



**NOAA Teacher at Sea**  
**Carolyn Bielser**  
**Onboard NOAA Ship DELAWARE II**  
**May 23 - 30, 2005**

**Tuesday, May 24**  
**Day Two**

Latitude 4038.64N  
Longitude 07250.81W  
Speed Over Ground 02.2  
Air Temperature 8.9  
Barometer 1010.4  
Fluorescence value 242.6  
Total Salinity 30.11  
Swell Height 1.3

**Scientific Log**

One of the things that stands out about this cruise is the use of the FSCS, or Fisheries Scientific Computer System. This is the second time this system is being used for clams. In 2002, the data from each station was obtained through SCS, but biological data was simultaneously recorded on the dredge log and also entered into the FCSC. This year all operations will be directly entered into the FSCS; also a newly modified celltech clamboard, a Limnoterra board, will be used.

Some of the objectives of this cruise are to:

1. Determine the distribution, relative abundance and biological data for surf clams and ocean quahogs
2. Collect dredge performance readings on each dredge haul utilizing a multi-sensor sampling device attached to the clam dredge
3. Collect positional data for the dredge using an experimental trackpoint system to determine the relative position of the dredge
4. Deploy a camera system to document the clam dredge performance
5. Conduct approximately 10 set up sites for commercial survey

How things operate:

A hydraulic jet dredge, equipped with a 60-inch blade will be towed at a speed of 1.5 knots for 5 minutes at approximately 450 randomly selected stations. The dredge is powered by an electric pump positioned on the dredge.

The station information will be logged by a Scientific Computer System and transferred to FSCS at the end of each tow.

The catch will be sorted into one-bushel baskets separating live surf clams, live quahogs and clappers (clappers are empty paired shells). Volume will be determined and recorded for the surf clams and quahogs. A sub-sample of one bushel each of surf clams and quahogs will be measured for shell length and recorded to the nearest millimeter.

### **Personal Log**

The sea got a little rough Tuesday night and I began to feel a little under the weather. I still have the scopolamine patch on, but will change it to a new one tonight and maybe that will help. I am able to sleep well so far, but going up on deck when it's rocking and rolling is getting to me a little.

I think I have spoken with everyone on the scientific end of things here. There are a lot of different people here and in different status. Some are permanent employees for NOAA, some are volunteers (like myself) who either would like to become a permanent employee or are looking at a career in marine biology, environmental science and so forth. Some people work for a different company that are contracted out for this research. Everyone really seems to work together well to accomplish the mission.

We are on a 6-12 schedule; I am on the "day" shift. It is a strange schedule – I start to wonder if it is day or night. Operations go on 24/7.