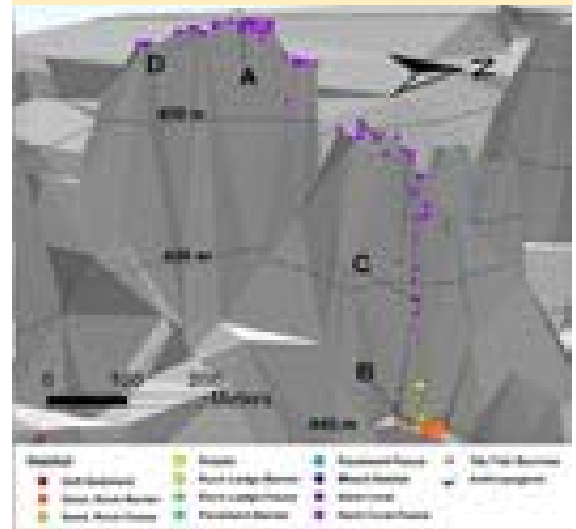


DIVE NUMBER: JSLI-4694**STUDY AREA: Cape Lookout Lophelia B****STATION OVERVIEW**

Project	Life on the Edge 2004
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 I Submersible
Science Divers	SW Ross (bow), TL Casazza (stern)
External Video Tapes	3 mini DVs, 2 HDs
Internal Video Tapes	3 mini DVs
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	16-Jun-04
Minimum Bottom Depth (m)	387
Maximum Bottom Depth (m)	440
Start Bottom Time (EDT)	8:29
End Bottom End (EDT)	10:41
Starting Latitude (N)	34° 11.277'
Starting Longitude (W)	75° 53.618'
Ending Latitude (N)	34° 11.284'
Ending Longitude (W)	75° 53.788'
Surface Current (Kts)	
Bottom Current (Kts)	0.6

Image A: Hard Coral
34° 11.250' N, 75° 53.802' W *

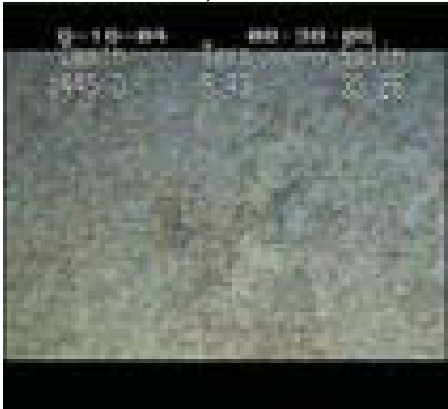


DIVE NUMBER: JSLI-4694**STUDY AREA: Cape Lookout Lophelia B****IMAGE GALLERY**

* indicates image position is approximated

Image B: Sand/Rubble/Rock-Barren

34° 11.262' N, 75° 53.616' W *

**Image C: Hard Coral**

34° 11.274' N, 75° 53.640' W

**Image D: Hard Coral**

34° 11.232' N, 75° 53.826' W

**RELEVANT WORK AND/OR LITERATURE CITED**

R/V Cape Hatteras cruises Aug 2001 & Sep 2006 (S.W. Ross, unpubl. data)
 EEZ-SCAN 87 Scientific Staff (1991)
 Reed and Ross (2005)
 Ross and Nizinski (in press)

BIOLOGICAL ENVIRONMENT

On the rubble and sand/rubble habitats, several *Laemonema barbatulum* and one squalid shark were observed. Invertebrates were not as common in these habitats as they were in the hard coral habitat. Brittle stars were the most abundant invertebrate in the hard coral (*Lophelia pertusa*) habitat area, covering the surface of and occupying all spaces in the dead coral matrices. Other invertebrates observed in the hard coral area were a few anemones, fly trap anemones, urchins, sea stars, squid, hexactinellid sponges, *Novodinia antillensis*, and *Eumunida picta*. Fishes were also more diverse in the hard coral habitat, and included *Conger oceanicus*, *Dysommima rugosa*, *Beryx decadactylus*, and *Hoplostethus occidentalis*.

PHYSICAL ENVIRONMENT

A strong current was present during most of this dive as the submersible traversed over three different habitat types: sand/coral rubble, coral rubble, and hard coral (*Lophelia pertusa*). Attached fauna was sparse throughout all habitats. Sand mixed with some coral rubble was on the base of a slope, whereas coral rubble was observed up slope. *Lophelia pertusa* was present near and at the top of the slope in large mounds that were densely packed and made up of mostly dead coral. Few (~10%) twigs and bushes of live coral were present throughout this area. Few anemones were sparsely attached to these dead coral mounds.

ADDITIONAL COMMENTS

This dive was recorded on 3 mini DVs and archived on 3 DVDs. The third DV has only 5 minutes of video. There is good footage of a *Conger oceanicus*.