

Pendrell Sound Sampling 2010

At the initiation of sampling, anchors will be set at two locations (stations 2 and 4) within the sound with a float attached. Temperature loggers and larval collectors will be installed along the lines.

Plankton sampling is to be conducted weekly beginning July 19, 2010 following the steps outlined below until larval density reaches sufficient levels. When larval density reaches this target, sampling crews will be notified and sampling will increase to twice a week.

Plankton sampling will consist of the following:

- at each station shown on Map A below:
 - Measurements of salinity, oxygen, air and water surface temperature and Secchi depths will be taken and written on the sampling card.
 - Two 5-minute plankton tows at a depth of 1-2 m at each station will be collected by pulling a plankton net slowly beside the boat at a rate of 0.5 m/s. Each tow will be washed into a large storage bottle and labeled with station name, date, and time.
 - Using one small bottle sample, write on the label provided before submerging the bottle elbow deep in the water, remove the lid and let the bottle fill up, replace the lid tightly then bring to the surface.
 - Lugol's solution should be added to each bottle (large and small) drop wise until the colour matches the whiskey or weak tea colour shown on the back of this card.
 - Randomly select a settlement plate from the submerged grid at stations 2 and 4, remove it carefully by cutting the straps that are connected to the plate and place it in the container provided
- Select at random, two adult oysters from the shore. Shuck the oysters and assess gonad development. Indicate adult oyster maturity on the sampling card.
- One sampling card should be completed and included with each shipment

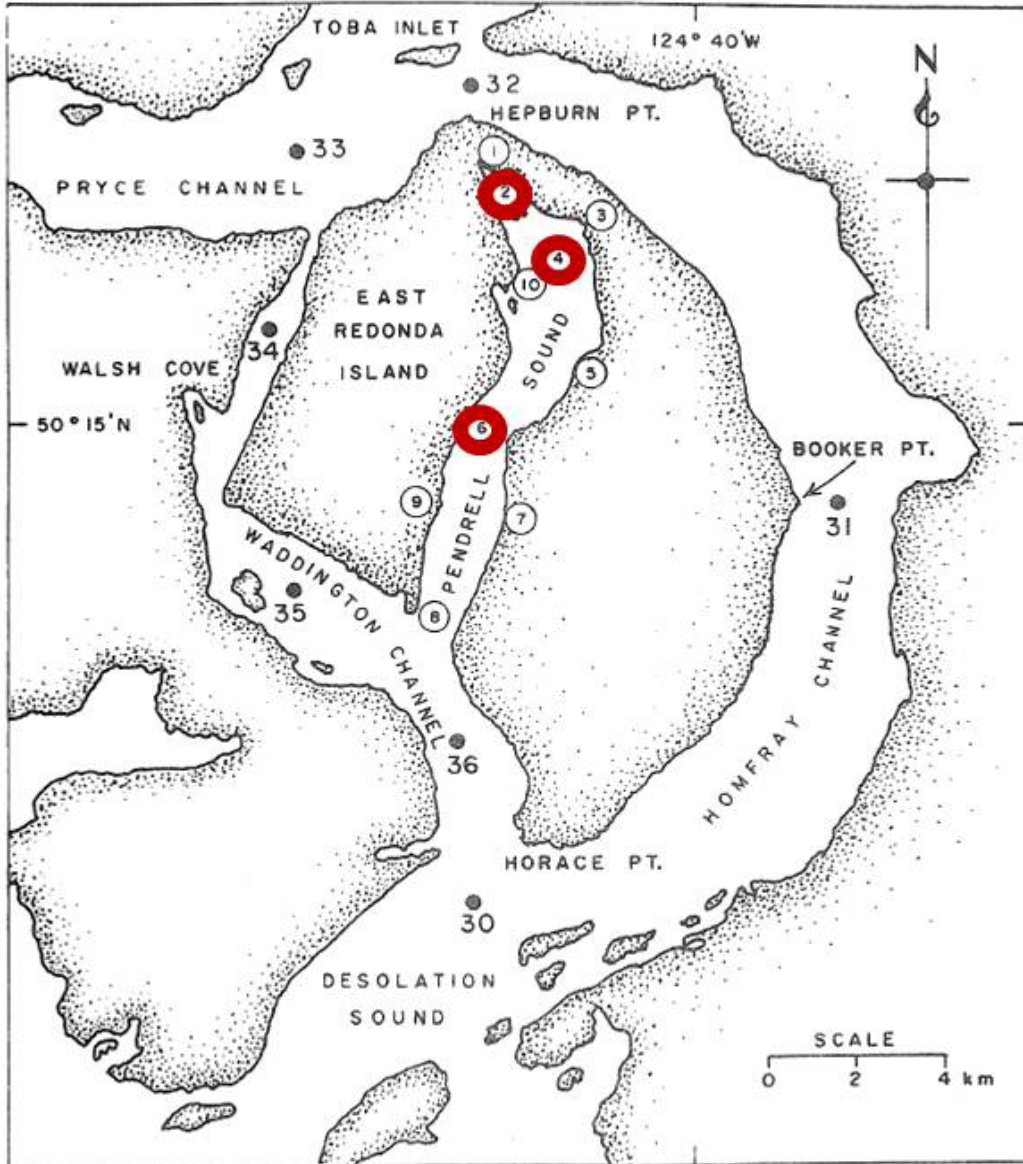
Shipping

- Double check that all labels and sample card are complete
- Check that all lids are secured tightly
- Place the 6 large bottles, three small bottles, settlement plate container and sample card into the shipping package provided and send to the Centre for Shellfish Research (CSR)

Each sample returned to the CSR will be analyzed for the following:

- Counts of all stages and species of bivalve larvae, counts of other major zooplankton groups if present and species of algae.
- Counts of spat on settlement plates

All results of environmental and larval monitoring will be made available to the shellfish growers in real time via a web interface through the BC Shellfish Growers Association (BCSGA) and Centre for Shellfish Research (CSR) webpages and via Google groups messages. All data will be entered into a database along with historical monitoring data, which is currently being transferred to electronic format from DFO archives, for subsequent data analysis.



Map A: Locations of plankton sampling. Sampling should be conducted at the locations indicated above by red circles. Station names should follow the numbers indicated within the red circle.

Please match Lugol's colour drop wise to a colour similar to this:

Contact Information:
Dr. Helen Gurney-Smith
 email: helen.gurney-smith@viu.ca
 phone: 250-740-6381
Dr. Daphne Munroe
 email: daphne.munroe@viu.ca
 phone: 250-888-8984
Kate Rolheiser
 email: katherine.rolheiser@viu.ca
 phone: 250-713-6246