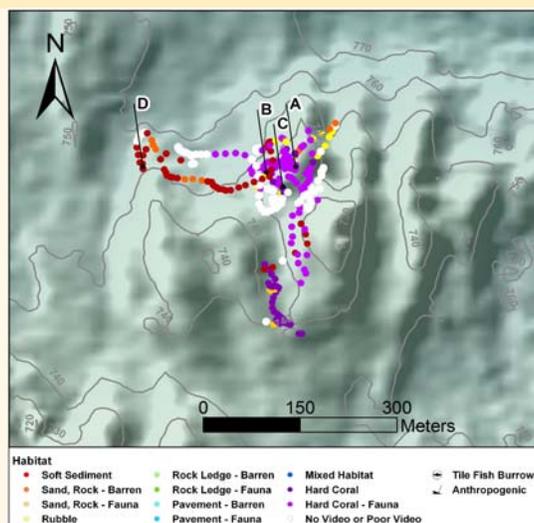


**DIVE NUMBER: JSLI-4909****STUDY AREA: Cape Canaveral South****STATION OVERVIEW**

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

**GENERAL LOCATION****Dive Track:****DIVE DATA**

<b>Date</b>	08-Nov-05
<b>Minimum Bottom Depth (m)</b>	724
<b>Maximum Bottom Depth (m)</b>	757
<b>Start Bottom Time (EDT)</b>	8:24
<b>End Bottom End (EDT)</b>	11:55
<b>Starting Latitude (N)</b>	28° 17.064'
<b>Starting Longitude (W)</b>	79° 36.828'
<b>Ending Latitude (N)</b>	28° 17.082'
<b>Ending Longitude (W)</b>	79° 36.852'
<b>Surface Current (Kts)</b>	
<b>Bottom Current (Kts)</b>	0.7

**Image A: Hard Coral - with Attached Fauna**

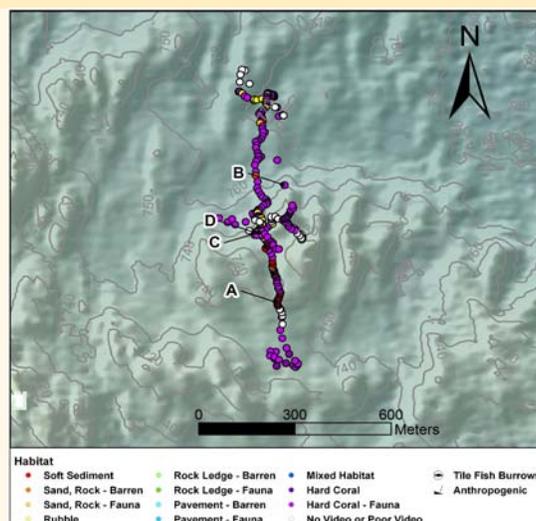
28° 17.105' N, 79° 36.858' W





**DIVE NUMBER: JSLI-4910****STUDY AREA: Cape Canaveral South****STATION OVERVIEW**

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

**GENERAL LOCATION****Dive Track:****DIVE DATA**

<b>Date</b>	08-Nov-05
<b>Minimum Bottom Depth (m)</b>	716
<b>Maximum Bottom Depth (m)</b>	768
<b>Start Bottom Time (EDT)</b>	17:32
<b>End Bottom End (EDT)</b>	19:45
<b>Starting Latitude (N)</b>	28° 16.883'
<b>Starting Longitude (W)</b>	79° 36.872'
<b>Ending Latitude (N)</b>	28° 17.039'
<b>Ending Longitude (W)</b>	79° 36.848'
<b>Surface Current (Kts)</b>	
<b>Bottom Current (Kts)</b>	0.5

**Image A: Soft Substrate**

28° 16.969' N, 79° 36.858' W



**DIVE NUMBER: JSLI-4910**

**STUDY AREA: Cape Canaveral South**

**IMAGE GALLERY**

\* indicates image position is approximated

**Image B: Hard Corals -  
with Attached Fauna**  
28° 17.132' N, 79° 36.846' W



**Image C: Rubble**  
28° 17.086' N, 79° 36.888' W



**Image D: Hard Corals -  
with Attached Fauna**  
28° 17.095' N, 79° 36.882' 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**

The *Lophelia pertusa* lithoherm of Cape Canaveral South was composed primarily of moderate and high relief dead hard coral habitat with abundant attached fauna. In two northerly transects, the sub traversed a few coral mounds with almost linear strips and "fences" of dead coral interspersed with patches of soft sediment and rubble. Soft sediment and rubble "valleys" also separated small lithoherms. The most northern mound of the lithoherm leveled off into a plateau covered in coral rubble with hard coral habitat on the peripheral ridges. Overall, coral cover was typically composed of 100% dead *L. pertusa*, the occurrence of live patches and tips of *L. pertusa* increased with elevation near feature peaks and ridges.

**PHYSICAL ENVIRONMENT**

This dive began on a southern coral mound in a series comprising a *L. pertusa* lithoherm with moderate to high relief dead hard coral habitat with abundant attached fauna. In two northerly transects, the sub traversed a few coral mounds with almost linear strips and "fences" of dead coral interspersed with patches of soft sediment and rubble. Soft sediment and rubble "valleys" also separated small lithoherms. The most northern mound of the lithoherm leveled off into a plateau covered in coral rubble with hard coral habitat on the peripheral ridges. Overall, coral cover was typically composed of 100% dead *L. pertusa*, the occurrence of live patches and tips of *L. pertusa* increased with elevation near feature peaks and ridges.

**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 live and dead *L. pertusa* and a hexactinellid sponge. Grants acoustic monitoring unit was collected.