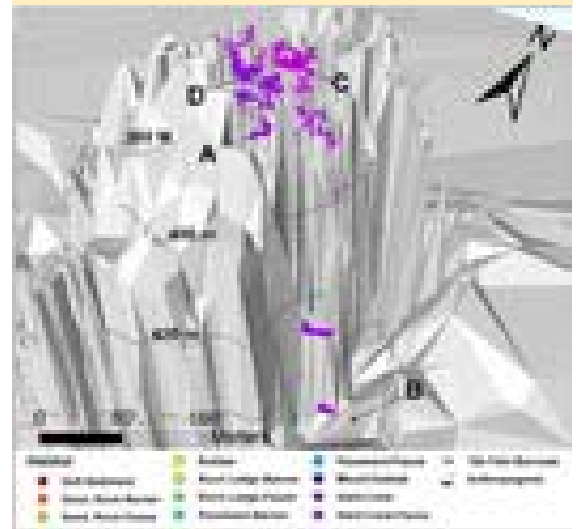


**DIVE NUMBER: JSLII-3308****STUDY AREA: Cape Fear Lophelia****STATION OVERVIEW**

<b>Project</b>	Islands in the Stream 2002
<b>Principal investigators</b>	SW Ross <sup>1</sup> KJ Sulak, 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, and educational outreach
<b>Vessel</b>	R/V Seward Johnson, Johnson Sea Link II Submersible
<b>Science Divers</b>	SW Ross (bow), M Nizinski (stern)
<b>External Video Tapes</b>	2 mini DVs
<b>Internal Video Tapes</b>	4 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>	Hard copies of bow and stern audio logs
<b>Acknowledgements</b>	NOAA-OE, USGS, UNCW, NC Coastal Reserve, NC Museum of Natural Sciences
<b>SEADESC Analyst</b>	AM Necaie, ML Partyka
<b>Date Compiled</b>	11/16/2006

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

<b>Date</b>	13-Aug-02
<b>Minimum Bottom Depth (m)</b>	368
<b>Maximum Bottom Depth (m)</b>	449
<b>Start Bottom Time (EDT)</b>	8:29
<b>End Bottom End (EDT)</b>	10:58
<b>Starting Latitude (N)</b>	33° 34.330'
<b>Starting Longitude (W)</b>	76° 28.054'
<b>Ending Latitude (N)</b>	33° 34.434'
<b>Ending Longitude (W)</b>	76° 27.905'
<b>Surface Current (Kts)</b>	
<b>Bottom Current (Kts)</b>	

**Image A: Hard Coral**

33° 34.398' N, 76° 27.948' W



**DIVE NUMBER: JSLII-3308**

**STUDY AREA: Cape Fear Lophelia**

**IMAGE GALLERY**

\* indicates image position is approximated

**Image B: Sand/Rubble/Rock-Barren**  
33° 34.326' N, 76° 28.044' W

**Image C: Hard Coral-Fauna**  
33° 34.344' N, 76° 27.906' W

**Image D: Hard Coral-Fauna**  
33° 34.386' N, 76° 27.918' 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 number of fishes were observed during the beginning of the dive, over low relief hard coral and scattered rubble substrata. The most common species in this area was *Laemonema barbatulum*. Also seen were *Helicolenus dactylopterus*, *Nezumia sclerorhynchus*, and *Polyprion americanus*. *Beryx decadactylus* were common over the high-relief reef area, with over 20 individuals seen in one location. Other species seen in low numbers over the reef were *Conger oceanicus*, *Helicolenus dactylopterus* and a number of other scorpaenids. A large number of mobile invertebrates were present on the reef, including *Eumunida picta*, *Bathynectes longispina*, spiny and pencil urchins and brittle stars. The number of sessile invertebrates observed varied, with some areas having only sparse flytrap anemones and small hydroids and others having a dense carpeting of small orange anemones that completely covered the underlying coral interspersed with flytrap anemones.

**PHYSICAL ENVIRONMENT**

This dive began at the base of a steep slope (~80°) on a sandy, rubble strewn area. The side of the slope was covered in dense coral rubble cemented into small mounds that graded into larger coral mounds of moderate-to-high-relief. The coral bushes near the top of the mound had a higher concentration of live *Lophelia pertusa* growth (~50%). Throughout the remainder of the dive, the habitat alternated between hard coral without attached fauna to hard coral with attached fauna. The underlying structure was typically the same in both of these habitats with rolling peaks of dense coral and valleys of sand and coral rubble.

**ADDITIONAL COMMENTS**

This dive was captured on 2 mini DVs and archived on 2 DVDs. The sub was frequently too far off the bottom to see the habitat clearly. Much of the wide-angle video was underlit and heavy particulates often caused backscattering of the light that was available. The video overlay was turned on and off periodically but the audio quality was good. There was something on the internal lens of the camera that caused the images to seem out of focus.