
Woods Hole Oceanographic Institution
Biology Department Seminar



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Redfield Auditorium – 12:00 Noon

Building a tool kit to assess reproductive performance of sea scallop populations

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In the US Northeast, fishing closures have been extremely successful in rebuilding and managing populations of the sea scallop *Placopecten magellanicus*. One of the assumed benefits of marine reserves and fishing closures to broadcast spawning species such as scallops is to promote aggregations that maximize per capita reproductive rates through greater fertilization success. However, spawner-to-recruit relationships are generally not well quantified and fertilization rates have not been directly measured “*in situ*” for sea scallops. In this series of field experiments, I explored the relationship between population size and density with fertilization success. I progressed from dockside trials to larger scale field manipulations of scallop aggregations. During this seminar I will discuss my results, how they compare to predictions from a fertilization model, and the potential implications for reproductive performance of scallops in fishing closures.