Mid-depth Rocky Habitat Monitoring



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

Leveraging seafloor maps to assess rocky habitat quantity & quality.





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

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Central Coast-Top Species Density Copper Rockfish Vermilion Rockfish Blue/Deacon Rockfish 0.10 0.005 0.02 0.05 0.01 0.000 0.00 0.00 -0.01 -0.05 China Rockfish Gopher Rockfish Kelp Greenling 0.0015 0.0010 0.010 0.02 m⁻²) 0.005 0.01 0.0005 0.000 0.0000 0.00 o L -0.005 -0.0008 -0.0* Designation Fish Density Painted Greenling Striped Seaperch MPA Lingcod Reference 0.02 0.02 6e-04 0.01 3e-04 0.01 0e+00 0.00 0.00 -0.0 3e-04 2005 2010 Pile Perch Pink Seaperch 10 0.012 0.02 0.008 0.01 0.004 0.000 2010 2015 2020 2005 2005 0 2020 201 Year

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 1st and 3rd quartiles of the data and the points represent the observed values. * represents a significant difference. Copper rockfish are more abundant and larger inside MPAs.