



**NOAA Teacher at Sea  
Tiffany Risch  
Onboard NOAA Ship DELAWARE II  
July 28 – August 8, 2008**

**NOAA Teacher at Sea: Tiffany Risch**

NOAA Ship: DELAWARE II

Mission: Surf clam/Quahog survey

Geographical area: Southeast of Nantucket, MA

Date: Friday, August 1, 2008

**Weather Data from the Bridge**

- Mostly cloudy with isolated showers
- Surface winds: 5 to 10 knots
- Waves: Swells 2-4 feet
- Water temperature: 23° Celsius
- Visibility: 7 nautical miles

**Science and Technology Log**

As I began my shift, I noticed on the map hanging in the dry lab that we are working our way towards an area southeast of Nantucket called Georges Bank. Georges Bank is a shallow rise underwater where a variety of sea life can be found. Before long, we were called to the deck for our first station of the morning. We set the dredge, hauled it back, sorted the catch, measured and recorded data, and moved on to the next station.

Recording data and sorting are two of my favorite things to do, especially when it involves shucking the clams for the meat to be measured! My watch seemed to be on a record pace, as we managed to complete seven hauls all before

breakfast at 5:00am. This process happens around the clock on the DELAWARE II, maximizing the amount of data we collect while at sea for two weeks.



**The dredge being brought back up onto the ship after being deployed**

Later in the day, the winch that is used to haul the dredge back from the water suffered a power problem. I and the person controlling the dredge noticed this right away, as one of my jobs is to switch the power on to the pump that the dredge uses. I alerted my watch chief, and also the chief scientist for this cruise who quickly began to assess the situation. Over the next hour or so, things became very busy on the back deck as the captain, engineers, and scientists tried to solve the problem. They did manage to get the power back to the winch again, which enabled the dredge to be brought back onboard the ship. The amount of talent exhibited by so many people on this ship continues to amaze me. They always have answers for everything, and Plan B for any situation is always on their minds!

### Personal Log

Today was a really exciting day of sorting, as my watch found a variety of different organisms. I actually saw a live scallop clapping in the bucket after it was hauled up! Other interesting creatures included a Little Skate (*Raja erinacea*), which is a fish made of cartilage and is closely related to rays and sharks, a sea robin, sea squirts, hermit crabs, some sea stars, and even a few



Collecting and sorting the variety of marine life that we find. Here, TAS Risch holds up some sea stars.

flounders. One of the more unusual characters that we encountered onboard was called a Yellow boring sponge, otherwise known as a Sulfur sponge or “Monkey Dung”. We take measurements of all of these things and quickly return them to their home in the ocean.

Very early this morning, around 1:00am I visited the bridge, or the area where the captain controls and steers the ship from, to see what everything looks like at night. Crew member Claire Surrey was on the bridge tonight, making sure the ship stayed on its course. The area was very quiet and dimly lit by the various monitors that broadcast

information back to the officer in charge. The ocean was pitch black, and I could only see faint lights of a few other ships bobbing up and down in the waves very far away. What a cool experience to see the ocean at night, with a starry sky, and know that all types of instruments are guiding my voyage through the sea!

### New Words/Terms Learned

**Min-logs:** sense temperature, depth, and pressure underwater on the dredge, and are brought back to the surface and recorded via computer.

**Starboard:** the right side of a ship

**Port:** the left side of the ship