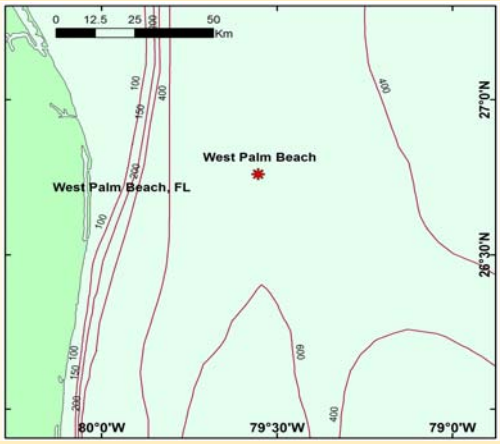
DIVE NUMBER: JSLI-4915 *STUDY AREA: West Palm Beach*

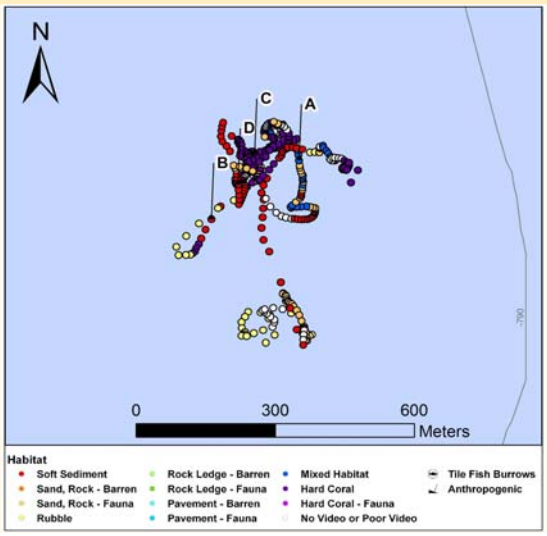
STATION OVERVIEW

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	C Messing (bow), E Jacobi (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	11-XI-05-1

GENERAL LOCATION



Dive Track:



DIVE DATA

Date	11-Nov-05
Minimum Bottom Depth (m)	759
Maximum Bottom Depth (m)	776
Start Bottom Time (EDT)	8:52
End Bottom End (EDT)	11:20
Starting Latitude (N)	26° 38.853'
Starting Longitude (W)	79° 32.562'
Ending Latitude (N)	26° 39.037'
Ending Longitude (W)	79° 32.472'
Surface Current (Kts)	
Bottom Current (Kts)	0.2

Image A: Mixed Habitat
26º 39.060' N, 79º 32.532' W

DIVE NUMBER: JSLI-4915 *STUDY AREA: West Palm Beach*

IMAGE GALLERY

*** indicates image position is approximated**

Image B: Soft Substrate
26º 38.962' N, 79º 32.658' W

Image C: Hard Corals - with Attached Fauna
26º 39.064' N, 79º 32.598' W

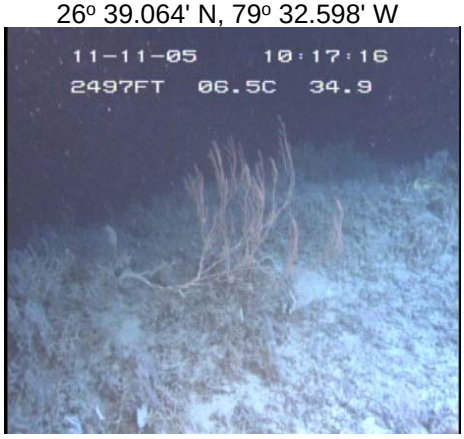
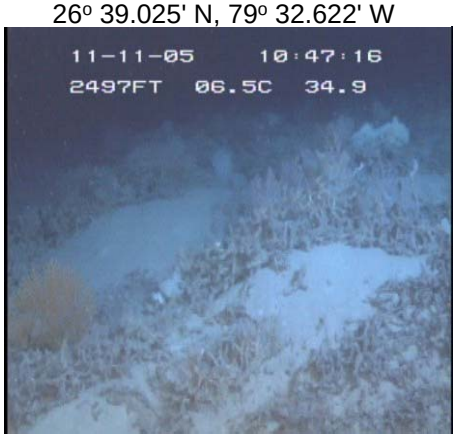


Image D: Hard Corals - with Attached Fauna
26º 39.025' N, 79º 32.622' W



RELEVANT WORK AND/OR LITERATURE CITED

Ayers and Pilkey (1981)
EEZ-SCAN 87 Scientific Staff (1991)
Reed (2002)
Reed and Ross (2005)

BIOLOGICAL ENVIRONMENT

Soft sediment habitat surrounding the low relief *Lophelia pertusa* mounds supported sparse fauna including the stalked hexactinellid sponge, *Hyalonema* sp., with attached zooanthids, sea urchins, and *Acanthacaris caeca*. Hard coral habitat was composed of 100% dead standing *L. pertusa* and dense coral rubble. Sessile invertebrates attached to the hard coral matrix include the hydrozoan coral (Stylasteridae), numerous soft corals such as gorgonians (e.g. *Plumarella* sp., *Eunicella* sp.) including a large orange Paramuriceid gorgonian, bamboo coral, black coral (e.g.*Bathypathes* sp.) and a large diversity of hexactinellid (e.g. *Asconema* sp.) and demospongia (e.g. *Phakellia* sp.) sponges and stalked crinoids. Mobile fauna included echinoid and cidaroid urchins, a brittle star, galatheid crabs, rattail fish (e.g. marlin spike grenadier), eels, midwater fish, an offshore hake, skates and squids.

PHYSICAL ENVIRONMENT

This dive began to the south of the *L. pertusa* bioherm in rubble habitat before traversing over soft sediment and soft sediment with coral rubble and attached fauna. The first coral bioherm supported a mixed habitat of sponges and soft coral attached to coral rubble and hard coral habitat with attached fauna. The habitat transitioned into primarily hard coral habitat with fauna at the northern extent of the dive. Hard coral habitat was comprised of 100% dead, low relief, standing *L. pertusa* or dense coral matrix with attached fauna (e.g. sponges and soft corals). Five small peaks of low elevation coral mounds were interspersed with patches and valleys of soft sediment and coral rubble.

ADDITIONAL COMMENTS

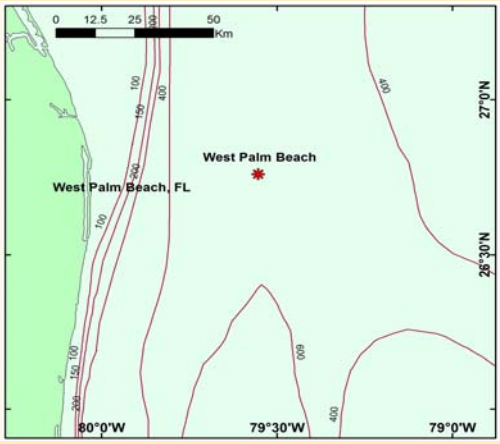
Original dives are on mini DVs transferred to digital on a mini DV reader and stored on an external hard drive. Video quality was mostly clear with only a few sections of unusable footage. Collections included dead *L. pertusa* rubble, *Bathypathes* sp., a galatheid crab, numerous white octocorals, *Eunicella* sp., *Plumarella* sp., an orange Paramuriceid gorgonian, an ophiuroid, a purple crinoid, bamboo coral, white hexactinellids, including *Hyalonema* sp. with zooanthids on the stalk, and a yellow sponge.

DIVE NUMBER: JSLI-4916 *STUDY AREA: West Palm Beach*

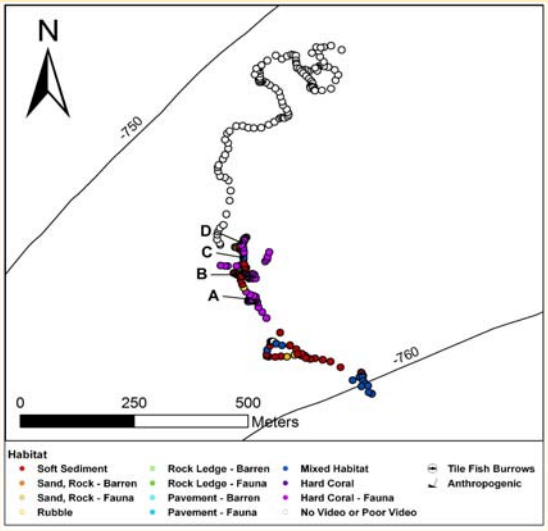
STATION OVERVIEW

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	W Schroeder (bow), J Thomas (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	11-XI-05-2

GENERAL LOCATION



Dive Track:



DIVE DATA

Date	11-Nov-05
Minimum Bottom Depth (m)	737
Maximum Bottom Depth (m)	757
Start Bottom Time (EDT)	16:39
End Bottom End (EDT)	18:41
Starting Latitude (N)	26° 45.480'
Starting Longitude (W)	79° 33.180'
Ending Latitude (N)	26° 45.480'
Ending Longitude (W)	79° 33.000'
Surface Current (Kts)	
Bottom Current (Kts)	0.1

Image A: Hard Corals - with Attached Fauna
26º 45.578' N, 79º 33.294' W

DIVE NUMBER: JSLI-4916 *STUDY AREA: West Palm Beach*

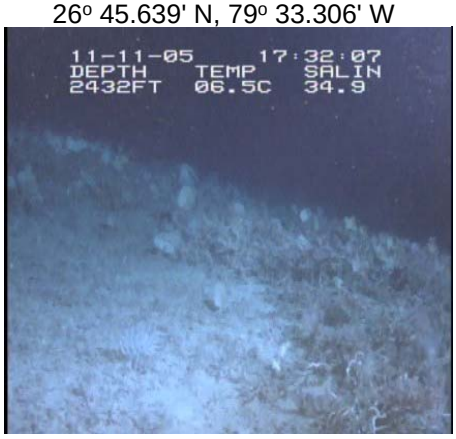
IMAGE GALLERY

*** indicates image position is approximated**

Image B: Soft Substrate
26º 45.602' N, 79º 33.300' W

Image C: Mixed Habitat
26º 45.606' N, 79º 33.306' W

Image D: Hard Corals - with Attached Fauna
26º 45.639' N, 79º 33.306' 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)

BIOLOGICAL ENVIRONMENT

Soft sediment habitat surrounding the low relief *Lophelia pertusa* mounds supported sparse fauna including the stalked hexactinellid sponge, *Hyalonema*, sp. with attached zooanthids, sea urchins, and *Acanthacaris caeca*.. Hard coral habitat was composed of 100% dead standing *L. pertusa* or coral rubble matrix. Sessile invertebrates attached to the hard coral included the hydrozoan coral (Stylasteridae), gorgonians (e.g. *Plumarella* sp., *Eunicella* sp.), bamboo coral, and a large diversity of hexactinellid sponges. Mobile fauna included echinoid urchins, rattail fish, eels, and skates.

PHYSICAL ENVIRONMENT

This dive traversed soft sediment habitat interrupted by a series of low relief coral mounds with abundant attached fauna. The sub transitioned through soft sediment and coral rubble with fauna through mixed habitat with abundant attached fauna on low relief dead coral. Hard coral habitat consisted of standing, 100% dead *L. pertusa* with attached fauna such as sponges and soft corals.

ADDITIONAL COMMENTS

Original dives are on mini DVs transferred to digital on a mini DV reader and stored on an external hard drive. Video quality was mostly clear with only a few sections of unusable footage. However, there was only one mini DV tape covering the first hour of the dive. The remainder of the dive was not documented with video. Collections caught on video included dead *L. pertusa* rubble, a bamboo coral, a white hexactinellid and a yellow sponge though live coral, more sponges and a crinoid were collected also.