



NOAA Teacher at Sea
Megan Woodward
Onboard NOAA Ship *Oscar Dyson*
July 1 – 18, 2009

NOAA Teacher at Sea: Megan Woodward

NOAA Ship *Oscar Dyson*

Mission: Bering Sea Acoustic Trawl

Geographical Area: Bering Sea

Date: Sunday, July 5, 2009

Weather/Location

Position: N 58.37.239; W 171.05.968

Air Temp: 4.5-6.0 (deg C)

Water Temp: 4.94 (deg C)

Wind Speed: 16 knots

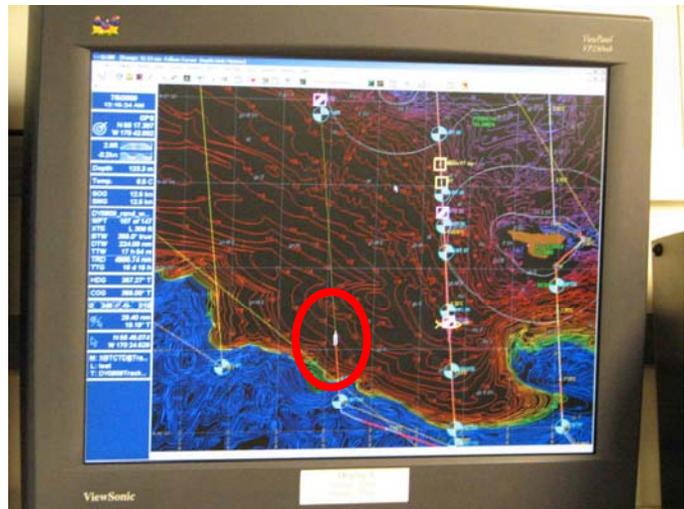
Weather: Overcast and rainy

Science and Technology Log

We have been at sea now for almost five days in search of pollock. The fish had not been spotted on the lines we traveled on until today. We had the opportunity for our first pollock trawl around 02:00, and used the Methot net to bring in two zooplankton samples earlier in my shift.



The survey tech and skilled fishermen lower the Methot net into the water.



This is the screen I use to get info about our ship's location. The little white speck inside the red oval is our ship.

This was by far the most action yet. I was eager and ready to see what the fishing process was all about. This log will focus on the zooplankton samples.

The Methot net was put in the water and lowered to the desired depth determined by watching the location of the acoustic return. After twenty minutes the net was brought back up and the catch was unloaded. I was expecting a net full of euphausiids, but the critters were actually collected in a small container on the back end of the net. The catch was brought into the fish lab and dumped into a bucket so we could separate the other organisms caught in the net (9 jellyfish and 23 tiny pollock in this case). Once the other fish had been removed, we took a sample (a 1/4 cup scoop) to weigh and count the euphausiids in the sample (sample is shown above). The rest of the catch was also weighed.

There were 543 euphausiids in the scoop. The weight and number help estimate the amount of euphausiids in the entire catch.

We repeated this process again a few hours later. The second sample had almost twice as many euphausiids, 13 jellyfish and fewer than 5 pollock.

Personal Log

Until today, the fishing portion of this trip remained a mystery. However, I was feeling a little sea sick, okay very sea sick, so it was probably a good thing. We encountered some VERY rough seas with sustained winds ranging from 30-40 knots and swells averaging 17 ft. Some of the swells were much larger; one was rumored to be almost 35 ft. high. Apparently the rough seas are expected to return tonight and tomorrow. My sea legs are securely fastened, so I am ready to take on whatever the sea has to offer.



A sample of zooplankton brought up in the Methot net. These are euphausiids, which are also referred to as krill.

When we brought in the first haul of pollock last night, my eyes must have looked like they were going to roll out of my head. I couldn't believe how many fish were coming across the conveyor belt. This was what I had been waiting for, so I got on my rain gear and started sorting the fish. Each species was placed into separate crates so a count of all fish caught could be taken. Of course, pollock made up the majority of the catch. In the next few weeks, I will become an expert member of the pollock survey team.



It was certainly a thrill to see the first whale of the trip. The pod was spotted just off the bow of the ship and later seen in the distance.

Getting used to the 16:00-04:00 (4pm-4am) shift has been trying. Today's shift was the first that didn't require a nap. Due to the odd shift hours, I've been waking up at 14:00 (2 pm) and going to bed around 05:00 (5 am). This makes mealtime tricky. Dinner is served first, then I eat some breakfast in the middle of the night. My body is thoroughly confused. The ship's cooks are wonderful, and continually provide a stocked mess hall with loads of choices. I swear the dessert bar is continually whispering my name.

I couldn't ask for a more kind, welcoming group of people to work with. Everyone on board, both scientists and crew, have been more than willing to answer my

questions. One part of this adventure I'm looking forward to is getting to know the wide range of characters who make this important research possible.

Animals Seen

- Fin Whale
- Jelly Fish
- Flathead Sole
- Northern Flathead Sole
- Arrow tooth Flounder
- Pollock
- Yellow Irish Lord
- Euphausiids

New Vocabulary

Zooplankton- A very small or microscopic animal organisms possessing little or no power of locomotion (can't move themselves), leaving them to merely drift or float in the water.

Euphausiids (eu·phau·si·id) - A type of zooplankton, also known as krill, are tiny shrimp-like crustaceans that form an important part in the diet of many animals including whales, seals, fishes and birds. These are the main food source for pollock.

Method Net - Method is the name of the man who designed the style of plankton net we used to catch the euphausiids.



One of several jellyfish brought up in the nets. This guy is slimy and heavy, but not a stinger