



**NOAA Teacher at Sea**  
**Elise Olivieri**  
**Onboard Research Vessel *Hugh R. Sharp***  
**May 9 – 20, 2009**

**NOAA Teacher at Sea: Elise Olivieri**  
Research Vessel *Hugh R. Sharp*  
Mission: Sea Scallop Survey  
Geographical area of Cruise: Mid-Atlantic  
Date: Thursday, May, 14 2009

**Weather Data from the Bridge**  
Air Temperature: 13.39 Degrees Celsius  
Barometric Pressure: 1028 mb  
Humidity: 84%

**Science and Technology**  
**Log**

Sampling the water column is a vital part of oceanographic work. Aboard the *Hugh R. Sharp* casts are conducted every third station using a special instrument called a CTD. CTD stands for conductivity, temperature and depth. Water samples are brought back aboard collected by a Niskin bottle two times a day. These samples are used to calibrate the CTD. Scientific research should always be double and even triple checked to calibrate all the various instruments being used and guarantee they are functioning properly.



**Sorting the catch!**

Today I got a chance to sit and talk with my Watch Chief, Geoff Shook. He is extremely organized and very helpful. He ensures the data is correctly entered into the FSCS computer database and watches over the night crew. Geoff was always interested in oceanography but during his undergrad he had an opportunity to study fisheries instead. Geoff is mainly interested in fish populations. He spends about 140 days out at sea every year. About a week before this Sea Scallop cruise Geoff just returned from a 2 leg bottom trawl fish population survey. Directly before that he was on a Monkfish Survey that concentrated on locations Monkfish are found along with the population index. Geoff spends his time on cruises auditing data, servicing all the

gear and fixing the scallop dredges. He is the head of inspections and we can thank him for that. Geoff organizes all the data so the ships have all the latest information. Geoff is very hardworking and patient. It takes a lot of hard work to do his job. I commend him for his dedication to fisheries research.

I also got a chance to sit and talk with Cristina Bascunan. Cristina is a physical science



From left to right: Geoffrey Shook, Kevin McIntosh, and Shad Mahlum

technician. I really enjoy talking with her and look forward to working with her and Geoff every night. Cristina was a biology major in college and started volunteering on sea scallop cruises her sophomore year. She got a job with NOAA and started working on oceanography cruises that follow Plankton. There were 40 set stations on Georges Bank where Plankton were collected and sampled. Cristina also worked on SOOP cruises. SOOP stands for Ships of Opportunity Project. Once

a month this cruise would take a scientist along and travel to Bermuda and complete a CPR. A CPR is a Continuous Plankton Recorder. The Plankton is sampled by a silk cloth tow that is dragged behind the boat. The silk cloth is treated with a preservative so further tests can be conducted later on. This helps create a time series where surface temperature could also be measured and mapped out. This data collected aided in many other studies and is extremely important. Cristina works very hard and she definitely has my respect.

### Personal Log

Today was pretty exhausting. All these 12-hour work shifts with no days off are finally catching up to me. I have a newfound respect for the crew of technicians and scientists that work these hours year round. Today the seas were really rough. We had at least 6-foot waves and water crashing onto the deck. When the moon makes a circle in the sky you're moving. It's very hard to work when the ground is moving below your feet. I spent a bit of time today hanging over the ship's railing. Can you guess what I was doing? I sure was seasick for a little while this morning, but it passes quickly which is good. Every night before I go to sleep I listen to the ship's noises. I hear some bangs and clicks, but my favorite sound is the waves crashing into the side of the boat. I literally rock and roll until I fall asleep. It's about that time right now. I can't wait to climb up to my bunk and get some rest.