

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: Sunday, June 14, 2009

## Weather Data from the Bridge

Temperature 7.6° C Humidity 94% Wind 17.3 kts

## Science and Technology Log

We are about half way to our location on the Mid-Atlantic ridge. Before we get there, we will do a comparative sampling over practice catch on the **abyssal plain** (a vast flat area on the bottom of the ocean). This will give us an idea of what lives in the deep open ocean away from the mid-ocean ridge for comparison with what we catch in our main study area. There has been very little sampling of the deep open ocean with large nets and not much is known about the animals that swim high above the bottom in such areas, even though they make up the largest living space on earth.

All the scientists were divided into two groups. Each group will work a 12 hour shift. I will be working the 12 noon to 12 midnight shift. We met with our work group today to learn how to use some of the scientific equipment on board. The lead scientist for my group is Shannon

DeVaney from Los Angeles, California. Her area of expertise is in mid-water fishes.

We will be using a specialized computer program to record the data from the organisms that are caught in the nets. All the organisms will be at the end of the net in a special removable container called a **cod-end.** 

This mid-water fish, a viperfish

<u>(Chauliodus sloani</u>), was 225 cm in length and had a mass 0.0230 kg. It was caught in an earlier tow test. Until today, I had only seen this fish in books. The teeth are really sharp and large for



A viperfish—see its huge teeth?



Various species that will have data recorded about them

such a small fish. To learn more about the viperfish go to <u>http://www.seasky.org/deep-sea/viperfish.html</u>.

Once the organism is measured and the information is recorded in the computer. A label can be printed and the animal will be either frozen or preserved for further investigation. Then it will be on to the next one.

# **Personal Log**

Everyone is participating in the "Bigelow Olympics". This is a fun competition for both the scientists on board as well as the crew. Today was the first event, a potato chucking

competition. We each had 5 potatoes that we loaded one at a time to in a large slingshot to shoot at a target off the back of the boat. Each "hit" earned you 20 points for a possible total of 100 points – I only hit the target twice so I got 40 points. The event is open for 24 hours since some



Here I am chucking my potato!

Here's my potato as it flies toward the target!

people will be working nights and some are working days. This is one of my attempts. Some people hit the target 5/5. There will be several more competitions, so maybe I will do better on the next one. If you look carefully, you can see my potato as it sails out to sea.

The temperature has dropped some since yesterday, so it is difficult to stay outside for any length of time. Of course the wind is always blowing but sometimes you can find a place that is protected from the wind to enjoy some outdoor time. We all want to see icebergs and we may be in the area by Monday or Tuesday.

## Did you know?

Did you know that icebergs are composed of fresh water? The density of fresh water is less than the density of seawater which is why the iceberg floats.