DIVE NUMBER: JSLII-3418

STUDY AREA: Savannah Banks East

STATION OVERVIEW

Project Investigating the Charleston Bump 2003

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Purpose To explore and describe habitats and associated

fauna of high-relief features of the Charleston Bump at a dive site called Neptune's Staircase.

Vessel R/V Seward Johnson, Johnson Sea Link II

Submersible

Science Divers LR Sautter (bow), C Leverett (stern)

External Video Tapes 3 mini DVs

Internal Video Tapes

Digital Still Photos

Positioning System dGPS

CTD File ✓

Specimens Collected

Other

Acknowledgements NOAA-OE

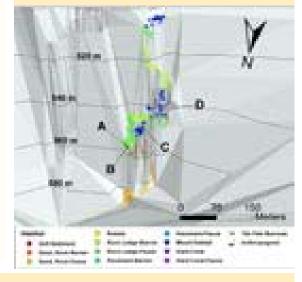
SEADESC Analyst ML Partyka

Date Compiled 11/16/2006

GENERAL LOCATION



Dive Track:



DIVE DATA

Date	13-Aug-03
Minimum Bottom Depth (m)	504
Maximum Bottom Depth (m)	584
Start Bottom Time (EDT)	8:39
End Bottom End (EDT)	10:41
Starting Latitude (N)	31° 44.268'
Starting Longitude (W)	78° 48.363'
Ending Latitude (N)	31° 44.124'
Ending Longitude (W)	78° 48.470'
Surface Current (Kts)	
Bottom Current (Kts)	1

Image A: Rock Ledge-Barren 31° 44.208' N, 78° 48.384 W



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IMAGE GALLERY

* indicates image position is approximated

Image B: Rock Ledge-Fauna 31° 44.214' N, 78° 48.378' W

Image C: Rock Ledge-Fauna 31° 44.196' N, 78° 48.420' W

Image D: Mixed Habitat 31° 44.178' N, 78° 48.438' W







RELEVANT WORK AND/OR LITERATURE CITED

BIOLOGICAL ENVIRONMENT

A variety of fish were observed during this dive, though they were few in number. The most common were *Nezumia* sp. and *Laemonema melanurum*. Other noteworthy species included *Conger oceanicus*, *Beryx decadactylus* and *Polyprion americanus*. As with other dives in this area, mobile invertebrates were not common, but a variety were observed, such as *Eumunida picta*, *Bathynectes longispina*, *Chaceon* sp. as well as pencil and spiny urchins. The area was dominated by sessile invertebrates, particularly *Stylaster*, *Lophelia pertusa*, *Enallopsammia*, primnoids, *Keratoisis* sp., and encrusting sponges and hexactinellid sponges. There were also a number of venus flytrap anemones on rock ledges and occasional basket stars.

PHYSICAL ENVIRONMENT

This dive took place over a combination of habitat categories including rock ledge with and without fauna, mixed habitat and sand/rubble/rock with and without fauna. The central feature of this dive was a rock ledge area with both high and low-relief ledges. The surrounding area was typically flat or gently sloped with a dense community of sessile invertebrates. The underlying substrate was typically hardpan covered in a thin layer of sediment with a large number of manganese nodules scattered throughout. This site is just north of a high-relief (100 m) scarp. Rock samples indicated foraminiferan limestone and calcareous mudstone in an interbedded sequence, resulting in "stairstep" relief of about 20 m.

ADDITIONAL COMMENTS

This dive was recorded on 3 mini DVs. There was no time overlay, so correlations between video time and real time were made using the audio commentary. The footage begins during the descent and includes the ascent as well. The first DV contains over 30 minutes of bottom footage before the initial bottom report was given. There was some very good footage of *Polyprion americanus*. A snail, crab, sea urchin, rocks and sediment were collected.