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The ecology of *Parvilucina tenuisculpta* (Carpenter, 1864) (Bivalva: Lucinidae) on the southern California borderland

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ABSTRACT

The pelecypod *Parvilucina tenuisculpta* (Carpenter, 1864) is a widely distributed member of the benthos of the southern California borderland where it is a prominent faunal element of every major habitat except the deep basins. In this fairly wide range of environments, it lives with a large number of other taxa which may differ markedly from one location to another. The population densities of *Parvilucina* were highest in two very dissimilar environments—the insular shelf of the northern Channel Islands and the central part of the mainland shelf (Santa Monica Bay and San Pedro Bay). The insular shelf is primarily a non-depositional environment where relatively strong currents result in the development of coarse sediments rich in biogenic calcium carbonate components. The area is influenced by persistent upwelling. By contrast, the parts of the mainland shelf where population densities of *Parvilucina* were highest are in equilibrium environments highly influenced by the release of sewage wastewaters. Organic enrichment, in one case upwelling and the other sewage wastewaters, may be the factor responsible for the areas of high population densities.

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