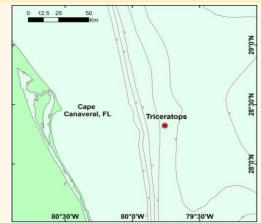
DIVE NUMBER: JSLII-3709

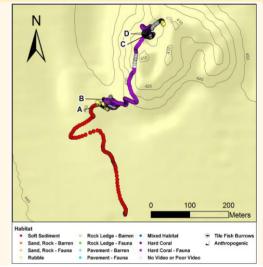
STUDY AREA: Triceratops

| STATION OVERVIEW | |
|------------------------------|--|
| Project | Deep-sea Coral Research |
| Principal investigators | SW Ross ¹ |
| | |
| PI Contact Info ¹ | Center for Marine Science, 5600 Marvin Moss Ln., Wilmington, NC 28409 |
| Purpose | Exploration of Deep-water Coral Ecosystems off Cape Canaveral, Florida |
| Vessel | R/V Seward Johnson, Johnson Sea Link II Submersible |
| Science Divers | J Reed (bow), S Ross (stern) |
| External Video Tapes | External Hard Drive |
| Internal Video Tapes | 2 mini DVs |
| Digital Still Photos | Yes |
| Positioning System | dGPS |
| CTD File | \checkmark |
| Specimens Collected | |
| Other | |
| Acknowledgements | NOAA, USGS, SAFMC, OIMB, NC Museum of Natural Sciences |
| SEADESC Analyst | M Watts |
| Date Compiled | 1/13/2012 |
| PI Station Number | JSLII-09-Atl-3709 |

GENERAL LOCATION







DIVE DATA

| Date | 11-Aug-09 |
|--------------------------|-------------|
| Minimum Bottom Depth (m) | 419 |
| Maximum Bottom Depth (m) | 439 |
| Start Bottom Time (EDT) | 8:23 |
| End Bottom End (EDT) | 10:52 |
| Starting Latitude (N) | 28° 19.032' |
| Starting Longitude (W) | 79° 45.601' |
| Ending Latitude (N) | 28° 19.283' |
| Ending Longitude (W) | 79° 45.540' |
| Surface Current (Kts) | |
| Bottom Current (Kts) | |
| | |

Image A: Rubble 28° 19.174' N, 79° 45.636' W



DIVE NUMBER: JSLII-3709

IMAGE GALLERY

Image B: Hard Coral with Attached Fauna 28° 19.181' N, 79° 45.630' W

STUDY AREA: Triceratops

Image C: Hard Coral with Attached Fauna 28° 19.267' N, 79° 45.564' W

 * indicates image position is approximated
 al Image D: Hard Coral

 na
 with Attached Fauna
 64' W
 28° 19.268' N. 79° 45.558' W



RELEVANT WORK AND/OR LITERATURE CITED

Ayers and Pilkey (1981) EEZ-SCAN 87 Scientific Staff (1991) Reed (2002) Reed and Ross (2005) Reed et al. (2006) Ross and Nizinski (2007) Ross and Quattrini (2007, 2009) Ross et al. (2012)

BIOLOGICAL ENVIRONMENT

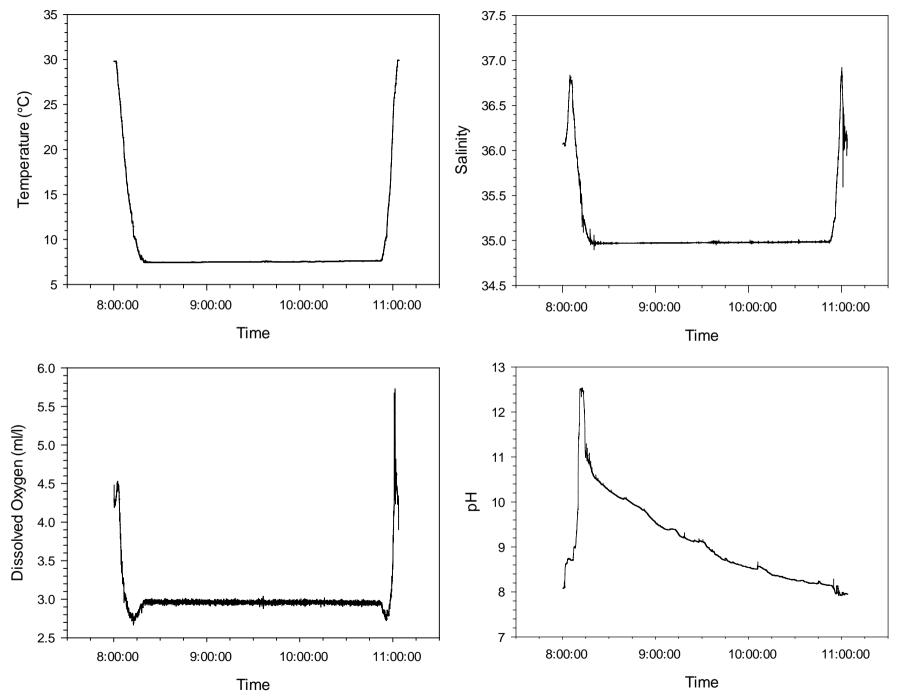
This dive traversed the western *Lophelia pertusa* bioherm of "Triceratops" off Cape Canaveral. The bioherm was comprised of dense, high relief live *L. pertusa* on a dead coral matrix. The hard coral rubble and matrix habitats supported abundant attached fauna such as cup corals, anemones, gorgonians (e.g. *Plumarella* sp.), hydroids, a diversity of hexactinellid sponges (e.g. *Aphrocallistes* sp.), and patches of the hard corals *Madrepora oculata* and *Enallopsammia profunda*. Mobile fauna included echinoid and cidaroid urchins, an octopus, crinoids, golden and galatheid crabs, *Bathynomus giganteus*, blackbelly rosefish, rattail fish, coral hakes, a red bream, a western roughy, and a yellow shark.

PHYSICAL ENVIRONMENT

This dive begin south of the western *L. pertusa* bioherm, requiring a northerly traverse over soft sediment, then coral rubble. At the base of the bioherm the slope increased and was dominated by low relief, 70% cover of hard coral habitat with abundant attached fauna. The bioherm consisted of a series of high relief coral ridges separated by narrow valleys of low relief coral patches interspersed with soft sediment. Almost the entire pinnacle consisted of hard coral habitat with attached fauna, and was comprised of high relief, 40-70% live *L. pertusa* on a dead coral matrix.

ADDITIONAL COMMENTS

Original dives are on mini DVs that were transferred to digital and stored on an external hard drive. Video quality was clear with only brief sections of unusable footage when the submersible was too far off the bottom. Between the second and third tape, 15 min. of the dive was not recorded. Suction samples and punch cores for sediment were taken at the base of corals along with collections of live and dead *L. pertusa*, *E. profunda*, *Plumarella* sp., cup corals, *Aphrocallistes* sp., galatheid crabs, a rattail fish, an octopus, a blackbelly rosefish, and a hexactinellid sponge with yellow zooanthids. Also, a baited trap was briefly deployed and nothing was caught before it was retrieved.



Plots of CTD data recorded during submersible dive JSL-2009-Atl-3709 (11 Aug 2009) off Cape Canaveral, FL.