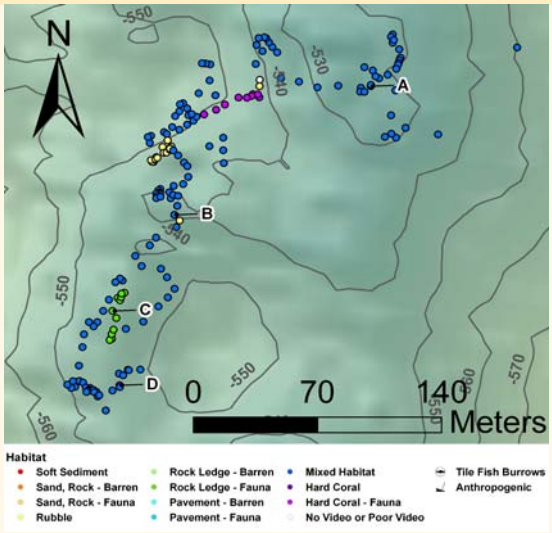
DIVE NUMBER: JSLI-4907 *STUDY AREA: Jacksonville*

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	M Roberts (bow), T Casazza (stern)
External Video Tapes	6 mini DVs
Internal Video Tapes	3 mini DVs
Digital Still Photos	Yes
Positioning System	dGPS
CTD File	☑
Specimens Collected	☑
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	9/28/2011
PI Station Number	JSLI-05-4907

GENERAL LOCATION

Dive Track:



DIVE DATA

Date	01-Nov-05
Minimum Bottom Depth (m)	517
Maximum Bottom Depth (m)	553
Start Bottom Time (EDT)	8:28
End Bottom End (EDT)	10:47
Starting Latitude (N)	30° 48.150'
Starting Longitude (W)	79° 38.385'
Ending Latitude (N)	30° 48.032'
Ending Longitude (W)	79° 38.505'
Surface Current (Kts)	2.5
Bottom Current (Kts)	0.1

Image A: Mixed Habitat
30º 48.128' N, 79º 38.413' W

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IMAGE GALLERY

*** indicates image position is approximated**

Image B: Mixed Habitat
30º 48.094' N, 79º 38.485' W

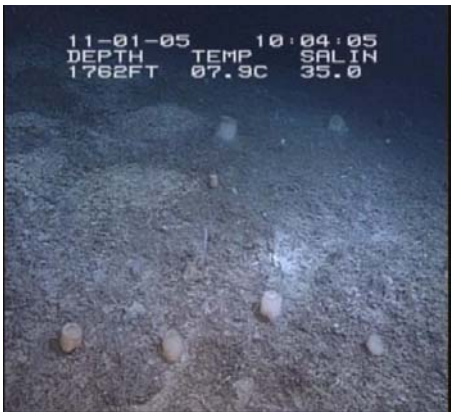


Image C: Rock Ledge - with Attached Fauna
30º 48.051' N, 79º 38.507' W

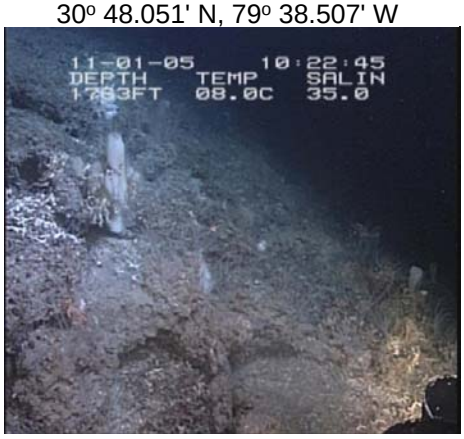


Image C: Hard Corals - with Attached Fauna
30º 48.024' N, 79º 38.495' W

RELEVANT WORK AND/OR LITERATURE CITED

Ayers and Pilkey (1981)
EEZ-SCAN 87 Scientific Staff (1991)
Paull et al. (2000)
Reed (2002)
Reed and Ross (2005)
Williams et al. (2007)
Reed et al. (2006)
Ross and Nizinski (2007)
Ross and Quattrini (2007, 2009)
Ross et al. (unpubl. cruise data)

BIOLOGICAL ENVIRONMENT

Very few fishes were observed on this dive and included *Laemonema melanurum*, *Trachyscorpia cristulata*, and *Squalus cubensis*. Motile invertebrates included octopus, pancake urchins, cancer crabs, and galatheid crabs, which were common. The habitat was not dominated by hard coral, although a few individual living branches of *Enallopsammia profunda* and *Lophelia pertusa* were observed. Other common corals were stylasterids and cup corals. The area was largely dominated by small gorgonians difficult to identify on video. Collections were taken of *Keratoisis* sp., *Chrysogorgia* sp., *Bathypathes* sp., *Leiopathes* sp. and others. Both hexactinellid sponges and demosponges were abundant throughout the dive, sometimes in patchy distributions.

PHYSICAL ENVIRONMENT

The majority of the dive transected low profile (<0.5 m relief) rubble with approximately 90% bottom coverage. Except for a few sections, the rubble had abundant attached mixed fauna. Long ridges with steep slopes (>45º) on either side were characteristic of this area. A section of rock ledge was encountered and had abundant attached fauna. A small area of hard coral habitat was also observed, also with attached fauna, and with a relief of around 0.5 m. Currents varied from 0.1-0.5 kn and visibility was approximately 40 ft.

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 camera was often out of focus, making identifications difficult.

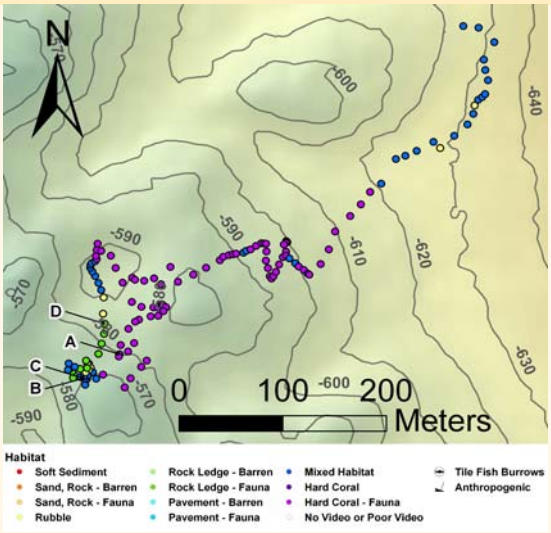
DIVE NUMBER: JSLI-4908 *STUDY AREA: Jacksonville*

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	M Nizinski (bow), C Young (stern)
External Video Tapes	6 mini DVs
Internal Video Tapes	3 mini DVs
Digital Still Photos	0
Positioning System	dGPS
CTD File	☑
Specimens Collected	☑
Other	Hard copies of bow and stern audio logs
Acknowledgements	NOAA-OE, NOAA Fisheries, USGS, UNCW, NC Museum of Natural Sciences
SEADESC Analyst	A Zilg
Date Compiled	10/6/2011
PI Station Number	JSLI-05-4908

GENERAL LOCATION

Dive Track:



DIVE DATA

Date	01-Nov-05
Minimum Bottom Depth (m)	568
Maximum Bottom Depth (m)	628
Start Bottom Time (EDT)	16:38
End Bottom End (EDT)	18:55
Starting Latitude (N)	30° 31.122'
Starting Longitude (W)	79° 39.633'
Ending Latitude (N)	30° 31.254'
Ending Longitude (W)	79° 39.407'
Surface Current (Kts)	1.9
Bottom Current (Kts)	0.4

Image A: Hard Corals - with Attached Fauna
30º 31.099' N, 79º 39.606' W

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IMAGE GALLERY

*** indicates image position is approximated**

Image B: Rubble
30º 31.098' N, 79º 39.636' W

Image C: Mixed Habitat
30º 31.078' N, 79º 39.633' W

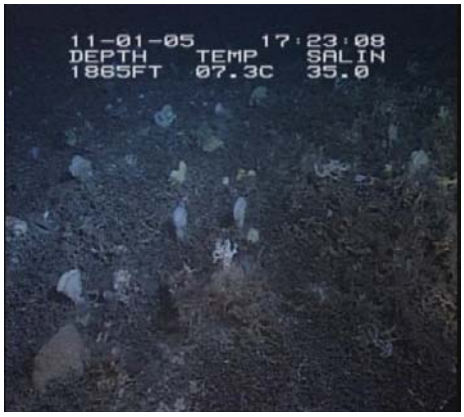

Image D: Rock Ledge - with Attached Fauna
30º 31.105' N, 79º 39.617' W

RELEVANT WORK AND/OR LITERATURE CITED

Ayers and Pilkey (1981)
EEZ-SCAN 87 Scientific Staff (1991)
Paull et al. (2000)
Reed (2002)
Reed and Ross (2005)
Williams et al. (2007)
Reed et al. (2006)
Ross and Nizinski (2007)
Ross and Quattrini (2007, 2009)
Ross et al. (unpubl. cruise data)

BIOLOGICAL ENVIRONMENT

This dive was characterized by extremely abundant attached fauna. An intact matrix of hard corals, *Enallopsammia profunda*, *Lophelia pertusa*, and *Madrepora oculata*, covered the sea floor and housed numerous sponges and other corals. *Enallopsammia profunda* was the most common scleractinian. Solitary cup corals were abundant, and *Stylaster* spp. was common. Small Gorgonians were extremely abundant and covered hard coral and mixed habitats. *Keratoisis* sp., *Plumarella* sp., *Anthomastus* sp., and *Leiopathes* sp. were all observed. Various forms of hexactinellid sponges were abundant; *Aphrocallistes beatrix* was the dominant sponge, although other vase sponges were also very abundant. Demosponges were present in high numbers, but less abundant than hexactinellids. Galatheid crabs were the most abundant motile invertebrate, cancer crabs and seastars were observed occasionally. Very few fishes were observed and included *Laemonema melanurum* and *Scyliorhinus meadi*.

PHYSICAL ENVIRONMENT

This dive transected four habitat types: 1) hard corals with attached fauna, 2) mixed, 3) rubble, and 4) rock ledge with attached fauna. Hard coral habitat was characterized as such due to the 100% bottom coverage of moderate relief (0.5 - 1 m) coral bushes and matrices made up of *E. profunda*, *L. pertusa*, and *M. oculata*. The majority of the coral was dead, but matrices were still intact. Fauna attached to the matrices were extremely abundant and dominated the area. Mixed habitat was only classified when the attached fauna was found on crushed coral rubble. Rubble habitats had sparse to no attached fauna. Rock ledges were rare and also had less attached fauna than the surrounding hard coral areas. Current was consistent around 0.4 kn.

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.