DIVE NUMBER: JSLII-3462

STUDY AREA: Charleston Bump

Project Estuary to the Abyss 2004 Principal investigators GR Sedberry' Pl Contact Info' Marine Resources Research Institute, SCDNR P.O. Box 12559 Charleston SC 29422-2559 Purpose Explore Wreckfish Cave on the Charleston Bump. Caves and wreckfish had been previously reported by Popence and Manheim (2001). Vessel R/V Seward Johnson 2, Johnson Sea Link II Submersible Science Divers R King (bow), C Fiore (stern) External Video Tapes Imini DV Positioning System dGPS CTD File Imini DV Specimens Collected Other NOAA-OE Acknowledgements NOAA-OE McAnogements Marine, Cause Jute Compiled 1219/2006	STATION OVERVIEW		GENERAL LOCATION
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DIVE DATA

Date	22-Aug-04
Minimum Bottom Depth (m)	523
Maximum Bottom Depth (m)	552
Start Bottom Time (EDT)	8:38
End Bottom End (EDT)	11:09
Starting Latitude (N)	31° 18.939'
Starting Longitude (W)	78° 51.539'
Ending Latitude (N)	31° 18.721'
Ending Longitude (W)	78° 51.558'
Surface Current (Kts)	
Bottom Current (Kts)	

Image A: Rock Ledge-Fauna 31º 18.816' N, 78º 51.636' W



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IMAGE GALLERY

Image B: Rock Ledge-Fauna 31° 18.912' N, 78° 51.564' W

* indicates image position is approximated

Image C: Soft Substrate 31º 18.822' N, 78º 51.654' W Image D: Rock Ledge-Fauna 31º 18.852' N, 78º 51.666' W



RELEVANT WORK AND/OR LITERATURE CITED Popenoe and Manheim (2001) Sedberry (2001)

BIOLOGICAL ENVIRONMENT

There were a variety of fishes observed during this dive, though all were seen in low numbers. These included *Helicolenus dactylopterus, Laemonema melanurum, L. barbatulum* and *Polyprion americanus*. All of these fishes were seen in rock ledge habitats. There were fewer mobile marine invertebrates such as squid, large red shrimp and sea stars. The sessile invertebrates were diverse and patchy throughout the dive. Mixed habitat areas and the plateau above the large wall were covered in small stony corals, a variety of sponges, hydroids, fly trap anemones, primnoids, small isidid bamboo corals and occasional *Leiopathes* and *Paramuricea* corals. Other rock ledge habitats were predominantly small stony corals with a few sponges.

PHYSICAL ENVIRONMENT

The dive began over a mixed habitat area with a mixture of hard-pan bottom and sandy sediments giving way to a rough, broken rock ledge habitat covered in small hard corals and sponges. Large sand dunes, lined with chunks of rubble and manganese slabs, led to the base of an enormous rock feature. This wall was almost barren of fauna along its face and completely covered in fauna along its uppermost ledge. In a number of places, the face of the wall was broken into deep caverns and crevices. The plateau of the feature was mostly mixed habitat covering a hard-pan, rocky area with a thin veneer of sediment.

ADDITIONAL COMMENTS

This dive was recorded onto one DV, which excludes approximately 90 minutes of the dive. Though the footage was quite grainy and a little underlit there is excellent footage of a large limestone wall.