



CRUISE SUMMARY

**R/V Brooks McCall
September 27th to October**

for

DEEP SEARCH

**DEEP Sea Exploration to Advance Research on
Coral/Canyons/Cold Seep Habitats**

**Deepwater Atlantic Habitats II: Continued Atlantic Research
and Exploration in Deepwater Ecosystems with Focus on
Coral, Canyon and Seep Communities
Contract – M17PC00009**

Daily Summaries

Sept 27th - 30th

The science party started arriving to port in Jacksonville on Sept 27th and began mobilizing and building the landers. The chief scientists and the remainder of the science party arrived and mobilized the rest of the science gear on Sept 29th. Once on the ship the science party spent the 30th trying to partition and organize the lab space for everyone's various needs.

Oct 1st

A Jacksonville Port Authority reporter came by the ship on the morning of October 1st and interviewed the chief scientists and a few others of the science party. The ship left port around 1130 to sail towards the Million Mounds station, expecting for a late night (0300) arrival. However, the sea state was too rough for operations so the call was made to bypass Million Mounds and continue on to Richardson Bend. During transit the science party held a planning meeting to discuss and partition water and sediments needs. Many of the science party were seasick as the seas were rough throughout the first day.

Oct 2nd

We arrived at Richardson Bend and planned two CTD casts and one midnight trawl. Found out the ship had no way to determine depth and no way to determine the scattering layer for trawling because the fish finder is broken. The first CTD (CTD 001) was deployed at 19:15 but none of the bottles fired. The second CTD (CTD 002) was deployed and the bottles fired at depth and on the surface. It was decided to wait on the next CTD until morning so a midnight trawl could get underway. Once the trawl was set up and laid out in place the chief scientist was informed the crane operator was asleep and it was suggested the trawl be hand carried and

pushed into the water. This option was unsafe and vetoed by the chief scientist so a trawl did not happen.

Oct 3rd

On the morning of October 3rd the next CTD cast (CTD03) was conducted at Richardson Bend around 1100. Following the CTD cast a piston core was successfully collected at Richardson Bend. There was a 2 hour transit to Richardson Hills, however, we arrived at the wrong Richardson Hills site and continued to transit for another hour to reach the correct site. We then collected another piston core at Richardson Hills, this piston core was very long (~ 6 meters) however the plastic tubing was jammed up into the corer resulting in a portion of the core needing to be extruded into plastic bags. Next, there was an hour transit to the Richardson Hills site where the lander would be deployed. Once on site a CTD cast (CTD04) was conducted at 2130, the winch failed while the CTD was around 830 meters and the alternator needed to be replaced. It was decided that the remaining CTD and lander deployment for this site would happen the next morning.

Oct 4th

On the morning of October 4th a second CTD cast (CTD05) was conducted at Richardson Hills around 0800. Following the CTD cast a lander was successfully deployed at Richardson Hills with the crane and taglines. A 24 hour transit to Pamlico Canyon started around 1100. However, the health condition of a member of the science party continued to deteriorate so a decision was made around 1430 to change course and head to port in Morehead City, N.C. to drop that person off on shore for medical attention.

Oct 5th

The ship arrived into Morehead City around 0900 and a quick transfer was made to offload two of the science party. The ship then started a 10 hour steam back to Pamlico Canyon. Once on the

Pamlico site, the science team successfully conducted one CTD cast (CTD 006), one piston core and the deployment of the second lander (early hours of October 6th). During preparation of the piston core, an error in A-frame manipulation caused the piston core to be pulled apart, delaying the operation.

Oct 6th

After this was fixed, the science party began the second lander deployment at approximately 01:00 (October 6th). After the second lander deployment, the ship began a 48-hour transit back to port in Jacksonville, Florida.