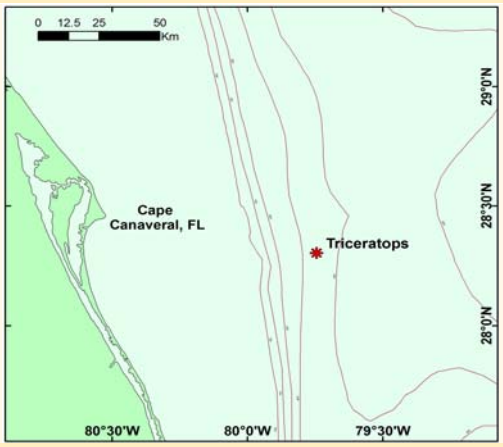
DIVE NUMBER: JSLI-4913 *STUDY AREA: Triceratops*

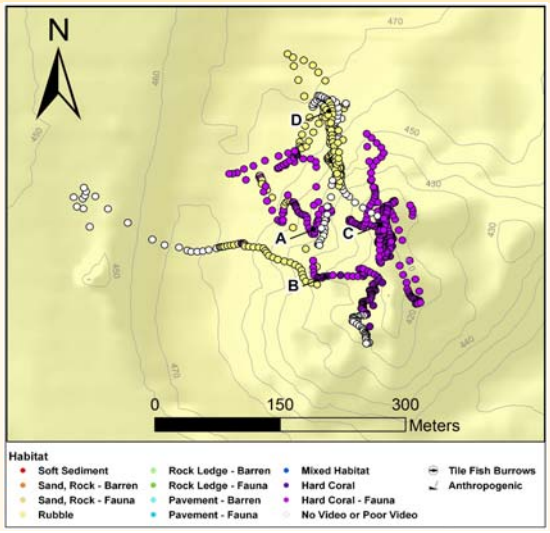
STATION OVERVIEW

Project	Ocean Exploration 2005
Principal investigators	SD Brooke[1] J Reed, C Messing
PI Contact Info[1]	Oregon Institute of Marine Biology, 63466 Boat Basin Rd., Charleston, OR 97420
Purpose	Exploration of deep-water coral ecosystems off the east coast of Florida
Vessel	R/V Seward Johnson, Johnson Sea Link I Submersible
Science Divers	G Gilmore (bow), A Schulze (stern)
External Video Tapes	External Hard Drive
Internal Video Tapes	
Digital Still Photos	0
Positioning System	dGPS
CTD File	☑
Specimens Collected	☑
Other	
Acknowledgements	NOAA-OE
SEADESC Analyst	M Watts
Date Compiled	9/19/2011
PI Station Number	10-XI-05-1

GENERAL LOCATION



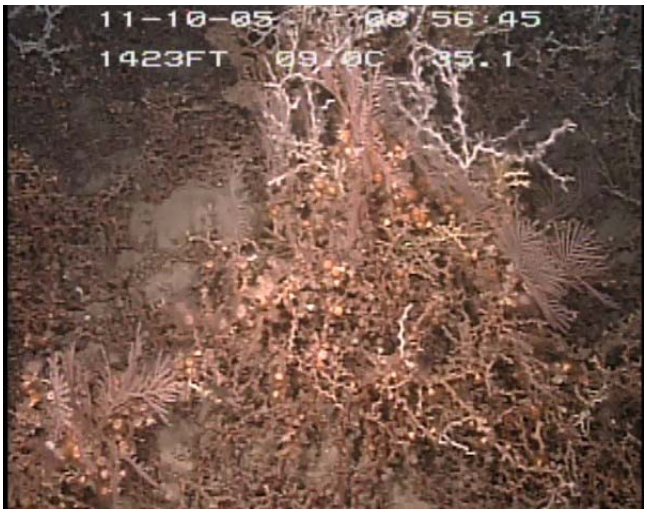
Dive Track:



DIVE DATA

Date	10-Nov-05
Minimum Bottom Depth (m)	393
Maximum Bottom Depth (m)	462
Start Bottom Time (EDT)	8:33
End Bottom End (EDT)	11:16
Starting Latitude (N)	28° 19.338'
Starting Longitude (W)	79° 45.309'
Ending Latitude (N)	28° 19.383
Ending Longitude (W)	79° 45.126
Surface Current (Kts)	
Bottom Current (Kts)	0.5

Image A: Hard Corals - with Attached Fauna
28º 19.332' N, 79º 45.120' W



DIVE NUMBER: JSLI-4913 *STUDY AREA: Triceratops*

IMAGE GALLERY

*** indicates image position is approximated**

Image B: Hard Corals - without Attached Fauna
28º 19.302' N, 79º 45.132' W

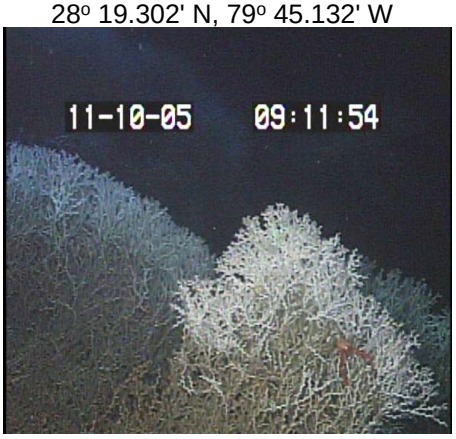


Image C: Hard Corals - with Attached Fauna
28º 19.338' N, 79º 45.096' W

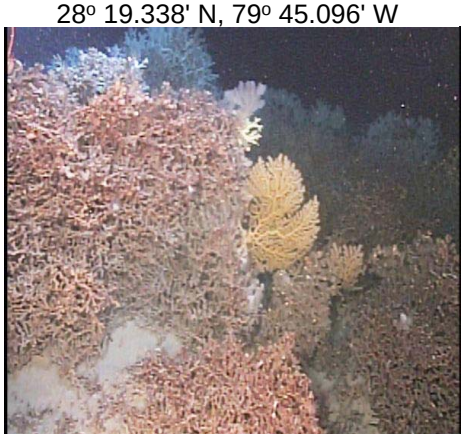


Image D: Rubble
28º 19.422' N, 79º 45.132' W

RELEVANT WORK AND/OR LITERATURE CITED

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

BIOLOGICAL ENVIRONMENT

This dive traversed the central and largest *Lophelia pertusa* bioherm of the coral mounds of "Triceratops" of South Cape Canaveral, called "The Pinnacle" in the OE 2005 dive logs. Coral rubble leading up to the mound supported fauna such as cup corals and *Plumarella* sp. The coral mound 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, white anemones, gorgonians (e.g. *Plumarella* sp. and Paramuriceids), bamboo coral (e.g. *Acanella* sp.), a diversity of hexactinellid sponges and rare patches of the hard coral *Madrepora oculata*. Mobile fauna included cidaroid urchins, cancer, golden, and galatheid crabs, squid, scorpionfish (e.g. blackbelly rosefish), roughies, rattail fish, coral hake, skates, catsharks, a flatfish and a *Mola mola*.

PHYSICAL ENVIRONMENT

This dive begin southwest of the central *L. pertusa* bioherm, requiring an easterly traverse over coral rubble and low relief, 100% dead hard coral covered with abundant sessile fauna. At the base of the bioherm the slope increased to a 50° incline, flattened after an initial rise of a *L. pertusa* mound step to a plateau before continuing to the peak of the bioherm pinnacle. The main bioherm consisted of hard coral habitat, primarily with attached fauna, and was comprised of high relief, 50-90% live *L. pertusa* on a dead coral matrix. The steep north slope of the feature supported dead coral rubble with sparse attached fauna and a diversity of fishes.

ADDITIONAL COMMENTS

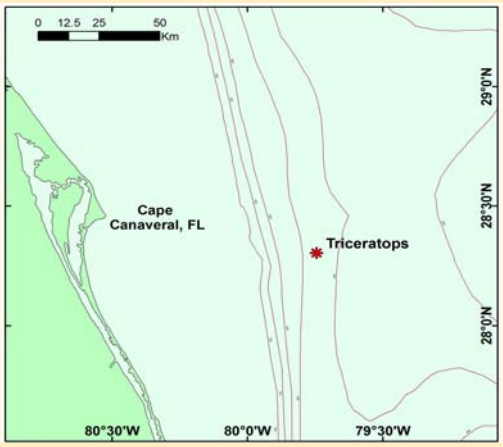
Original dives are on mini DVs transfer to digital on a mini DV reader and stored on an external hard. Video quality was mostly clear. However, the bow scientist periodically turned off the camera. As the majority of the dive did not have a time stamp on the video, it was difficult to determine the time and location of the footage when the video was turned back on. Time and location of events recorded in the dive log was used to calculate the approximate time for some video segments, though a small margin of error is likely. Collections were taken of live and dead *L. pertusa* and rubble, an orange Paramuriceid, and a skate. Twice, the lights on the submersible were turned off or dimmed for 10-15

DIVE NUMBER: JSLI-4914 *STUDY AREA: Triceratops*

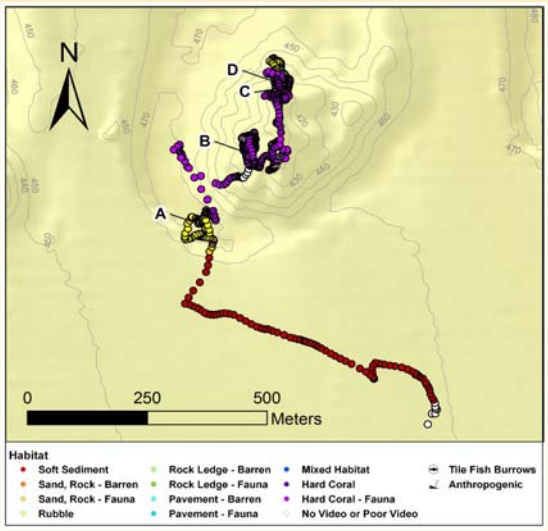
STATION OVERVIEW

Project	Ocean Exploration 2005
Principal investigators	SD Brooke[1] J Reed, C Messing
PI Contact Info[1]	Oregon Institute of Marine Biology, 63466 Boat Basin Rd., Charleston, OR 97420
Purpose	Exploration of Deep-water Coral Ecosystems off the east coast of Florida
Vessel	R/V Seward Johnson, Johnson Sea Link I Submersible
Science Divers	S Brooke (bow), J Reed (stern)
External Video Tapes	External Hard Drive
Internal Video Tapes	2 mini DVs
Digital Still Photos	0
Positioning System	dGPS
CTD File	☑
Specimens Collected	☑
Other	
Acknowledgements	NOAA-OE
SEADESC Analyst	M Watts
Date Compiled	8/2/2011
PI Station Number	10-XI-05-2

GENERAL LOCATION



Dive Track:



DIVE DATA

Date	10-Nov-05
Minimum Bottom Depth (m)	397
Maximum Bottom Depth (m)	467
Start Bottom Time (EDT)	15:49
End Bottom End (EDT)	18:55
Starting Latitude (N)	28° 19.326'
Starting Longitude (W)	79° 45.120'
Ending Latitude (N)	28° 19.320'
Ending Longitude (W)	79° 45.102'
Surface Current (Kts)	
Bottom Current (Kts)	0.4

Image A: Hard Coral - with Attached Fauna
28º 19.195' N, 79º 45.187' W

DIVE NUMBER: JSLI-4914 *STUDY AREA: Triceratops*

IMAGE GALLERY

*** indicates image position is approximated**

Image B: Hard Coral - with Attached Fauna
28º 19.275' N, 79º 45.131' W

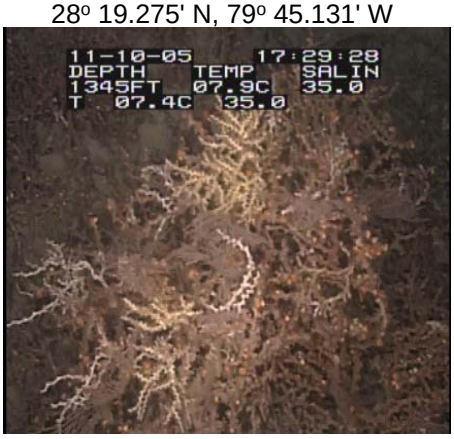


Image C: Hard Coral - with Attached Fauna
28º 19.358' N, 79º 45.076' W

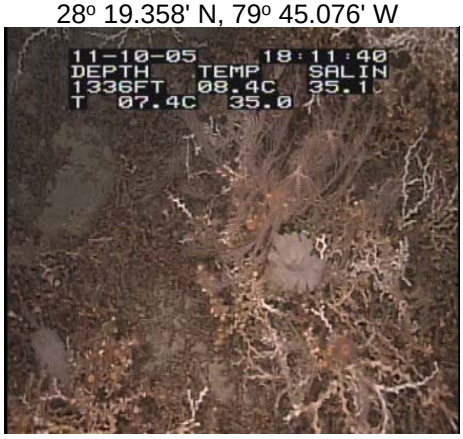


Image D: Hard Coral - without Attached Fauna
28º 19.366' N, 79º 45.096' W

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)

BIOLOGICAL ENVIRONMENT

This dive traversed the central and largest *Lophelia pertusa* lithoherm of the three *L. pertusa* mounds of "Triceratops" of South Canaveral, called "The Pinnacle" in the OE 2005 dive logs. Soft sediment surrounding the mound had anemones and evidence of bioturbation. The coral rubble leading up to the mound supported fauna such as small brown cnidarians and gorgonians such as *Plumerella* sp.. Dense, live *L . pertusa* were found on top of a dead coral matrix on the slopes and plateau of the mound. Abundant attached fauna on the dense coral beds include gorgonians such as *Plumerella* sp., cup corals, anemones and hexactinellid sponges some with yellow zooanthids. Rare patches of *Madrepora oculata* and soft corals such as gorgonians were also present. Mobile fauna included galatheid, golden, and cancer crabs, cidaroid urchins and fishes such as blackbelly rosefish, dogfish, and a black tipped shark.

PHYSICAL ENVIRONMENT

The *L. pertusa* lithoherm is surrounded by soft sediment, turning into coral rubble with attached fauna at the base of the mound. This dive began at the southern side of the mound before progressing around the west slope to the center and up to the northern peak. The cover of live *L. pertusa* increases with distance up the mound, reaching 100% cover of live coral on top of dead coral matrices at the top of the mound. The top of the mound consists of peaks of high relief with dense live *L. pertusa* with or without fauna separated by small "valleys" of coral rubble and soft sediment. Some sections of *L. pertusa* on the northern extent of the mound had sparse attached fauna.

ADDITIONAL COMMENTS

Original dives are on mini DVs transferred to digital on a mini DV reader and stored on an external hard. Video quality was clear with only brief sections of unusable footage. Collections were taken of *L. pertusa*, a yellow gorgonian, and a hard coral of the family Dendrophylliidae.