



NOAA Teacher at Sea
David Riddle
Onboard NOAA Ship ALBATROSS IV
July 13 – 28, 2006

NOAA Teacher at Sea: David Riddle

NOAA Ship ALBATROSS IV

Mission: North Atlantic Sea Scallop Survey

Day 4: Sunday, July 16, 2006

Science Log

We're in an area now with an abundance of scallops, and most of them are large. When the catch is emptied from the net onto the deck, it takes 6 to 8 people working steadily, on hands and knees, to separate the scallops from the rest of the catch.

We've gotten up to 16 bushels so far in one 15-minute tow, using an 8-foot dredge. If the next

station is nearby, we just have time to get the measurements completed and clean up before it's

time to start again. But it's not always that busy. If the next station is several miles away, we get time to sit for a few minutes and relax.



Not all scallop shells are pretty, but these were outstanding!

During one of my relaxing moments, I photographed some of the fish that were caught along with scallops and starfish and everything else. We catch small skates, which are shaped like stingrays, with a broad, diamond-shaped body and an elongated narrow tail. We also catch goosefish, sometimes called angler fish, with mouths agape, showing rows of needle-like teeth. We catch flounder too. All of these are bottom-dwellers, probably too slow to swim away from the net, or else when they feel the net coming they just hunker down in their standard defensive posture, which unfortunately is no help when the thing that's coming after you weighs nearly a ton and is being dragged at between 3 and 4 knots.

As we have moved farther south today, I've begun noticing scallops with different patterns on their shells. Some look like sunbursts; some are striped. I've collected a few



Scallop eyes are visible as rows of dots inside the shell margin.

to take home. I want to get some photos of live scallops also.

When they open their shells you can see the row of eyes along the margin of the gills.

Scallops can swim, which is unusual for a bivalve. The powerful muscle (the part we eat) which holds the shells together, opens and closes the shell in rapid succession. This

draws water in between the shells and forces it out the back near the hinge in little

concentrated jets. Scallops swim by jet propulsion! Prior to sailing, we saw a brief film clip showing a group of scallops swimming, in a jerky, erratic motion.

Sightings: An osprey landed on the mast about 11:00am. The fishermen say we're about 20 miles offshore, so I imagine he/she is pretty tired. Maybe it will hang around for a while. Later...It's 9:00 pm now and the osprey is still perched on the mast. I expect it will still be here in the morning. Another small songbird showed up later in the afternoon. I didn't see it, so I don't know the species. The fishermen offered it some fresh water, but it didn't drink. They say it probably won't survive this far out, if it won't drink. Even so, some birds seem quite at home this far out.

Personal Log

Midnight notes: We did 18 stations in 12 hours; several were back to back. Do you think I'm ready for a shower and bed? Does a scallop live in the ocean?