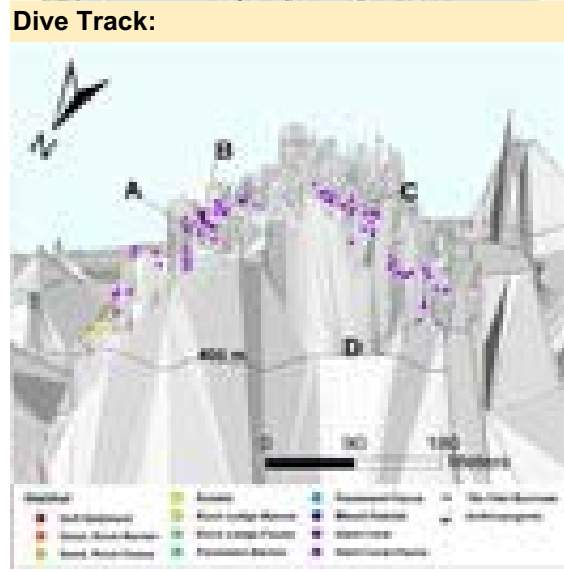
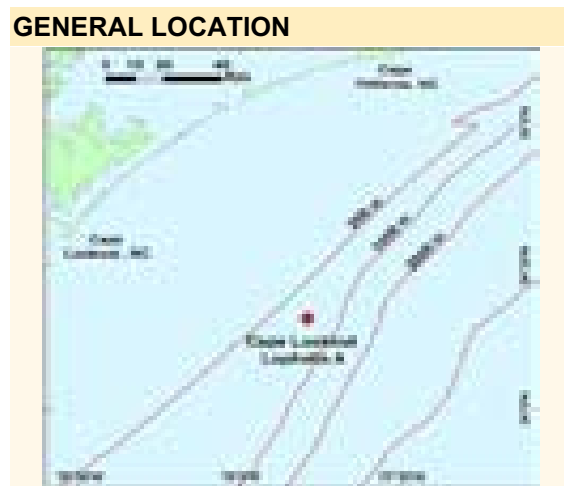


DIVE NUMBER: JSLI-4207

STUDY AREA: Cape Lookout Lophelia A

STATION OVERVIEW	
Project	Slope Trophodynamics
Principal investigators	SW Ross ¹ KJ Sulak
PI Contact Info¹	Center for Marine Science, 5600 Marvin Moss Ln., Wilmington, NC 28409
Purpose	Initial Lophelia community and habitat assessment off NC
Vessel	R/V Ed Link, Johnson Sea Link I Submersible
Science Divers	SW Ross (bow), D Weaver (stern)
External Video Tapes	1 Hi 8
Internal Video Tapes	1 mini DV
Digital Still Photos	0
Positioning System	dGPS
CTD File	<input checked="" type="checkbox"/>
Specimens Collected	<input checked="" type="checkbox"/>
Other	Hard copies of bow and stern audio logs
Acknowledgements	NC State Legislature, USGS, UNCW, NC Coastal Reserve
SEADESC Analyst	AM Quattrini, ML Partyka
Date Compiled	11/16/2006



DIVE DATA

Date	28-Jul-00
Minimum Bottom Depth (m)	388
Maximum Bottom Depth (m)	418
Start Bottom Time (EDT)	15:56
End Bottom End (EDT)	17:45
Starting Latitude (N)	34° 19.569'
Starting Longitude (W)	75° 47.134'
Ending Latitude (N)	34° 19.430'
Ending Longitude (W)	75° 47.287'
Surface Current (Kts)	
Bottom Current (Kts)	

Image A: Hard Coral
34° 19.512' N, 75° 47.172' W



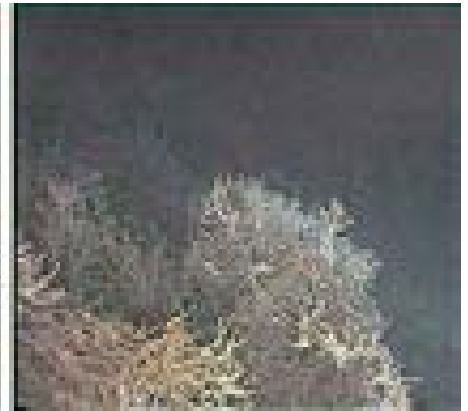
DIVE NUMBER: JSLI-4207**STUDY AREA: Cape Lookout Lophelia A****IMAGE GALLERY**

* indicates image position is approximated

Image B: Hard Coral
34° 19.506' N, 75° 47.184' W

Image C: Hard Coral
34° 19.452' N, 75° 47.238' W

Image D: Hard Coral
34° 19.428' N, 75° 47.292' 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 wide diversity of both fishes and invertebrates were seen during this dive. Some of the most common fish species included *Hoplostethus occidentalis*, *Laemonema barbatulum*, *L. melanurum*, *Helicolenus dactylopterus* and a large number of unidentified mid-water fishes. Other less common, but still frequently observed species included *Scyliorhinus meadi*, *S. retifer*, *Cirrhigaleus asper* and *Conger oceanicus*. Rare species of note were *Lophiodes beroe*, *Synagrops* sp., *Beryx decadactylus* and *Zenopsis conchifera*. *Eumunida picta* was the most commonly observed mobile invertebrate followed closely by *Rochinia crassa*. Echinoderms such as brittle stars and spiny urchins were common on the reef, while basket stars were only seen occasionally. The reef was made up of dense mounds of *Lophelia pertusa*, about 30% of which was actually living. Only a couple hexactinellid sponges were observed.

PHYSICAL ENVIRONMENT

Two habitats were observed during this dive, rubble and hard coral. The hard coral areas were free of attached macrofauna and were typically densely concreted bushes of dead *L. pertusa* with or without living colonies at the extremities. Other areas of hard coral were more loosely aggregated thickets with a large number of interstices and lower overall relief. Spaces between coral patches varied from dense rubble fields to large sandy swashes. The rubble habitat often merged with the hard coral habitat in an area best described as a dense dead coral matrix.

ADDITIONAL COMMENTS

This dive was captured on 1 Hi-8 and archived on 2 mini DVs and 1 DVD. The overall picture was hazy and the lighting was at times too low to have a clear view of the habitat and/or organisms inhabiting the area. However, there is some good footage of sharks and conger eels.