Project Title: Gonad development in *Ostrea lurida* broodstock compared to wild in varying temperatures

Project description:

In partnership with the Puget Sound Restoration Fund this project seeks to understand gonad development and gametogenesis in the Olympia oyster (*Ostrea lurida*). Observations in the hatchery and previous data suggest an effect of winter sea surface temperatures on broodstock fecundity and larval fitness. In this project we will collect gonad samples from broodstock held in multiple temperatures in the hatchery to assess gonad development and/or resorption. We seek to compare the hatchery held animals to the natural gonad development in the wild by sampling Olys from the broodstock collection site, Mud Bay in Dyes Inlet near Bremerton in Kitsap County. We will collect oysters in batches of ten periodically (every 2-4 weeks) from December 1, 2017 through approximately April 2018. We anticipate approximately 6-10 sampling events, for a maximum of 100 animals over the 5 months. Harvest method will include collecting oysters at low tide by hand.

Applicant Qualifications:

Education

Masters Candidate
University of Washington
School of Aquatic and Fishery Sciences
2016-present

Bachelor of Science
University of Washington
Oceanography, Chemical, 3.52
2005-2010

Relevant Employment:

Puget Sound Restoration Fund, Technician, 2014-2016 (with broodstock collection experience)

Honors & Awards

Hall Conservation Genetics Research Award March 2017, University of Washington College of the Environment
Libbie H. Hyman Memorial Scholarship (*Declined*) March 2017, The Society for Integrative and Comparative Biology, Division of Invertebrate Zoology
Melbourne R. Carriker Student Research Grant March 2017, National Shellfish Association
NSA Student Travel Award January 2017, National Shellfish Association
Fellow, Graduate Research Fellowship Program (NSF GRFP), April 2016, National Science Foundation

Membership, Certificates, and Positions

Pacific Coast Shellfish Growers Association, member since 2016
National Shellfish Association, recruits co-chair and member since 2017
World Aquaculture Society, member since 2017
United States Aquaculture Society, social media subcommittee and member since 2017
UW Shellfish Club, Vice-President since 2017
PADI Open Water, 2015-present
UW Scientific Diver in-training

Products

Earth Echo International: STEM Career Close-Up, March 2016
Earth Echo International: Shell Shocked, March 2016
Geoduck as indicators of environmental change
–Poster, NSA Annual Meeting in Knoxville, March 2017
–Presentation, PCSGA Conference in Welches OR, September 2017

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