

Mapping Squid Egg Beds with Sidescan Sonar: Preliminary Findings

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Abstract: The market squid (*Loligo opalescens*) supports the largest commercial marine fishery in California, both in terms of quantity landed and dollars paid ex-vessel. The fishery is presently being managed without an estimate of population abundance, which is critical to establishing catch limits. Preliminary findings from a cruise with in Monterey Bay, 5-12 May 2003, may change this situation by allowing quantification of the spawning products. Imaging the spawning grounds by means of sidescan sonar at 420 kHz has revealed characteristic markings that are very suggestive of the size and distribution of clumps of market-squid benthic egg beds, each composed of groups of gelatinous egg capsules. The hypothesis that these are due to squid egg beds has been tested by means of video surveys conducted by scuba divers over comparable seafloor areas with and without egg beds.

Evidence for the correspondence is presented.

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