Pendrell Sound Monitoring Project – data from 12 August 2010 samples

Report date 16 August 2010

COMMERCIAL-SCALE SPAT SETTLEMENT PREDICTED FOR THIS WEEK AND NEXT WEEK!!!

(SEE DETAILS BELOW)

Note: Many thanks to Joe Sr and Joe Jr. of Baynes Sound Oysters for sending the following samples at the weekend!!

(A) Qualitative Pacific Oyster larval summary (samples were verified by Dr. Neil Bourne – thanks Neil!)

One 5-minute plankton tow at a depth of 1-2 m at each station was collected by plankton net (60µm mesh) from the Station 5 area.

Biomass (low, medium, high)			
Station	**Sample 1**	**Sample 2**	**Sample 3**
D hinge	**med**	**med**	**med**
Umbone	**med**	**med**	**med**
Eyed	**low**	**low**	**low**

In terms of percentages of different stages present:

5% late straight hinge stage
35% early umbo stage (10 to 14 days to settlement = approx 22nd to 26th August)
55% mid umbo stage (6 to 10 days to settlement = approx 18th to 22nd August)
5% late umbo (3 to 4 days to settlement = 15th / 16th August)
0% eyed larvae

So although there may be some settling now, the majority will settle towards the end of this week and during next week. This is also dependent upon the temperature remaining high (around 23 / 24°C) for good settlement. It is also likely that additional spawns may occur which will prolong the settlement season.

The vast majority of bivalves present in the samples were Pacific oyster larvae, with a few mussels and clams also present in small numbers.

This information, previous reports and project details can also be found at

http://www.viu.ca/csr/PendrellSoundMonitoringProject2010.asp
and
http://www.bcsga.ca/

(B) Quantitative plankton results (numbers of individuals per 5 minute tow)*

	Sample 1	Sample 2	Sample 3
Zooplankton			
Cladocerans	80	280	800
Copepods	29920	16920	28000
Crab Larvae	1120	0	2160
Ctenophores	120	40	160
Eggs	0	0	0
Foraminifera	0	0	0
Gastropods	0	120	0
Jellyfish	0	0	0
Polycheates	0	280	0
Rotifers	0	0	0
Spirorbis	0	0	0
Larvaceans	80	560	840
Bryozoan		1080	520
Bankia setacea (shipworms)			
Early	0	0	0
Mid	0	0	0
Late	0	0	0
***Mytilus edulis* (mussel)**			
Early	0	0	0
Mid	0	0	0
Late	40	80	200
***Ostrea lurida* (native oyster)**			
Early	0	0	0
Mid	0	0	0
Late	0	0	0
Clams			
Early	0	0	0
Mid	80	40	40
Late	0	0	0
***Crassostrea gigas* (Pacific oyster)**			
Straight Hinge	440	0	0
Early Umbo	2880	0	40
Mid Umbo	2120	1400	840
Late Umbo	120	280	320
Eyed	0	0	0
Biomass (low, medium, high)			
D hinge	med	med	med
Umbone	med	med	med
Eyed	low	low	low

*** Please note that only plankton tow samples were taken. No algal identifications or site conditions will accompany this data.**