



## NOAA Teacher at Sea Log:

Deborah Moraga

NOAA Ship: R/V Fulmar

Mission: ACCESS

Geographical Area: Cordell Bank

Date: Friday, June 23, 2010

### Weather Data from the Bridge

Start time: 0705 (7:05am)

End Time: 1708 (5:08 pm)

Position:

Line 2 start on eastern end: Latitude =  $38^{\circ} 3.4080$  N; Longitude =  $123^{\circ} 10.9800$  W

Line 2 end on western end: Latitude =  $38^{\circ} 2.7660$  N; Longitude =  $123^{\circ} 33.7800$  W

Line 1 start on western end: Latitude =  $38^{\circ} 7.8240$  N; Longitude =  $123^{\circ} 31.9200$  W

Line 1 end on eastern end: Latitude =  $38^{\circ} 8.3940$  N; Longitude =  $123^{\circ} 11.5200$  W

Present Weather: Cloud cover 100%

Visibility: 3-10 nautical miles

Wind Speed: light, variable winds 5 knots or less

Wave Height: 0.25 - 1 meter

Sea Water Temp: 11.5 C

Air Temperature: Dry bulb = 12.1 C

Barometric Pressure: 1013.5 mb

### Science and Technology Log

From the flying bridge...It was noted that there are unusually high numbers of some animals from Alaska - such as Northern Fulmars. There were also many sightings of humpback whales, one blue whale, numerous California sea lions and Dall's porpoises. Today was the first sighting of a fin whale recorded on an ACCESS survey.

The seas were so calm... with a swell height of 0.25 meters, you could say the ocean looked as calm as a bathtub right before you get in.

With the seas being so calm it was great to work on the back deck (stern) of the boat. Today while working line 2 we deployed the CTD six times and took hoop net samples of zooplankton at 50 meters below the surface. The Tucker trawl was also deployed (put into the water and towed behind the

### Krill



### Sending out the CTD



boat) to 200 meters. In the jars of organisms that we sampled from line 2 we found adult and juvenile krill. We found some krill with chlorophyll still in their stomachs.

Two small fish found their way into the hoop net. Myctophid - these fish live deeper during the day and come up towards the surface at night. The scales on the myctophid looked like a colored mirror and are iridescent.

I had the chance to do the water samples today as the CTD was deployed. To do a water sample you throw a bucket over board (attached to the boat with a line). Pull the bucket out of the water and “clean it out” by swirling the water around. Drop the bucket back into the ocean and bring it up to the deck. You then take a small vial that is labeled with the sampling location and rinse it out several times before capping with a lid. It is then placed in the freezer to be analyzed for nutrients by another agency. I was just about to cap the sample and I heard this ‘poof’ sound. I looked over and two humpback whales surfaced just meters away from me. I knew they were humpbacks, a type of baleen whale, because their blow hole is actually two holes. They started to swim off and fluked (raised their tails above the water before diving) just as I was finishing the water sample, how lucky I am to be here!

### **Personal Log**

#### **Getting My Sea Legs**

Okay, I will admit I was seasick the first day. I mean really sick. The sea was rough... 9 foot swell and even with a patch on to combat seas sickness...breakfast came up. I have not been sick again! But tomorrow is another day out at sea!

### **Myctophid**



### **Humpback Whale**

