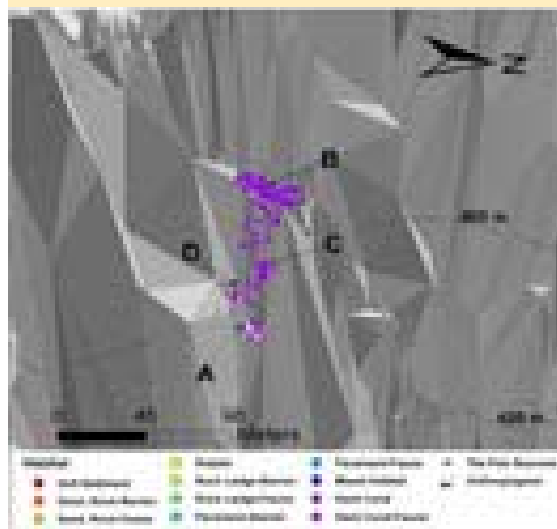


**DIVE NUMBER: JSLI-4696****STUDY AREA: Cape Fear Lophelia****STATION OVERVIEW**

<b>Project</b>	Life on the Edge 2004
<b>Principal investigators</b>	SW Ross <sup>1</sup> KJ Sulak, MS Nizinski, E Baird
<b>PI Contact Info<sup>1</sup></b>	Center for Marine Science, 5600 Marvin Moss Ln., Wilmington, NC 28409
<b>Purpose</b>	Mapping of deep coral banks, ecological studies of macroinvertebrates and fishes, paleoclimate studies, coral genetics and educational outreach
<b>Vessel</b>	R/V Seward Johnson, Johnson Sea Link I Submersible
<b>Science Divers</b>	A Brooks (bow), M Nizinski (stern)
<b>External Video Tapes</b>	2 mini DVs, 1 HD
<b>Internal Video Tapes</b>	3 mini DVs
<b>Digital Still Photos</b>	0
<b>Positioning System</b>	dGPS
<b>CTD File</b>	<input checked="" type="checkbox"/>
<b>Specimens Collected</b>	<input checked="" type="checkbox"/>
<b>Other</b>	Copies of bow and stern audio logs
<b>Acknowledgements</b>	NOAA-OE, NOAA Fisheries, USGS, UNCW, NC Museum of Natural Sciences
<b>SEADESC Analyst</b>	AM Necaice, ML Partyka
<b>Date Compiled</b>	11/16/2006

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

<b>Date</b>	17-Jun-04
<b>Minimum Bottom Depth (m)</b>	389
<b>Maximum Bottom Depth (m)</b>	402
<b>Start Bottom Time (EDT)</b>	8:31
<b>End Bottom End (EDT)</b>	10:25
<b>Starting Latitude (N)</b>	33° 34.367'
<b>Starting Longitude (W)</b>	76° 27.708'
<b>Ending Latitude (N)</b>	33° 34.360'
<b>Ending Longitude (W)</b>	76° 27.670'
<b>Surface Current (Kts)</b>	
<b>Bottom Current (Kts)</b>	1.1

**Image A: Hard Coral**  
33° 34.350' N, 76° 27.678' W



**DIVE NUMBER: JSLI-4696**

**STUDY AREA: Cape Fear Lophelia**

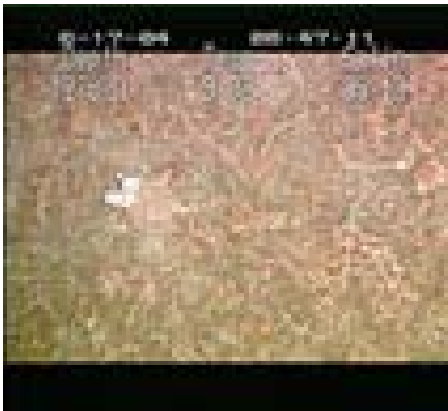
**IMAGE GALLERY**

\* indicates image position is approximated

**Image B: Hard Coral**  
33° 34.368' N, 76° 27.702' W

**Image C: Hard Coral**  
33° 34.368' N, 76° 27.684' W \*

**Image D: Hard Coral**  
33° 34.350' N, 76° 27.702' W



**RELEVANT WORK AND/OR LITERATURE CITED**

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

**BIOLOGICAL ENVIRONMENT**

Thousands of brittle stars covered the substrate (mostly dead *Lophelia pertusa*) in this area. In addition, *Echinus tyloides*, *Eumunida picta*, pencil urchins, fly trap anemones, and sea stars were observed. Only four individuals of three fish species were observed: *Laemonema barbatulum*, *Helicolenus dactylopterus*, and *Chaunax stigmaeus*.

**PHYSICAL ENVIRONMENT**

A strong current was evident on bottom and a lot of particulate matter was in the water column. A dense, dead, hard coral (*Lophelia pertusa*) matrix covered the slope and slope crests in this area. In some areas, there were small patches of thick layers of broken pieces of coral rubble interspersed with sand channels. In other areas, there were patches of dense, cemented coral rubble, which created a standing "matrix" of dead, hard coral. Throughout this area, there were standing twigs or small bushes of live *L. pertusa*; however, 95% of coral observed was dead.

**ADDITIONAL COMMENTS**

This dive was captured on 2 mini DVs and saved to 2 DVDs for archiving. The majority of both DVs contains zoomed footage with little perspective on the surrounding habitat. The submersible spent most of this dive in a stationary position, collecting specimens and videotaping in close-up mode.