



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

NOAA Teacher at Sea: Lollie Garay

Ship: Research Vessel *Hugh R. Sharp*

Mission: Sea Scallop Survey

Geographical Area: North Atlantic

Date: Saturday, May 9, 2009

Weather Data from the Bridge

SW winds 10-15KT

Seas 4-8ft, cold front moving of land

Science and Technology Log

The Research Vessel *Hugh R. Sharp* set sail this morning around 8AM from Lewes, DE. There are 13 members of a science team including two teachers: Elise Olivieri and myself. There are 9 crew members as well, for a total of 22 people onboard. We met this morning for introductions and a briefing on the schedule of the day. Captain Jimmy Warrington gave safety instructions and a muster drill was held on the stern of the ship. With logistics covered, the team got to work preparing for a test tow of the scallop



Research Vessel *Hugh R. Sharp* just before we set sail

dredge. The dredge is 8ft wide and is made of a metal frame from which netting and a bag constructed of rings is attached aftward. It is lowered with a winch off the stern of the vessel and descends to depths that range from 10 meters to 150 meters. As the ship moves at a speed of 3.8 nautical miles per hour for 15 minutes, organism is being scraped off the seafloor. A test tow is conducted near the shore to make sure this important equipment is working properly. In the event that something needs work, we are close enough to go back for repairs

The focus of this NOAA Fisheries cruise is to survey the population of *Placopecten magellanicus*, the deep-sea scallop. Chief scientist Kevin McIntosh (NOAA-Fisheries) leads the team of researchers for Leg 1 of this survey which will do representative sampling. Victor



Lollie in her survival suit during the muster drill

Nordahl (NOAA Fisheries) is responsible for organizing the sampling survey. The NOAA Fisheries Service monitors the populations of sea scallops in the federal waters on the Eastern continental shelf of the U.S. In 2007, scallops represented the most valuable commercial fishery, along with lobsters. It is critical to monitor their populations to avoid over-fishing of these waters. Fishing areas are either open or closed, meaning that fishing is either allowed or not. Closed areas allow time for repopulation of the area of the commercial species. Temperature and depth are important for scallops. The species we are studying are found in waters cooler than 20C (68F) along the North Atlantic continental shelf area between Newfoundland and North Carolina. In the 12-day time period of Leg 1 of this survey, we will conduct about 15 sampling stations per day, working 24hrs a day. I am working the noon-midnight shift. Today being the first day, my team will work from 4pm-midnight. On Sunday we begin the 12 hr. shifts. Each crew has a Watch

Chief responsible for making sure everything runs well with the survey on his watch. Our Watch Chief is Shad Mahlum (NOAA Fisheries).

Personal Log

My bunk mate for this cruise is Elise Olivieri, a TAS from New York. We share a small room with bunks and on the first night we realized that without a ladder to use, she definitely had to take the top! (Elise has more height to her than I!) We experienced some rough seas this first day due to storms that were circling around. When night fell, we could see lightning in the distance. We were tossed around quite a bit during the late hours of our shift, bumping into walls, equipment and each other! Waves pounded over onto the deck where we worked and sprayed chilly waters over everything it could reach. Sure made it hard to get those sea legs going.

By the end of my shift I felt that I had a good understanding of my role on the survey team. I



Rough seas sure made it hard to get those sea legs going!

am working with a great group people who have been most patient with all my questions. They are teaching me a lot about scallops, marine life and the importance of their jobs. This is going to be a great experience!

Question of the Day

What's the difference between an East Coast Deep Sea Scallop and an East Coast Bay Scallop?