

This study tests the very general hypothesis that field fertilization success in red abalone is a predictable function of the hydrodynamic regime, and the density, sex ratio and spacing of animals within aggregations.

Project Goals and Objectives (1) To determine the hydrodynamic mechanisms that facilitate fertilization of abalone inhabiting coastal waters; (2) To establish the optimal adult density, spacing and sex ratio to maximize fertilization success within a given flow regime; (3) To identify optimal field environments for transplanting or out-planting abalone aggregations, as well as natural abalone distributions that likely experience little or no reproductive success.