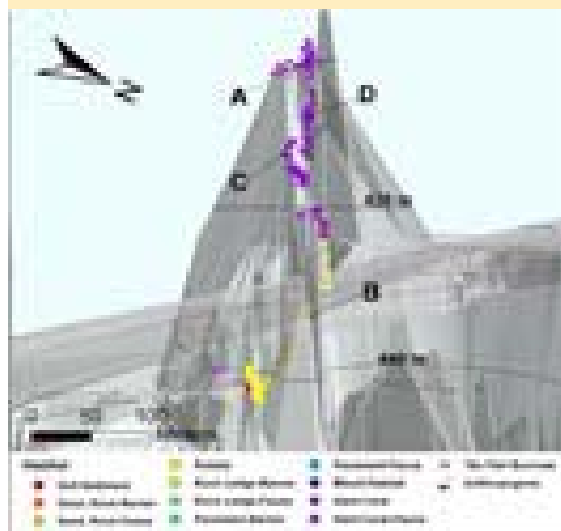


DIVE NUMBER: JSLI-4364**STUDY AREA: Cape Lookout Lophelia A****STATION OVERVIEW**

Project	Islands in the Stream 2001
Principal investigators	SW Ross ¹ KJ Sulak, E Baird
PI Contact Info¹	Center for Marine Science, 5600 Marvin Moss Ln. Wilmington NC 28409
Purpose	Continued trophodynamic studies off North Carolina; mapping of deep coral banks and ecological studies of macroinvertebrates and fishes; educational outreach
Vessel	R/V Seward Johnson, Johnson Sea Link I Submersible
Science Divers	J Caruso (bow), KJ Sulak (stern)
External Video Tapes	3 mini DVs
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	No bow audio log, hard copy of stern audio log
Acknowledgements	NOAA-OE, USGS, UNCW, NC Coastal Reserve, NC Museum of Natural Sciences
SEADESC Analyst	AM Necaize, AM Quattrini, ML Partyka
Date Compiled	11/16/2006

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

Date	23-Sep-01
Minimum Bottom Depth (m)	398
Maximum Bottom Depth (m)	443
Start Bottom Time (EDT)	16:02
End Bottom End (EDT)	18:53
Starting Latitude (N)	34° 18.840'
Starting Longitude (W)	75° 47.013'
Ending Latitude (N)	34° 18.765'
Ending Longitude (W)	75° 47.130'
Surface Current (Kts)	
Bottom Current (Kts)	

Image A: Hard Coral
34° 18.762' N, 75° 47.124' W



DIVE NUMBER: JSLI-4364**STUDY AREA: Cape Lookout Lophelia A****IMAGE GALLERY**

* indicates image position is approximated

Image B: Rubble

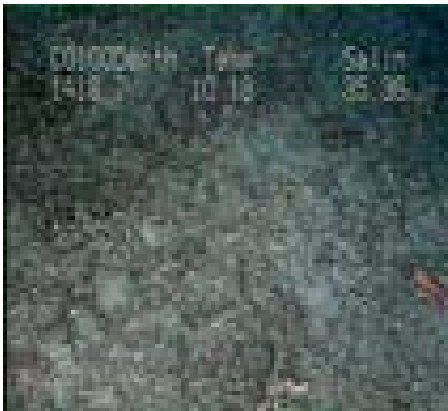
34° 18.822' N, 75° 47.094' W

Image C: Hard Coral

34° 18.792' N, 75° 47.094' W

Image D: Hard Coral

34° 18.768' N, 75° 47.124' 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

A diversity of fishes were identified over both rubble and hard coral habitats during this dive. The most common species were found in both habitats and included *Laemonema melanurum*, *L. barbatulum* and *Scyliorhinus retifer*. *Trachyscorpia cristulata*, *Fenestrella plutonia* and *Helicolenus dactylopterus* were only seen over the rubble and low-relief dead coral matrix areas of the dive. *Dysommia rugosa*, *Conger oceanicus* and *Hoplostethus occidentalis* were observed within the prime reef area.

PHYSICAL ENVIRONMENT

This dive began over a flat rubble plain. The submersible transected to the main target up a relatively steep slope (~50°) covered in dense rubble and eventually a dense dead coral matrix of cemented rubble. The majority of the dive was spent over a large *Lophelia pertusa* reef without attached fauna covering a series of steep ridges and valleys. The reef in this area varied from other dives in that the coral branches were less robust, forming lacy thickets with large interstices. There was also a larger percentage of live coral growth. The valleys between the coral thickets were typically filled with a mixture of sand and rubble.

ADDITIONAL COMMENTS

This dive was contained in 3 mini DVs and archived on 3 DVDs. There was no time or CTD overlay for this dive. Most of the first DV was spent transecting to the target site. A lot of video time covers the attempts to rotenone and capture fish, so little time was spent filming the reef in wide angle. The internal video was used in a number of instances for fish identifications.