



NOAA Teacher at Sea
Lollie Garay
Onboard Research Vessel *Hugh R. Sharp*
May 9 – 20, 2009

NOAA Teacher at Sea: Lollie Garay

Ship: Research Vessel *Hugh R. Sharp*

Mission: Sea Scallop Survey

Geographical Area: North Atlantic

Date: Wednesday, May 13, 2009

Weather Data from the Bridge

Temperature: 13.5° C

Wind: E-SE 8.9 KT

Seas: 3-5 Ft.

Science and Technology Log

The seas have been favorable to us again and we begin work under sunshine skies. We are still sampling in the Elephant Trunk area. At this writing we are approaching station #75. We have had a variety of different catches today; in fact most dredges are different. One might be full of starfish, another full of sand or mud and crabs, and others full of scallops – every one of them is different. The biggest dredge of the day brought up about 4000 scallops!

Starfish and crab are also sorted and counted at every third station. There are primarily 3 different types of starfish in this area. Researchers do a representative sampling to estimate what types are out here. So far the biggest starfish I have seen had arms about 24 cm long (*Asterias vulgaris*); the smallest about .5cm. (*Asterias forbesi*). Starfish are natural predators to scallops. I have noticed that when the catch has lots of starfish, the numbers of scallops goes down. I asked Vic Nordahl about this and he said that it may be possible that the number of starfish suggests the results of predation, or it could simply be that this area is not good for scallops. Crabs are counted to determine numbers and distribution. The majority of crabs in this area are from the Genus *Cancer*: Rock crabs (*Cancer irroratus*) and Jonah crabs (*Cancer borealis*).

Sulphur sponges, or Monkey Dung, also come up in the dredges. It's a yellow thick sponge with pores so small that there don't appear to be any. It smells like sulphur and looks like monkey dung! Are sponges plant or animal?



"Monkey Dung"



A Robin Fish—look at those eyes!

There is still some question about whether a sponge is an individual or a colony of sponges. Sponges are the most primitive of multi-cellular animals, and lack organs or systems.

What we see in the dredges is only a very small sampling of the variety and numbers of species that call the sea “home”. And every organism that comes up in the dredges validates the reason for conducting fishery surveys.

Personal Log

The 12 hours of work we put in each day goes by fairly quickly. My shift crew members lighten up the long day with

their sense of humors and laughter. But make no mistake, they take their work very seriously. I am always asking questions (as usual) and they always respond patiently. I really feel like a contributing member of this team now, not just a visitor.

The night was cold on deck, so I head to my cabin with a cup of hot tea at the end of my shift. Tomorrow is a new day!

Answer to the question: What’s the difference between a Deep Sea scallop and a Bay scallop?

A deep sea scallop is orange or cream colored, is a larger scallop and has a larger meat (adductor muscle). The shell is not as concave and lacks the ridges of the bay scallop shell. They are distributed in depths from 20 meters to 150 meters. A Bay scallop is smaller in size and has a smaller meat in proportion to the shell size. The shell is ridged and usually mottled colored in shades of red, white, brown and tan. They tend to be distributed in depths from right at shore to 20 meters. They occupy different habitats.



Unusual eggs—what kind are they?

New Question of the Day

What is the connection between false Quahogs and the Wampanoag people of Massachusetts?

Animals Seen Today

Razor clams

Ocean Quahogs

False Quahog

Pod of Dolphins (racing around the ship again!)

Cragmon shrimp

Red spiked Sea Urchin

Storm Petrels

Sheer water gulls

Common gulls