



NOAA Teacher at Sea
Jeff Lawrence
Onboard Research Vessel *Hugh R. Sharp*
June 8 – 19, 2009

NOAA Teacher at Sea: Jeff Lawrence

Ship: Research Vessel *Hugh R. Sharp*

Mission: Sea Scallop Survey

Geographical Area: North Atlantic

Date: Sunday, June 14th, 2009

Weather Data from the Bridge

East winds 3 KT's, 1015mb pressure

Seas 2-4ft, Partly cloudy early, clearing sunny skies late afternoon

Science and Technology Log

The bridge of a ship is a very busy place where all activities that are occurring on the ship being managed from this location. When any equipment is going overboard it is the responsibility of the captain or first mate to ensure that it is done safely and correctly. The ship must follow a predetermined route for each stations sampling and be kept on tract by precise navigating from the bridge. Whenever anything goes overboard the bridge has be notified, it is important for the bridge to know everything that is in the water to avoid the boat form being fouled up by miscellaneous line in the water. This could be dangerous and costly for the ship and crew.

Captain BillByam has been very helpful to me and my fellow teacher at sea making sure we have the availability of the crew and ship to write our journal entries and then submit them online to NOAA. The ships crew is also responsible for deployments and retrieving of all instruments put overboard the ship. Along with the dredge and occasional CTD is deployed to get a profile of the water column and collect water samples at varying depths. The water samples can be used for a variety of things, such as water filtering to see what microscopic critters may be present,



Left: The bridge of the ship; Right: Crewmembers on the bridge discussing the cruise operational procedures

chemical analysis, as well as conductivity or salinity of the water. The CTD is standard instruments used on most science research vessels. The crew on the *Sharp* are very proficient, professional, and hard working as they also help with assisting the scientist with some of the work on deck.

Personal Log

The cruise has gone very smoothly with lots of scientific data have been collected for future analysis. I have worked closely on the deck with members of the noon to midnight shift for almost two weeks. In that time we have collected many samples of scallops, crabs, starfish, sand dollars, sea urchins, many varieties of fish, and even occasional pieces of trash left from man's misuse of the ocean. I hope to be able to take the knowledge gleaned from this experience and the scientist onboard the ship and give my students back in Oklahoma a better understanding of our oceans and how their health impacts everyone around world even those in land-locked Oklahoma. It has been my goal to better inform my 5th-8th grade students, my college students who are training to become teachers, and the general lay member how all of us impact the health of the oceans and how important the oceans are to us all in maintaining a homeostatic balance with the Earth's biosphere and atmosphere.



Shad and Stacy repair the net on one of the dredges

We all have much to gain with a healthy ocean system and much more to lose if we are not adequate in our stewardship of our oceans.

I would like to give a special thanks to Chief Scientist Stacy Rowe for allowing me to participate in all aspects of the cruise and collecting samples. The team I am with are very cordial and extremely helpful in answering all my questions. They made me feel a part of the team and not an outsider. It was great to work with a group of people who are so dedicated. When one team member finished a task they simply moved to help another team member until the whole catch was sorted, measured, and weighed. It is good to work with people who are equally vested in their work. No one person stood and watched as others worked, each did an equal share of the work and made sure the task was completed in a timely and organized fashion. This made the long hours of the shift seem shorter and the days went by much quicker. It is always good to be a part of a good team. Thanks to the crew aboard the *Sharp*, and the scientist that made this trip a profitable one, not only for me but also for my students back in Oklahoma. Thank you Bill Byam, captain aboard the *Sharp* and all of his dedicated crew. The ships crew, were hospitable host and I really enjoyed meeting you all. Thanks to NOAA for allowing a previous teacher at sea another opportunity to learn more about the oceans and have another lifetime memory to share with others.

Questions of the Day

What instrument does a ship use today to navigate in precise lines? (hint cars use it also to find their way around town)

Who is Hugh R. Sharp? (ship is named after him)