

Pendrell Sound Monitoring Project – data for 17th September samples 2010

Reporting date 22th September 2010

Note: These are end of season samples, and therefore unless there are further indications that larvae may still be settling, there will be no further samples taken. In addition, the season samples and possible future plans for Pendrell sampling will be discussed at the forthcoming BCSGA Annual Meeting on the 15th of October. If you cannot attend and have some points that you would like to be raised, then please e-mail them to Helen.Gurney-Smith@viu.ca.

(A) Qualitative bivalve larval summary

One 5-minute plankton tows at a depth of 1-2 m at each station were collected by pulling a plankton net slowly beside a boat at a rate of 0.5 m/s. Samples were spun to condense larvae etc. in the centre and qualitative estimates were made from these condensed samples.

Biomass (low, medium, high)			
Station	2	4	6
D hinge	None	None	None
Umbone	None	None	None
Eyed	None	None	None

(B) Settlement plates

Settlement plate collectors are located at Site 2 and 4. Each week one plate from each site will be removed and the number of spat on the upper and lower surface of the plate will be counted. In addition one oyster shells was provided.

Settlement Plate: Bivalves Present

Site	Upper	Lower
2	33	47
4	35	26
Oyster Shell*	152	153

Larger sized oyster spat were observed on the under side of the settlement plates. However, this was opposite for the oyster shell where smaller sized bivalves were dominant on the under side of the shell.

*Oyster shell numbers are approximate and time of planting / exposure for settlement unknown.

(C) Phytoplankton report

Sample taken by submerging bottle elbow deep in water, removing the lid and letting the bottle fill up, replace the lid tightly then bring to the surface and preservation in 1% Lugol's solution.

Report Date: September 21, 2010 **Sample Date:** September 17, 2010

Site	Time	Sample Biomass	Biomass % by Group	Harmful or Potentially Troublesome Species	Dominant Species (Group)
2	5:00pm	v.low-low	diatoms 80% dinoflagellates 0% raphidophytes 0% other flagellates 10% zooplankton 10%	None seen	Coscinodiscus sp. ~ 5 cells/mL
4	5:30pm	v.low-low	diatoms 90% dinoflagellates <1% raphidophytes 0% other flagellates 10% zooplankton 0%	None seen	Coscinodiscus sp. ~15 cells/mL
6	6:00pm	v.low-low	diatoms 90% dinoflagellates <1% raphidophytes 0% other flagellates 10% zooplankton 0%	None seen	Coscinodiscus sp. ~110 cells/mL

(D) Site conditions

<u>Sampling Date:</u> September 17, 2010		<u>Crew:</u> Ed Bereziak		<u>Current Weather:</u> Partial Cloud		<u>Weather Past week:</u> Wet		
Site	Salinity	Oxygen	Wind	Waves	Air Temp (°C)	Water Temp (°C)	Secchi Disk Down	Secchi Disk Up
2	20 ppt	110%	Calm	Calm	18.9	18.1	9m	8m
4	20 ppt	105%	-	-	19.8	17.1	5m	5m
6	24 ppt	112%	-	-	17.4	17.2	7m	6m

Adult Oyster Condition:

Oyster 1 spent

Oyster 2 spent

General Comments:

(E) Quantitative plankton results (numbers of individuals per 5 minute tow at rate of 0.5m/s)

Plankton Surface Tows

Sample

Date:

Sept 17 2010

Analysis Date:

Sept 21 2010

Time:

Station 2		Station 4		Station 6	
Tow A:	Tow B:	Tow A:	Tow B:	Tow A:	Tow B:
4:50PM		5:40PM		6:10PM	

<u>Zooplankton</u>						
Cladocerans	80		80		0	
Copepods	115040		152320		108960	
Crab Larvae	80		240		40	
Ctenophores	0		0		0	
Eggs	80/mL		55/mL		125/mL	
Fish	0		0		0	
Foraminifera	0		0		0	
Gastropods	0		0		0	
Jellyfish	0		0		0	
Polycheates	0		0		0	
Rotifers	0		0		0	
Spirorbis	0		0		0	
Larvaceans	40		40		120	
<u><i>Bankia setacea</i> (shipworms)</u>						
Early	0		0		0	
Mid	0		0		0	
Late	0		0		0	
<u><i>Mytilus edulis</i> (mussel)</u>						
Early	0		0		0	
Mid	0		0		0	
Late	0		0		0	
<u><i>Ostrea lurida</i> (native oyster)</u>						
Early	0		0		0	
Mid	0		0		0	
Late	0		0		0	
<u>Clams</u>						
Early	0		0		0	
Mid	0		0		0	
Late	0		0		0	
<u><i>Crassostrea gigas</i> (Pacific oyster)</u>						
SH	0		0		0	
EU	0		0		0	
MU	0		0		0	
LU	0		0		0	
Eyed	0		0		0	