



NOAA Teacher at Sea
Duane Sanders
Onboard Research Vessel *Hugh R. Sharp*
June 8 – 19, 2009

NOAA Teacher at Sea: Duane Sanders

Ship: R/V *Hugh R. Sharp*

Mission: Sea Scallop Survey, Leg Two

Geographical Area: New England Coast

Date: Tuesday, June 16, 2009

Weather Data from the Bridge

Wind: Speed 10 KTS, Direction 50 degrees

Barometer: 1024 millibars

Air temperature: 13 °C

Seas: 3-5 ft.

Science and Technology Log

Why is it that we find huge numbers of sand dollars at so many stations? There have been some stations where our dredge was completely filled with sand dollars. The sorting table was so full that there was no clear space in which to work. This has piqued my curiosity as a biologist. Some questions come to mind. Are there any natural predators of sand dollars? What is it about sand dollars that allow them to out-compete other organisms that might otherwise be found at these locations? What do sand dollars eat? How can there be enough food at a given location to support these huge populations?



A sorting table full of sand dollars!

I talked with Stacy Rowe, the chief scientist for this cruise, and she was not aware of any research being done to answer these questions. Stacy did know that a species of fish known as the Ocean Pout eats on sand dollars. I am looking forward to seeing results of some research on these organisms. Maybe one of my students will follow up. Who knows?

Many different scientists use data taken during this survey. NOAA staffers come to the ship with a list of types of organisms or samples that have been requested by researchers. For example we have been setting aside a few scallops from certain stations for special handling. The gender of each scallop is determined and then they are measured and weighed. Next, the

meat from each scallop is carefully removed and weighed. The shells are carefully cleaned and

set aside to give the scientist who made the request along with all of the measurement data.



Duane Sanders with Keiichi Uchida: A fellow scalloper!

I have made a new friend, Keiichi Uchida, of a visiting researcher from Japan. He is doing research that involves tracking the movements of the conger eel, *Conger oceanicus*, using GIS systems. Keiichi is here to learn more about how NOAA does surveys like the one we are on now. He is also looking at data similar to his and trying to correlate the different data sets.

Personal Log

In many ways I am going to miss living and working with people who are interested in the same branch of science as me. I have had fun talking about all of the things I have observed and the kinds of work being done by this branch of NOAA.

There is one thing about this trip that causes me some real sadness. I have not seen a whale. Two whales have been spotted, but I have always been at the wrong place to see them. I hope my luck changes before we dock at Woods Hole.