NOAA Teacher at Sea
Cary Atwood
Onboard NOAA Ship ALBATROSS IV
July 25 - August 5, 2005

Log 2

Date: July 26, 2005 Tuesday
Time: 7:55 GMT 3:55 a.m. EDT

Latitude: 40.31
Longitude: 69.05 W
Visibility: unknown
Wind direction: S (193 degrees)
Wind speed: 19.6 knots
Sea wave height: 1'
Swell wave height: 1'
Seawater temperature: 17.7°C
Sea level pressure: 1013.0 millibars
Cloud cover: 00 Clear

Question of the Day
What do scallops need in order to survive within their habitat?

Yesterday's Answer
The scientific name of the Atlantic Sea Scallop is Lacopectin magellanicus. Lacopectin means "smooth scallop.

Science and Technology Log

The real work of the ALBATROSS IV mission is accomplished during the four six-hour shifts with a crew of six workers each. On my watch, they are Sean, watch chief, Bill, Avis, Dvora, Noelle and myself. Working as a team, we accomplish great things in each tow, which takes about 30 minutes to process. Here's how it unfolds. The eight-foot dredge basket is specially designed to capture all sizes and ages of scallops for research. It is dredged from a depth up to 100 meters to the surface for a fifteen-minute time period.

After each tow comes out of the water, fishermen release it from the cable and it's deposited on the fantail, also known as the back deck of the ship. The fantail is a huge open area complete with non-skid surface-very important when the boat is on an intense rock and roll session. With our "Helly's" on (the yellow and orange storm gear you see in the pictures) and tall rubber boots, I take a picture of the mound, along with Bill, who holds up a whiteboard indicating the catch number, the tow and the strata (level) where we do the dredging. Once that is done, orange baskets, white buckets and kneepads are

hauled to it. On our hands and knees we look for what might seem like buried treasure; sifting through the debris of the sea. We toss scallops and many varieties of fish, into the baskets until we have combed through every inch of them. Once the sort is done, we all move into the covered lab area for a variety of assessments, including the weight and length measurements of each scallop, as well as any ground fish that are caught. Even though some of the work is manual, computers play a very important role in accurate capture of the data. One instrument we use is a long, flatbed magnetically charged scanner. Once we put a scallop shell on the bed and hold a magnetized wand against it, it reads out the measurement onto a touch computer screen. Computers such this one has relieved some of the tedium of the work, making it more accurate and faster. The same is done with fish, and depending upon the tow, we will keep crabs and starfish out.

All of this data is uploaded into the FSCS – Fisheries Scientific Computer System which compiles the data from the survey. This valuable data is used to assess populations and biomass for the scallop fishery and then make management decisions for present and future fishery use.
The watch crews and scientists love it because it has saved so much time, and compilation of the data is considerably easier and less time consuming in the long run.

Personal Log

Sleep of any length of time is longed for, but never received. Due to our 6 hour on, 6 hour off shifts, at best we can manage 5 hours. Today I am feeling very zombie like as my body adjusts to this schedule. I rarely see John, my other TAS compadre since he works opposing shifts from mine. When we do meet, we share notes and commiserate about the work and our need for sleep!

One of my favorite haunts on board in my free time is the bridge and the upper bow. It is a quiet, calm place with great views--and a really strong pair of binoculars and field guides. The ever shifting texture of the water always captures my attention when I am outside; from the glossy velvet of early mornings, thick fog during the day, complete with fog rainbows!-and the ethereal brightness of sunset through the fog.

Another constant is the “ocean motion”. We are in a constant state of rocking-at times delicate and other times, the swells are deep and we will roll with them. I am very glad I have an ear patch to mitigate the possibility of seasickness….now I can just enjoy the ride!

Until next time,

Ms. Atwood