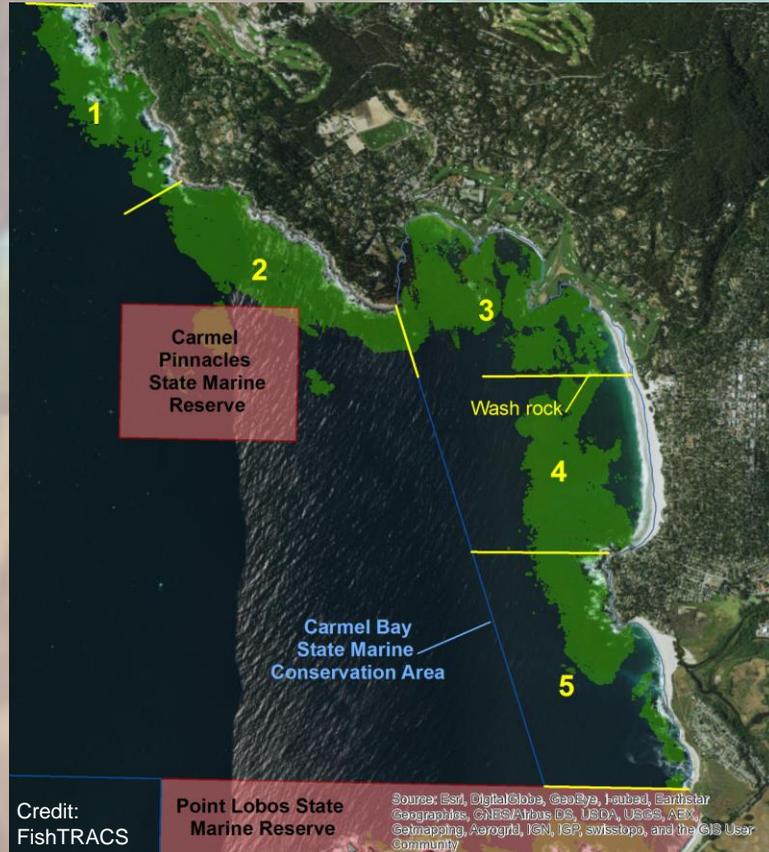


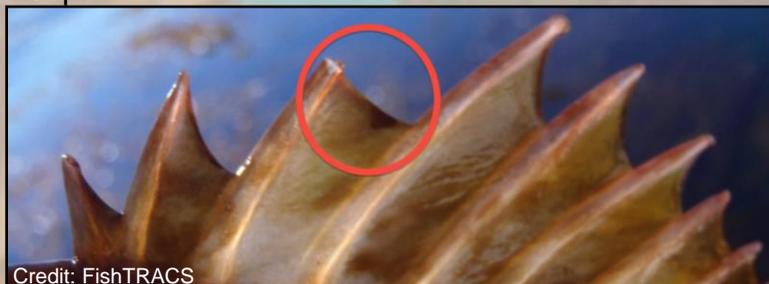
SAMPLE AREA



If GPS is not available, please record the location where each fish was caught as a block number (1-5). Use this map to estimate your location and record block number on your sample envelope.

SAMPLE FIN CLIP

Clip the tip of the third dorsal spine from fish you keep.



BECOME A VOLUNTEER ANGLER

To participate fully in this project, you must sign up to become a volunteer angler. As a volunteer angler you will be able to operate under the FishTRACS scientific collecting permit, which will allow you to release fish after fin clipping.

Fin clips from released fish are the most valuable to our project, because those fish are likely to survive and reproduce in future years, making it more likely that we will also sample their offspring.

To become a volunteer angler, you should regularly fish in the shallow kelp forest habitats of Carmel Bay where the target species (kelp rockfish, black-and-yellow rockfish, and cabezon) can be found. It is important that you fish in the Carmel Bay area because that is the focal area for our study.

To sign up as a volunteer angler, please contact a FishTRACS representative at FishTRACS@ucsc.edu.

FishTRACS



**TRANSPORT,
RECRUITMENT,
AND
CONNECTIVITY
STUDIES**

**UNIVERSITY OF CALIFORNIA,
SANTA CRUZ**

Thank you for your interest in FishTRACS Larval Dispersal Project. By helping to collect dorsal fin clips, you can provide data to answer questions about how far young (larval) fish travel, and how marine protected areas (MPAs) may contribute to replenishing fished populations along the coast.

To learn more please visit :
<http://rockfish.ucsc.edu/>

Mail fin clip samples to:
Long Marine Laboratory
FishTRACS Project
100 Shaffer Rd
Santa Cruz, CA 95060

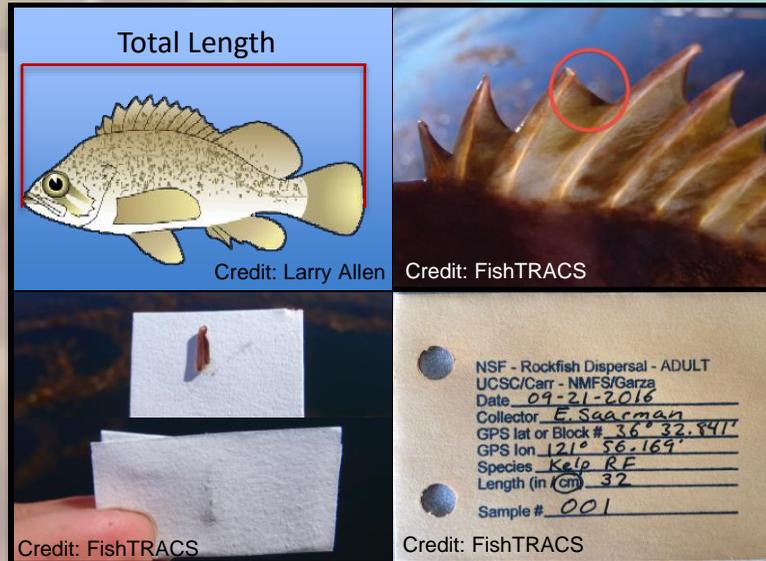
Email questions or concerns to:
FishTRACS@ucsc.edu

SAMPLE COLLECTION

You must sign up as a volunteer angler to take samples from fish you plan to release. However, you don't need any special permission to send us samples from fish you keep.

To collect a sample:

1) measure, 2) clip the third dorsal spine, 3) fold paper around sample, 4) fill-out envelope with sample information, and 5) store sample in a cool dry place



DATE: Day the fish was caught

COLLECTOR: Name of volunteer angler

GPS LAT (or Block #): Where the fish was caught
EX: 36°25'15" or 36°25.12.' Lat/Lon, preferred but block # can be used (see map)

GPS LON: GPS longitude

SPECIES: Kelp Rockfish, Black-and-Yellow Rockfish, or Cabezon

LENGTH: Measure total length, from tip of snout to end of tail; specify cm or inches

SAMPLE #: Assign a new numbering system for each day to prevent replication of numbers and samples

SPECIES IDENTIFICATION



Kelp rockfish: spiny, color variations of brown, green, and off-white. (Common name: sugar bass)



Black-and-Yellow rockfish: spiny, covered in alternating black and yellow patches.



Cabezon: groundfish with large mouth and bulbous head. Color varies from green to brown to red.

DESCENDING DEVICES

Safely releasing a fish may require a descending device.



What is barotrauma?

Air in the air bladder expands as the fish rises from deep to shallow water. This expanded air can push the stomach out of the mouth and change in pressure makes the eyes bug-out.

Fish can make a full-recovery if they are quickly released using a descending device.

Devices:

- Inverted barbless hook with weight
- Upside-down milk crate
- Commercially-available descenders (e.g. Shelton Fish Descender, RokLees, Blacktip, SeaQualizer)

For more info: <http://barotrauma.ucsc.edu/> and www.wildlife.ca.gov/Conservation/Marine/Groundfish/Barotrauma

NOTE: Please do not use venting (puncturing the swim bladder) as a method to descend the fish. This damages the organ and can introduce infection.