



**NOAA Teacher at Sea
Jill Carpenter
Onboard NOAA Ship DELAWARE II
September 5 – 15, 2006**

NOAA Teacher at Sea: Jill Carpenter
Onboard NOAA Ship DELAWARE II
Mission: Herring Hydroacoustic Survey
Day 10: Thursday, September 14, 2006

Weather Data from Bridge

Visibility: 10 nautical miles
Wind direction: 180°
Wind speed: 14 kts
Sea wave height: 2ft.
Swell wave height: 7 ft./9 sec. from 90°
Seawater temperature: 16.8°C
Sea level pressure: 1018.7mb
Cloud cover: PC

Science and Technology Log:

The trip is winding down and we will be in port in a few hours. I am writing this final log in the early hours of the morning of my last night shift. We will soon be approaching Cape Cod Canal, and our time of arrival into Woods Hole is scheduled for 9:30 this morning.

On last night's shift, we passed the time taking CTD measurements and logging the events. Unfortunately, no trawls were completed since we didn't come upon a location with an abundance of fish.



Teacher at Sea Jill Carpenter on board the DELAWARE II.

Tonight we began with a trawl. As with the last trawl, the majority of our catch was redfish. We also caught Atlantic herring, northern shrimp, anchovies, pearlsides, silver hake and red hake, short fin squid, several dogfish and a goosefish. The catch from the trawl was sorted by species, just as before. The individual species were weighed and measured. Again, we took a subsample of redfish which means that we took a portion of the total catch and measured each individual length. Additional information was again gathered on the herring including sex, maturity stage, and stomach contents, and then a subsample was frozen for age analysis back at the lab. The Fisheries Scientific Computer System (FSCS) system was used for entry of the biological data.

I was also able to interview a few more of the crewmembers on the ship.

Commanding Officer Richard Wingrove (otherwise known as Captain) has worked his way up to his Commander position during his 17 years experience with NOAA. Richard has a degree in Marine Biology and has loved the ocean from the time he was a child. His extensive background experiences include being a satellite oceanographer for the NOAA Hurricane Center, working for the National Marine Sanctuary on oil spill cleanups, and serving the Peace Corps as a fisheries officer in Antigua. As commanding officer of the NOAA ship DELAWARE II, his job involves overseeing the entire ship, supervising officers, and safely completing missions. He claims the best part of his job is working with the crew, which he thinks of as his family at sea, although he admits it is still tough being away from his real family. As one can imagine, the job of commanding officer comes with a great amount of responsibility. Richard is in charge of a \$12 1/2 million ship and a crew of 34 people. Pretty intimidating!

He has a great deal of fond memories and stories of rough seas, though he recalls one humorous incident in particular. He was once on board a ship off the coast of Alaska when the seas were 25-30 ft. It was so rough that all the crew could do was ride out the seas; the cooks weren't even able to make a meal! On a dare from the other crew members, Richard tried jumping up to touch his back to the ceiling, but mistimed his jump and ended up being slammed to the floor when the ship descended quickly and the ceiling pushed him down. He was stunned, but otherwise okay. This legendary stunt is still spoken of amongst Richard's seafaring friends. Richard recommends taking many classes in science and math if one is interested in commanding a ship.

Lead fisherman Pete Langlois has experienced a lot of rough weather during his six years at sea aboard NOAA ships. He has many responsibilities aboard the DELAWARE II. A lead fisherman splits a 24 hour shift with the boatswain, and their duties are to operate the machinery on deck, such as the nets, winches and crane. Pete is responsible for the fishermen's and scientists' safety on deck while machinery is operating. He also oversees the deployments and recoveries of scientific instruments such as the CTD sensor. Additional duties of a lead fisherman include general maintenance of the ship, such as loading and unloading stores and equipment. Mr. Langlois also serves as third mate of the ship. A third mate is in charge of the track lines of the ship and acts as a representative of the captain.

One of the first things that Pete recommends for future sailors is to try spending time aboard a ship to see if you like it. It is also necessary to get your Able Seaman Certificate which is issued by the U.S Coast Guard. One path to pursuing your career is through a maritime academy, such as the Massachusetts Maritime Academy. He claims there is a high demand for all positions aboard ships, and it is important to get experience at sea in order to get an Able Seamen or Captain's license.

Personal Log:

Although I am sad for the trip to be over, I am looking forward to returning home to my family, friends, and classroom and sharing my experience with them. This trip has been invaluable to me in so many ways. I have met many amazing people, I have participated in recording ocean data, and I have seen how much thought, effort and talent goes into a fisheries research vessel. I am fortunate to have completed 3 mid-water trawls while on board. Being able to see and touch the fish that we are studying was amazing. I gained hands-on knowledge and experience, and I began to see the species not as slimy and gross fish, but as a necessary tool for progressing our understanding of ocean species.



TAS Jill Carpenter dressed in her survival suit on board the NOAA ship DELAWARE II.

The crew of the DELAWARE II has been nothing but welcoming and accommodating to me. I appreciated all of their care, time and patience with me as I learned about life on board a scientific research ship. Their sincere good natures and the humorous spirits will always be remembered by me. I can now better understand the wisdom shared by

our Chief Scientist, Bill Michaels, about how people and teamwork are to be greatly appreciated. People are such a large part of what make a job enjoyable. It is easy to see that the entire crew of the DELAWARE II enjoy their jobs and each other's company. They make an unbelievably great team.

Thanks to all of the crewmembers of the DELAWARE II. I will never forget you or my experiences on board. My students will surely benefit from my gained knowledge for years to come. Thanks again for sharing a slice of your lives with me. I've been inspired by all of you.



TAS Jill Carpenter in front of the NOAA ship DELAWARE II.