Seafloor Characterization of the U.S. Caribbean
2010 Field Season
March 18-April 6, 2010

Day 8: March 25, 2010

Today data collection activities began on the far west side of the survey area and ended in a southern portion of the area. Vieques, and island off the east coast of Puerto Rico, and Culebra were visible.

The Day's Events

Late yesterday evening the seas started to settle, clearing the way for morning drop camera activities aboard the launch boat. Over the course of the day the drop camera team collected ground truthing data at 47 sites in the mid-west portion of the mapped area south of St. Thomas. On average, the sites were roughly 130 feet deep. At each point GPS coordinates, percent coral cover and habitat type were typed into a mapping-quality GPS unit.

More than half way through the day the team collected video of a large nurse shark. "It followed us for a good ways," Tim Battista, research mission lead said. Battista also reported seeing a lot of fish at the sites.

Tim Battista and Chris Taylor head out for the second drop camera operation of the day (left). A crew member lines the launch boat up right next to the ship so the drop camera team can step in (center). Tim Battista reviews some of the drop camera video captured earlier in the day.

ROV Operations

The three ROV dives revealed much the same in terms of habitat– mostly aggregate reefs, aggregate patch reefs and spur and groove formations. "It looks like the reef continues westward further than we thought," Bryan Costa, a scientist with NOAA's Biogeography Branch points out.

Once again few animals were spotted during the ROV dives. However, the team did see some nice coral formations. Coral cover seemed to be more varied and a little lower on the western, more shallow sections of the survey area. The amount of coral ranged between 10 percent at some sites and as much as 90 percent at others. In the eastern portion of the study region coral cover remained consistently high. Overall these reefs in this area appeared to be in good condition.

Images collected during today's three ROV dives: (A) a reef fish; (B) a coral formation typical of what was seen during the day; (C) a sea fan; (D) a mix of plate corals and algae; (E) a shot of the underwater, coral-covered seascape.

DID YOU KNOW …

•Shallow coral reefs grow best in warm water (70–85° F). It's possible for soft corals to grow in places with warmer or colder water, but growth rates in these types of conditions are very slow.

•Reef-building corals prefer clear and shallow water, where lots of sunlight filters through to their symbiotic algae.

•Corals also need salt water to survive, so they also grow poorly near river openings with fresh water runoff.

•Mesophotic coral ecosystems, where the dominant habitat-forming species can be comprised of coral, sponge, and algae species, are found a depths between 30 and 150 m in tropical and subtropical waters.

• To learn more about coral reef ecosystems, visit http://coralreef.noaa.gov/

MEET THE CREW …

Sean Cimilluca

Sean is the on-coming executive officer on the NOAA Ship Nancy Foster. When he takes the position in May, he will be responsible for carrying out the Commanding Officer's orders and managing administrative aspects of the ship.

Abigail Higgins

Abigail Higgins is the operations officer aboard the NOAA Ship Nancy Foster . Her primary role is to serve as a liaison between the science team and the ship's crew. She is also a deck officer and can drive the ship.

For more information about NOAA's Center for Coastal Monitoring and Assessment Biogeography Branch visit, http://ccma.nos.noaa.gov/about/biogeography/welcome.html