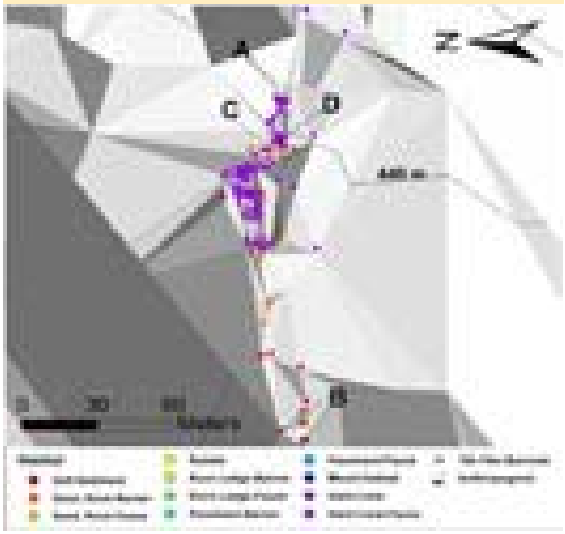
## *DIVE NUMBER: JSLI-4366* *STUDY AREA: Cape Lookout Lophelia B*

### STATION OVERVIEW

| | |
|---|---|
| **Project** | Islands in the Stream 2001 |
| **Principal investigators** | SW Ross[1]<br>KJ Sulak, E Baird |
| **PI Contact Info[1]** | 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** | G Dennis (bow), SW Ross (stern) |
| **External Video Tapes** | 2 mini DVs |
| **Internal Video Tapes** | 1 mini DV |
| **Digital Still Photos** | 0 |
| **Positioning System** | dGPS |
| **CTD File** | ☑ |
| **Specimens Collected** | ☑ |
| **Other** | Hard copy of bow audio log |
| **Acknowledgements** | NOAA-OE, USGS, UNCW, NC Coastal Reserve, NC Museum of Natural Sciences |
| **SEADESC Analyst** | AM Necaise, AM Quattrini, ML Partyka |
| **Date Compiled** | 11/16/2006 |

### GENERAL LOCATION

**Dive Track:**



### DIVE DATA

| | |
|---|---|
| **Date** | 24-Sep-01 |
| **Minimum Bottom Depth (m)** | 438 |
| **Maximum Bottom Depth (m)** | 450 |
| **Start Bottom Time (EDT)** | 16:18 |
| **End Bottom End (EDT)** | 17:32 |
| **Starting Latitude (N)** | 34° 10.754' |
| **Starting Longitude (W)** | 75° 53.507' |
| **Ending Latitude (N)** | 34° 10.765' |
| **Ending Longitude (W)** | 75° 53.370' |
| **Surface Current (Kts)** | |
| **Bottom Current (Kts)** | |

**Image A: Hard Coral**
34° 10.770' N, 75° 53.376' W *

## *DIVE NUMBER: JSLI-4366* *STUDY AREA: Cape Lookout Lophelia B*

**IMAGE GALLERY** *** indicates image position is approximated**

**Image B: Soft Sediment**
34° 10.758' N, 75° 53.460' W

**Image C: Sand/Rubble/Rock-Barren**
34° 10.770' N, 75° 53.406' W

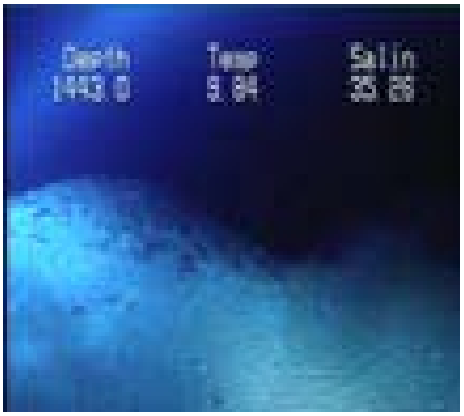


**Image D: Hard Coral**
34° 10.770' N. 75° 53.382' W

### 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

The two species of fishes observed over soft-substrate habitat at the beginning of the dive were *Myxine glutinosa* and *Chlorophthalmus agassizi*. The most common species found over the hard coral habitat were *Laemonema barbatulum, L. melanurum* and *Helicolenus dactylopterus*. Other fishes observed in small numbers included *Nettenchelys exoria, Dysommina rugosa* and *Trachyscorpia cristulata*. Mobile invertebrates included a large number of *Rochinia crassa* over the sandy habitat as well as long worm tubes, while over the reef habitat there were occasional *Chaceon* and box crabs, spiny urchins and large numbers of brittle stars. Sessile invertebrates were limited to sparsely located flytrap anemones. No other corals or reef building sponges were observed during the dive.

### PHYSICAL ENVIRONMENT

This dive begins over low-relief soft-sediment habitat. Scattered clumps of dead *Sargassum* were found across this habitat. Soft substrate transitioned into a narrow sand/rubble/rock area without attached fauna. This habitat changed abruptly into hard coral habitat of low to moderate relief. The remainder of the dive was spent over rolling dune-like mounds of sand capped by hard corals. The extent, relief and health of the coral was variable amongst the dunes. The small mounds encountered near the end of the dive had an increased percentage of live *Lophelia pertusa* up to 75% in some instances.

### ADDITIONAL COMMENTS

This dive was covered over 2 mini DVs and converted to 2 DVDs for archiving. There was no time or CTD overlay during this dive. The dive was aborted shortly after the beginning of the second DV, and therefore, there was limited survey footage of the reef area. Footage was occasionally too dark for habitat classification. There was a lot of footage (~40 min) of attempts to rotenone and capture fish, which took up the majority of the first DV.