

Newport Bay Conservancy Research Committee Report

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Submitted by

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Research on bivalves

The work on bivalves in Newport Bay has been continued with many volunteers from UCI, NBC, and Fullerton College in a series of sampling activities in order to understand the distribution and diversity of filter-feeding invertebrates in the Bay. A graphic summary of the work is attached. The work continues to support the following conclusions:

- The south coast of Balboa Island shows a much higher level of bivalve diversity than the other sites examined, with a 1cu.ft. sample often showing 7 or 8 species. The north coast of Balboa Island shows a very low density.
- Both North and South shores of Lido Island show extremely low densities of bivalves (2 and 0 respectively in the ~1 cu.ft. samples examined so far), in spite of the presence of dense populations of other (non-burrowing) filter feeders including mussels and sea squirts on the docks and pilings.
- The large population of jack-knife clams reported near the harbor entrance in 2003 was not detected.
- The lower part of the upper bay shows a very high density of an invasive species, the Japanese Littleneck Clam, identified unambiguously by Paul Valentich-Scott at the Santa Barbara Museum of Natural History.

In addition, at some sites we have been able to compare localities with and without eelgrass, and the results so far show a positive association between them.

UCI Senior Nancy Phu is analyzing the results by species, size and locality and summarizing them in a report.

Samples of the bivalves have been provided to Dr. Robert Hamersley at Soka University for analysis of heavy metal bioaccumulation.

We are now ready to ask permission for access to Upper Newport Bay sites. With more volunteers we could extend the study to include a survey of the other filter-feeding invertebrates (e.g. mussels and sea squirts).

Research Workshops

A Research Workshop was held on Thursday June 7, dealing with Urban Coyotes. A copy of the final program is attached. We were successful in getting almost all points of view represented, although it was disappointing that we were unable to get a speaker from the CA Department of Fish and Game.

Attendees who registered on-line: 41 including only ⁴ NBC Board members; revenue \$410
(Note: the on-line registration and revenue appears to have been much higher, but our Pay-Pal database does not show this as a separate category)

Walk-in registration: 6; revenue \$60

Total revenue (estimated): \$470