DIVE NUMBER: JSLII-3708

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	
Vessel	R/V Seward Johnson, Johnson Sea Link II Submersible	
Science Divers	A Howard (bow) T Casazza (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	
Additionicagemente	NC Museum of Natural Sciences	
SEADESC Analyst	M Watts	
Date Compiled	1/12/2012	
PI Station Number	JSLII-09-Atl-3708	

GENERAL LOCATION







DIVE DATA

Date	10-Aug-09
Minimum Bottom Depth (m)	398
Maximum Bottom Depth (m)	453
Start Bottom Time (EDT)	17:16
End Bottom End (EDT)	20:05
Starting Latitude (N)	28° 19.102'
Starting Longitude (W)	79° 45.155'
Ending Latitude (N)	28° 19.289'
Ending Longitude (W)	79° 45.097'
Surface Current (Kts)	
Bottom Current (Kts)	

Image A: Hard Coral with Attached Fauna 28° 19.180' N, 79° 45.186' W



DIVE NUMBER: JSLII-3708

IMAGE GALLERY

Image B: Hard Coral with Attached Fauna 28° 19.238' N, 79° 45.138' W Image C: Hard Coral with Attached Fauna 28° 19.324' N, 79° 45.078' W

STUDY AREA: Triceratops

* indicates image position is approximated al - Image D: Hard Coral na with Attached Fauna 78' W 28° 19.300' N. 79° 45.102' 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 central and largest *Lophelia pertusa* bioherm of the coral bioherms 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 *Hertwigia* sp.), and patches of the hard coral *Madrepora oculata*. Mobile fauna included echinoid and cidaroid urchins, a seastar, crinoids, golden and galatheid crabs, blackbelly rosefish, rattail fish, coral hakes, and catsharks.

PHYSICAL ENVIRONMENT

This dive begin 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 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, 10-90% 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 clear with only brief sections of unusable footage. Suction samples and punch cores for sediment were taken at the base of corals along with collections of live and dead *L. pertusa*, *M. oculata*, *Plumarella* sp., galatheid crabs, a golden crab, a cidaroid urchin, and a seastar. 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-3708 (10 Aug 2009) off Cape Canaveral, FL.