



**NOAA Teacher at Sea
Amy Pearson
Onboard NOAA Ship DELAWARE II
August 13-30, 2007**

NOAA Teacher at Sea: Amy Pearson
NOAA Ship: DELAWARE II
Mission: Ecosystems Monitoring Survey
Date: Monday August 27, 2007
Location: North Atlantic

Weather Data from the Bridge

Time: 1000
Air temp: 15.6
Water temp: 15.1
Wind direction: 003
Wind speed: 12 kts
Sea wave height: 2-3 ft.
Visibility: 10+

Science and Technology Log

What a gift. After what seems like many days of fog, it is a perfect day in the Gulf of Maine. I witnessed it at about 1:30 a.m. from the bridge where I went to photograph a full moon from the “darker” end of the ship. The deck where we work (stern) is well lit all night, so there is light pollution. The reflection of the moon on the water is hard to reproduce in a photo, but worthy of the attempt. The air has also cleared, replaced with dry, crisp Canadian air, and as a bonus, the seas are calm. After a good six hour sleep I head to the deck for what I think is the best morning yet. Clear skies with visibility that seems infinite, deep blue water with barely 1 ft. waves, and a gentle breeze mark the morning hours. The air feels so clean, almost brand new. Shearwaters are gliding onto the top of the water and dunking their head in for a quick taste. It is the first time I’ve see herring gulls at sea in at least a week. There are large mats of yellowish sargassum floating in the water. There have been humpback whales spotted but I haven’t seen them yet. It is still quite deep here, about 200 meters. The plankton samples contain a lot of *Calanus* which is almost a salmon color and appears like small grains of rice in the sieve. It is a tiny crustacean, and food for so many large organisms...a favorite of young cod. I was late for breakfast but had some freshly cut honeydew melon, toast and cheese. Some warm coffee cake was soon put out. I’m so lucky to have this great experience. I spotted a grey triangular shaped dorsal fin in the water. It was quite wide at the base and a lighter grey near the top. It appeared twice then disappeared. Claire on the bridge confirmed sighting, a Mola Mola, a large sunfish.



A full moon over the Gulf of Maine

Today is such a spectacular weather day. The Chief Steward pulled out the barbecue grill and charcoals were lit late in the afternoon. He added some hickory wood and grilled steaks and tuna. What a feast!

We took samples in the Gulf of Maine today and tonight. They were a salmon pink color due to the *calanus* but contained a mix of zooplankton including amphipods, glass shrimp, and a few large, clear jellyfish. I preserved a jar from the baby bongo net for my students.

Because I work into Tuesday morning, I wanted to include a special event on 7/28 at about 4:50 a.m. There was a lunar eclipse going on one side of the ship and a gorgeous sunrise on the other. Photos of both are below, as well as the moon rise the evening of 8/27, above.



On one side of the ship a lunar eclipse was taking place, while on the other the sun was rising.

A Shipboard Community

Nineteen people living aboard a ship, working twenty-four hours a day, seven days a week for seventeen days. A very unique community. Thirteen of them are there to support the scientific research of four science staff and to maintain the ship for its use as a scientific research vessel. The four-man deck crew maintains the ship and runs the heavy equipment for the scientists. The four-person NOAA Corps staff navigate, drive and manage the ship. They re-adjust courses when conditions force a change, deal with fog and rough seas, lots of other boats that want to be in the same place we do, and make sure everyone has their needs met. The two-person kitchen staff feeds this team of nineteen as they work on twenty-four hour shifts. Good food is so important on a ship. The



Thanks to Kim Pratt, a fellow teacher, & Jerry Prezioso, a NOAA scientist.

Four-person engineering team seems to stay behind the scenes (below deck!) and keep all systems running like clock-work. Last, but certainly not least is the electronic technician, a genius with anything that has wires. He told me the favorite part of his job is problem-solving, and quite frankly, that is what is required of him each day. From email to satellite TV reception to the electronics in the winch, he is constantly fixing new problems or finding ways to make things work better. Each person has a different background and reason for being here. The age range of the members of this community begins at 23 and goes to the upper 50's. The key to a good working ship is respect,



Thanks to Betsy Broughton, also a scientist.



Teachers Kim Pratt and Amy Pearson (rt.) say thanks to the crew of the DELAWARE II.

consideration, and cooperation between people. There are many personal stresses on everyone, from lack of personal space, lack of sleep, seasickness, little contact with family, and inability to “go home”. In addition, each person needs to think of the needs of others so as not to disturb them or make their jobs any harder than they already are. This may seem like a utopian ideal. I suspect it is achieved on many vessels, though I can only speak for the DELAWARE II. What a great team to work with. Thank you for your support.