

# NOAA Teacher at Sea Christopher Monsour Onboard NOAA Ship OSCAR ELTON SETTE June 12 – July 12, 2007

**NOAA Teacher at Sea:** Chris Monsour NOAA Ship OSCAR ELTON SETTE

Mission: Lobster Survey, Northwestern Hawaiian Islands

Day 1: Wednesday, June 13th, 2007

### Science and Technology Log

I have been in Hawaii for three days already to acclimate myself to the time change, learn about the job ahead of me, and to get to know the crew. There are 11 members of the scientific crew including myself, all of us with a background in biology formally or informally. Our adventure over the next 30 days will be to visit some of the islands that make up the Hawaiian Archipelago to see how the populations of two species of lobster have changed in the past year. The Northwestern Hawaiian Islands-(NWHI) are an uninhabited archipelago that extends 1200 miles across the Central Pacific Ocean. The area supports many marine species including lobsters, bottomfish, and monk seals. The two species of lobster that we will be studying are the slipper lobster and the spiny lobster. Both species of lobster were fished for about 15 years in the waters of the NWHI Six years ago the lobster fishery was closed and data suggests that the populations have not recovered appreciably. The areas where the lobsters will be collected are Maro Reef and Necker Island. One of the interesting facts that I learned from the chief scientist is that the lobsters were not separated when they were collected; they were grouped together as lobster, even though there are major anatomical differences between the two. The data suggests that the slipper lobster population has done better in terms of increased population. I will be doing various jobs over the next four weeks such as baiting the traps, measuring the carapace of the lobsters, and collecting samples for DNA/ genetic research that one of the grad students is working on. Essentially, he will be doing a population genetics study. I have not asked what type of information he is looking for and should do that tomorrow.

Another area that we others in the group will be studying is the bottomfish fishery. Bottomfish are fish that are found at deeper depths and include pink snapper, flower snapper, red snapper, and the Hawaiian snapper. I am not sure how the bottomfish sampling will occur because there is a limit on the number of bottomfish that can be taken because the NWHI was declared a Marine National Monument in June of 2006. With this status new restrictions have now been placed on what can and cannot be done within the Monument. Another question I need to find the answer to is, "What is the difference between a monument and a sanctuary?"

#### **Personal Log**

I have spent most of the day getting use to the rocking of the boat and settling into my stateroom, which I am very happy with and should be quite comfortable for the next 30

days. If the beginning of the trip is any prelude to the rest, it will be an amazing experience. I am looking forward to getting to know the rest of the scientific crew and learning from them, just as I hope they learn from me.

## **Animals Seen Today**

Terns Shearwaters Hawaiian Spinner Dolphin

#### **Question of the Day**

What type of interactions might be occurring between the spiny and slipper lobster that could explain the differences in their populations? Is one a generalist/specialist?

Aloha... Chris



A rainbow is seen over Pearl Harbor as the OSCAR ELTON SETTE sets sail for its 30 day mission to survey the lobster population of the NWHI.