

Activity Summary

Cruise **biolum2009**

Project **Bioluminescence 2009**

2009/07/25 17:00:00 EDT - 2009/07/25 20:30:00 EDT

Bioluminescence in the Deep-Sea Benthos

JSL2-3690

Activity Vitals

Dates/Times/Depth	Bndg	Coordinates	System(s)
Start 2009/07/25 17:00:00	North	26 24.5 N	Johnson Sea Link II
End 2009/07/25 20:30:00	South	26 24.5 N	
Time zone EDT	East	77 48.4 W	Data Collected
MaxDepth (m) 2272	West	77 48.4 W	Multimedia
Operating Depth Range (m) 2000-2272			

Participants

Sonke Johnsen, Forward Observer
Jamie Baldwin, Aft Observer
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,

Overall Dive Site Ratings

1=low, 10=high

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

Objectives

Deploy and collect traps. Collect specimens. Observe and photograph bioluminescence.

Dive Track Description

dropped to bottom and then searched for "crab dinner" site. After about 30 minutes, we couldn't find it, so we set up a crab trap at the base of a five foot ledge. At this time we also saw a six gill and a large fish (maybe a wreckfish) swimming near the sub. We then moved north away from the crab trap along a mild ridge. The floor was quite barren, typical of abyssal plain, but there were always a few animals in sight, mostly small corals, urchins, sea cucumbers, crinoids, anemones, and brittle stars. As the dive progressed, the landscape was mostly fine sediment with half-buried urchins moving around. Lots of odd burrows, holes, and curvy trails. A highlight was a bioluminescent sea pen relative that looked like a 2 foot long bottle brush. When collected, the polyps pulled in. Another highlight was a swimming sea cucumber of the same species that we saw on the previous dives (greyish blue and very mushy). We didn't collect him, but got very nice footage of him swimming. We went back to the crab trap site and noticed that the trap had been moved 15 feet laterally and 5 feet vertically (now at the top of the ridge). We assumed that the six gill had moved it. The trap had a shrimp and crab next to it, but nothing inside. We then surfaced in the dark and looked at the bioluminescence. Tried to photograph it without success.

Biological Comments

see above.

Geological Comments

No geological comment recorded.

Living Habitat Structure

Type	% Cover
Nothing recorded	

Sediments

Type	% Cover
Nothing recorded	

Geomorphology

Type	% Cover
Nothing recorded	

Anthropogenics

Type/Description
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.