

Shellfish Culture Internship

Background Information and Project Justification

We are pursuing several research projects that can use assistance:

- Growth and survival field trials of selectively-bred disease-resistant oysters (MA, RI, CT)
- Growth and survival field trials of selectively-bred disease-resistant hard clams (MA, RI)
- Research and development of offshore long-line mussel farms (MA and RI)
- Refinement of stock enhancement techniques for lobsters (MA)
- Development of scallop strains



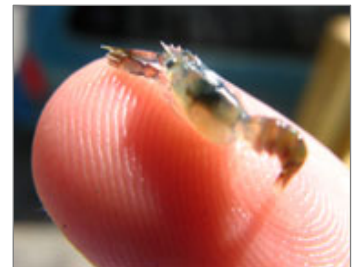
Typical crop of micro-algae grown for feeding hatchery shellfish



Wellfleet Project Site, L to R: oyster farmer, A. Cummings, State Representative, S. Peake and MBL Aquaculture Program Director, S. Lindell



Measuring four-month old lobster



Stage 4 lobster raised at MBL

Primary Objectives:

The primary objective of this internship is to develop skills appropriate for all stages of shellfish cultivation, and a basic understanding of shellfish biology. You will be trained in efficient means of growing micro-algae cultures, feeding and assessing health and growth of juvenile shellfish, and culture techniques indoors and outdoors through the hatchery, nursery and field-grow-out stages. Travel and work at field research sites will be involved occasionally.

Resources Available for this Project:

- State of the art wet-lab space with temperature controlled water, filtration system, etc for shellfish hatchery and micro-algae culture. We manage a shellfish nursery upwelling system under our dock to promote maximum growth of our juvenile shellfish seed.
- Availability of general use equipment; water quality test kits, microscope, autoclave etc.
- Access to computer and use of world renowned MBL/WHOI Library for literature searches.
- Mentors with over 50 combined years of experience in hatchery technology and aquaculture experience.
- Project field sites in MA, CT and RI with commercial partners who have extensive practical experience.

Skills Required:

- Aptitude for understanding aquatic animal husbandry and plankton culture.
- Problem solving skills and ability to correct minor problems (i.e. simple plumbing).
- Accurate record keeping skills.
- Ability to work and make decisions independently with minimal supervision.

Estimated Time Commitment: For a full-time intern, 20 to 40 hrs/week; 10 hours/week for a part-time intern.

Project Supervisor: Scott Lindell