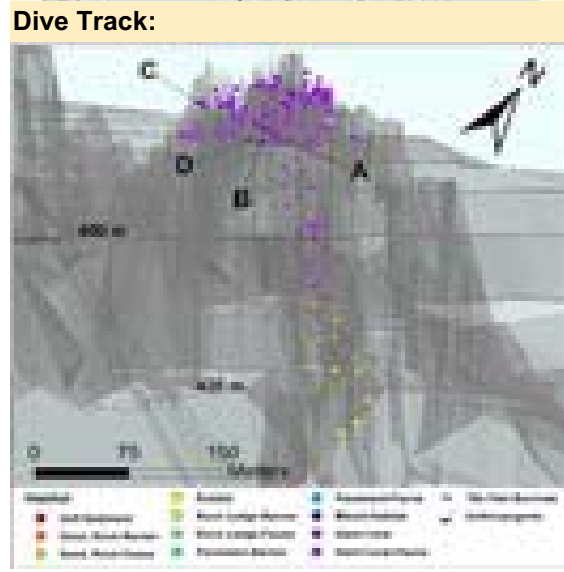


DIVE NUMBER: JSLII-3432

STUDY AREA: Cape Lookout Lophelia A

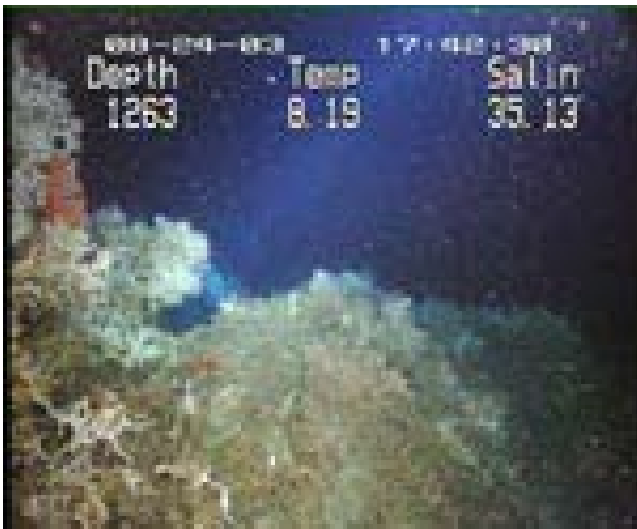
STATION OVERVIEW	
Project	Life on the Edge 2003
Principal investigators	SW Ross ¹ KJ Sulak, MS Nizinski, E Baird
PI Contact Info¹	Center for Marine Science, 5600 Marvin Moss Ln., Wilmington, NC 28409
Purpose	Mapping of deep coral banks, ecological studies of macroinvertebrates and fishes, paleoclimate studies, coral genetics and educational outreach
Vessel	R/V Seward Johnson, Johnson Sea Link II Submersible
Science Divers	AM Necaie (bow), J Berg (stern)
External Video Tapes	3 mini DVs
Internal Video Tapes	1 mini DV
Digital Still Photos	84
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, AM Quattrini, ML Partyka
Date Compiled	11/16/2006



DIVE DATA

Date	24-Aug-03
Minimum Bottom Depth (m)	381
Maximum Bottom Depth (m)	424
Start Bottom Time (EDT)	16:47
End Bottom End (EDT)	18:57
Starting Latitude (N)	34° 19.427'
Starting Longitude (W)	75° 47.158'
Ending Latitude (N)	34° 19.482'
Ending Longitude (W)	75° 47.213'
Surface Current (Kts)	1.1
Bottom Current (Kts)	0.5

Image A: Hard Coral
34° 19.446' N, 75° 47.232' W

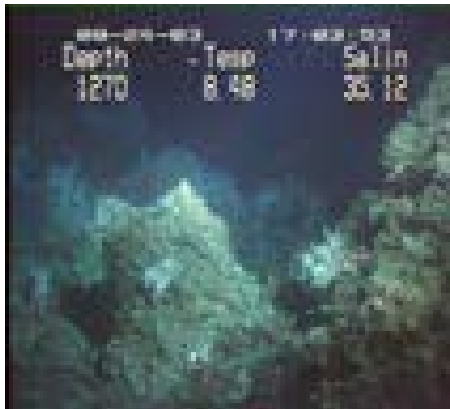


DIVE NUMBER: JSLII-3432**STUDY AREA: Cape Lookout Lophelia A****IMAGE GALLERY**

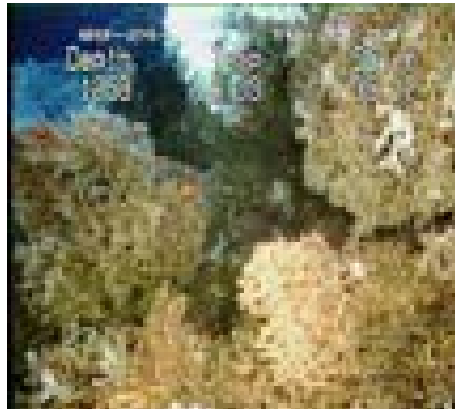
* indicates image position is approximated

Image B: Hard Coral

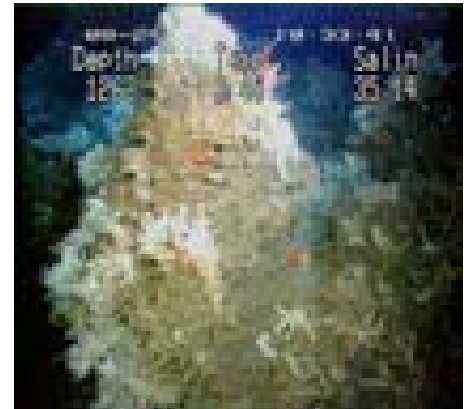
34° 19.428' N, 75° 47.214' W

**Image C: Hard Coral**

34° 19.416' N, 75° 47.250' W

**Image D: Hard Coral**

34° 19.446' N, 75° 47.226' W

**RELEVANT WORK AND/OR LITERATURE CITED**

Uchupi (1967)

R/V Eastward training cruise 1966 (photo in Rowe and Menzies 1968 and Menzies et al. 1973)

NR-1 submersible cruise Nov 1993 (Sulak and Ross unpubl. data)

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

Beryx decadactylus and *Conger oceanicus* were observed over prime coral reef habitat and were the dominant species in the area. *Hoplostethus occidentalis*, *Laemonema melanurum* and *L. barbatulum* were also relatively common throughout the dive. Only a single *Helicolenus dactylopterus* was observed. The only mobile invertebrates observed were large numbers of brittle stars, *Eumunida picta* and a species of spiny urchin. Attached macrofauna were sparse in this area, limited to a few basket stars and occasional venus flytrap anemones. Though this area was dominated by an extensive *Lophelia pertusa* reef, the amount of living *Lophelia* varied from <10% to nearly 50%. There were no other corals or sponges observed during this dive.

PHYSICAL ENVIRONMENT

This dive took place almost exclusively over hard coral habitat without attached fauna. The hard coral habitat at the beginning of the dive consisted of a low-relief area of dense dead coral matrices and a few living pieces of *Lophelia*. This habitat eventually transitioned to a moderate-to-high-relief coral reef on a series of crests and slopes. The slopes were steep, 50-60°, and the valleys between were filled with a mixture of rubble and soft-sediment.

ADDITIONAL COMMENTS

This dive was captured on 3 mini DVs and saved on 3 DVDs for archiving; however, the third DV/DVD does not contain footage of the bottom, only the ascent. The time/CTD overlay was turned off intermittently during both the first and second DVs. At times the footage quality was reduced by condensation on the inner lens of the camera and frequent periods when the camera actually ran into the substrate completely blocking all views.