## **DIVE NUMBER: JSLII-3700**

# STUDY AREA: Triceratops

### STATION OVERVIEW

Project Deep-sea Coral Research

Principal investigators SW Ross<sup>1</sup>

PI Contact Info<sup>1</sup> 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 S Ross (bow), S Brooke (stern)

External Video Tapes External Hard Drive

Internal Video Tapes 2 mini DVs

Digital Still Photos Yes

Positioning System dGPS

CTD File 
✓
Specimens Collected 
✓

Other

Acknowledgements

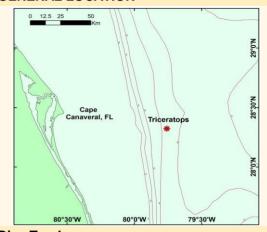
NOAA, USGS, SAFMC, OIMB,
NC Museum of Natural Sciences

SEADESC Analyst M Watts

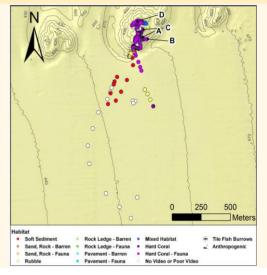
Date Compiled 11/22/2011

PI Station Number JSLII-2009-Atl-3700

#### **GENERAL LOCATION**



## **Dive Track:**



### **DIVE DATA**

Date	06-Aug-09
Minimum Bottom Depth (m)	424
Maximum Bottom Depth (m)	450
Start Bottom Time (EDT)	15:38
End Bottom End (EDT)	18:26
Starting Latitude (N)	28° 18.979'
Starting Longitude (W)	79° 45.123'
Ending Latitude (N)	28° 19.318′
Ending Longitude (W)	79° 45.052'
Surface Current (Kts)	
Bottom Current (Kts)	

Image A: Hard Coral with Attached Fauna 28° 19.272' N, 79° 45.108' W



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## **IMAGE GALLERY**

\* indicates image position is approximated

Image B: Hard Corals with Attached Fauna

28° 19.248' N. 79° 44.898' W



Image C: Hard Corals with Attached Fauna 28° 19.278' N. 79° 45.048' W



Image D: Hard Corals with Attached Fauna 28° 19.319' N. 79° 45.100' W



#### **RELEVANT WORK AND/OR LITERATURE CITED**

Avers 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**

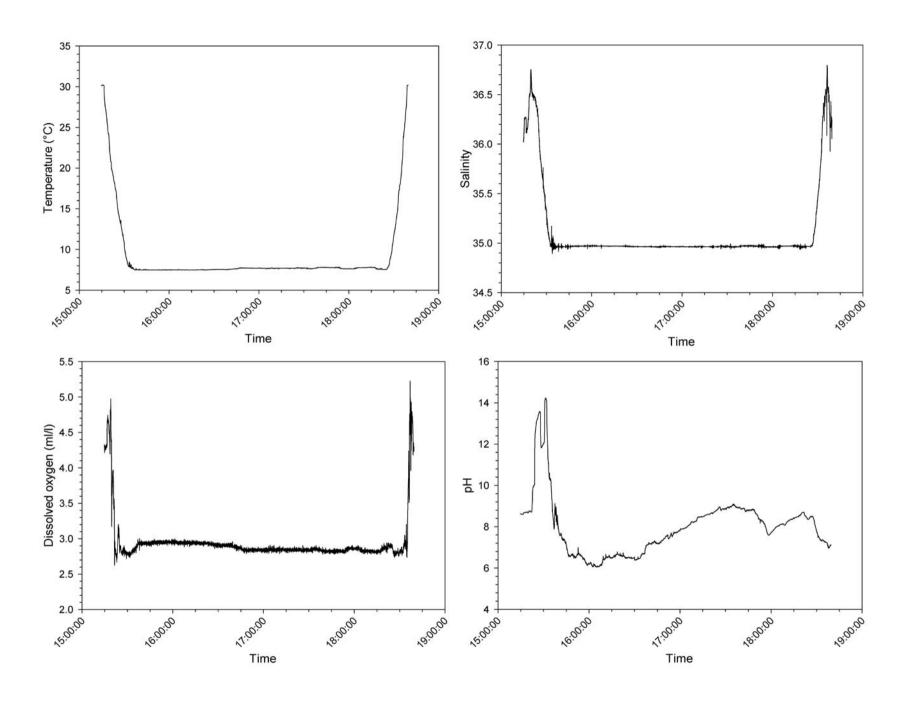
This dive traversed the central and largest Lophelia pertusa bioherm of the coral mounds called "Triceratops" off Cape Canaveral. Coral rubble leading up to the top of the bioherm supported fauna such as cup corals and *Plumarella* sp. The top of the bioherm was comprised of dense, high relief live L. pertusa on a dead coral matrix. The hard coral rubble and matrix habitats supported abundant attached fauna such as cup corals, anemones, gorgonians, bamboo coral, hydroids, a diversity of hexactinellid sponges (e.g. Aphrocallistes sp., Hertwigia sp., and Vazella sp.) and rare patches of the hard coral Madrepora oculata. Mobile fauna included echinoid and cidaroid urchins, golden and alatheid crabs, squid and octopus, blackbelly rosefish, a red bream, rattail fish, coral hakes, a Cuban dogfish, catsharks, and conger eels.

#### PHYSICAL ENVIRONMENT

This dive began south of the central 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 hard coral habitat with and without abundant attached fauna. The bioherm consisted of a series of high relief coral thickets separated by narrow valleys of soft sediment and rubble with attached fauna. Almost the entire pinnacle consisted of hard coral habitat with attached fauna, and was comprised of high relief, 50-90% 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 unclear for the first hour on bottom before condensation on the lens mostly cleared. Due to this lack of video clarity. representative pictures of habitat were not taken in the first hour of the dive. Collections were taken of live and dead L. pertusa and rubble, Aphrocallistes sp., a yellow gorgonian, numerous galatheid crabs, a salp, a cidaroid urchin, Echinus sp., a conger eel, and a catshark.



Plots of CTD data recorded during submersible dive JSL-2009-Atl-3700 (6 Aug 2009) off Cape Canaveral, FL.