Activity Summary

Cruise **biolum2009**

Project **Bioluminescence 2009**

Northwest Providence Channel

2009/07/27 08:00:00 EDT - 2009/07/27 11:15:00 EDT

Bioluminescence in the Deep-Sea Benthos

JSL2-3693

Activity Vitals

Dates/Times/Depth		Bndg Coordinates		System(s)
Start	2009/07/27 08:00:00	**North**	26 24.5 N	Johnson Sea Link II
End	2009/07/27 11:15:00	**South**	26 24.5 N	
Time zone	EDT	**East**	77 48.4 W	**Data Collected**
MaxDepth (m)	2270	**West**	77 48.4 W	Multimedia
Operating Depth Range (m)	2000-2270			

Participants

Sonke Johnsen, Forward Observer
Jamie Baldwin, Aft Observer
,
,

Overall Dive Site Ratings

1=low, 10=high

Uniqueness	No rating
Health	No rating
Disturbance	No rating
Biodiversity	No rating
Relief Variation (m)	

Objectives

collect animals to test for luminescence. Do some in-situ low light imaging

Dive Track Description

descended to a flat plain with a few 5 foot ridges. Then moved across a wide rolling plain of very fine sediment populated with three species of urchin and the occasional solitary whip-like coral. Eventually came to some 5 foot cliffs that developed into 20-30 foot cliffs that looked to be conglomerates of shells and mud. The faces were barren, with the exception of the occasional large vase-like glass sponge and various crinoids. The tops of the cliff had more corals, some branching, some fanlike, that were covered with small crabs and ophiuroids (see still camera images). There were also bursts of crinoids at the top, sometimes densely packed in numbers of 20 or so. The bases of these cliffs were more mud flats with trails of urchins. The highest concentration of life was always at the tops of the cliffs, where we saw a range of crinoids, corals, and possible sea pens, with their associated ophiuroids and crabs. We saw one or two crabs walking along the bottom and an occasional cucumber in the flats, but these were rare. Typical bottom fish, though nothing larger than a foot long. No sharks or wreck fish. A highlight was a 3 foot long pyrosome that floated by along with several 1 foot long pyrosomes. We also saw two wine bottles, but no other trash. The water column had a relatively large number of lobate ctenophores and the occasional siphonophore or possibly a salp.

Biological Comments

see above.

Geological Comments

No geological comment recorded.

Living Habitat Structure		Sediments		Geomorphology		Anthropogenics
Type	**% Cover**	**Type**	**% Cover**	**Type**	**% Cover**	**Type/Description**
Nothing recorded		Nothing recorded		Nothing recorded		Nothing recorded

Living Marine Resources Abundance

None (0) Single (1) Few (2-10) Many (11-100) Abundant (>100)

Nothing recorded

Observations and Comments on Living Marine Resources

No other comments.

Unique or Rare Invertebrates

Nothing recorded.

Unique or Rare Vertebrates

Nothing recorded.

Fish Observation and Abundance

None (0) Single (1) Few (2-10) Many (11-100) Abundant (>100)

Nothing recorded

Other Comments/Notes

No additional comments.