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Fate of post-larval bottom fishes in a highly urbanized coastal zone

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ABSTRACT

Post-larval fishes on the Palos Verdes shelf, the site of a major municipal wastewater discharge in southern California, were surveyed using small otter trawls. Approximately 15% of the total fish catch in 169 samples taken at depths of 23 to 137m from 1972 and 1977 consisted of specimens less than 60 mm standard length. The species most frequently and abundantly represented by small individuals were the speckled sanddab (*Citharichthys stigmaeus*) and the stripetail rockfish (*Sebastes Saxicola)*
Several anomalous conditions developed in Dover sole (*Microstomus pacificus)* during the year following spring settling on the shelf. The percentages of specimens with fin erosion and skin tumors increased from 0.93 and 0%, respectively, in an April collection to 72 and 7.7%, respectively, in December. Liver enlargement had occurred by May. Previous studies (Mearns and Sherwood, 1977; Sherwood and Mearns, 1988; Sherwood et al., 1978) had May. Previous studies (Mearns and Sherwood, 1977; Sherwood and Mearns, 1988; Sherwood et al., 1978) had suggested that fin erosion and liver enlargement in this species were related to exposure to discharged contaminants and that initiation of skin tumors was not related to municipal wastewater discharges in southern California.