



# Volunteer Newsletter

A Summary of the 2018 Sampling Season

California Collaborative  
Fisheries Research  
Program – North Coast



Greetings Volunteers,

Thanks to you, we have successfully completed 4 years of data collection inside and outside MPAs on the North Coast. During the 2018 season we conducted 18 total hook-and-line surveys in 2 MPAs and 4 reference sites and caught 2027 (835 tagged) fish representing 20 different species. Please enjoy these pictures and some of our preliminary results from the 2018 sampling efforts. Thank You!!



We are already looking forward to the 2019 season! We plan to add the Redding Rock Marine Reserve to our sampling rotation this summer, and will continue to sample the Ten Mile Reserve and South Cape Mendocino Reserve. We will be presenting results from the first 4 years of MPA monitoring at the 2019 Humboldt Bay Symposium on April 11-12 in Eureka. More information on this event will be provided via email.

Don't forget to follow us on Facebook for updates and pictures from each trip!

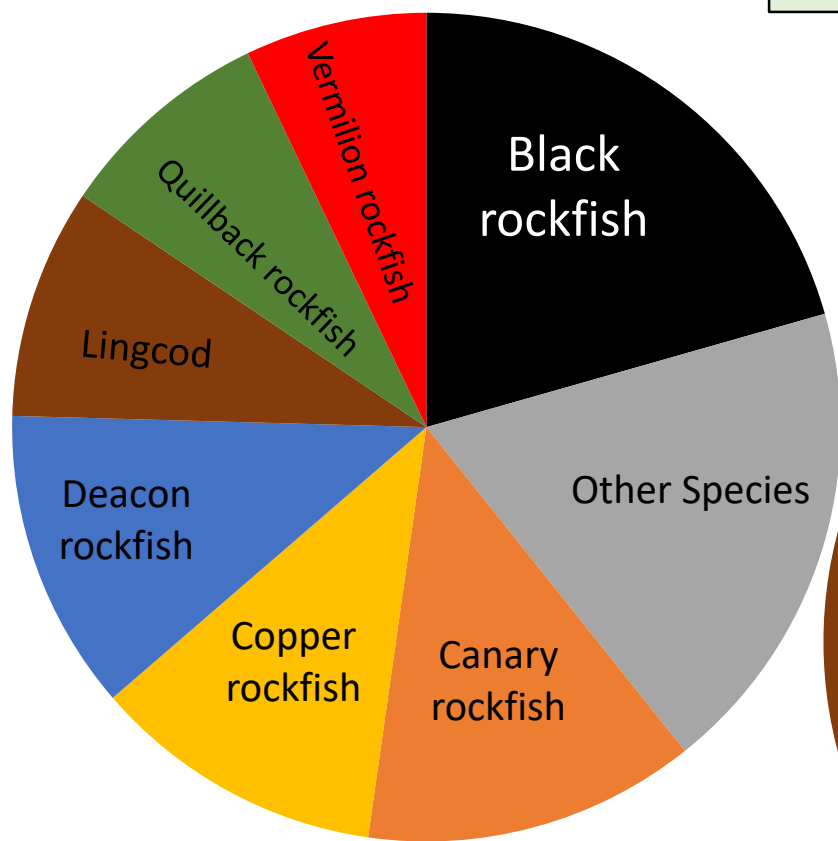


@NorthCoastCFR

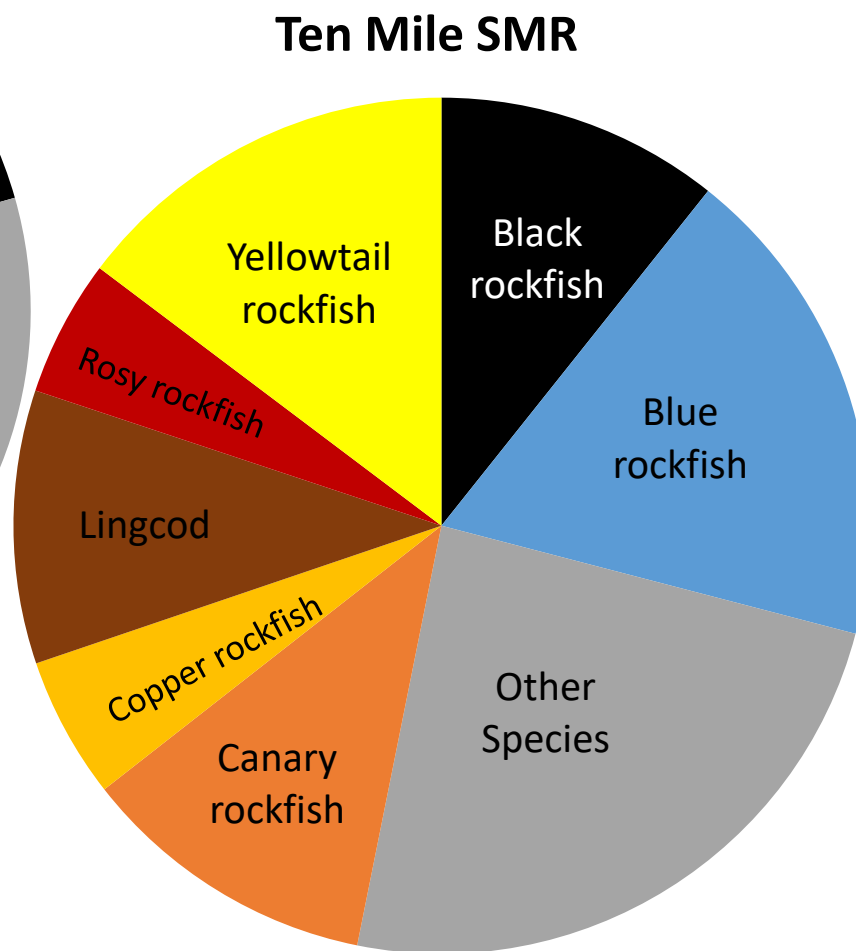
Email: NorthCoastCFR@gmail.com



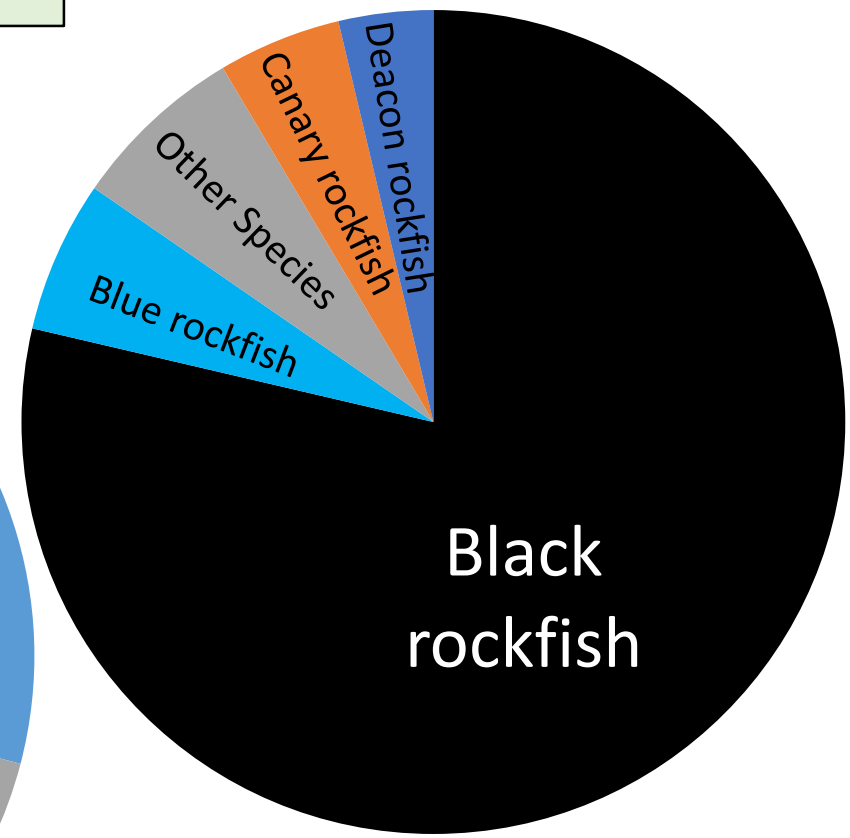
## Species Composition by Site



**South Cape  
Mendocino SMR**



**Ten Mile SMR**

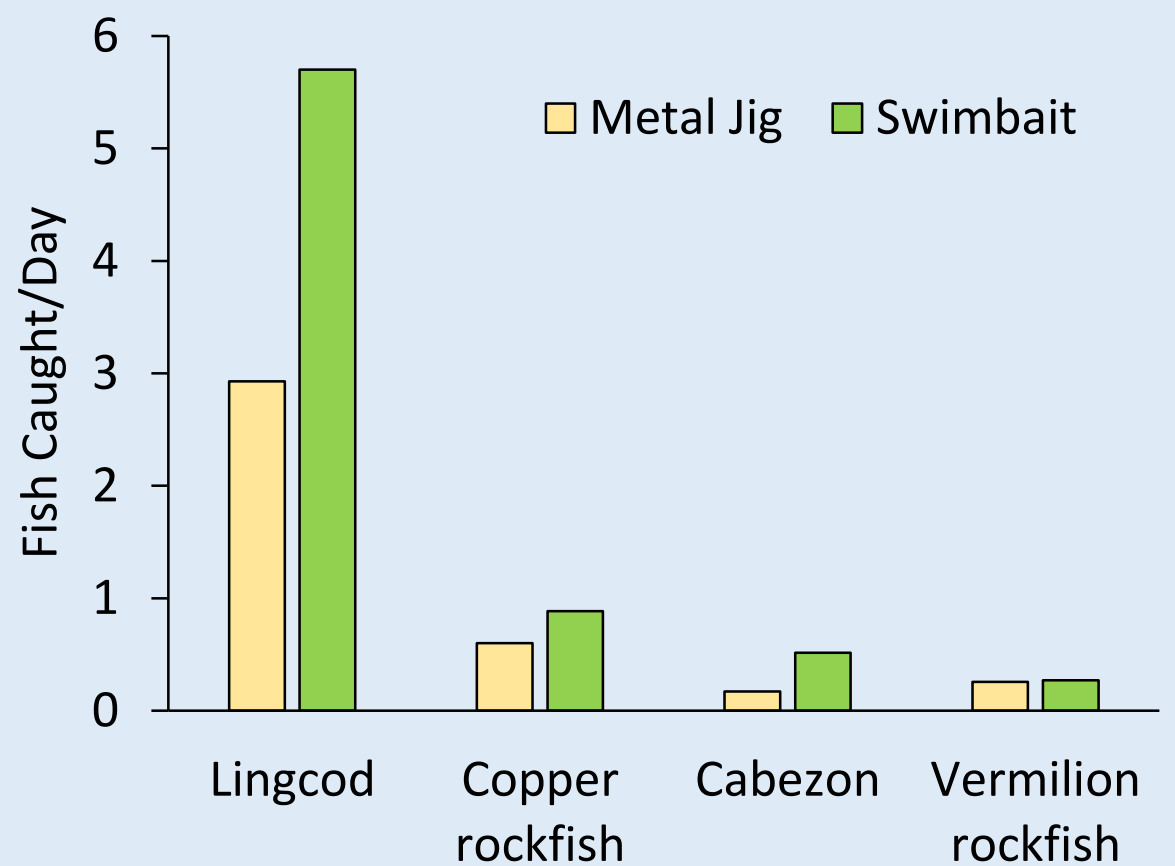


**Trinidad**

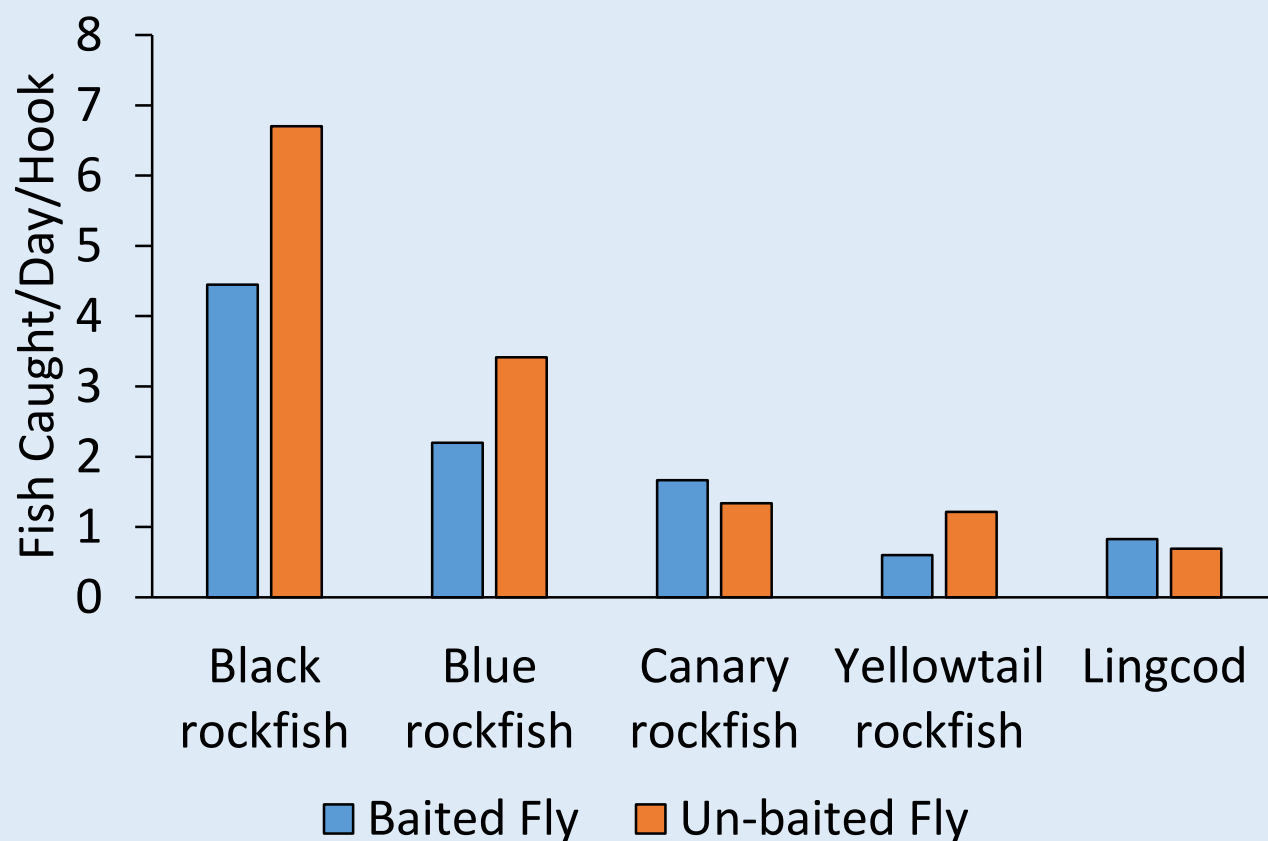
## Gear Analysis

Many of our volunteers like to fish the metal jig and plastic swimbait. There has been a lot of speculation on which gear catches more fish. This graph shows 4 of our most commonly caught species on the swimbait and jig, and how many of those species were caught per sampling trip over all sites and years fished.  
NOTE: Fish length was not significantly different between the two gear types.

### Metal Jig vs. Swimbait



### Baited v. Un-baited Fly

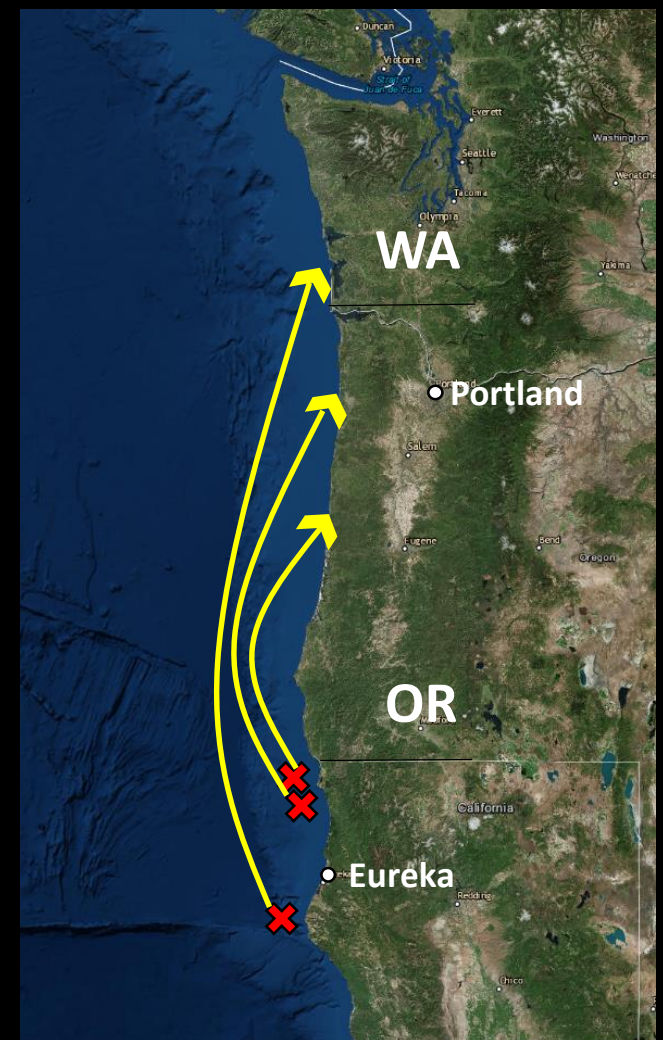


We also found some small differences in catch rates between a baited shrimp-fly, and an un-baited shrimp-fly in commonly caught rockfish and lingcod!  
Note: Fish length was not significantly different between gear types.

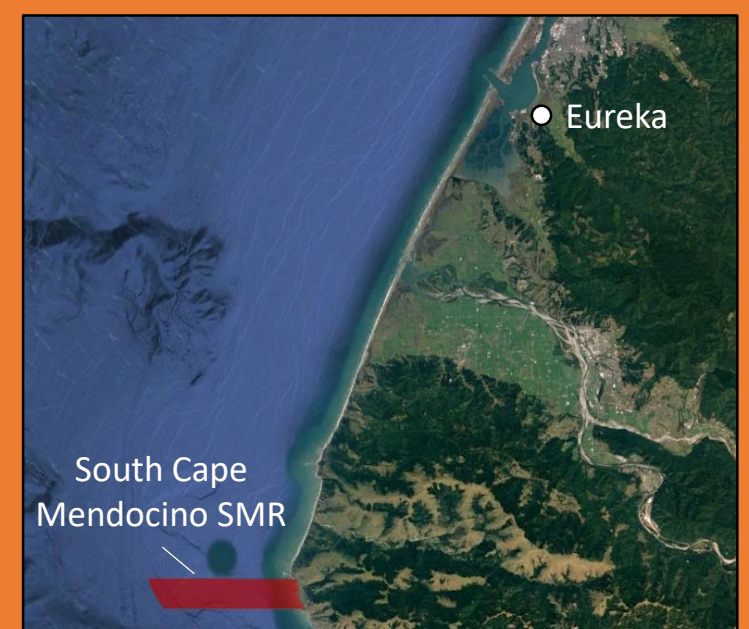
# Notable Tagged Fish

Tagging studies allow researchers to collect information about fish in their natural environment. Tagging a subsequent recapture of fishes can provide data on change in size, distance traveled from release, and estimates of abundance. Little is known about movement patterns of many rockfish species. These types of tag and recapture studies can help inform biologist and managers of how to better manage these valuable species into the future. Below is a look at some of our most interesting tag return data!

One notable Black rockfish, tag 735, was tagged in July, 2014 and recaptured in May, 2018. This Black Rockfish traveled over 180 miles north, and grew over 4 inches. This continues a trend we have observed of several black rockfish making long northward migrations of over 100 miles. The figure on the right shows the northward movement of 3 black rockfish captured tagged on this project.



Another notable fish, a Canary rockfish, tag 4540, was recaptured inside the same 500 meter by 500 meter sampling cell over 4 years after being tagged! This fish grew less than 2 inches during that time. Canary Rockfish are known for their long lifespans and slow growth like many species of rockfish. This particular Canary Rockfish was re-released so there is potential for this fish to relay more information to us in the future!





# 2018's Largest Fishes



Species	Length
Black Rockfish	57 cm (22 in)
Blue Rockfish	41 cm (16 in)
Lingcod	96 cm (38 in)
Canary rockfish	57 cm (22 in)
Yellowtail Rockfish	36 cm (14 in)
Copper Rockfish	59 cm (23 in)
China Rockfish	48 cm (19 in)
Quillback Rockfish	48 cm (19 in)
Vermilion Rockfish	56 cm (22 in)
Olive Rockfish	52 cm (20 in)
Kelp Greenling	42 cm (17 in)
Yelloweye Rockfish	62 cm (24 in)
Cabezon	65 cm (26 in)

\*All values rounded to the nearest centimeter and inch, respectively



# Thank you for your continued support!



Can't wait to see you on the boat this year!