Predicted Distribution of Benthic Macro-Invertebrates, Offshore of Refugio Beach Map Area and Santa Barbara Channel Region, California

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Information presented on this sheet is based on ground-truth surveys (see sheet 6) conducted by the U.S. Geological Survey and National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service for the California Seafloor Mapping Program. Benthic community structure was determined from 35 video towed-camera transects within California's State Waters limit in the Santa Barbara Channel. These transects were conducted by EarthData International in 2009 and (Map C) was collected by Fugro Pelagos in 2009). California's State Center (data collected by EarthData International in 2009). California's State Center (data collected by EarthData International in 2009). California's State Center (data collected by EarthData International in 2009).

Photograph of hydroids. Hydroids are sessile cnidarians (class Hydrozoa); found in large colonies, from intertidal zone to 150 m deep (Gotshall, 2005), on soft, mixed, and rugose rock. In shallower depths of the same habitat, cup corals have a higher probability of occurrence than that of hydroids. Brittle stars (Map E) in the sediment, observed by arms protruding from the substrate, have a probability of occurrence, which increases as depth increases. The probability of occurrence of short sea pens (Map B) peaks at water depths of between 30 and 60 m and then decreases as depth increases. Cup corals and decrease as depth either increases or decreases.

Although probability of occurrence for each invertebrate taxon was predicted for the entire Santa Barbara Channel region (Map F), this sheet highlights predictions for the Offshore of Refugio Beach map area, which is depicted by a color gradient ranging from blue (low probability) to red (high probability). The gradient reflects the likelihood of presence for each taxon based on the model predictions. The detailed maps (Maps A–E) illustrate the predicted distribution of tall sea pens (Map A), short sea pens (Map B), cup corals (Map D), brittle stars (Map E), and hydroids (Map C) within the Offshore of Refugio Beach map area.

EXPLANATION

- High (99.0%)
- Medium (75.0%)
- Low (25.0%)
- Not mapped as part of California Seafloor Mapping Program

Scale: 1:50,000

APPENDIX

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GIS database and digital cartography by Nadine E. Golden.