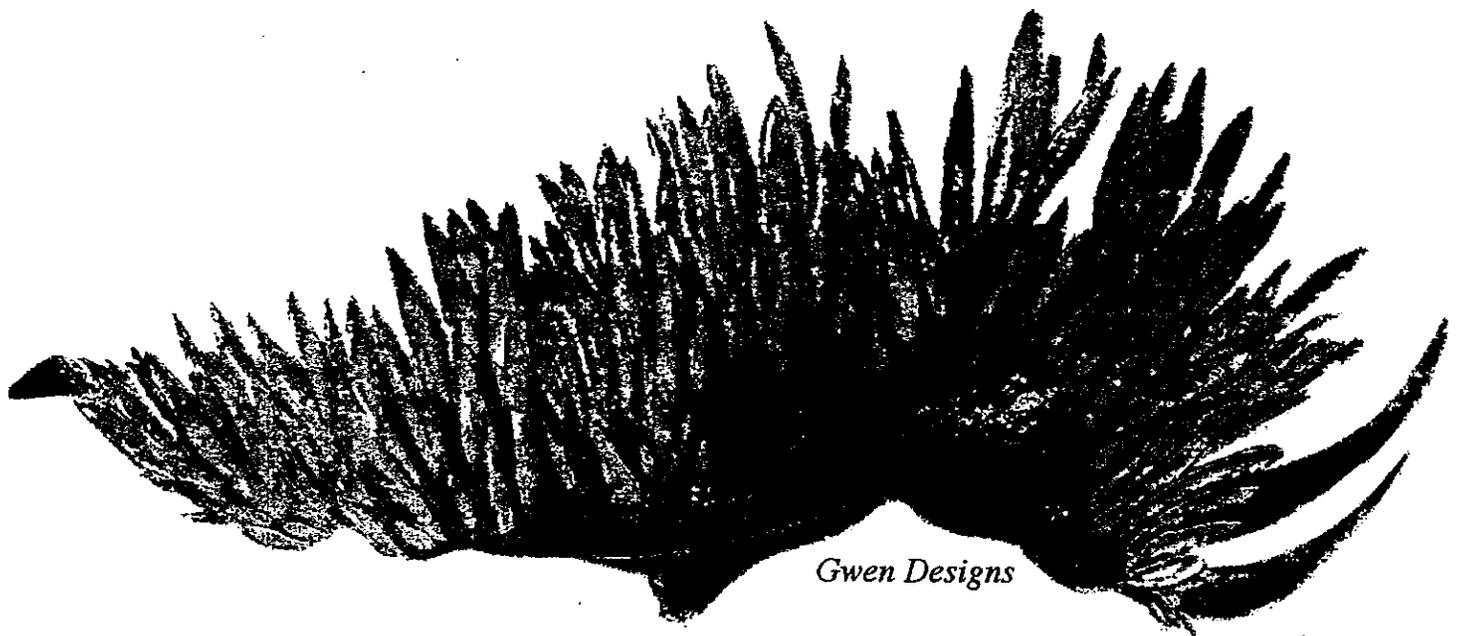


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Felix-Pico, E.F. *, G. Villarreal and O. Holguin. CICIMAR, Apdo. Postal 592, La Paz, BCS, C.P. 23000, México. CRUSTACEAN DIVERSITY (PALINURA, ANOMURA AND BRACHIURA) IN THE MARINE NATIONAL PARK OF BAHIA DE LORETO, MEXICO.

The results of a study on benthic macrocrustaceans, carried out during the years of 1997 to 1998, in islands and coast of Loreto, B.C.S, are presented. Collection was made by diving and manual recollection inside the Marine National Park of Bay of Loreto. The work is focused to know the specific diversity of the group. In total we identified 33 species of 17 different families, from these 4 belong to the Palinura, 9 of Anomura and 20 of Brachyura. The great amount of crustacean species (16) was located living in sublittoral zones in the coralline community. The other zone notable for the amount of species located was the mangrove with 7 species. The other zones with crustacean presence were: soft bottoms sublittoral (5 species), sandy beaches (3 species), mesolittoral oozy bottoms (2 species) and intertidal rocky shores (3 species). The most abundant species along the period of sampling was *Clibanarius digueti*. The fauna of coralline community is represented for the families: Majidae, Palinuridae, and Diogenidae, while the mangrove was represented by: Ocypodidae, Grapsidae, Geacarcinidae and Xanthidae. *Albunea lucasia*, *Calappa saussurei*, and *Parthenope exilipes* were registered for the first time in the Park although all they were already found in other sites of the Gulf of California. Some juvenile individuals of the lobster *Panulirus interruptus* as well as abundant adults of *Panulirus inflatus* were located in the coralline community and also in several other zones, particularly in the Monserrat island.

Fingerut, Jonathan, T *, Marshal Grattan and Richard K Zimmer. University of California Los Angeles, Department of Biology. EMERGENCE TIMING AND SWIMMING BEHAVIOR OF ESTUARINE TREMATODE LARVAE.

Establishing the dynamics of larval dispersal is critical to understanding the interactions between hosts and their parasites. We have begun a project to determine the factors that control the spread of estuarine trematode parasite larvae between first and second intermediate hosts. The time in the tidal cycle at which the larvae emerge from their first intermediary host (*Cerithidea californica*), as well as the swimming speeds and gravitational fall velocities of these larvae, have been measured for several trematode species. By combining data on emergence timing, swimming and sinking rates, and the hydrodynamic flow environment (using a doppler acoustical probe), we are working towards the development of a model to explain how physical and biological processes mediate parasite-host relationships and the spread of infections in estuarine settings.

Fisher, Robert. U.S. Geological Survey and San Diego State University, San Diego, CA. DISTRIBUTION AND STATUS OF AMPHIBIANS OF COASTAL SOUTHERN CALIFORNIA.

The amphibian fauna of coastal southern California consisted historically of seven salamander and nine toad/frog species. One introduced salamander and three introduced frogs have established in this region. Rapid urbanization has greatly reduced the natural habitats available for these species. Recent research involving intensive trapping using pit-fall traps with drift fences within protected habitats has recorded several of these species as widespread and common, and several other species as recorded rarely. One historically widespread species is currently unrecorded. Generally the exotic species are restricted to habitats that have been modified by humans, although *Rana catesbeiana* and *Xenopus laevis* have invaded natural lands. One native species (*Scaphiopus hammondi*) that was previously thought to be rare was found to be widespread, although its future may be challenged due to a lack of protection of its breeding sites. The potential to protect these native species will be dependent on adequate reserves that address all elements of the life-history of these species.

Forrester, Graham, E. Dept. of Organismic Biology, Ecology and Evolution, UCLA. TRACE-ELEMENTAL FINGERPRINTING AS A MEANS OF DEFINING POPULATION STRUCTURE AND DISPERSAL IN FISH POPULATIONS.

The analysis of trace elements deposited in fish otoliths (ear stones) is a promising new method for quantifying population structure and dispersal among fish populations. The approach is based on the fact that trace-metal concentrations often differ among sites in coastal habitats. These elements are deposited in the calcium carbonate matrix of the otolith as the fish grows, creating a permanent chronological record of the fish's exposure to trace elements in its environment. Pilot studies with tidewater gobies show that fish from different populations can be identified to source based on differences in their otolith chemistry, and that these chemical differences are environmentally determined. Other work using California halibut shows that trace-elemental "fingerprints" can also be used to identify the type of nursery habitat occupied by juveniles. This method can thus potentially be used to quantify the input to adult populations of recruits from different nursery habitats.