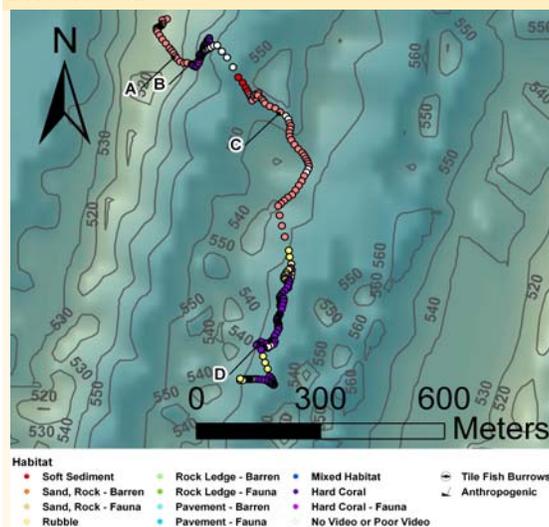


DIVE NUMBER: JSLI-4905**STUDY AREA: Savannah Banks West**

STATION OVERVIEW	
Project	Life on the Edge 2005
Principal investigators	SW Ross ¹ MS Nizinski, E Baird, C Morrison
PI Contact Info ¹	Center for Marine Science, 5600 Marvin Moss Ln., Wilmington, NC 28409
Purpose	Mapping of deep coral banks, ecological studies of macroinvertebrates and fishes, paleoclimate studies, coral genetics and education outreach
Vessel	R/V Seward Johnson, Johnson Sea Link I Submersible
Science Divers	C Morrison (bow), S Ross (stern)
External Video Tapes	6 mini DVs
Internal Video Tapes	3 mini DVs
Digital Still Photos	0
Positioning System	dGPS
CTD File	<input checked="" type="checkbox"/>
Specimens Collected	<input checked="" type="checkbox"/>
Other	Hard copy of bow audio log
Acknowledgements	NOAA-OE, NOAA Fisheries, USGS, UNCW, NC Museum of Natural Sciences
SEADESC Analyst	A Zilg
Date Compiled	9/8/2011
PI Station Number	JSLI-05-4905

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

Date	30-Oct-05
Minimum Bottom Depth (m)	505
Maximum Bottom Depth (m)	558
Start Bottom Time (EDT)	16:12
End Bottom End (EDT)	18:35
Starting Latitude (N)	31° 46.908'
Starting Longitude (W)	79° 12.261'
Ending Latitude (N)	31° 46.434'
Ending Longitude (W)	79° 12.104'
Surface Current (Kts)	1
Bottom Current (Kts)	0.1

Image A: Sand/Rubble/Rock - without Attached Fauna
31° 46.859' N, 79° 12.226' W



DIVE NUMBER: JSLI-4905

STUDY AREA: Savannah Banks West

IMAGE GALLERY

* indicates image position is approximated

**Image B: Hard Corals -
without Attached Fauna**
32° 46.868' N, 79° 12.187' W



**Image C: Sand/Rubble/Rock -
without Attached Fauna**
31° 46.796' N, 79° 12.081' W



**Image D: Hard Corals -
without Attached Fauna**
31° 46.492' N, 79° 12.057' W



RELEVANT WORK AND/OR LITERATURE CITED

- | | |
|-------------------------------------|---------------------------------|
| Milliman et al. (1967) | Reed and Ross (2005) |
| Ayers and Pilkey (1981) | Reed et al. (2006) |
| EEZ-SCAN 87 Scientific Staff (1991) | Ross and Nizinski (2007) |
| Reed (2002) | Ross and Quattrini (2007, 2009) |

BIOLOGICAL ENVIRONMENT

Soft rubble bottom was inhabited by a few invertebrates such as pancake urchins, *Stylaster* sp., and cancer crabs. Hard coral habitats were mostly dead *Lophelia pertusa* with only 0-10% alive. Very few areas had attached octocorals or glass sponges. Other corals included *Madrepora oculata*, *Enallopsammia profunda*, and cup corals. Fishes were commonly observed throughout the dive and included *Laemonema melanurum*, *Nezumia sclerorhynchus*, *Scyliorhinus retifer*, *Helicolenus dactylopterus*, *Breviraja claramaculata*, *Synaphobranchus* sp., *Benthobatis marcida*, and *Chimaera monstrosa*. Golden crabs were observed numerous times in pairs, possibly mating.

PHYSICAL ENVIRONMENT

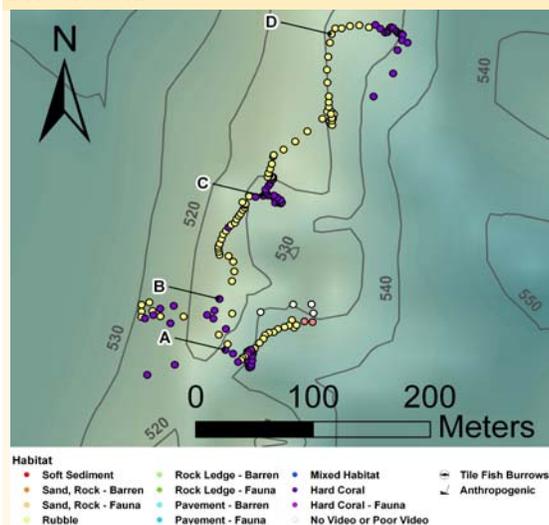
The majority of the dive took place over hard coral habitat of low profile with few intact matrices of mostly dead (0-10% live) *L. pertusa*. The second most abundant habitat transected was soft substrate rubble mix with little to no attached fauna. The entire dive was low profile (<0.5 m relief) with very little live invertebrate fauna. Some coral matrices approached 0.5 m relief at the top of the ridge. All slopes were gradual (<30°). Visibility was good at 30-40 feet, and currents were moderate making maneuvering and collections manageable.

ADDITIONAL COMMENTS

The external bow video was captured on 3 mini DVs and archived on 3 DVDs. External stern video was captured on 3 mini DVs and archived on 3 DVDs. Internal bow video was captured on 3 mini DVs and archived on 3 DVDs. The video quality was clear with good footage of paired golden crabs.

DIVE NUMBER: JSLI-4906**STUDY AREA: Savannah Banks West**

STATION OVERVIEW	
Project	Life on the Edge 2005
Principal investigators	SW Ross ¹ MS Nizinski, E Baird, C Morrison
PI Contact Info ¹	Center for Marine Science, 5600 Marvin Moss Ln., Wilmington, NC 28409
Purpose	Mapping of deep coral banks, ecological studies of macroinvertebrates and fishes, paleoclimate studies, coral genetics and education outreach
Vessel	R/V Seward Johnson, Johnson Sea Link I Submersible
Science Divers	S Ross (bow), A Quattrini (stern)
External Video Tapes	4 mini DVs
Internal Video Tapes	2 mini DVs
Digital Still Photos	Yes
Positioning System	dGPS
CTD File	<input checked="" type="checkbox"/>
Specimens Collected	<input checked="" type="checkbox"/>
Other	
Acknowledgements	NOAA-OE, NOAA Fisheries, USGS, UNCW, NC Museum of Natural Sciences
SEADESC Analyst	A Zilg
Date Compiled	9/22/2011
PI Station Number	JSLI-05-4906

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

Date	31-Oct-05
Minimum Bottom Depth (m)	507
Maximum Bottom Depth (m)	543
Start Bottom Time (EDT)	17:26
End Bottom End (EDT)	18:52
Starting Latitude (N)	31° 46.578'
Starting Longitude (W)	79° 11.640'
Ending Latitude (N)	31° 46.620'
Ending Longitude (W)	79° 11.555'
Surface Current (Kts)	1
Bottom Current (Kts)	0.2

Image A: Hard Corals - without Attached Fauna
31° 46.483' N, 79° 11.640' W



DIVE NUMBER: JSLI-4906

STUDY AREA: Savannah Banks West

IMAGE GALLERY

* indicates image position is approximated

**Image B: Hard Corals -
without Attached Fauna**
31° 46.499' N, 79° 11.660' W



**Image C: Hard Corals -
without Attached Fauna**
31° 46.559' N, 79° 11.640' W



Image D: Rubble
31° 46.641' N, 79° 11.593' W



RELEVANT WORK AND/OR LITERATURE CITED

- | | |
|-------------------------------------|---------------------------------|
| Milliman et al. (1967) | Reed and Ross (2005) |
| Ayers and Pilkey (1981) | Reed et al. (2006) |
| EEZ-SCAN 87 Scientific Staff (1991) | Ross and Nizinski (2007) |
| Reed (2002) | Ross and Quattrini (2007, 2009) |

BIOLOGICAL ENVIRONMENT

The dive covered mostly rubble habitat, and hard coral areas were mostly dead (0-10% live). Living branches were often of *Enallopsammia profunda*, not *Lophelia pertusa*. *Madrepora oculata* and patches of cup corals were also observed. Stylasterids were common throughout the dive. Glass sponges were rare. Numerous species of fish were observed, but they were represented by few individuals. They included *Laemonema melanurum*, *Squalus cubensis*, *Nezumia sclerorhynchus*, *Helicolenus dactylopterus*, *Scyliorhinus retifer*, *Dysommia rugosa*, *Benthobatis marcida*, a chamerid, and a scorpaenid. Motile invertebrates included a pancake urchin, a starfish, and golden crabs which were commonly observed in pairs, possibly mating.

PHYSICAL ENVIRONMENT

This dive transected low profile (<0.5 m relief) hard coral and rubble habitat. Clumps of live and dead coral were present along the transect. Attached fauna was extremely rare. Small sections of soft rubble bottom were observed as well. A ridge was present but the slope leading to the top was gradual. Current was moderate and visibility was clear.

ADDITIONAL COMMENTS

The external bow video was captured on 2 mini DVs and archived on 2 DVDs. External stern video was captured on 2 mini DVs and archived on 2 DVDs. Internal bow video was captured on 2 mini DVs and archived on 2 DVDs. The video quality was clear with good footage of paired golden crabs.