

UNIVERSITY OF CALIFORNIA,  
SAN DIEGO

Genetic divergence among populations  
of black abalone,  
*Haliotis cracherodii* along the central  
California coast.

A thesis submitted in partial satisfaction of  
the requirements for the degree Master of  
Science in  
Marine Biology

By

David E. Hamm

Committee in charge:

Professor Ronald S. Burton, Chair  
Professor Nicholas Holland  
Professor Trevor Price

1999

## ABSTRACT OF THE THESIS

Genetic divergence among populations of black abalone, .  
*Haliotis cracherodii* along the central California coast.

By

David E. Hamm

Master of Science in

Marine Biology

University of California, San Diego, 1999

Professor Ronald S. Burton, Chair

Seven populations of *Haliotis cracherodii* were sampled between Point Conception and Monterey Bay, California. Allelic frequencies were determined for three polymorphic enzyme-encoding loci (PGI, GOT-1 and PGM). Significant allelic frequency differentiation among sites was observed at two of the three loci. DNA sequence data from the mitochondrial gene cytochrome oxidase I were examined also. The frequency of mitochondrial haplotypes did not differ between sites. Genetic distance was independent of geographic

distance over the approximately 300-kilometer sampling range. These results suggest a modest amount of population differentiation over this portion of the species range.

---

**National Sea Grant Depository**  
Pell Library Building - GSO  
University of Rhode Island  
Narragansett, RI 02882-1197 USA