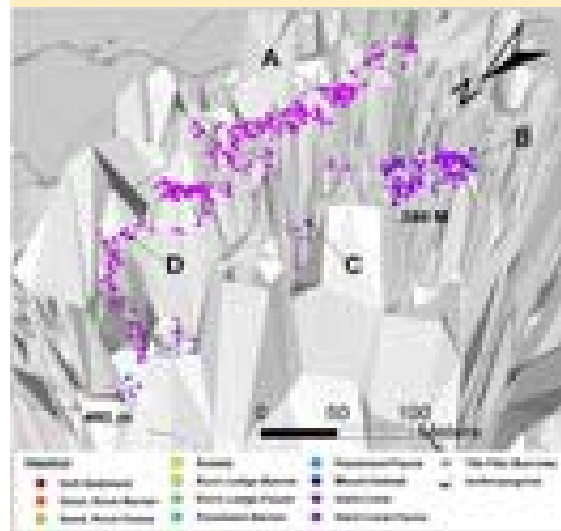


DIVE NUMBER: JSLII-3428**STUDY AREA: Cape Fear Lophelia****STATION OVERVIEW**

Project	Life on the Edge 2003
Principal investigators	SW Ross ¹ KJ Sulak, MS Nizinski, E Baird
PI Contact Info¹	Center for Marine Science, 5600 Marvin Moss Ln., Wilmington, NC 28409
Purpose	Mapping of deep coral banks, ecological studies of macroinvertebrates and fishes, paleoclimate studies, coral genetics and educational outreach
Vessel	R/V Seward Johnson, Johnson Sea Link II Submersible
Science Divers	AM Necaie (bow), M Randall (stern)
External Video Tapes	2 mini DVs
Internal Video Tapes	0
Digital Still Photos	0
Positioning System	dGPS
CTD File	<input checked="" type="checkbox"/>
Specimens Collected	<input checked="" type="checkbox"/>
Other	Hard copy of stern audio log
Acknowledgements	NOAA-OE, NOAA Fisheries, USGS, UNCW, NC Museum of Natural Sciences
SEADESC Analyst	AM Necaie, ML Partyka
Date Compiled	11/16/2006

GENERAL LOCATION**Dive Track:****DIVE DATA**

Date	22-Aug-03
Minimum Bottom Depth (m)	368
Maximum Bottom Depth (m)	397
Start Bottom Time (EDT)	16:11
End Bottom End (EDT)	18:17
Starting Latitude (N)	33° 34.384'
Starting Longitude (W)	76° 27.949'
Ending Latitude (N)	33° 34.441'
Ending Longitude (W)	76° 27.886'
Surface Current (Kts)	
Bottom Current (Kts)	0.7

Image A: Hard Coral-Fauna
33° 34.422' N, 76° 27.882' W



DIVE NUMBER: JSLII-3428**STUDY AREA: Cape Fear Lophelia****IMAGE GALLERY**

* indicates image position is approximated

Image B: Hard Coral-Fauna

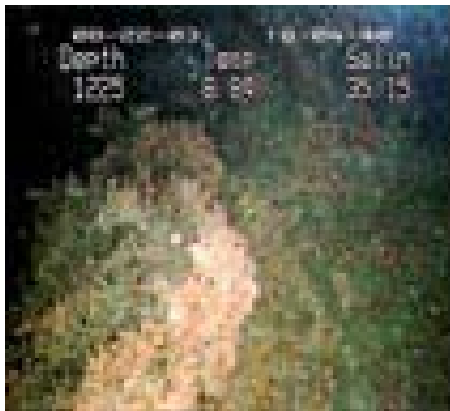
33° 34.374' N, 76° 27.936' W

Image C: Hard Coral

33° 34.440' N, 76° 27.912' W

Image D: Hard Coral

33° 34.512' N, 76° 27.858' W

**RELEVANT WORK AND/OR LITERATURE CITED**

EEZ-SCAN 87 Scientific Staff (1991)
 Reed and Ross (2005)
 Ross and Nizinski (in press)

BIOLOGICAL ENVIRONMENT

A large variety of fish species were observed during this dive, though most were represented by only a few individuals. The most common were *Polyprion americanus*, *Laemonema melanurum* and *L. barbatulum*. Others seen included *Conger oceanicus*, *Nezumia sclerorhynchus*, *Scyliorhinus meadi* and *Helicolenus dactylopterus*. *Eumunida picta* was the most common mobile invertebrate, followed by unidentified spiny urchins. *Rochinia crassa* and *Chaceon* crabs were seen occasionally. Sessile attached invertebrates were dominant in one portion of this dive, with orange and flytrap anemones forming dense carpets over the top of dead *Lophelia pertusa* reefs. In other areas small sponges and flytrap anemones were scattered across the reef in low numbers.

PHYSICAL ENVIRONMENT

This dive took place primarily along the top of this large feature, traveling down a steep (~45°) slope to a valley floor and up another similarly steep slope. The base of these slopes contained a dense dead coral matrix of low-relief that was covered with thousands of small orange anemones and large flytrap anemones. Most of the coral habitat encountered during this dive had almost no living *Lophelia* (<5%), though some areas near the beginning had large bushes of healthy *Lophelia* growth (>50%).

ADDITIONAL COMMENTS

This dive was captured on 2 mini DVs and archived on 2 DVDs. There was some kind of material on the inner camera lens that obscured some details and caused blurriness. Additionally, the first DV did not begin until after the sub had been on bottom for almost 15 minutes, and there was no internal video from which to recover these data. There was no time/CTD overlay for the majority of the dive, though it did come on for short periods that allowed for correlations to be made between video time and real time.