NOAA Teacher at Sea
Ruth S. Meadows
Onboard NOAA Ship *Henry B. Bigelow*
June 11 – July 18, 2009

NOAA Teacher at Sea: Ruth S. Meadows
NOAA Ship *Henry B. Bigelow*
Mission: Census of Marine Life (MAR- Eco)
Geographical Area: Mid- Atlantic Ridge; Charlie-Gibbs Fracture Zone
Date: Monday, June 15, 2009

NOAA Ship *Henry B. Bigelow*

Weather Data from the Bridge
Temperature: 54^{o} F
Humidity: 76%
Wind: 10 kts

Science and Technology Log
In addition to the scientists on board, we have an entire crew of NOAA personnel to run the ship and all the equipment.

CDR Anne Lynch and ENS Kyle Sanders on the bridge of the *Bigelow*

The National Oceanographic and Atmospheric Administration is a part of the United States Department of Commerce. CDR (Commander) Anne Lynch is in charge of the *Henry B. Bigelow.* She joined the NOAA Corp after graduating from college and has worked her way up to Commander during her 18 years of service. She has been on many different ships and has traveled as far away as Antarctica.

ENS (Ensign) Kyle Sanders is new to the NOAA corps. He graduated from college and became a part of NOAA about 9 months ago. He has been on the *Henry B. Bigelow* for at least 6 cruises. He majored in meteorology in college so he has a science background and is learning about piloting the ships of NOAA.

ENS Kyle Sanders

The *Henry B. Bigelow* is a fairly new ship. It was commissioned in July, 2007 and has many technical features that make it a wonderful ship for doing scientific research. In the lab there are computers set up to take data from many different types of organisms. There are microscopes to dissect tissue samples or view very small organisms. When the nets are towed behind ship, they will be on 6000 m (about 5 miles)

The state-of-the art lab on the *Bigelow*

of wire and will go down almost 3000 m. Then they will be brought back up to the ship's deck. Of course, someone has to be able to operate and repair all the equipment. The crew on board has expertise in all type of mechanical engineering to make sure the equipment the scientists are using works properly

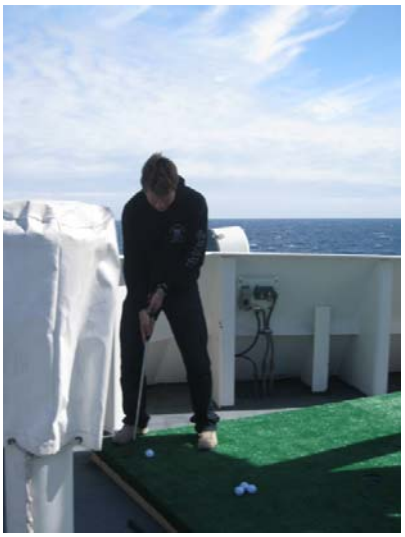
In each cabin, the lounge, on the bridge and in the acoustics room, there are computers that allow everyone to communicate and transfer information. The bridge has specialized computers that help navigate the ship and conserve fuel for long distance travel. The computer screens can show the depth of the water, temperature of sea and air, wind speed, ship speed and other necessary data that makes the ship run smoothly. Information technology helps the ship travel safely even when it is too foggy to see very far ahead of you. One of the most important jobs on the ship is the Information Technology specialist. It is his job to make sure all the computers are working so that the trip will run smoothly.

One of the doors on the ship

Something to think about when on a ship this size are the doors. The outside openings are equipped with watertight doors that must be closed before entering or after leaving an area. As you can see, the locking mechanism looks like a wheel. This turns the lock for the door to seal.

Personal Log

Last night's weather was really rough. The waves were 10 – 12 feet in height and it was a little more difficult to sleep. You had to make sure you had something blocking the end of the bed so you didn't fall out. This morning the weather improved a lot and by afternoon, the sun and blue skies were finally visible. We took advantage of the good weather to go outside for the next part of the Bigelow Olympics – golfing !! I scored better on this event than this first one. You had to putt the ball into the hole from 4 different places, while the wind blew and the ship rocked back and forth. It was a good way to have fun with others on the ship as we travel to the area of sampling. It was nice to see the sun and blue skies for a change.



This is Tom Letessier, a PhD student from the University of St. Andrews in Scotland. His concentration is in zooplankton.

CJ Sweetman tries for a hole in one. He is a PhD student from Virginia Institute of Marine Science.

This is Zach Baldwin, another PhD student from New York City. His concentration is in mid-water fishes.