Reproduction and Population Dynamics of a Population of *Grandidierella japonica* (Stephensen) (Crustacea: Amphipoda) in Upper Newport Bay, California

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ABSTRACT

Patterns of reproduction, as measured by brood size and abundance, were studied for a population of the amphipod *Grandidierella japonica* (Amphipoda: Gammaridea) in Newport Bay, California during the period of July 1993 to June 1994. Weekly measurements of temperature, salininity and photoperiod were also made at the study site. *G. japonica* reproduced year-round at this site. However, both brood site. *G. jaonpica* reproduced year-round at this site. However, both brood size and abundance declined during the winter months. Large females were found to have both a larger brood size and produced offspring of greater length. Physical factors, such as temperature and photoperiod, appear to play a role in the pattern of reproduction. However, biotic factors, such as food supply and predation, which were not measured in this study, appear to have an effect as well.

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