



**NOAA Teacher at Sea
Michele Brustolon
Onboard NOAA *Oscar Dyson*
June 28 – July, 2010**

NOAA Teacher at Sea: Michele Brustolon

NOAA Ship *Oscar Dyson*

Mission: Pollock Survey

Geographical area of cruise: Eastern Bering Sea (Dutch Harbor)

Date: July 7, 2010

Weather Data from the Bridge

Time: 1500

Latitude: 56.30N

Longitude: 172.05W

Cloud Cover: 100% (8/8)

Wind: 16 knots

Air Temperature: 8.0⁰ C/ 46⁰ F

Water Temperature: 7.3⁰ C/ 45⁰ F

Barometric Pressure: 1011.8 mb

Science and Technology Log

Where am I?

Life aboard a ship is difficult to comprehend until you have experienced it first hand. If you forget something, oh well, and you live with what you have for the duration of your leg. Planning ahead is huge for a mission to the Bering Sea! (Sound familiar students?!) Life at sea can be much slower than I think people believe it to be. On this particular type of cruise, much of the day is spent waiting, watching, and analyzing information. While everyone has their job, some of those jobs require patience and flexibility.



NOAA Ship *Oscar Dyson* anchored in Dutch Harbor

What happened?

Ever have that moment when a demonstration fails, the cool lab you worked so hard on doesn't work, there's a schedule change thrown into your day, or maybe that special dinner you were planning didn't taste right? It happens on the boat too! You have to be prepared and understand that it is going to happen. Equipment failure, human error; they all happen on board. I arrived in Dutch Harbor on June 26th and we were scheduled for departure on June 27th. There was a broken crank shaft in one of the large generators so our departure from

Dutch Harbor was an educated guess at best. Without the generator, we would be in short supply of fresh water for a ship holding 39 people until July 16th. There wasn't anything that we could do so we took advantage of being in Dutch Harbor for a couple of extra days until we departed on June 29th. Maybe the copper wire was cut before it reached the bottom on an XBT or there was a hole in the trawl net that needed to be mended. That part of life on board is no different than any other environment.

It's an albatross, an orca, a tree?

Talk about patience...the mammal observers have lots of it. They are on watch constantly



Looking toward the horizon through the "Big Eye"

looking along the horizon for blowholes and other signs of mammalian life. When observations are slow, anything in the water can become exciting. Earlier this week while I was on the bridge, the mammal observers called down from their observation deck to the bridge because there was an object in the water that we were getting closer to. You could feel the excitement from everyone growing as this magnificent object grew closer. We got our cameras ready because this could be "the" picture of the trip and positioned ourselves to take the shot of our lives. As we approached this rather large piece of unidentified matter, we realized that it was a piece of driftwood with murrets hanging out on it. At this point, the adrenaline rushed out of me and laughter took over.

None of us could believe how excited we became and how let down we were to find out it wasn't a mammal at all. Back to the observation deck!

You can't force the fish!

My primary job on this boat is to help with the fish surveying. Using the acoustics helps decide when the trawl nets are deployed for fishing. In order for fishing to occur there needs to be at least 2-3 miles of pollock showing up on the transducer screens. Weather also plays a role on what we see on the transducers. We have been very pleased with the weather so far; although it has been foggy, that usually means calmer seas. Later in the week, the weather is supposed to get dicey. When this happens there is a chance that it will be too rough to fish even if we do see the pollock. Look for my journal on weather after the weekend! Since the start of our journey we have fished three times during my shift and deployed the Methot a few times. When we are not fishing we find other things to keep us busy. Some people are analyzing data, checking equipment, or if you are a teacher at sea, you may be documenting all of your experiences. I have never taken so many pictures! The down time gives me a chance to talk to others on the boat to see what other operations are happening. As my friends and family know, I have a hard time sitting still. This is the perfect place for me to be because I have no choice but to slow my pace! It's REALLY hard, but I think I am doing a pretty good job!

What shift are you working?

Aside from the flexibility needed to work on the ship, you also need to be flexible and patient just to live on board. Remember, you can't just leave the ship when you need a break!

The boat runs 24/7 so there are lots of shifts on the boat. To give you an idea you may be on watch for 4 hours in the dead of the night, or you may be observing mammals from sunrise to sunset. I was lucky to land the 12 hour shift from 0400-1600, but the other fisheries crew comes on for the remaining 12 hours of the day. I say this because with a full crew of 39 people on board and with everyone working different shifts, there is etiquette on board a vessel. If

you and your roommate do not have the same shift, it is the unwritten rule not to enter the room while they are sleeping. That

means you need to take everything with you for that shift. Not everyone eats during the allotted times that the mess hall is open so food is often set aside so everyone can have their meals regardless of what shift they work. Taking showers need to be short because everyone would like to take a hot shower after 12 hours of working. Appropriate volume is important because there may be people sleeping in the stateroom next to you and you don't want to wake them while they are trying to sleep when off shift (remember inside voices!). It makes you very aware of your surroundings. I absolutely lucked out because Rebecca (the other TAS) and I have the same shift and same schedule. We have it much easier than most people on the boat that have opposite shifts.



2000: Time for Bed!

0330: Time to Wake Up!

TAS shift- 0400-1600



TAS stateroom (where we sleep)



Stateroom head (bathroom)

Can anybody hear me?

Need time away from the hustle and bustle of life back on land? Need to take a break from your TV, cell phone, blackberry, I phone, and the internet...the Bering Sea is the place for you! Even though there is a phone on board that allows you to call off the ship, it is extremely expensive so it is definitely not for everyday use. Phones don't work here so you can save the batteries in your cell phone or I phone for home. Most of them actually don't even work on Dutch Harbor either. As far as the internet is concerned, that's a little trickier. As you may have noticed, my journals took a while to be posted. It is very difficult to send information via internet from the *Oscar Dyson*. If we are traveling on a northern transect, we may not get internet the entire time. The transect itself could take 2 days to complete running at 12 knots! If we are turning or heading south, we may get lucky for a while. Therefore it takes time to get all the information and pictures sent just to be posted. It is very hard to be patient because I want everyone to know what's happening and all the cool things we have been doing. Internet is sporadic at best, but keep the emails coming! It is nice to hear from everyone back home!

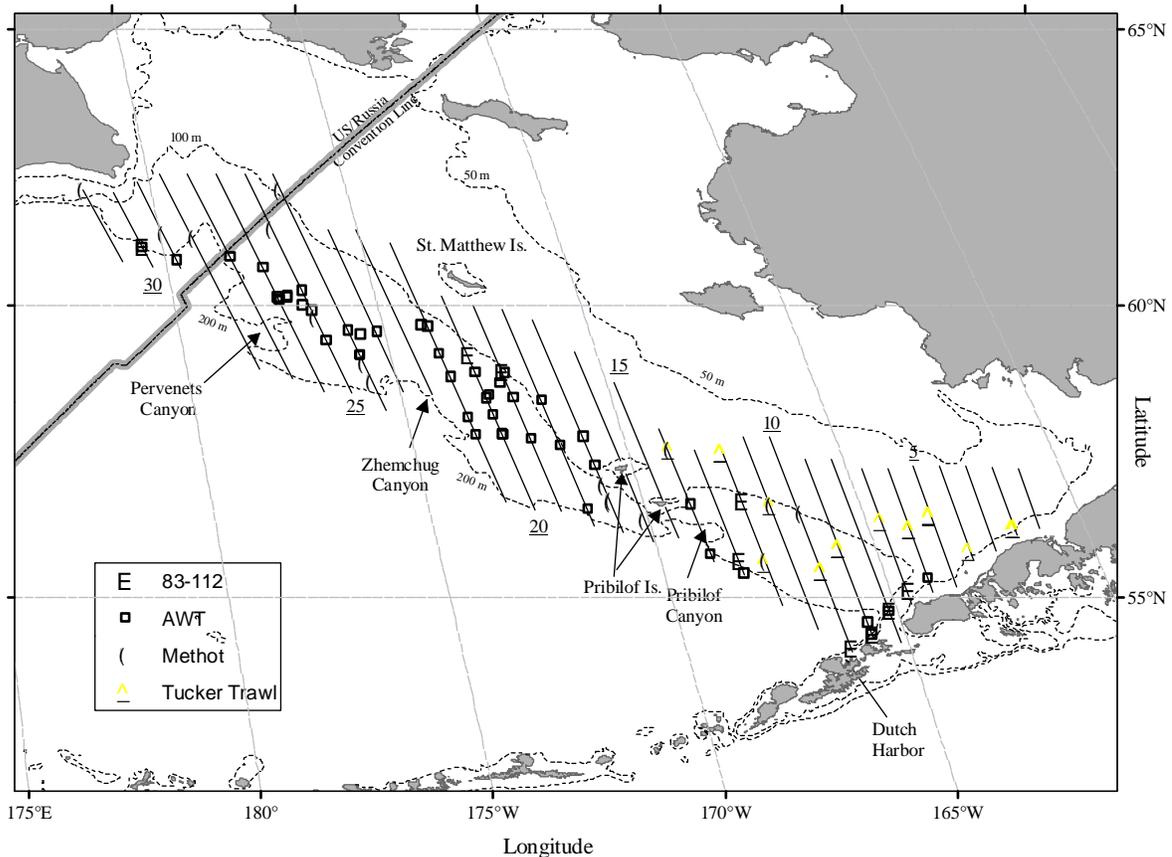


Figure 1.--Transect lines with locations of midwater (Aleutian wing trawl (AWT), and Methot trawls), bottom trawls (83-112), and Tucker trawls during the summer 2009 echo integration-trawl survey of walleye pollock on the Bering Sea shelf. Transect numbers are underlined.

Transects for Legs I-III for 2010

Animals seen

murres

fulmars

brittle stars- *Ophiura sp.*

basket star

sand dollars

hermit crabs

2 types of cockles- *Clinocardium sp.*

and *Serripes sp.*

Tanner crab

Aleutian moonsnail

Arctic moonsnail

jellies- *Chrysaora melanaster*

krill- euphausiids

amphipods

Dall's porpoises

flounder- *Kamchatka flounder*

spiny lumpsucker



Basket star

Word of the day

Dupe: to deceive, fool

New vocabulary

Head: bathroom

Mess hall: cafeteria, where you eat your meals