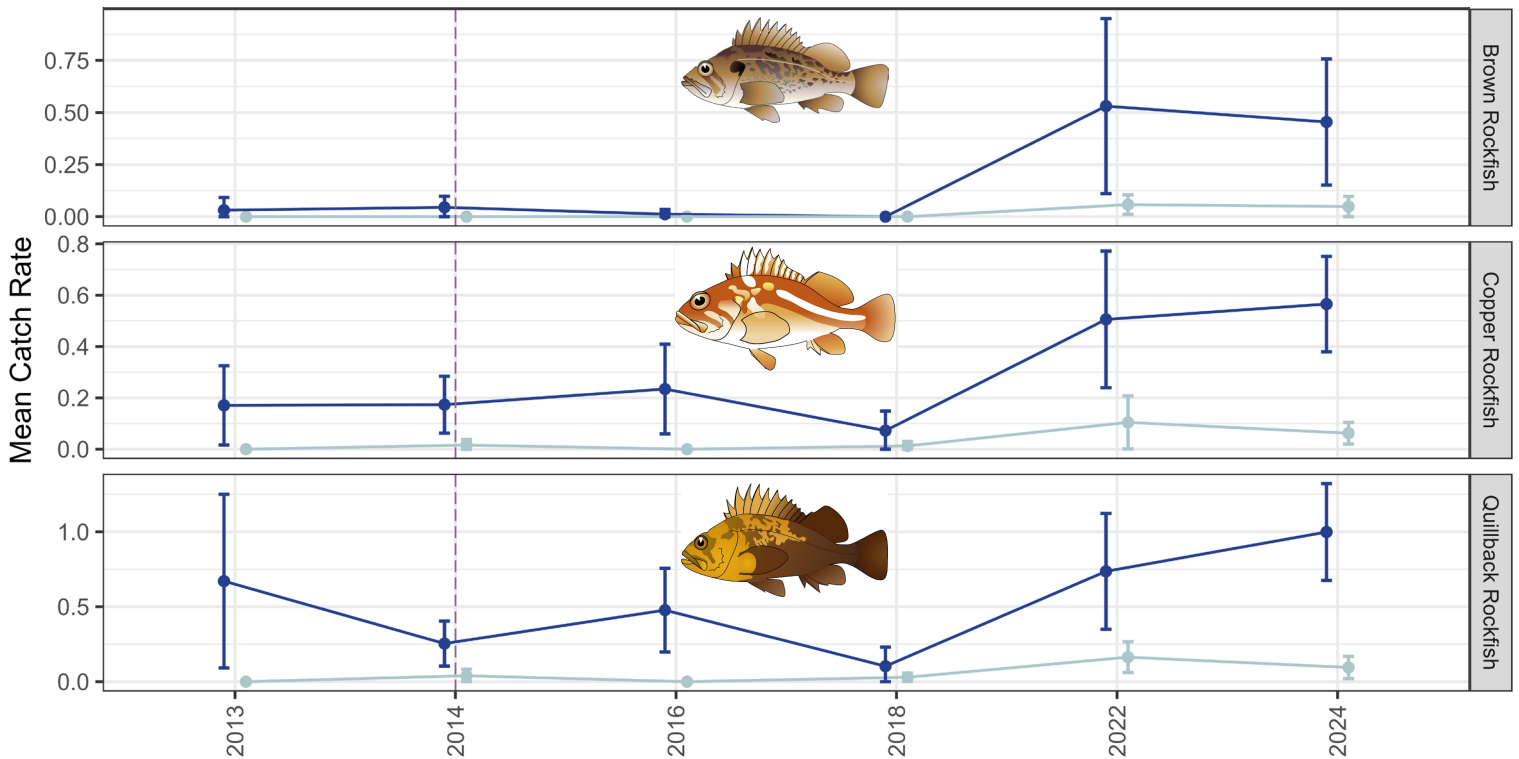
# CAPE PERPETUA MARINE RESERVE

## SIMILAR TRENDS ACROSS MULTIPLE BENTHIC ROCKFISH SPECIES

The Cape Perpetua Marine Reserve was implemented in 2014 as the largest marine reserve by total area and uniquely protects isolated, deep rocky reef patches. Across the past two survey years in 2022 and 2024, several benthic (i.e. lives close to the seafloor) rockfish species showed the highest catch rates observed to date. Brown Rockfish are only encountered at the Cape Perpetua Marine Reserve and its comparison area, and in 2022 there was a substantial increase in average catch rates that held-up during our 2024 sampling. Both Copper Rockfish and Quillback Rockfish also appear to have increased in catch rates since 2022. All three species live near the seafloor and have small home ranges, so are less likely to swim outside the borders of the marine reserve compared to other more mobile species. Given the relatively short time since the reserves were implemented, it is too early to say whether these patterns are permanent or due to marine reserve protections, but we are eager to survey again in 2026.



● Cape Perpetua MR    ● Postage Stamp CA



**Figure:** Mean catch rates of Brown (top), Copper (middle), and Quillback Rockfish (bottom) at the Cape Perpetua Marine Reserve (MR) and comparison areas (CA). The vertical dashed line indicates the start of reserve closure.





# FAREWELL CAPTAIN ROMAN

Our team was shocked and heartbroken to learn of the sudden passing of Captain Roman Smolčić of the *F/V Sunrise* in early November. This was our first year working with Roman, and deckhand Grant Howard, and we had a terrific time with them both. We could not have collected this year's data without Roman's expertise in captaining local fishing grounds, including the Casade Head Marine Reserve. Beyond his year's of experience, he was an easy and fun person to work with and we were looking forward to having more time with him at sea. He will always be remembered by our 2024 field team, where in our brief time with him, he led us safely in and out of Depoe Bay for 12 survey days and helped us catch some record numbers of fishes in the marine reserve. A favorite staff member's memory was his uncanny ability to guess almost exactly the total number of fish caught per day - a game we play at the end of each survey day. Our condolences go out to his friends and family.

