DIVE NUMBER: JSLI-4695

STUDY AREA: Cape Lookout Lophelia B

STATION OVERVIEW

Project Life on the Edge 2004

Principal investigators SW Ross¹

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Purpose Mapping of deep coral banks, ecological studies

of macroinvertebrates and fishes, paleoclimate studies, coral genetics and educational outreach

R/V Seward Johnson, Johnson Sea Link I Vessel

Submersible

Science Divers KJ Sulak (bow), C Morrison (stern)

External Video Tapes 2 mini DVs, 2 HDs

1 mini DVs **Internal Video Tapes**

Digital Still Photos 30 dGPS **Positioning System**

CTD File ~ Specimens Collected

✓

Other Hard copy of stern audio log

NOAA-OE, NOAA Fisheries, USGS, UNCW, NC Acknowledgements

Museum of Natural Sciences

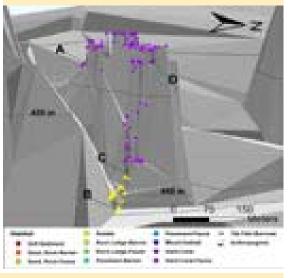
SEADESC Analyst AM Necaise, ML Partyka

Date Compiled 11/16/2006

GENERAL LOCATION



Dive Track:



DIVE DATA

Date	16-Jun-04
Minimum Bottom Depth (m)	407
Maximum Bottom Depth (m)	442
Start Bottom Time (EDT)	16:49
End Bottom End (EDT)	18:59
Starting Latitude (N)	34° 11.406'
Starting Longitude (W)	75° 53.647'
Ending Latitude (N)	34° 11.411'
Ending Longitude (W)	75° 53.739'
Surface Current (Kts)	
Bottom Current (Kts)	0.4

Image A: Hard Coral 34° 11.388' N, 75° 53.772' W



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IMAGE GALLERY

* indicates image position is approximated

Image B: Rubble 34° 11.406' N, 75° 53.634' W * Image C:Rubble 34° 11.000' N, 75° 53.670' W Image D: Hard Coral 34° 11.454' N, 75° 53.688' 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

Several fishes and invertebrates were observed in coral rubble and hard coral habitats. *Nezumia aequalis, Helicolenus dactylopterus, Laemonema barbatulum, Chlorophthalmus agassizi* and a few pencil urchins were observed in the rubble zone. In the hard coral area, a few *Hoplostethus occidentalis, Beryx decadactylus,* and *Laemonema melanurum* were observed. Mobile invertebrates were common, including brittle stars, pencil urchins, *Eumunida picta*, sea stars, and *Echinus* spp. Sessile invertebrates included few *Novodinia antillensis* and anemones attached to *Lophelia pertusa*.

PHYSICAL ENVIRONMENT

Near the base of a large slope, coral rubble was the dominant substrate. As the submersible transected up slope, an extensive *L. pertusa* habitat was observed. On the face of the slope, *Lophelia* was mostly dead, with few standing twigs and bushes of live coral with low relief < 1 m. The submersible passed over the crests of several slopes, where mostly (50-90%) live *Lophelia* was found in large bushes with very high relief (up to 5 m). Sparse attached fauna was observed in both habitats.

ADDITIONAL COMMENTS

This dive was recorded on 2 mini DVs and archived on 2 DVDs. At times, video transects were underlit and the color balance was off for the majority of the dive giving a green cast to the footage. Most of the video on the second DV was close-up footage during submersible collections.