**FISH 310 Biology of Shellfish**

**Animals for lab**

**Spring 2012**

**April 2-3**
Ocean Acidification Part I

Animals Needed:

* mussels-**40,** **LIVE**
* oysters-**40,** **LIVE**
* clams-**40,** **LIVE**
* larval oysters – (will be provided by Roberts Lab)

**April 4-5**
Intro to Cnidaria
Animals needed
•    **LIVE**: Several representative members of hydrozoa (thecate and athecate), anthozoa, and scyphozoa
•    **LIVE**: 18 Anthopleura
•    Brine shrimp larvae
•    Any preserved cnidaria specimens

**April 16-17**
Mollusc 1: Introduction to Mollusca
Animals needed
•    Representatives of 5 classes of molluscs—can be alive or preserved, as appropriate (animals A-E)

o    Polyplacophora (chiton) - **LIVE**
o    Cephalopoda (squid, octopus or cuttlefish)
o    Scaphopoda (tusk shell)
o    Bivalvia - **LIVE**
o    Gastropoda - **LIVE**

•    Additional gastropods, bivalves and cephalopods to examine  (can be others, as available, alive or preserved, as appropriate)

o    True limpet - **LIVE**
o    Moon snail - **LIVE**
o    Clam - **LIVE**
o    Dog whelk
o    Nudibranch - **LIVE**
o    Squid (B)
o    Chiton (3 species) - **LIVE**

•    Molluscs to observe pedal morphology

o    Giant chiton
o    Clam
o    Squid
o    Nudibranch
o    Limpet
o    Moonsnail

 **April 18-19**
Mollusc 2: Bivalves
Animals needed
•    **LIVE**: mussels (1 per student) ~40

**April 25-26**
Mollusc 4: Gastropods and Cephalopods
Animals needed:
•    **LIVE**: Helix
•    **LIVE:** Nudibranchs
•   **LIVE:** Neogastropods

**April 30-May 1**
Arthropoda/ Crustacea 1: Introduction
Animal needs:
•    Chelicerates

o    **LIVE**: 1 big terrestrial spider
o    Horshoe crab

•    Crustaceans

o    Pericarida

•    **LIVE**: Isopod
•    Amphipod
•    Pillbug

o    Eucarida

•    **LIVE:** shrimp
•    Shrimp (large, preserved)
•    **LIVE:** hermit crabs
•    Crab (large, preserved or **LIVE**)

* **LIVE**: Barnacles

**May 2-3**
Crustacean 2: Crab Dissection
Animal Needs
•    **LIVE:** Enough large crabs (Cancer spp. and/or Pugettia producta) for dissection (~18)

**May 9-10**
Crustacean 3: Crustacean Development/ Mysids/ Euphausiids/ Copepods/ Branchiopoda/ Shrimplike critters

Animal Needs:
•    **LIVE:** Large crab
•    **LIVE:** Artemia nauplii (TA will hatch)
•    **LIVE:** Crangon shrimp
•    **LIVE:** Salt water plankton tow

o    Barnacle nauplius
o    Brachyuran crab zoea
o    Copepods

•    **LIVE:** Freshwater plankton tow

o    Copepods

•    Preserved  King Crab Zoea (slide)

o    Porcelain crab zoea (slide)
o    Dungeness crab (Cancer magister) megalops (slide)
o    Phyllosoma larva of a spiny lobster (preserved)
o    Mysids (preserved)
o    Euphausiids
o    Branchipoda

•    Anostraca
•    Notostraca
•    Cladocera
•    Conchostraca
Preserved/molts/slides:
•    Mysid statoscyst (slide from **Greg?**)
•    Shrimp eye and crab eye slides (slide from **Greg?**)

**May 14-15**

Ecninoderms: Asteroidea, Holothuroidea, and Ophiuroidea
Animal Needs:
**LIVE**
•    Cucumaria piperata
•    Other species of cucumbers (Parastichopus and ??)
•    Brittlestars

**May 16-17**
Shellfish Parasites

Animal needs:

* Isopod - **LIVE**

•    Live shrimp carrying a bopyrid isopod parasite on its abdomen/gill-**LIVE**
•    Any other cool examples of crustacean parasites