STUDY AREA: Pourtales Terrace

STATION OVERVIEW

Project Ocean Exploration 2005

Principal investigators SD Brooke¹

J Reed, C Messing

PI Contact Info¹ 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 pilot training (bow), J Harasewych (stern)

External Video Tapes External Hard Drive

Internal Video Tapes 0
Digital Still Photos 0

Positioning System dGPS

CTD File

Specimens Collected

✓ Training dive

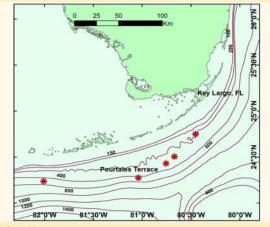
Acknowledgements NOAA-OE

SEADESC Analyst M Watts

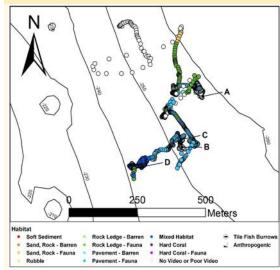
Date Compiled 9/28/2011

PI Station Number 18-XI-05-1

GENERAL LOCATION



Dive Track:



DIVE DATA

Other

Date	18-Nov-05
Minimum Bottom Depth (m)	176
Maximum Bottom Depth (m)	298
Start Bottom Time (EDT)	8:20
End Bottom End (EDT)	11:12
Starting Latitude (N)	24° 30.292′
Starting Longitude (W)	80° 40.152′
Ending Latitude (N)	24° 30.006′
Ending Longitude (W)	80° 40.127'
Surface Current (Kts)	
Bottom Current (Kts)	0.6

Image A: Pavement with Attached Fauna 24° 30.163' N, 80° 39.984' W



STUDY AREA: Pourtales Terrace

IMAGE GALLERY

* indicates image position is approximated

Image B: Rock Ledge with Attached Fauna 24° 30.090' N. 80° 40.008' W

Image C: Pavement with Attached Fauna 24° 30.077′ N, 80° 40.032′ W

Image D: Mixed Habitat 24° 30.028' N. 80° 40.110' W







RELEVANT WORK AND/OR LITERATURE CITED

EEZ-SCAN 87 Scientific Staff (1991) Reed (2002) Reed and Ross (2005) Reed et al. (2005) Reed et al. (2006)

BIOLOGICAL ENVIRONMENT

Abundant sessile fauna attached to the low relief rock, pavement and ledge habitats included numerous species of hexactinellid and demospongia sponges ranging from small vase, ball and large plate forms, a large diversity of hydrozoan corals (Stylasteridae), black coral (e.g. Antipathes sp.) and small gorgonians. No Lophelia pertusa were evident. Mobile fauna included slit shell snails, seastars, hermit crabs, cidaroid urchins, scorpionfish, snowy grouper, red bream, redeve gapers, an amberjack, and a boarfish.

PHYSICAL ENVIRONMENT

This dive began to the northwest of a rock ridge beginning over a mix of soft substrate and rock with fauna and traversing a region with periodic boulders and low-lying rock slabs with attached fauna. The submersible continued along a gradual incline with expanses of solid rock pavement with a thin layer of sediment and attached fauna that was interrupted by periodic vertical rock faces and ledges with attached fauna. The southern extent of the dive covered mixed habitat with dense assemblages of hydrozoan corals and sponges.

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 clear though the bow pilot frequently turned off the camera resulting in large sections of the dive track being labeled 'no data'. This dive was a pilot training dive so only a stern scientist was present. Collections were taken of numerous slit shell snails, an unknown conical snail, hydrozoans (Stylasteridae), and a redeve gaper.

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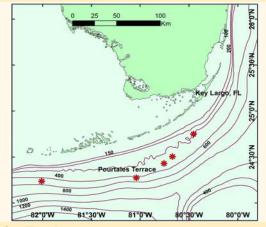
Specimens Collected

Other

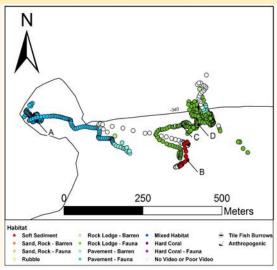
Acknowledgements NOAA-OE

SEADESC Analyst M Watts
Date Compiled 10/21/2011
PI Station Number 18-XI-05-2

GENERAL LOCATION



Dive Track:



DIVE DATA

Date	18-Nov-05
Minimum Bottom Depth (m)	329
Maximum Bottom Depth (m)	530
Start Bottom Time (EDT)	16:44
End Bottom End (EDT)	20:00
Starting Latitude (N)	24° 16.450′
Starting Longitude (W)	81° 02.482′
Ending Latitude (N)	24° 16.515'
Ending Longitude (W)	81° 02.176′
Surface Current (Kts)	
Bottom Current (Kts)	0.4

Image A: Pavement with Attached Fauna 24° 16.440' N, 81° 02.440' W



STUDY AREA: Pourtales Terrace

IMAGE GALLERY

* indicates image position is approximated

Image B: Soft Substrate 24° 16.380' N, 81° 02.220' W Image C: Rock Ledge - with Attached Fauna 24° 16.440' N, 81° 02.220' W Image D: Rock Ledge with Attached Fauna 24° 16.440' N, 81° 02.220' W







RELEVANT WORK AND/OR LITERATURE CITED

EEZ-SCAN 87 Scientific Staff (1991) Reed (2002) Reed and Ross (2005) Reed et al. (2005) Reed et al. (2006)

BIOLOGICAL ENVIRONMENT

Abundant sessile fauna attached to the rock pavement and rock ledges surrounding Jordan sinkhole included numerous species of hexactinellid and demospongia sponges (e.g. *Phakellia* sp. and an abundant encrusting blue sponge), a large diversity of hydrozoan corals (family Stylasteridae), black coral (e.g. *Antipathes* sp.), bamboo coral, small white gorgonians, and anemones (e.g. venus flytrap anemone) as well as small patches of *Lophelia pertusa* and *Madrepora oculata*. Mobile fauna included seastars (e.g. brissingids), galatheid crabs, shrimp, cidaroid urchins, comatulid crinoids, a slit shell snail, scorpionfish (including blackbelly rosefish), coral hake, shortbeard codling, western roughy, a conger eel, a requiem shark, and a large school of squid.

PHYSICAL ENVIRONMENT

This dive began to the west of Jordan sinkhole on a steady decline across rock pavement habitat with attached fauna. The submersible reached an abrupt ledge of barren pavement before rapidly descending 175 meters into Jordon sinkhole. At the bottom of the sinkhole a northerly transect crossed soft sediment habitat before meeting a 90° vertical wall. The submersible alternated between vertical transects up the rock ledge and horizontal transects following in the contour of the rock face. This habitat was rock ledge with attached fauna before transitioning to barren pavement at the top of the feature.

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 clear with only brief sections of unusable footage. Collections were taken of a slit shell snail, bamboo coral, crinoids, hydrozoans (Stylasteridae), *M. oculata, L. pertusa*, a small white gorgonian, and sediment samples.