

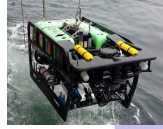
# Mid-depth Rocky Habitat Monitoring

Video systems assess the response of fish and invertebrate communities in MPAs.

Human operated vessel (HOV)



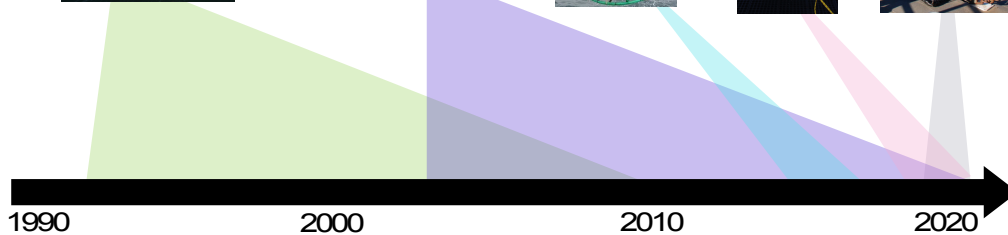
Remotely operated vehicle (ROV)



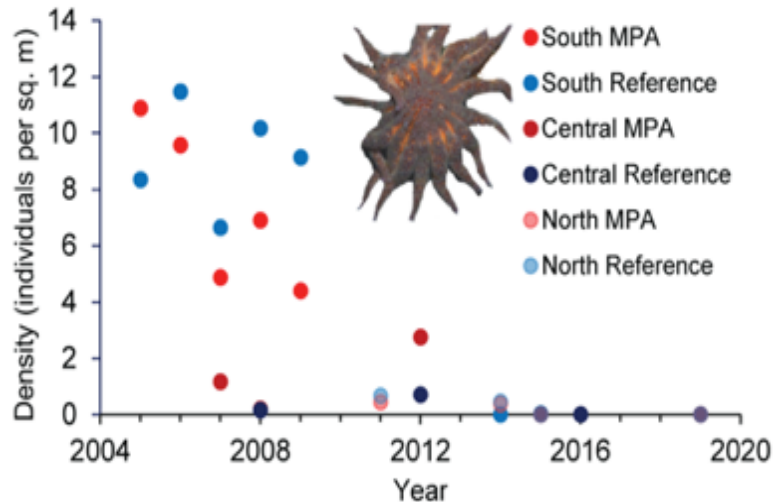
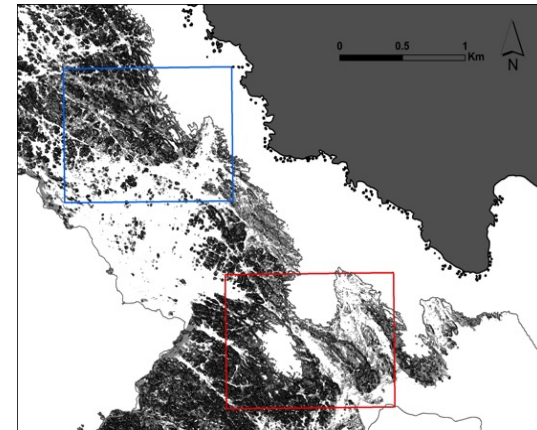
Tethered video landers



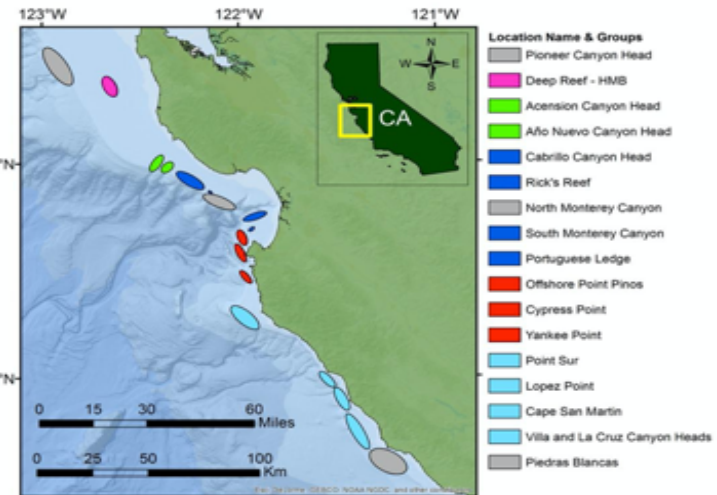
Baited remote underwater video (BRUV)



Leveraging seafloor maps to assess rocky habitat quantity & quality.

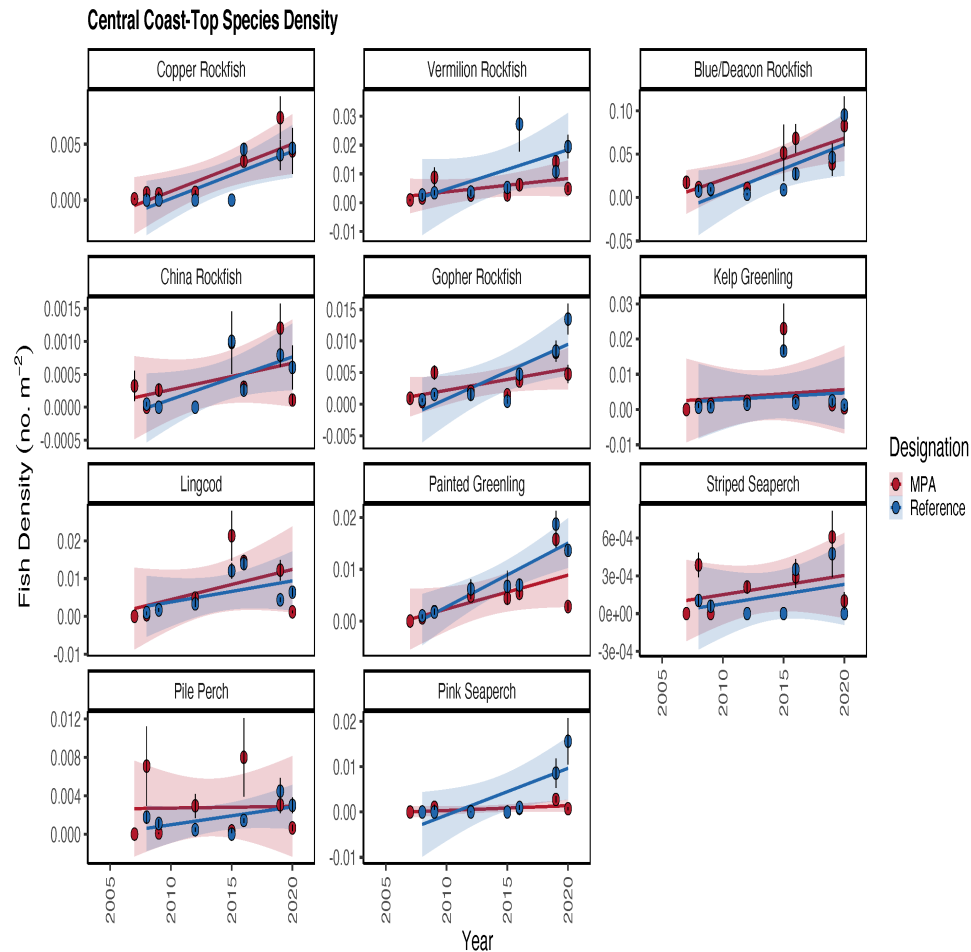


ROV surveys showed that sunflower star densities dropped to zero by 2015 due to the sea star wasting syndrome epidemic.

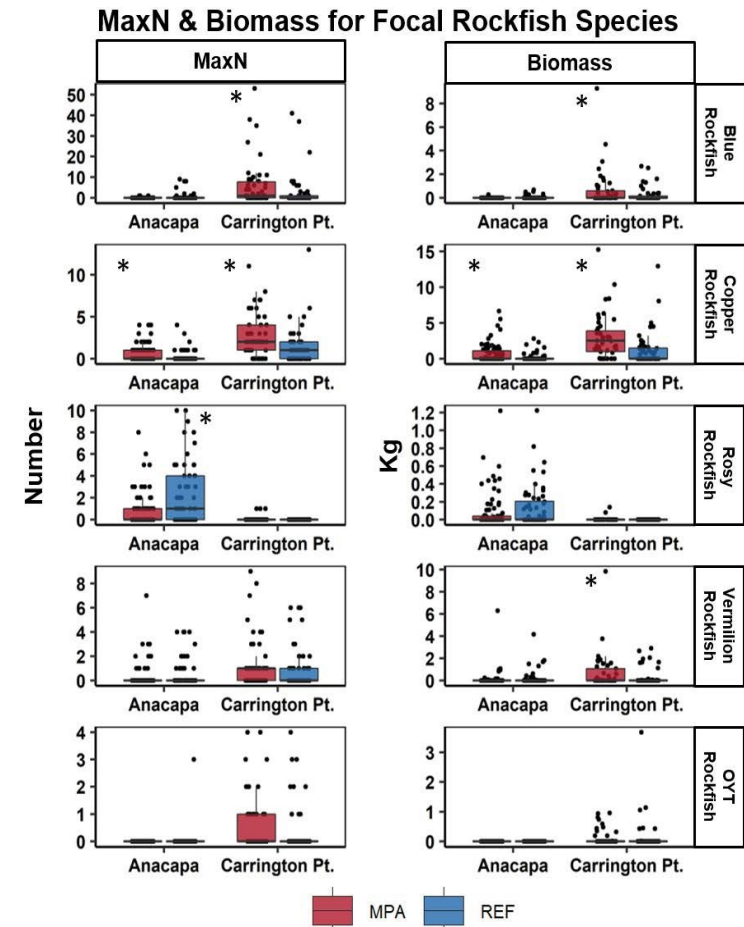


Analyses of tethered video landers have identified clusters of different mid-depth fish communities along the coast.

# Mid-depth Rocky Habitat Monitoring



ROV surveys on the Central Coast showed that 9 of 11 species showed increasing densities through time. However, there were no statistical differences among MPAs and Reference sites, except density of Pink Seaperch was higher in Reference sites.



Results of BRUV surveys showing mean density (MaxN) and Biomass (kg) for select focal species. Upper and lower portions of the boxplot represent 1<sup>st</sup> and 3<sup>rd</sup> quartiles of the data and the points represent the observed values. \* represents a significant difference. Copper rockfish are more abundant and larger inside MPAs.